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Table of Contents i

Economics and Business Quarterly Reviews Editorial Board iii

Empirical Analysis of the Effect of Public Debt on the Economic Growth of Nigeria 1
Fijoh Kalu, Iheaturu Ikechukwu Boniface

Opportunities and Constraints Confronting transformation Towards a Green Economy in the Developing Countries 19
Haga Elimam

Vertical Fiscal Imbalance and Public Service Expenditure: Effects on Economic Growth Before and During Covid-19 Pandemic 31
Suyanto

The Influence of Net Profit Margin and Debt to Asset Ratio on Profit Growth: Case Study of Coal Mining Subsector Companies Listed on the Indonesia Stock Exchange in 2017-2021 39
Risma Ayuningsih, Eddy Winarso

The Impact of Spiritual Marketing on Consumer Loyalty 59
Aurelia Suhan, Ariesya Aprillia

A Conceptual Model of the Role of Perception of Celebrity Endorsement in Consumer Purchase Intention of MS Glow Beauty Products 65
Nirvanni Reswari Adi Putri, Budi Haryanto

The Influence of Brand Image on Purchasing Decisions on IM3 Cellular Card User in Gorontalo 76
Suci D. Machmud, Mahendra Wijaya, Andre Rahmanto

The Debate on Reforms of the WTO Appellate Process: A Proxy for a More Serious Discussion of the Future of the WTO 86
Richard J. Hunter, Jr., Héctor R. Lozada, John H. Shannon

Relevance of Management Support and Consideration in Augmenting Organizational Resilience: Evidence from Telecommunication Companies in Kenya 106
Jotham Mukundi Gichuhi, David Oginde, Patrick Wambua

Determinants Audit Report Delay and Its Effects on Investor Reaction in Public Companies in Indonesia 124
Krishna Kamil, Tri Widyastuti, Nurmala Ahmar, Zulkifli

Information on Cash Flow Statements and Stock Return 140
Sri Oktavia Br Sitorus, Rosemarie Sutjiati Njotoprajitno, Bram Hadianto

Inflation and Stock Market Returns: An Empirical Study of Sectoral Indices with Special Reference to India 148
Khurshid Ali, Irshad Ahmad Malik, Khalid Ashraf Chisti, Numaira Showkat

The Influence of Organizational Environment and Career Development on Organizational Citizenship Behaviour (OCB) in Employees with Organizational Commitment as An Intervening Variable 155
Dewi Kurniawati

Assessing the Welfare Effects of Rising Prices of Animal-Derived Sources of Food on Urban Households in Indonesia 165
Nikmatul Khoiriyah, David Forgenie, Atiek Iriany, Hadi Apriliawan

Gaining Consumer Trust through Quality of Information and Interaction: An Empirical Study on Online Shopping 179
Tety Elida, Eko Sri Margianti, Ari Raharjo

The Influence of Strategic Leadership, Organizational Learning, And Organizational Culture on Organizational Performance Through Organizational Citizenship Behavior in Timor-Leste National Police Using Structural Equation Modeling 187
Arquimino Ramos, Teman Koesmono, Lena Ellitan, Bambang Widjanarko Otok

The Effect of Audit Report Lag, Leverage Ratio and Audit Tenure On Going Concern Audit Opinion: Empirical Study of Go Public Companies Listed on the Indonesia Stock Exchange in 2018-2020 197
Krishna Kamil, Muhammad Maksum

A Review of Knowledge Management Orientation: Revisiting the Paradigm 207
Humphreys J. Arunga, James M. Kilika

The Role of Social Media in Promoting Mobile Payment: A Qualitative Study of Consumers in Macao 241
Fung Yi Tam, Jane W. Y. Lung, C. H. Iao, N. L. Chong, I. K. Mak

An Empirical Survey of Individualized Consideration on Talent Management Practices: Lessons from Insurance Companies in Kenya 253
Joshua K. Magambo, Maina Muchara, Kelemba Joy

Data Dashboarding in Accounting using Tableau 269
Clarence Goh

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Empirical Analysis of the Effect of Public Debt on the Economic Growth of Nigeria

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Abstract
For adequate economic growth and development, a country's savings may not equate her desired investments in goods and services. When deficit exist, a country will always bring out means to finance the deficit. Such financing in most cases is through debts from both internal external sources. The objectives of the study are to determine the effect of public debts proxied as internal debts, external debts and interest rate on economic growth proxied as gross domestic product. The study applied ex-post facto design with secondary data as instrument for data collection. Multiple regression model, applying ordinary least square regression was used for analysis. Findings showed that external debts have significant negative impacts on GDP while internal debts showed significant positive impacts on GDP. There is also high cost of borrowed fund it is recommended that Government should make sure that all borrowed fund is judiciously used. They should exhaust internal means of borrowing before resorting to external debts. Also creating the enabling environment that will make public debt to achieve the purpose for which it was borrowed.

Keywords: External Debt, Internal Debt, GDP

1. Introduction

1.1 Background of The Study

Every economic policy of a nation aims at sustainable economic growth and in order to achieve the growth in the economy a country must put in place policies that enhances capital formation through savings and investment. As Adepoyu, Salau and Obayelu (2007) opined, countries resort to debt in order to complement savings.

World over developing nations seem to be at the mercy of advanced economies due high public debt proliferation. The adverse effect of high debt burden is usually as a result of adverse volatility in oil prices, exchange rates, interest rate etc. This negatively affects the economic growth of the country involved. (Favour, Ideniyi, Oge and Charity,2017). This notwithstanding debt still remains veritable took to stimulate economic growth of a country mainly developing economies, (Muhammad, Ruhaini, Nathan and Arshad, 2017). In has been identified that deficit budgets are meant to grow the economy and, in most case, the only available option to finance the deficit is by borrowing. (Mankiw, 2013). Deficit is said to occur in public budget when expected revenue falls short of expenditure and one of the ways of financing the short fall is debt (Rahman, 2012). Therefore, public debt is simply the borrowing of the governments of all levels both internally and externally, (Idenyi, Igberi & Anoke, 2016). It should also be noted that though the government has the powers to as the central bank to go into currency inflation of printing more money, such action may possibly reduce interest rate but it will give rise to hyperinflation (Idenyi, Igberi & Anoke (2016).

According to Soludo (2003), countries borrow to enhance consumption, investment, finance balance of payment deficit and budget deficit and all these are aimed at growing the economy. Most countries rely on debts in order to finance capital accumulation, (Adepoju et al 2007). Some of these debts are medium term facilities and used for economic projects geared towards enhanced standard of living of the people.

Hamed (2008), is of the view that external borrowing complements domestic financing so as to enhance economic growth. There is no doubt that debt will improve factor productivity through increased output which result to increase in total output.

Although external debt may be seen as a tool for economic growth and improved standard of living, at times it may maybe an impenitent to economic growth and stability, as there is exportation of resources when interest and principal are repaid.

Mustasa (2003), is of the view that one may say that Nigeria for instance has large debt that has resulted to huge trade arrears with high cost of funds in the form interest. Developing countries are always burdened with high debt service payments which comes with much problems to the such countries.

According to Adesola (2009), Nigeria had the first debt service burden after the fall in oil prices in 1978. Before then, Nigeria had debt of N28million for railway construction and $13.1million as Jumbo loan in 1958 and 1964 respectively. That is not well managed may result to high debt servicing which may affect the purpose for which the debt was contracted. At such level, the debt gives a poor economic growth and low standard of living, (Fosu, 2009).

In Nigeria some economic restricting policies like the Structural Adjustment Programme (SAP) of the mid 1980s led to high rate of public debts mainly from multilateral sources. The high debt services burden led to Nigeria being classified as one of the heavily indebted poor countries (HIPC), (Omottoye, Sharma and Ngassan, 2008).

Iwaela (2011), is of the view that, increase in the debt service payment has resulted to imbalance in fiscal deficit and budgetary problems resulting to low private investment and low growth in the country's Gross Domestic Product, (GDP).

1.2 Statement of the Problem

From 2008 until 2014, Nigeria's external debt stock was an average of $6920.43 with 16.98% of GDP. It showed a record low of $3627.5m with 12.52% of GDP (Iweala, 2011). Usually huge debt is as a result of accumulated debt service payment, due to the inability to meet the repayment obligations. This debt crises reflects in the fall in real GDP, investment rate. Cohen (2001) saw public debt as a constant factor in economic growth and development of the country.

With the development fund could have been used in economic development are channeled to debt payment servicing, thereby reducing the standard of living of people of the country.

Due to low level of internal resources and capital formation, countries mainly the emerging ones resort to borrowing so as to argument shortfalls in internal revenues. To meet up with economic growth and development countries borrow to finance shortfalls in capital expenditures which form bedrock for enhanced and sustained standard of living of the people (Adepoju, Salau and Obayelu, 2007). It is also important to note that borrowing can be from internally (within the country) and/or externally (outside the country). In order words governments borrow when there is shortfall in internal savings, (Aluko & Arowolo, 2010; Safdari & Mehrizi, 2011). According to Soludo (2003), nations borrow basically so as to take care of macroeconomic issues like financing of high levels of consumption and investment; to finance balance of payment budget deficits. The frequent deficit budgets by governments and the need to finance the deficit has accelerated external borrowing options of governments at all levels. (Osinubi & Olaleru, 2006).

In this believe people have seen public borrowings as a good source of providing projects and infrastructures for economic growth so to enhance the standard of living of the people. In their words Hameed, Ashraf and Chaudary (2008) described external public debt as a tool to boost economic growth and supplement domestic finance. Public debt is meant to increase capital formation which will boost factor productivity and the Gross Domestic Product of the country. It is worthy to note every public debt mainly foreign debt should take with care because excessive and abuse of external debts has resulted to instability in the economies of mainly developing countries, which also has become a threat to their sovereignty, (Audu, 2004; Mutasa, 2003). In fact, government should only borrow for projects that are self-liquidating and such borrowing should just be adequate and significant the growth of the economy. Also, countries should not borrow such that the later servicing of the loan will create such a serious burden on the economy, (Nur, Shafinar & Abdul, 2019).

According to Gohar and Butt (2012), the high volume of debt servicing in the emerging economies has been a big problem in economic development. Most times the amount used to service the debts has grown more than the debt principal amount. Nigeria is not left out in this problem as her debt service obligations have cause serious economic burden the growth and development of the country (Audu, 2004). According to (Adesola, 2009), historically, the Nigeria's debt service burden started in the late 1970s when there was fall in world oil prices, although before this date Nigeria had already borrowed small loans from: World Bank in 1958, US$28m; Paris Club debtor nations in 1964, ItalyUS$13.1m; with the first big debt of US$1b in 1978 from International Capital Market.

As Pattilo, Poirson and Ricci (2002), put it borrowing has the effect of increasing the economic growth of a country with less burden but such positive effects erodes out when the debt grows beyond the desirable limit. According to Fosu (2009) such high debt service will also mean starving important sectors of the economy which resultant negative effect on economic growth and development.

In 1986, Nigeria came with the Structural Adjustment Programme (SAP) which led to the liberalization of the economy so as grow the GDP. The implementation SAP also led to increase government debt from multilateral external sources with also increased debt service burden. The magnitude of the foreign debt made Nigeria to be classified as one the heavily indebted poor countries by the World Bank in 1929. And Omotoye, Sharma, Ngassam and Eseonu (2008) put it, Nigeria has the biggest debt in Sub Sahara Africa. It is also more worrisome because the debt amount has shown an upward trend movement unlike other countries like South Africa, (Ayad and Ayadi, 2008). From records Nigeria external debt moved from US$28,454.8m in 1997 to US$31,041.6m and US$37,883.1m in 2001 and 2004 respectively. This no doubt has resulted to serious imbalances in fiscal deficits with negative effect on the growth of the economy. As (Okonjo-Iweala, 2011), put it, the resultant effect of the excess debt burden may cause a situation crowding out of private investment and low GDP growth.

This is not to say that large external debt always amounts to low economic growth rather what is important is the country's ability to channel the debt to the priority and productive sectors of the economy (Were, 2011). The big question is, how has Nigeria fared in this direction? Actually, Nigeria has not done well in its administration and that has exposed her to a high debt servicing threat. For instance, in 2003 only US$2.3m was used for servicing Nigeria's foreign loans and 2005 the Paris Club group of creditor nations wrote off 60% of US$30.85b debt owed by Nigeria and this amounted to US$18 billion.

According to Patio (2012), when government borrows, it agrees on the terms repayments and this come with conditions that may not be very favourable with the borrowing nation. More times lending conditions may result to rising inflation and crowding out of private investment and low economic.

There have been mixed reactions on role of public debts in reshaping the Nigerian economy for good. While some commend the use of debt to boost the economy, others share a different view as nation has over the years witnessed undesirable debt servicing and burden. This is what the research will try to resolve.

It is also worrisome that notwithstanding the debt relief of US$18 b enjoyed by Nigeria from the Paris Club in 2005, the country has not any major progress in its debt burden (Bakare, 2010).

1.3 Objectives of the Study

The broad objective of the study will be to determine the effect of public debt on the Nigeria economic growth proxied as GDP. The specific objectives will be

1. To ascertain the significant effect of external debt on the economic growth of Nigeria.
2. To determine the effect of internal debt on the economic growth of Nigeria.
3. To ascertain the significant effect interest rate on debts on economic growth

1.4 Research Questions

1. What significant effect has external debt on the economic growth of Nigeria?
2. What significant effect has internal debt on the economic growth of Nigeria?
3. To what extent has interest rate on debts significantly affected economic growth?

1.4 Research Hypotheses

From the above objectives the following hypotheses are derived:
$H0_1$: External debt has no significant effect on the economic growth of Nigeria
$H1_1$: External debt has significant effect on the economic growth of Nigeria.
$H0_2$: Internal debt has no effect on the economic growth of Nigeria
$H1_2$: Internal debt has effect on the economic growth of Nigeria proxied as GDP.
H03: Interest rate on borrowed funds has no significant effect on economic growth
H13: Interest rate on borrowed funds has significant effect on economic growth

2. Review of Related Literature

2.1 Conceptual Framework

2.1.1 Concept of Public Debt

It is obvious that you cannot talk about meaningful development of a country without the issue of acquisition of both external and internal debts by that country. In fact, government borrowing is often seen as a major indicator of global market macroeconomic of the image of such a country. Public debts of a country also point the magnitude and direction the inflow of foreign direct investment. In any case public debts can only boost the economic growth of a country when it is prudently managed to positively affect the GDP of the country. With this it means the country will experience economic stability through effective resources mobilization at concessional conditions, (Christabell, 2013).

Public debt has been explained to mean all the borrowings of the governments of country. The total revenue sources of every government will always be internally generated revenue in form of taxes and borrowings or debts. Public expenditures in excess of the internally generated revenue are usually financed by debts (Makau, 2008 in Christabell, 2013).

As Kibul (1997) put it, there is increase in public debt because of over-reliance on external debts needed to boost capital formation of a country. A major factor that worsens debt burden is high interest rate. According to Isaac and Rosa (2016), sub-national governments *borrow.*

so as finance public infrastructures and other investment projects in order to complement and create enabling environment for the private investments as these will reflect on the overall economic growth of the country. In their view, Nassir and Wani (2016) see public debt as all the borrowings of a country's governments at all levels. Obi (2014) opined that most literatures on the relationship between external debt and economic growth dealt more on the negative effect of debt overhang and Krugman (1998) described debt overhang as when the expected repayment on external debt falls below the value of debt.

In their opinion, Arnone, Bandiera and Presbitro (2018), defined external public debt as money borrowed by the country from other countries, which may be public or private institutions.

To Hameed and Ogbeifin (2017), public debt is as a result of the gap between savings and investment. To them as the gap widens, debt increases. While internal debt of a country is owed to the citizens of that country, her external debt is owed to the citizens of other countries.

Internal debt consists of money borrowed by the government within her domestic economy. Unlike external debt, internal debt does not increase the aggregate resources of the country. It is simply exchange of resources from one sector to another (Nurudeen & Usman, 2010). With his, internal debt is the transfer of purchasing power among the citizens of the country and there is no giving out of real output to another country. When the government wants to borrow internally, she uses such instruments as, treasury bills, treasury certificates, development loan stock and Federal Government bonds (Isibos, Babajide, Akinjare, Oladeji Osuma, 2018).

(b) Productive and Unproductive:

The debt that is expected to create assets which will yield income sufficient to pay the principal amount and the interest on it, is known as 'productive debt' bin other words, they are expected pay their way; they are self-liquidating. J.L. Hanson has referred such a debt as 'reproductive debt'.

On the other hand, unproductive debt is the debt that is raised for financing unproductive assets or heavy unproductive expenditures. Such as a debt is a deadweight debt. Debt invested on wars or prevention of war is a deadweight debt.

(C) Short-term and Long-term:

The loans that are repayable within a period of one year, they are termed as short-term loans' and if they are taken for more than one year, they are referred to as 'long-term loans' following are the reasons for raising short-term loans:

1. If, at any time, the expenditure of government exceeds the revenue, then she takes recourse to short-term borrowing.
2. If, at any time, the rate of interest in the market is very high and the government needs large fund to finance her various projects, then it raises loan for a short-period of time only and waits till the prevailing high rate of interest comes down.
3. The commercial banks find a very safe and profitable opportunity to invest their surplus funds in the government short-term loans.
4. If the government needs large funds and the short-term loans are not enough, then she takes recourse to long-term borrowing. Long-term loans entail following advantages:

5. Long-term loan provides an opportunity to the state in undertaking large projects like construction of canals, hydroelectric projects, buildings, highways, etc. as these loans are not to be repaid at a short productive project.
6. Long-term loans are also unavoidable for strengthening country's defense.
7. Long-term loans provide good opportunity for commercial banks and insurance companies to invest their surplus funds. As the rate of interest on long-term loans is higher than on the short-term loans.
8. Long-term loans can be repaid by the government by the time which is favorable or convenient to her. She can also convert these loans at a lower rate of interest later on.
9. If at any time, the rate of interest is low, the government can contract a long-term loam and with the amount thus raised some public work programmes at lower cost.

ROLE OF PUBLIC BORROWING AN A DEVELOPING ECONOMY

Sammuel (2005) stated the following roles of public borrowing:

1. Taxation should cover at least current expenditure on normal government services and borrowing should resort to finance government expenditure which results in creation of capital assets.
2. Public borrowing for financing productive investment generates additional productive capacity in the economy.
4. it is used as an instrument to mobilize resources which would otherwise hoard in real estate or jewelry.
5. It provides the people opportunities to hold their wealth in the form of safe and stable income-yielding asset, i.e., government bonds.
6. The management of public debt is used as a method to influence the structure of interest.
7. Public has become a powerful tool of development monetary policy.
8. there are two ways in which the governments of under-developed countries raise resourced through public loans.
   (a). Market borrowing, i.e., sales., to the public of government bonds (long-term) and treasury bills (short-term) in the capital market.
   (b). Non-market borrowing, i.e., issue to the public of debt which is not negotiable and it not exchanged in the capital market.
9. These are two forms of loans, i.e., voluntary and forced loans. Forced loans or compulsory borrowing. Like a tax it is a compulsory contribution to the government but like a loan, it is to be repaid with interest

Effects of Public Debt on Production, Consumption, Distribution and Level of Income and Employment.

1. Effects on Production: Public debts are raised to finance productive enterprises of various kinds, e.g., steel works, cement, multipurpose products, construction of ships, railway lines and highways, heavy electrical and engineering works, mining, oil refining, etc.
2. Effects on Consumption: When people subscribe to government loans, they generally have to curtail consumption. Since investment of funds raised by borrowing raises the level of employment and as a result raises the level of consumption.
3. Effects on Distribution: Public loans transfer money from rich to government. The fiscal operations of the government are to benefit the poor primary. The incomes of the poor increase directly through increased employment or it benefit them in directly through the enlargement of social service.
4. Effect on the Level of Income and Employment: In modern times, public borrowing is resorted to in order to raise funds for financing agriculture, industry, mining, transportation, communication, etc. it increases employment opportunities, the level of income and standard of living.

2.2. Theoretical Review

Though a lot of theoretical contributions have been made the article is focused on the DUAL GAP THEORY. Most times shortfall exits between the level of savings and investment and borrowed funds is used to close this gap (Omonuyi, 2015). This means that the motive behind public debt is to close the lack of savings so as to have increased investment and economic growth. The Gap theory is of the view that the development of a nation is a function of investment and savings may not always be enough to take care of the interest. In his own view Akpoko (2005), the dual-gap analysis provides the framework which shows that the development of a nation is a function of investment and that such investment which requires domestic savings is not sufficient to ensure that development takes place. According to (Oloyde, 2002), the importance of external debt on the growth process of a nation cannot be overemphasized. Hameed, Ashraf, and Chaudhary (2008) stated that external borrowing is ought to accelerate economic growth especially when domestic financial resources are inadequate and need to be supplemented with funds abroad.

Since external debt is a source of public receipts, its accumulation should not signify slow economic growth. It is a country's inability to meet its debt obligation compounded by the lack of information on the nature, structure and magnitude of external debt that result to slow growth, (Were, 2001). In his view, Soludo (2003) opined that countries borrow for two broad categories: macroeconomic reasons to either finance higher investment or higher consumption and to circumvent hard budget constraint. This implies that an economy borrows to boost economic growth and alleviate poverty. He argued that when debt reaches a certain level it begins to have adverse effect, debt servicing becomes a huge burden and countries find themselves on the wrong side of the debt-ladder curve, with debt crowding out investment and growth. The debt service burden has militated against Nigeria's rapid economic development and worsened the social problems (Audu, 2004).

2.3 Empirical Review

There have been several researches to analyze the effect of public debt on the economy. For instance, Faraji and Makame (2013) researched on the impact of external debt on the economic growth of Tanzainia. The study adopted a time service approach, using ordinary least square for analysis finding established an impact between external debt and GDP growth.

Ejiayehu (2018), Studied on the effect of external debt on the economic growth of eight indebted nations of Benin, Ethiopia, Mali, Madagasear, Mozambique, Senegal, Tanzania and Uganda. The study used a panel data concerning 1991 -2010. The Gross – Sectional regression model was used. Finding showed that external debt has effect on the economies of these countries the study recommended that there should be political and economic stability for effective management of the debts.

In his study, Ogunuyiwa (2017) studied whether external debts promote economic growth in Nigeria. The study adopted the regression analysis with Error correction model. The finding showed that there is no causality between external debt and economic growth in Nigeria. In his study, Panagiotis (2018) examined the 'Nexus between Public Debt and the Determinants of Economic Growth' using such proxies as private and government consumptions, investment etc in Greece. To determine whether the variables are stationary or not, the study adopted unit root tests and Auto-regressive Distributed Lag (ARDL) model to determine the long run relationship among the variables. While the unit root tests showed both order zero and order one among the variables, the ARDL model showed that there is long-run relationship; trade openness indicated positive effects on economic growth and public debt and population growth indicated negative effect on the dependent variable (economic growth). The findings also showed that there is break effects between public debt and economic growth, which means that there is nexus between debt and economic growth is a function of debt breaks.

In their study, Alenjandro and Ifeana (2017) investigated 'The Impact of Government Debt on Gross Domestic Product in 16 Latin American Economies' for the period 1960-2015. The study adopted a Two-Stage Least Squares

(2-SLS) in the analysis. From the findings, debt has a positive effect on GDP growth and showed a declining effect to zero beyond public debt-to-GDP and stimulating impact on growth after a given level.

Nassir and Wani (2016) in their research studied the 'Relationship between Public Debt and Economic Growth in Afghanistan for the Period 2008-2012' adopting Analysis of Variance (ANOVA) in the test of hypotheses. From the result, government stock, Advances from commercial banks and external debt showed negative and insignificant impact on the Gross Domestic Product (GDP) in Afghanistan. The study recommended for the government to develop a policy for recording, monitoring and management of contingent liabilities.

In their research, Isaac and Rosa (2016), investigated 'The Effect of Public Debt and Public Investments on Economic Growth in Mexico' and this covers the period of 1993-2012. The analysis adopted panel data model and the generalized method of moments. The empirical results showed a positive impact of public debt a on public investment and economic growth in the economy.

In his study, Naeem (2015) investigated 'The Consequences of Public Debt for Economic Growth in the Philippines for the period of 1975-2010 and the study used the Autoregressive Distributed Lag analytical tool in data analysis. The findings reveal that public external debt negatively and significantly impact on the economic growth and investment of the country. The study also did not state if there is existence of crowding out hypothesis since debt servicing revealed significant relationships with investment and economic growth in the economy. The study also indicated that domestic debt had a negative influence on the investment and positive effect on economic growth. The study recommended the developing countries should formulate policies that will reduce their debt burdens.

3. Methodology

3.1 Research Design

This study employs the multiple linear regression design to form the main procedure in this work. The data used were secondary ones and no attempt was made to control or manipulate them. The aim was to determine and measure the effect of the independent variables on the dependent variable. The Ordinary Least Square (OLS) technique is chosen because of its computational simplicity and possession of some desirable statistical properties such as linearity, unbiasedness, minimum variance, etc (Koutsoyiannis, 2003 and Gujarati, 2005).

3.2 Method of data collection

Secondary data of the variables will be used and they include, economic growth proxied as gross domestic product and public debts proxied as external debts and internal debts. These data will be collected from the Central Bank of Nigeria and the Bureau of Statistics for the period under study, 1992-2019. The unit of measurement for external debts, internal debts and GDP will be the naira, while the unit of measurement for interest rate will be percentage.

3.3 Method of data analysis

The study adopted a quantitative technique based on established studies and methodologies. In order to test for the hypotheses, the following were adopted: A multiple regression model applying Ordinary Least Square (OLS) regression analysis, unit root test, to test for the stationarity of the variables; the co-integration and Granger causality test. The need for these tests was to overcome some challenges in econometric application like the issue of subjectivity and bias of response as it is not easy incorporating these challenges into econometric model.

3.4. Model Specification

The aim of this study is to know whether public debts has contributed positively or negatively to the economic growth of Nigeria, so the researcher will use econometric model (multiple regression) and followed Eigbiremolen and Anaduaka (2014); Jegede, Kehinde and Babtunde (2011); Khandker (1998) models, with modifications. The study will use one multiple regression model, with external debts, internal debts and interest rate as the independent variables while Gross Domestic Product will form the dependent variable in the model.

The model captured the impact of public debts financing on economic growth in Nigeria as stated below:
GDP = a_o+a_1ERD + a_2 1PD + a3INT +...Ui
Where GDP = Gross Domestic Product
EPD = External Public Debt
IPD = Internal Public Debt
INT= Interest Rate
a_o,a_1,a_2 = Coefficient
u = Arising error term.

3.5 Description of the variables

The dependent variable was economic growth, proxied as Gross Domestic Product (GDP), while the independent variables are external debts, internal debts and interest rate on debts between 1992-2019.

3.6 Justification of the Variables

The dependent variable is Gross domestic product and it is used as a proxy for economic growth. GDP will be used because it measures the value of goods and services in a particular country for a period. This is to establish the extent public debts have contributed to the economic growth of Nigeria. GDP can serve as a measure of prosperity and a measure of income earned by a country in a certain area (Wikipedia, 2014).

The independent variables, public debts proxied as: external debts, internal debts and interest rate. The external debts will help to measure the extent borrowings from outside Nigeria have contributed to economic growth while internal debts will help to establish the extent borrowings within the Nigeria have contributed to the GDP of Nigeria. Cost of credit or interest rate no doubt affects borrowed funds. High interest rate will likely reduce the demand for micro credit thereby negatively affecting economic growth, while low interest will likely help the growth of businesses. These variables will help to explain the objectives of the government economic policies.

3.7 Test of Validity and Reliability

To adudge the regression model efficient, the following tests will be conducted so as to ascertain the linearity or otherwise and the independence of the arising error term of the model: the F-test described the significance of the explanation provided by the model as a whole. The T-test will test the significance of the contributions made by each explanatory variable in the model.

The time series properties of the variables will be determined so as to establish the stationarity or otherwise of the variables. The unit root test will be conducted, using the Augmented Dickey-Fuller (ADF) test. Cointegration will be used to ascertain the long-term relationship between the variables. The Durbin - Waton test will be used to establish whether there is presence of auto correlation in the model. Statistical descriptive test will establish the characteristics of the research variables such as the regression coefficient, T-statistic, probability, R-squared, Adjusted R-squared, F-statistic and Granger Causality test, using Akaike Information Criterion (AIC).

To test for the validity of each of the three hypotheses, the research will consider the size of each of the selected independent variables. Essentially, the decision rule will be to conclude the existence of significant relationship between the dependent and independent variables if the probability of the t-values is less than 0.05 at 5% level of significance.

DECISION RULE

If Calculated T-Statistic > Tabulated T-Statistic, reject the null hypothesis and conclude that the regression coefficient is statistically significant. Otherwise accept the null hypothesis.

4. Data Presentation and Analysis

4.1. Results and Discussion of Effect of Public Debt on Economic Growth

Table 4.1: Regression Coefficients of GDP and Public debts, $n = 29$ (1992-2020)

Variables	Unstandardized Coefficients		Test Statistic t	P-value
	B	Std. Error		
(Constant)	17914.095	4234.616	4.230	0.000
External Debt	-0.830	0.530	-1.566	0.130
Internal Debt	9.968	0.333	29.935	0.000
Interest Rate	-938.132	289.093	-3.245	0.003

The results of Table 4.1 show that the effect of external debt on economic growth (GDP) is -0.830 indicating that 1 Billion Naira borrowed causes a N830 Million reduction in the GDP economic growth of Nigeria. The test statistic for the external debt is -1.566, which is not significant at 5% significance level as its p-value is 0.130. Thus, we say that the reduction effect that external debt has on Nigeria GDP is not significantly at 5% significance level. The effect of internal debt of Nigerian GDP is 9.968 with the test statistic value of29.935, which is statistically significant at above 0.01% level against a two-sided alternative. This indicates that 1 Billion Naira borrowed internally causes a N9.968 Billion increase in the GDP economic growth of Nigeria for the period under review. The effect of interest rate on the GDP is found to be significant and negative. A 938% reduction in the interest rate is needed to give 1 Billion Naira reduction in the GDP economic growth of Nigeria. The associated test statistic value is -3.245 with a p-value of 0.003, that is, the effect of interest rate is negatively significant at 0.3%.

Table 4.2: Coefficient of Determination and Durbin-Watson statistic

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0.994	0.989	0.988	5341.8802	1.168

The results of Table 4.2 show that the multiple correlation coefficient, R is 0.994, the multiple coefficient of determination, R^2 is 0.989 and adjusted R Square is 0.988 indicating that the combined effect of External debt, internal debt and interest rate explain 98.8% of the variation in GDP. And this highly statistically significant at 0.02%. The Durbin-Watson statistic shows that there is no serial correlation in the residual as DW =1.168 $< d_L =$ 1.198 and does not lie between the d_L of 1.198 and d_U of 1.650 for $n = 29$ and $k' = 3$ (number of explanatory variables).

4.2. Residual Diagnostics

The standardized residual is used to conduct key diagnostics tests which include stationary test and normality test. The time series plot of the standardized residual is given in Figure 4.1andAutocorrelation Function for Standardized Residual given in Figure 4.2 show that the standardized residual is stationary, indicating that the regression model used in this study modeled the economic growth very well because the left over in the residual is a white noise.

Figure 4.1: Time series plot of the standardized residual

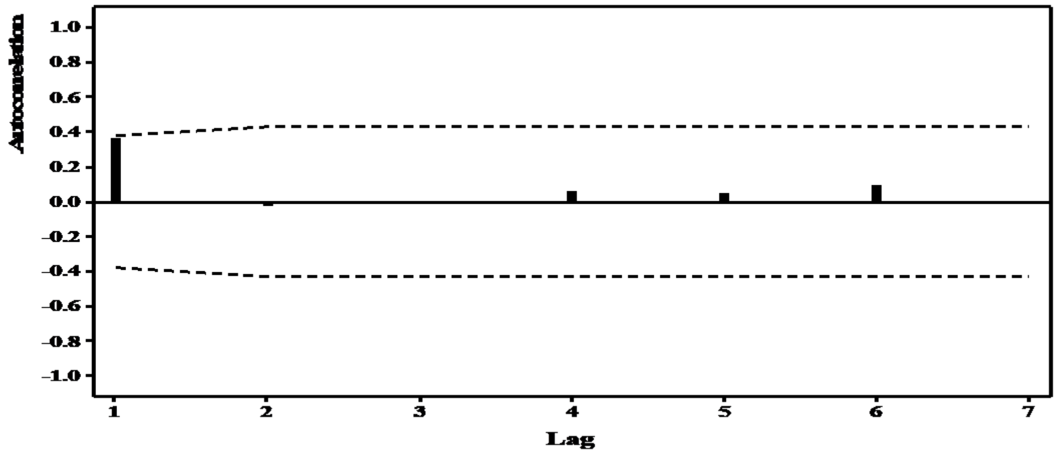

Figure 4.2: Autocorrelation Function for Standardized Residual with 5% significance limits.

Table 3: Unit toot and Stationarity test and Normality of Standardized Residual (SRED)

Model Selection Criteria	H_0: SRED has a unit root		H_0: SRED is Stationary	H_0: SRED is Normal
	ADF Tests	PP Tests	KPSS	Jarque-Bera
Test statistic	-3.494	-3.366	0.206	1.263
P-value	0.016	0.021	5% critical value = 0.453	0.532

Note: ADF, PP and KPSS tests are performed for the model with the intercept only as the time series plot indicates.

The 3 tests of unit toot and stationarity (ADF, PP and KPSS) shown in Table 3confirm that the standardized residual (SRED)of the predicted model is stationary and has no unit root and the test for normality done using Jarque-Bera confirms that the standardized residual is normality distributed.

Johansen cointegration

H0: There is no cointegration equation between GDP, External debt, internal debt and interest rate
(There is no long-run relation between GDP, External debt, internal debt and interest rate)
H1: There are cointegrating equations between GDP, External debt, internal debt and interest rate
(There is a long-run relation between GDP, External debt, internal debt and interest rate)

The stationary test is presented in Table 4 below:

Table 4: ADF Unit root test for trend and intercept H_0: Series has unit root

Series	Exogenous terms included in the model (None, Intercept only, Trend and Intercept)					Order	Remark
	Terms included in the model	Test statistic	1% crit value	5% crit value	10% crit value		
Lngdp	Trend&Intercept	-5.727	-4.374	-3.603	-3.238	I(1)	Stationary
Inextdebt	Intercept only	-3.587	-3.700	-2.976	-2.627	I(1)	Stationary
Inintdebt	Intercept only	-4.273	-4.339	-3.588	-3.229	I(1)	Stationary
Inintrate	Trend&Intercept	-7.068	-4.339	-3.588	-3.229	I(1)	Stationary

Source: Author's computation using EViews 10 Edition

The unit root test of the variables was done using the Augmented Dickey-Fuller (ADF) test to determine the stationary of the series and the results as given in Table 4. The results reveal that Ingdp, Inextdebt, Inintdebtand Inintrate are stationary at first difference i.e., I(1).

Table 5a: Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigen Value	Trace Statistic	0.05 critical value	Prob.**
None *	0.857033	100.1841	47.85613	0.0000
At most 1 *	0.770461	51.55557	29.79707	0.0000
At most 2	0.436395	14.76354	15.49471	0.0642
At most 3	0.016994	0.428498	3.841466	0.5127

Table 5b: Unrestricted Cointegration Rank Tests (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigen Value	Max-Eigen Statistic	0.05 critical value	Prob.**
None *	0.857033	48.62856	27.58434	0
At most 1 *	0.770461	36.79203	21.13162	0.0002
At most 2 *	0.436395	14.33505	14.2646	0.0487
At most 3	0.016994	0.428498	3.841466	0.5127

The results of the Trace test indicate that there are two cointegrating equations at the 0.05 level, indicating that we reject the hypothesis at the 0.05 level. Therefore, there are cointegrating equations between Ingdp, Inextdebt, Inintdebt and Inintrate, that is there is a long-run relation between gdp, external debt, internal debt and interest rate. The results of the Max-Eigen

Statistic test indicate that there are three cointegrating equations at the 0.05 level, confirming that we reject the hypothesis at the 0.05 level. Therefore, there are 3 cointegrating equations between Ingdp, Inextdebt, Inintdebt and Inintrate, that is there is a long-run relation between gdp, external debt, internal debt and interest rate. Also, even if there are shocks in the short run which may affect movement in the individual series, they would converge with time in the long run.

Table 6: Normalized cointegrating coefficients

Variable	lngdp	lnextdebt	lnintdebt	lnintrate
Coefficient	1	-0.337954	3.8411	14.3009
Standard error	-	0.62498	0.48533	2.56774
Test statistic	-	-0.54074	7.914405	5.569466

The result of table 6 shows that in the long run lnextdebt has a negative impact on lngdp, though the impact is not significant at 5% significance level as its test statistic of -0.54074is significantly less than one. Lnintdebt has a positive impact on lngdp and the impact is highly significant at 5% significance level as its test statistic of 7.914405 is significantly greater thanunity. Lnintrate has a positive impact on lngdp and the impact is highly significant at 5% significance level as its test statistic of 5.569466is significantly greater than unity. All these results are in the long run ceteris paribus.

Hence, we proceed to estimate the VECM.

Table 7: vector error correction model

Error Correction:	D(LNGDP)	D(LNEXTDEBT)	D(LNINTDEBT)	D(LNINRATE)
CointEq1	0.065100 (0.02304) [2.82533]	0.004624 (0.15423) [0.02998]	-0.07076 (0.02642) [-2.67822]	-0.10663 (0.06565) [-1.62413]
D(LNGDP(-1))	0.037894 (0.21429) [0.17684]	-2.62945 (1.43434) [-1.83322]	-0.35046 (0.24570) [-1.42638]	-0.52474 (0.61057) [-0.85942]
D(LNGDP(-2))	0.507098 (0.16851) [3.00926]	-0.89828 (1.12794) [-0.79638]	-0.18814 (0.19321) [-0.97375]	-0.28911 (0.48015) [-0.60213]
D(LNEXTDEBT(-1))	0.013162 (0.03786) [0.34768]	0.164987 (0.25340) [0.65110]	-0.05335 (0.04341) [-1.22900]	-0.04299 (0.10787) [-0.39857]
D(LNEXTDEBT(-2))	0.040076 (0.03649) [1.09817]	-0.20562 (0.24427) [-0.84177]	0.002278 (0.04184) [0.05445]	0.082518 (0.10398) [0.79359]
D(LNINTDEBT(-1))	0.760794 (0.17686) [4.30178]	-0.63347 (1.18379) [-0.53512]	-0.18596 (0.20278) [-0.91707]	-0.18281 (0.50392) [-0.36278]
D(LNINTDEBT(-2))	0.181888 (0.17252) [1.05429]	2.067632 (1.15478) [1.79049]	-0.02925 (0.19781) [-0.14788]	0.655103 (0.49157) [1.33267]
D(LNINRATE(-1))	-0.24518 (0.09565) [-2.56335]	-0.28686 (0.64023) [-0.44806]	0.082941 (0.10967) [0.75628]	0.003663 (0.27253) [0.01344]
D(LNINRATE(-2))	-0.11024 (0.07879) [-1.39909]	-0.18237 (0.52741) [-0.34578]	0.107401 (0.09034) [1.18880]	-0.10129 (0.22451) [-0.45114]
C	-0.08994 (0.04751) [-1.89305]	0.518179 (0.31802) [1.62939]	0.282474 (0.05448) [5.18530]	0.060189 (0.13538) [0.44461]
R-squared	0.724770	0.392701	0.553252	0.423886
Adj. R-squared	0.569953	0.051096	0.301957	0.099821
Sum sq. resids	0.086688	3.883907	0.113964	0.703787
S.E. equation	0.073607	0.492691	0.084396	0.209730
F-statistic	4.681466	1.149575	2.201599	1.308029
Log likelihood	37.25358	-12.1761	33.69725	10.02949
Akaike AIC	-2.09643	1.705853	-1.82287	-0.00227
Schwarz SC	-1.61255	2.189736	-1.33898	0.481615

Mean dependent	0.171857	0.114410	0.141215	-0.00617
S.D. dependent	0.112244	0.505782	0.101014	0.221053
Determinant resid covariance (dof adj.)	1.71E-07			
Determinant resid covariance	2.45E-08			
Log likelihood	80.25000			
Akaike information criterion	-2.78846			
Schwarz criterion	-0.65938			
Number of coefficients	44			

Table 8: vector error correction model system equation

Vecm model parameter		Coefficient	Std error	t-statistic	Prob
C(1)	CointEq1	0.065100	0.02304	2.82533	0.0045
C(2)	D(LNGDP(-1))	0.037894	0.21429	0.17684	0.4305
C(3)	D(LNGDP(-2))	0.507098	0.16851	3.00926	0.0029
C(4)	D(LNEXTDEBT(-1))	0.013162	0.03786	0.34768	0.3654
C(5)	D(LNEXTDEBT(-2))	0.040076	0.03649	1.09817	0.1411
C(6)	D(LNINTDEBT(-1))	0.760794	0.17686	4.30178	0.0001
C(7)	D(LNINTDEBT(-2))	0.181888	0.17252	1.05429	0.1507
C(8)	D(LNINRATE(-1))	-0.24518	0.09565	-2.56335	0.0082
C(9)	D(LNINRATE(-2))	-0.11024	0.07879	-1.39909	0.0868

The results of tables 7 and 8 show the vector error correction model and system. The coefficient C(1) is the error correction term which is the short run correction of the model, indicating that the model can correct any short run shock to the system by 6.5%, that is The previous year's deviation from long run equilibrium is corrected at a speed of 6.5% in the short run. The coefficient C(2) is the effect of the differenced GDP at lag 1, indicating that the impact of the difference of present GDP and its one last period gives about 3.8% effect in the short run, that is, a percentage change in GDP is associated with a 3.8 % increase in difference of GDP in the first lag on average ceteris paribus in the short run.

Year	GDP	External Debt	Internal Debt	Interest Rate
1992	906.03	544.26	177.96	17.50
1993	1257.17	633.14	273.84	26.00
1994	1768.79	648.81	407.58	13.50
1995	3100.24	716.87	477.73	13.50
1996	4086.07	617.32	419.98	13.50
1997	4418.71	595.93	501.75	13.50
1998	4805.16	633.02	560.83	13.50
1999	5482.35	2577.37	794.81	18.00
2000	7062.75	3097.38	898.25	14.00
2001	8234.49	3176.29	1016.97	20.50
2002	11501.45	3932.88	1166.00	16.50
2003	13556.97	4478.33	1329.68	15.00
2004	18124.06	4890.27	1370.33	15.00

2005	23121.88	2695.07	1525.91	13.00
2006	30375.18	451.46	1753.26	10.00
2007	34675.94	438.89	2169.64	9.50
2008	39954.21	523.25	2320.31	9.75
2009	43461.46	590.44	3228.03	6.00
2010	55469.35	689.84	4551.82	6.25
2011	63713.36	896.85	5622.84	12.00
2012	72599.63	1026.90	6537.54	12.00
2013	81009.96	1387.33	7118.98	12.00
2014	90136.98	1631.50	7904.03	13.00
2015	95177.74	2111.51	8837.00	11.00
2016	102575.42	3478.91	11058.20	14.00
2017	114899.25	5787.51	12589.49	14.00
2018	129086.91	7759.20	12774.40	14.00
2019	145639.14	9022.42	14272.64	13.50
2020	154252.32	12705.62	16023.89	11.50

5. Summary of Findings, Conclusion and Recommendations

5.1. Summary of Research Findings

Findings emanating from this study are as follows:

i. From the test of hypothesis one, external debt had significant negative impact on economic growth of Nigeria. This was confirmed through the use of P-value (0.1300) which is less than 5% level of significance;

ii. From hypothesis two, the internal debt in Nigeria coefficient stands at 0.333. with a t-statistics of 29.935 while probability value is 0.0000. This shows that the internal debt is significant. This means there is significant effect of liquidity ratio on economic growth of Nigeria.

iii. The equation in the third model regressed GDP on interest rate. The regression coefficient carries negative sign and its t-value (-3.245) is statistical and per value 0.003 significant at 5% level. This implies that interest rate affects the GDP significantly.

iv. There is high cost of borrowing banks. The high interest rate usually arises from the fact that banks source their funds from market which is not cheap.

v. That decrease in external debt results to economic growth reflect by the level of economic activities. As more credits are made available to investor, there is increased economic growth.

vi. Economic growth remains the major targets of the government and monetary authorities. The level of internal debt remains one of the determinant factors of economic growth. Again, the attainment of high level of accessibility, loan repayment and banking habit depend on the strength and stability of the monetary policy, evidenced by capital adequacy, assets quality technological customer-oriented products.

5.2. Policy Implication of the findings

This study has examined the effects of public debts on economic growth of Nigeria. Results from study confirmed previous evidence obtained by number researchers on public debt in the economy. The findings of this study signify that the variables used for this are the major variables used for economic growth and public debt in Nigeria compared with other emerging economies in the world. Despite the achievement of public debt in transforming the economy there have been difficulties like interest rates policy inconsistency, abuses and fraudulent practices government officials, global economic crisis and inept regulatory abilities among others. Consequently, since public debt have made significant contributions to economic growth of Nigeria, government need to been strengthened in terms of better capital base, skilled manpower, increase of size of loan, effective management, enabling polices and operational guidelines. This means that public debt will contribute immensely to the economic growth of Nigeria if public debts are well managed and channeled to areas of needs.

6. Conclusion

The growth of the economy affects the economic development of the Nigerian population. In the work 0f Orji (2017) who reported that 40 percent of the budgets are financed through debts while the remaining 60% come through other source like tax. John (2003) opines that a new method of providing credit is through effective fiscal policy operation. This study examined the effect of fiscal policy on economic growth of Nigeria. The multiple regression results reveal that about 55% of the systematic variation in the economic growth is explained by the three independent variables i.e. external debt, internal debt, interest rate, The P value is significant at the 5% level showing that there is a positive relationship between the economic growth and the independent variables. On the basis of apriori expectation, the coefficients of all the variables except internal debt have negative signs. In fact, a unit decrease in the external debt will increase the level of economic growth. The implication is that the economic growth responds favorably to measures taken to decrease external debt.

Based on the findings of this study, we have come to the conclusion that there is a significant positive effect of public debts on the economic growth in Nigeria. This means that if the public debt can help in to grow the economic growth if well managed.

7. Recommendations

In order to improve on the effectiveness of public debt in Nigeria, the following recommendations are made:

1. In order to increase public debt for economic growth, the government should make such policies that encourage vicious use of the loans. The economy should be classified into tiers, which are “first tier”, and “second tier”, while the first tier is used to describe the local government area, the second tire should describe the states. while the first-tier for the federal government. This will help to spend out how the borrowed money is spent.
2. Central Bank of Nigeria (CBN) should lower interest rate for local borrowings to make loan more attractive and productive to the economy.
3. In order to increase the availability of loans the government should give incentives to banks soft loans to reduce cost of obtaining fund that will be used by governments. This will result to reducing high level of risk associated with loans repayment delinquency.
4. It is obvious that public debt administration relies on data gathered from the market as such effort should be made to ensure that the data are never manipulated. Money authorities should be discouraged from manufacturing data in homes and offices.
5. Government should be serious by providing good infrastructure like electricity, road, water etc. They should be able to create the enabling environment for the public debt to flourish. The poor states of these facilities make the cost of business very high. Economic growth will continue to be a mirage until government starts living up to her responsibilities.
6. The size of internal loans should be increased for income to increase and in turn reduce poverty level in the country.
7. Regulatory authorities should involve other economic operators in the fiscal policy formulation and put up measures to increase the awareness of monetary policy among the people.
8. There should be the involvement of traditional rulers, town criers, age grade leaders. to bring out the needs of the rural areas. This will help to source for reliable data.
9. There should be a more serious regulatory framework. The frequent review of the fiscal policy framework of the government and the poor infrastructure enough sign that there are still loopholes in the regulatory framework. The regulatory authorities should be able to conduct effective supervisions (both on -site and off-site) so as to identify early symptoms of economic decay.

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Opportunities and Constraints Confronting transformation Towards a Green Economy in the Developing Countries

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Abstract
In the growing economy of developing countries, the environment is getting unsustainable. There is the requirement of goals that are standardized and complementary for the promotion of Green Economy Growth and developed the constraints confronting transformation and providing opportunities. Industrial civilization and inorganic products erode the healthy pathway. World global policies initiated the transformation of the planet as the result of the "Green go Economy". This platform is an alternate vision for that developing countries' growth and development which are facing climate change, biodiversity losses, water scarcity, and negative externalities. This study aims to assess the effect of environmental factors quality of living standards, opportunities, and constraints confronting transformation towards a green economy in developing countries. The study measured the dimensions and principles of the "green economy" as a base for additional society development. The several challenges to initiating a green economy and achieving sustainable technological change need to be understood by professionals and policymakers to make adequate changes in the social setting. Effective influence on the level of echo of several important phenomena was implemented for the aspirational transformation of economic and environmental measurement. The recent developments are improving cheap, faster broader frameworks for measuring socio-economic environmental interactions. In the light of UNEP, OECD, and UN policies all the issues, challenges, and critics of the green economy that developing countries are facing are positively analyzed for promoting the green economy for sustainable development and maintaining a long-term relationship between environment and economic growth. The reviewer has many objectives for better improvement of measures in Green economy transformation. The study contributes towards the green economy development over a policy to decrease the environmental risks and progress economic growth. The study concludes that better investment in green product GDP, better interaction in the economy society environment, and ecosystem, and better economic transformation methodologies of the green economy will attain attention for a better future in developing countries.

Keywords: Ecological Scarcities, Poverty, Biodiversity, Low Carbon World, Organic Products, Green Economy, Sustainable Development

1. Introduction

The Green Economy concept was introduced by (UN) the United Nations Environment Program for improving social equity and human well–being, and to reduce ecological scarcities and environmental risks. It is considered a new approach that can promote environmentally sustainable economic development (Fedrigo-Fazio, & ten Brink, 2012). The project of the green economy has many advantages but it has been utilized for limited purposes like low greenhouse gas emissions. The technique and design adopted for this project have utilized the resources more efficiently. This has given a big contribution to generating, income and jobs to observe social equity and inclusiveness (UNEP, n.d.a).

According to the report of the Organization for Economic Co-operation and Development (OECD), the term "Go green" and "Green growth" has been introduced by the Growth institute. This organization have a different implementation approach. The definition presented by ***OECD*** was "Green growth as enhancing economic growth and development", along with natural assets ensuring to provide the environmental services and resources for the country's well-being (OECD, n.d.a). The question of the era is if efficiency and saving of this world in developing countries are required and how the individual can take initiative to develop. The basic development of nature or human beings starts with basic needs such as food, shelter, energy clothing, and transport. Without these significant goods and services, it is not possible to minimize the ratio of poverty. The green economy drives the concept of the GDP (Gross Domestic Product) and jobs by generating capital income towards technologies and natural resources through which social institutions are shifting. The green economy plan/design targets the social dimension, and private investment institutions to support social reform policies. The green economy aims to emphasize the economy, capital/infrastructure, positive social/environmental outcomes, investment, and employment (Figure 1).

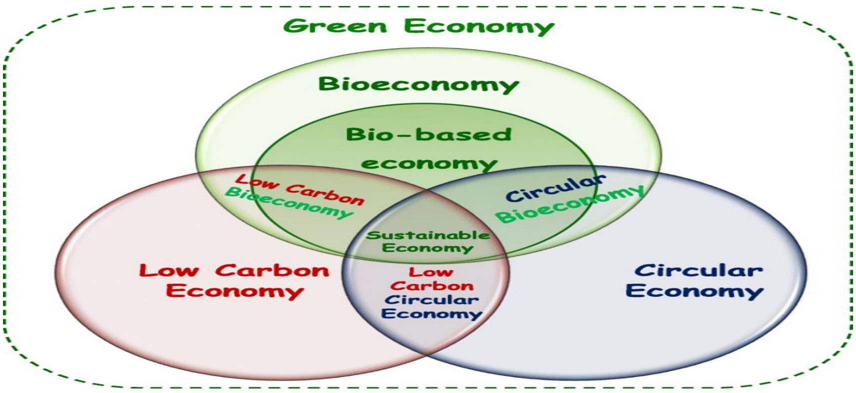

Figure 1: Venn diagram depicting various economies in the green economy

Source: Kardung and Wesseler (2019); Dahiya, et al. (2020)

2. Literature Review

The literature on Green growth and economic associations with sustainability addresses economic and industrial policies for various series of innovations and wealth. Among International organizations, the United Nations Environment Programme (UNEP) has been engaged in determining and encouraging the green economy. Their means are to create jobs and reduce poverty. The consequences arise in better-quality human well-being and social equity. The main outcome has been dropping ecological insufficiencies and environmentally friendly risks (UNEP, 2011). Around 191 UN members gathered in Rio at the UN Conference on Sustainable Development for the discussion of various crises in developing new plans for economic growth. The discussions done during this meeting turned into an International concept (Linnér and Selin, 2013; UNDESA/UNDP, 2012). The prosperity of documents and encouragement-driven assessments were introduced during increasing of Rio+20 to explain the Earth's environment, its assets, and its populations. Moreover, the ecological crisis remains to deteriorate, despite sectoral developments. Although there had been variations in symbols and outlooks (EEA, 2012; The Royal Society, 2012). Rio+20 is considered a great transformation and shows extraordinary uprising in various directions of sustainable development (IISD, 2012). Rio+20 was called by UN General Assembly to describe two aspects: the role of the green economy in poverty extermination and sustainable development. The major focus is on the international organization, and politicians in industrialized countries and the essential of strengthening GDP growth for creating jobs (Meltzer et al, 2013).

In the indeterminate retrieval of the worldwide economy, governments established economies for developing countries, together with the UN and civil society performers. They can figure out a circumstance for a green economy. The Eco industry developed the low carbon framework to produce environmentally friendly products to reconstruct a country's whole economy (Barbier, 2012). There is an increase in 'competence productivity' or 'low-carbon economies', which has been considered to be the intersecting point at times (UNEP and CSIRO, 2011). These degree variables emphasize well-researched dematerialization, resource decoupling (UNEP, 2011a), ecosystem services appreciation (Nellemann and Corcoran, 2010), and energy competence (IEA, 2012). Underestimating usual capital also has been insinuations outside the economic ineffectiveness. It indicates both growth and deference in human welfare (OECD, 2011), which has been progressively documented by international and national organizations (MEA, 2005). Furthermore, scholars relate green growth and economy to the talented variations in the Eco industry segments, built inexpensive markets, and unstable environmental security technology to reserve exchangeable technologies (Jänicke, 2012). A collective interest in reviewing lifestyles has noted many circumstances which have been; sustainable consumption programs, the classic separation of individualists, the adaptation of universal methodologies, and the role of technical and social factors (Backhaus et al, 2012).

Tariq Banuri attended the Separation for Sustainable Development at the United Nations through Rio+20 after the suggestion to emphasize the green economy (Zarro, 2012). His words at a conference on Development (Zarro, 2012) convey life quantity of thinking after the suggestion to emphasize the green economy. The argument throughout Rio+20's discussion has deviating significances. These deviations have been observed in industrialized and developing unindustrialized nations since 1972 (Griffin, 2012). During this, Bolivia communicated with "uncertainties concerning all relevance to the green economy and any clarification for modification purposes and cycles of nature" (IISD, 2012b). Thus, confidence that Rio would change towards a green economy was diverged by reservations along with the emerging economies to execute a one-model-fits-all approach (Watts and Ford, 2012).

3. Methodology

This study examines the predictable developments to access sustainability signs. With their response to basic interdependence, there have been ecological and socio-economic crises. This study aims to appreciate and differences between suggestions limited in increasing literature and policies. This investigation approves an organized qualitative examination and documented material. The term 'discourses' has been used to mention the expectations, decisions, and arguments that "hypothesis relationships, helping to describe common sense and valid knowledge" (Dryzek, 2005). This will encourage the qualitative analysis of three features supporting the socioeconomic model, theoretical economic background, and conception of progress. The corresponding reflects after the examination of inspiration for the economic directions of sustainable development on the environment and society. This has been an encouraging factor for the distinction between strong and weak origins of sustainability (Ekins et al, 2003; Neumayer, 2003; Endl et al, 2012; Hobson, 2013). From this examination, three patterns develop—explaining the lacks and restrictions, means, and reductionism separation) and the agreement involved or excluded from the papers on greening economies; these lighten up more differences between the three groups and greening about sustainable development.

4. Dimensions of Green Economy

The health of the Earth's population has been the priority of the green economy and is interlinked with SDG (sustainable development goal) for implementing green initiatives. It also helps countries to achieve multiple sustainable development goals (Kim, 2018).

The green economy enclosed the nutshell message of the dynamic course of economic convergence in the dimension of least-carbon industrialization. The power to gain resource allocation and standard of living throughout the population by using inventions that can generate new jobs while cutting off risks exposure in the long run (Frone & Frone, 2015) (Figure 2).

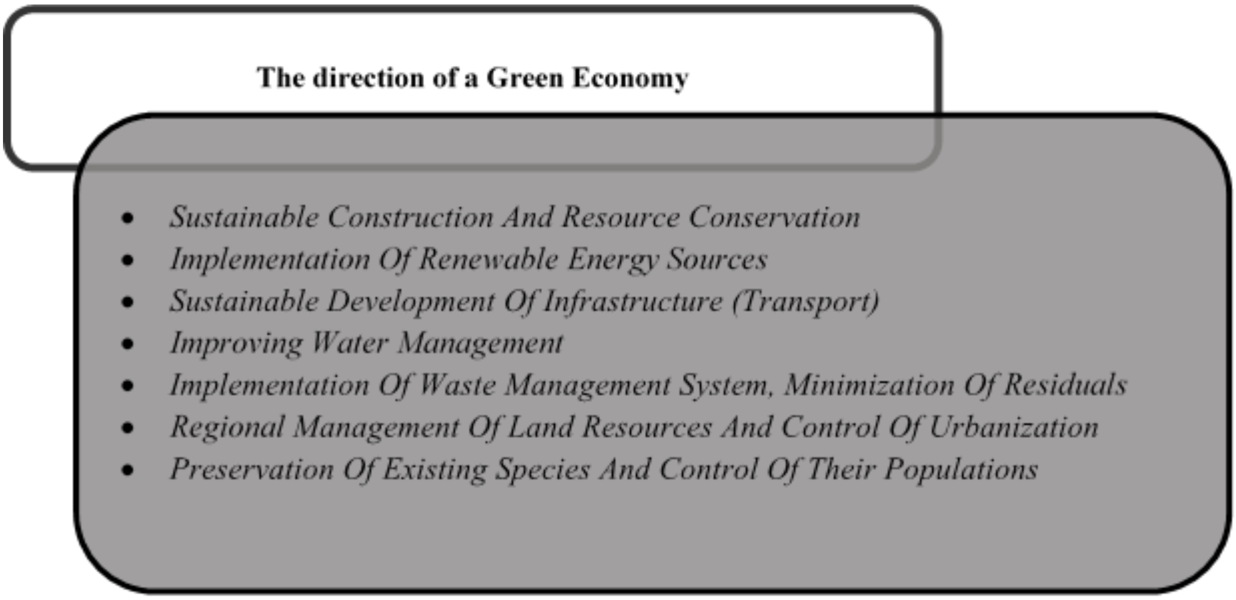

Figure 2: Direction of green economy

Source: Frone & Frone (2015)

4.1. SDG 3: Good health and well-being

The SDG 3 targets have to implement major investments in the environmental and energy sector to create job opportunities and render universal access to affordable vaccines and medicines. This will help in increasing health financing and supporting the health workforce in developing countries.

4.2. SDG 16: Peace, justice, and strong institutions

The social and economic advantages of the green economy are supported by interdisciplinary institutes. Their major supplement is; science, economics, and knowledge across sectors by including various community aspects. There is a need for a strong financial system to serve common standards and procedures by promoting local economies.

4.3. SDG 13: Climate action

Climate mitigation and restoration of biodiversity have been the recovery safeguards to restore the economies in the limited natural capital growth of natural systems. The green economy is strongly linked with the cycle of producing, consuming, recycling, and reusing different materials and products.

4.4. SDG 12: Responsible consumption and production

The relationship of the green economy with the circular economy should reduce the consumption of natural resources to sustainable levels. Developmental economies should present nature-saving models and projects to work on future aspects (Kim, 2018).

5. Transition to Green Economy (GE)

The industrial revolution increases natural resource consumption in the future, according to natural resources guidelines which directly disturbed human behavior and would implement significant negative effects on the ecosystem. The significant rise in population sizes and a growing global population leads to a subsequent increase in demand for resources. This leads towards not having sustainable impacts that risk undermining progress. The world’s transition into a green economy has proven the viability and profitability of enhancing this natural capital as a new engine. This platform created the enabling condition incorporating broader environmental and social criteria.

The question arises that why there has been a need for a transition into a green economy. The uncontrolled demands and social factors have been one of the factors to give birth to death, fresh water storage, ecological footprint, and growing unemployment.

The economic system needs more attention and focuses on its policies to do transformation. There has been an increase in resource efficiency, flexibility to overcome environmental pressure, and the leading factors causing risks. This can also be a beneficial transformation toward environmental sustainability (Green Growth Knowledge Platform, 2021).

5.1. What transition is required in Green Economy (GE)?

GE considers the value of natural assets of the environment in planning and decision-making. Economic growth can reduce poverty in low-income countries. The standard of working with the societies of green economy traditional environmental management lay stress on the pollution taxes and high fees. The fear of making or spreading more pollution costly more incentives for new green jobs technologies, opportunities, and investments (IBRD Funding Program; Green Bonds, 2022). Figure 3 shows the relationship of the green economy with various factors like green investment, sustainability, green consumer, green financing, ecological balance, etc.

Figure 3: Green economy and linkage with various factors

Source: Ali (2018)

The green economy concept relates to the ideas of low-carbon development and green growth (Table 2) (UNEP Green Economy Initiative, n.d.b).

Table 2: Concept of a green economy

Green Economy	**Green Growth**	**Low-carbon Development**
A transition towards an economic model considering sustainable generation of equitable social, economic and environmental benefits	The potential of green sectors and industries as engines of growth	The development emphasizes reduced use of fossil fuels as the engine for development (as climate-resilient development)

6. Green Economy: Achieving Sustainable Development in Developing Countries

The developing countries which are about 1.4 billion people have been deprived of electricity and 2.7 billion people utilize traditional biomass for cooking (UNEP, 2011). Governmental policies have been one of the biggest barriers to developing regions. The main reason is to produce vague guidelines for future energy policies, disburse a lack of competitive structures and manipulate the employment structures, such as independent producers face many licensing and trading issues and weak environmental regulation and enforcement (UNEP, 2011). About 18-51 billion unemployment level increased on the planet since 2007. Rising fuel prices in developing countries have a higher expenditure on energy and food. 100 million people have reached the bottom line of poverty (UN, n.d.a). In India, 480 million people (57%) earn their livelihood in small farming, informal forestry, fisheries, and animal husbandry (UN, n.d.a). Arabian Peninsula is facing a 34% loss of irrigation due to land degradation and $5 billion of agricultural revenue per year because of desertification. Uncontrolled climatic changes can destroy the livelihood of developing and developed economies on large scale.

The world faces barriers to attaining sustainability in developing countries. They do not specification to action factors like climate change adaptation, education, agriculture, and providing organizational platforms to fulfil the need of service providers. Another biggest barrier they are facing: is the lack of solid information and the inherent uncertainty according to the surrounding lie nature, timing, and risk of climate change affecting badly the companies to take action. Most companies resist taking steps in developing countries because it is difficult to cover the greatest potential of that investment.

6.1. Steps Taken to Achieve Sustainable Development in Developing Countries

In 1992, Green economy policymakers presented detail-oriented international negotiations including UNCED in Rio to promote the incorporation of economic instruments and multiply environmental costs. Poor countries which are in a struggling process need to develop attention towards the green economy. Only 2% of the total wealth of the organization of economic Co-operation and Development (OECD) countries has provided for environmental health assets (Bierman, 2001).

6.1.1. Objectives of Rio+20 and Agenda 21

Rio 20+ road map established a key thrust to unlock technological progress, in the green economy. It helped to save natural and environmental systems so that economically and socially sustainable trajectory. Rio 20+ has not only working on hard technology for producing goods and services but also on soft technologies for consumption patterns and production processes to adopt in economic lifestyle Rio+20 summits declare that three main threads ***(a)*** Green Economy ***(b)*** Green development ***(c)*** Sustainable development (UNCTD, 2010; Braconier, et al., 2014). The world internationally working on this project are branching into national and international summit and conferences like Agenda 21 which further elaborated the development of national strategies for sustainable development must internalize effective legal. The regulatory organizational structure has been required for more market-effective incentives and established systems for integrated environmental and economic accounting (Ali, 2018).

6.1.2. Education

Education considers to be one of the pillars of sustainable development which relies on the broader, social economic, political, and cultural benefits to empower all people with knowledge, skills, and confidence to give better shape to the future (Smith, 2011; UNESCO, 2010).

6.1.3. Green Growth Policies and Strategies

Green growth policies play an integral role in the structural reform of green economy sustainability.

- Opening new economically productive green markets to stimulate green goods, services, and technologies

- Contributing to fiscal consolidation by generating antipoverty programs such as water supply and sanitation
- By mobilizing the green taxes and implementing cost-effective planning for green product growth
- By reducing risk factors that affect green product agriculture and subsidiary resources (What is sustainability? n.d.).

Figure 4: Integrated policy cycle for three pillars of sustainability

Source: What is sustainability? (n.d.).

7.United Nations Sustainable Development Goals (UNSDG)

UNSDG have set some attainable objectives. Their guidelines have been proven to develop states or countries by maintaining their sustainable platform. These are as mentioned below:

- Economic growth should promote equality and provide sustainable jobs to improve overall nutrition and help eradicate poverty.
- Healthy solutions ensure major physical and mental illnesses for a large portion of the population.
- Ensure inclusive and equitable quality education and a necessary gender equality foundation for a peaceful and sustainable world.
- Affordable supply of energy, and clean and accessible water.
- Sustainable economic growth creates the conditions to have valuable jobs in sustainable cities and communities.
- Infrastructure, reduced inequalities, and responsible production/consumption.
- The climate crisis has been a global challenge affecting everyone that required careful management of the global resource, life on land, combat desertification and halt biodiversity loss.
- Access to justice peace and strong Institutions for revitalizing the global partnership for sustainable development (What is sustainability? n.d.).

8. Green Economy in the Developing Countries – Opportunities and Constraints

Opportunities encouraging the latest innovation of the “green economy” in the world are now transmitted every year. Nevertheless, economics leads to progress and affects their vitality. Industrialized countries with upraised GDP per capita have been frequently applying for environmental conservation programs. Therefore, unindustrialized countries with the least standard of living have been foreigners in innovating new technologies. Rather than expecting one of the problems they are facing by unindustrialized opposition of the state and initiatives to modify technologies and reverse environmental conservation. The industrialized countries have been elaborated for environmental degradation and the lack of strategic ideas, which could not affect the negative implications. It can cumulative effect which can decrease human welfare and the country’s potential. Nonetheless, the developed country has a significant impact of introducing friendly environment technologies and has been complaining about the already recognized standard of living. The constraints confronting the transformation of the green economy in developing countries are how the civil society role models can play in the developing countries and the project “The Future we want” with zero degrees draft will reveal deep conflicts regarding the green economy approach.

- Encourage subsidiaries and financial aid to increase taxes and penalties for non-agreements with recognized standards and minimize the negative impact on the environment.
- Raising the control on the activities of initiatives with environmental impact and ecosystem to be constant.

- Encourage the management and communication skills between the businesses and individuals, creating attractive maps on all sides of developing a "green economy", and generating a quick response sets to criticism.
- Data on production technologies are transparent and affect economic individuals in the ecosystem, against the monopolist market and generating free competition, where the priority is to manage the ecological state and regulate information policy.
- Criticism of the green economy dread the financial support from industrialization-based countries into the green-based economy
- To reduce the poverty and to bring international equality all social dimensions of developing countries should be considered. A lack in any one of the aspects will never make a strong framework.
- Institutional and infra-structure green-based economies are fear full to facing competitors and need to root sustainable protection in the form of Eco-labelling, eco-customs, and eco-taxes. Intellectual property regulators and other barriers encounter the trade established in industrialized countries (Allen, 2012).

9. Confronting Transformation to a Green Economy

9.1. Global governance and its economics

New kinds of governance in developing countries always bring new strategies according to their support system which is sometimes beneficial to life support systems. *Control of pollution in highly populated regime*: Complex economy-wide adjustment use technology to change increase and rapid urbanization of society and transform the industrial revolution. This industrial civilization will fail crucially for social development.

9.2. Behavioral impacts and their effectiveness

Industrial civilization does not only bring reform in technology but it brings change to the energy supply which is not sufficient for the green economy. A green economy cannot build equal good and services to industrial technologies specifically when the customer demand to analyze the shape and its customer's values concerning belief in greener energy products.

9.3. Racial influence and inequalities

In developing countries, many efforts are made to practice racial influence which leads to unsustainable and undesirable behavior transformation in society. Many nations are addicted to conflicts within ethnic groups and subclasses of society (Netzer & Althaus, 2012).

10. Opportunities towards a Green Economy (Developing Countries)

a) **Green Economy Initiative:** According to a report in 2008, (United Nations Environment Programme) UNEP proposed an agenda for the Green Economy Initiative to analyze the investment support in green sectors and for greening resources in highly populated sectors. From 2009 to 2011, The (Global Green New Deal) GGND made a significant share for funding green sectors and made three objectives: (i) Recovery of the state economy (ii) strategy reducing poverty (iii) Reducing CO_2 and ecosystem degradation to support domestic and international policies (Chalil, 2020).

b) **Provision of Green Jobs:** This report was assembled by UNEP world lead forwarding steps in low carbon world sustainability to prove the evidence of existing jobs for the future in the major sectors of renewable energy, building and construction, agricultural, chemical, and paper industry. These jobs are the initiatives for long green life with a safe future that will protect the ecosystem playing the same role as an industrial civilization in damaging the world but the results will be the opposite. This report acknowledges that it will minimize air, land, and water pollution, protect ecosystem diversity, and reduce energy material. The project will work on the high strategies of decarbonization of the economy, target-based and attainable government policies for indispensable carbon markets, target reforms, regulatory tools, feed-in tariffs, eco-labeling, R&D development, and international financial support (Renner, 2008).

c) **Facilitating the opportunities in the GE economy:** Green growth economy policies implemented the platform of services to reduce unemployment but the risk is to facilitate the reallocation of workers from the contract and expand them to different sectors of the state. Labour policies must strengthen to focus on and preserve employment for the adjustment of skilled people quickly in different cultures. The emerging green innovation must bring economic change by including new opportunities like sharing adjustment costs by transition (OECD, 2018).

12. Discussion

Green economies' definitions have a very broad vision for the future and have very effective measurements and approaches and multiple levels of governance. This aspect of the world which continues with 'Green New Deals' and progress at Rio+20 was examined and introduced in national policy frameworks in developed countries. The reviewer has many objectives for better improvement of measures in Green economy transformation. They are as mentioned below:

- Better investment in green product GDP
- Better interaction in the economy- society environment
- Better economic transformation measure
- Introduction to implementing methodologies of the green economy (Kaufmann, 1993).

Global Green's new deal objectives have been ideally standing to reduce the poverty, carbon dependency, ecosystem degradation, and water scarcity, and create protective vulnerable employment services (UN, n.d.a).

The preservation and protection of the ecosystem are at the root of the green investments and green economy agenda. Green economic evidence provides 2.3 million employment in developing countries to generate renewable energy. The efforts of China have acknowledged the working on jobs in recycling output to provide 10 million jobs. A green economy offers to develop countries to attain economic and social gains. They consist of improving resource efficiency through investment in green products, increasing food security in every state of developing countries, make easy and emerging green goods and services in markets (UN, n.d.a). The target function leads to generating a system of "green economy". This transmission to the "green economy" is difficult without sufficient funding. The usage of funding programs has related to minimal efficiency in unindustrialized countries, where the government has to be controlled the environmental standard of living and affect the development of green technologies.

13. Conclusion

The environment of the planet has been closely linked with the economic system, impact of factors that increase the change and outcomes leads to macroeconomic indicators forming a new system called a "green economy". It is necessary to exist in political situations with applicable laws and regulators that minimize negative impact. The ecosystem is mostly considered in developing countries which affects the standard of living throughout the countries. Investing in the development of green technologies does not guarantee a positive impact because of the lack of non-transparent use of funding.

However, the green economy has been scaled up to form integrated and sustainable development pathways for pro-growth and pro-jobs. For green economy policies, the government expenditure policies with private investment both need to play a major role in long-term effectiveness. Globally, Green economy opportunities in water protect the population.15 to 35% of irrigation should be sustainable. At least $1 should be invested in the Safe drinking water project. 90% of energy and 70% of water savings can be achieved by recycling industrial and municipal waste. A small investment in flood prevention, and control, pandemic control, and water resource management control should be made on regular and proper checks.

The agricultural industry increases the productivity of the conversion of organic products into inorganic products (UN, n.d.b). UNEP/ILO has been dedicated to working on green employment to make a strong social-economic green investment. UNEP/WTO marks a better understanding of the association between trade practices and policies and the control of climate change barriers. The study has presented the importance and suggestions of greening for sustainable development that seeks to address the persisting weak explanation of sustainable development.

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Vertical Fiscal Imbalance and Public Service Expenditure: Effects on Economic Growth Before and During Covid-19 Pandemic

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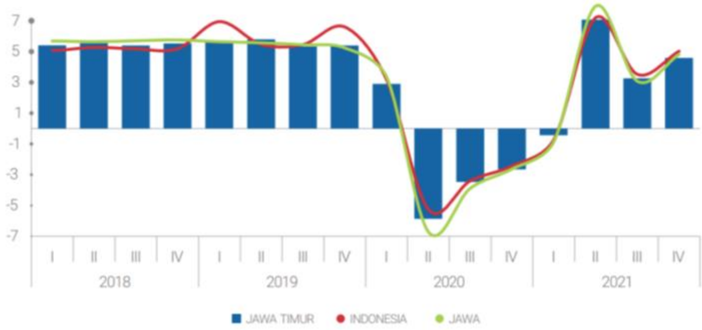
Abstract
Since 2020, Indonesia has been facing the Covid-19 pandemic for 2 years. Many impacts caused by the Covid-19 pandemic, especially on the economy, have led to a recession. Regional revenues are disrupted during a recession so local governments depend on central government transfer funds. From these issues, researchers suspect that there was a change in the decentralization conditions in East Java province during the Covid-19 pandemic as it was the province with the second largest GDP and has also experienced the greatest impact in Indonesia. This research method uses multiple linear regression with cross-sectional data from 38 district/city data units in East Java province. The results of this study are that the Decentralization Fund, Civil Service Capital Expenditure and the Human Development Index did not change before and during the Covid-19 pandemic. While the vertical fiscal imbalance has a positive influence on economic growth before the Covid-19 pandemic, the vertical fiscal imbalance has no influence on economic growth. This shows that there is another shift in priority in the use of central government finances, as state money is refocused and reallocated to deal with Covid-19. This makes development programs in other health sectors postponed.

Keywords: Decentralization Fund, Vertical Fiscal Imbalance, Public Service Capital Expenditure, Human Development Index, Economic Growth

1. Introduction

The COVID-19 pandemic that has hit the world has changed the order of various aspects of human life. According to the official website of the Indonesian Ministry of Health, as of November 24, 2021, the total number of confirmed cases of COVID-19 worldwide was 258,164,425 cases with 5,166,192 deaths (2.0% fatality rate) in 204 infected countries and 151 countries with a community transmission. This is the worst pandemic the world has ever seen. Indonesia is no exception, the Government of the Republic of Indonesia has reported 4,254,443 people confirmed positive for COVID-19 and there have been 143,766 deaths (CFR: 3.4%) reported COVID-19, and 4,102,700 patients have recovered from the disease. This also impacts the economy of Indonesia.(Widiastuti & Silfiana, 2021).



Picture 1 Comparison of the Economy in Java Island with Indonesia
Source: East Java Province Economic Report, 2022

Based on the figure, it can be seen that the economy went into decline until in the second quarter of 2020 the economy turned negative. In the fourth quarter of 2020, Indonesia was confirmed to be in recession. Even if at the start of 2021 the economy will increase, this increase is still not stable. In addition, based on Statistics Indonesia data, East Java Province is the province with the second highest GDP after DKI Jakarta province but has experienced the largest positive case of COVID-19 in Indonesia (Hastuti, 2021)(Farisa, 2021). To facilitate the implementation of development, Indonesia applies the concept of decentralization. Decentralization is a concept that involves the delegation of authority from the central government to local governments to take care of their domestic affairs. Decentralization aims to enable the government to further improve the efficiency and effectiveness of its service functions at all levels of society. This means that decentralization shows a vertical construction of the form of state power. In Indonesia, the adoption of the principle of decentralization then materialized in the form of regional autonomy policies (Nurmiyati Niken et al., 2020)(Mulyaningsih & Sedarmayanti, 2022).

The Constitution of the Republic of Indonesia of 1945 (UUD NRI 1945) Article 18, paragraph (1), states that "The Indonesian state is divided into provincial areas and the province is divided into districts and cities, each having a regional government, which shall be governed by law." Meanwhile, Article 18, paragraph (2) of the 1945 Constitution, as the fundamental norm of the regional government, expressly states: "Provincial, municipal/ of the district regulate and manage their governmental affairs according to the principle of autonomy and co-administration." The implementation of the regional government is then carried out based on the principle of the widest possible autonomy, except for government affairs which are determined by law to be the affairs of the central government. (Simandjuntak, 2015) In the policy of implementing regional autonomy and fiscal decentralization, is based on the consideration that c e are the regions that best know the needs and service standards for the inhabitants of their regions, so the granting of regional autonomy should stimulate the improvement of the well-being of the inhabitants of the regions through a growth increased economy. In essence, development is human development, so it is necessary to prioritize the allocation of expenditures for this purpose when preparing the budget (Tarumingkeng et al., 2018).

In the context of governance, local governments question the continued use of regional revenues, in particular the original regional revenue (PAD). A high DPA reflects advanced regional funding, so capital expenditure allowance should be a concern. Developed regions tend to maintain the spending structure in maintenance spending, not just capital spending. This shift in spending patterns is a critical issue for local governments given the importance of financing capital expenditures. It is therefore natural that the regional budget should be allocated to the general interest. Capital expenditure for public services is expenditure used to finance investment activities (addition of assets) aimed at improving public equipment and infrastructure, the results of which can be used directly by the community (Tamawiwy et al., 2016).

Capital expenditures for public services are a way for the government to play a role in building good quality human resources. Development should aim at the development of human resources because development is defined as a process that aims to develop the choices made by humans. This hypothesis indicates that improving the quality of human resources will be followed by opening up choices and opportunities to freely determine the path of human life. In this regard, three components are calculated in the HDI (HDI) and are considered very decisive for development, namely the average length of schooling, income per capita, and life expectancy. Human development is closely linked to the increase of human capacities which can be summed up in the increase in knowledge, attitudes, and skills, in addition to the health status of all family members and their environment (Hariani RS, 2018).

In Sosvilla-Rivero & Rubio-Guerrero (2022); Thiombiano et al. (2022); Dinh Thanh et al. (2020) research, to examine Economic Growth they use variables like public expenditure, net revenues, and others. In Canavire-Bacarreza et al. (2020); de Mendonça & Baca (2022); Arvin et al. (2021); Selvanathan et al. (2021); Choudhury & Sahu (2022) research, to examine economic growth they use variables like Revenue Decentralization (Decentralization Fund), Expenditure Decentralization and others. In Bansal et al. (2021); Bortolotti & Biggeri (2022); Mohmmed et al. (2019) research, to examine economic growth they use variables like Human Development Index, Foreign Direct Investment, and others. In Meloni (2016); Eyraud & Lusinyan (2013) research, to examine economic growth they use variables like Vertical Fiscal Imbalance. From various previous studies, it was found that there are many factors that influence economic growth. However, in this study it is limited to the variables Vertical Fiscal Imbalance, Decentralization Funds, Public Service Expenditures, and the Human Development Index because they focus on the impact of the Covid-19 Pandemic.

Based on the above explanation, the researcher assessed the state of decentralization of the economic growth rate in East Java Province before and during the Covid-19 pandemic. Because researchers suspect that there will be a significant change in the decentralization conditions of the economic growth rate when the Covid-19 pandemic enters Indonesia, especially the province of East Java.

2. Method

The Method section describes in detail how the study was conducted, including conceptual and operational. The type of research used is a quantitative research using multiple linear regression analysis using the One Least Square (OLS) method. The decentralization variables used in this study are decentralized funds, vertical fiscal imbalance, public service capital expenditure, and human growth index. With Economic Growth (EG) as the dependent variable and Decentralization Fund (DF), Vertical Fiscal Imbalance (VFI), Public Service Capital Expenditure (PSCE), and index development as independent variable (independent variable)). The data collected is secondary data in the form of a cross-section with 38 units, where many units correspond to many districts/cities of East Java province. Data timing is selected based on the most recent year representing conditions before and during the pandemic. To represent the last year Indonesia has not yet entered a pandemic, the researchers chose 2019, and To represent the last year Indonesia entered a pandemic, the researchers chose 2021.

Economic growth rate and human development index data are taken from the official website of the Central Statistical Agency of East Java Province. Civil service capital expenditure data is obtained from the East Java Provincial Budget which is downloaded from the official website of the General Directorate of Balanced Budget. The Tax and Non-Tax Revenue Sharing Fund is a tax revenue sharing and natural resource transfer fund from the central government to regencies and self-governing cities. The amount of money in this fund is measured in billions of rupees. The General Allocation Fund is a grant program that transfers funds from the federal government to counties and self-governing cities. The amount of money in this fund is measured in billions of rupees. The Special Allocation Fund is a federal government grant for autonomous districts and cities. The amount of money in this fund is measured in billions of rupees. Decentralization funds are financial transfers from the central government to autonomous regional governments in the form of balancing funds, such as the Tax and Non-Tax Revenue Sharing Fund, General Allocation Fund, and Special Allowance Funds. The amount of the balancing fund is measured in billions of rupees. The vertical fiscal balance indicator reflects the mismatch between central government fiscal capacity/potential and fiscal needs (in this study, district and municipal governments). The following formula is used to calculate the magnitude of the vertical fiscal imbalance: Shah and Qureshi (1994), Hunter (1977), and Hamid (2003):

$VFI = 1 - [(GAF + SAF + TTRS)/EXP]$(1)

Where :
VFI = Coefficient of Vertical Fiscal Imbalance in each region
GAF = General Allocation Fund
SAF = Special Allocation Fund
TTRS = Tax and Non-Tax Revenue Sharing Fund
EXP = Total Expenditure on APBD

The analytical method used in this study is multiple linear regression with the method of least squares (OLS). The analysis was carried out in 2019 and 2021, where the results of the analysis were compared to find out the differences in the decentralization conditions that occurred before and during the Covid-19 pandemic in East Java Province. However, before doing the regression analysis, the researcher performed a classic hypothesis test to meet the BLUE (Best Linear Unbiased Estimator) standard. The classical hypothesis tests carried out were the test of normality, the test of multicollinearity, and the test of heteroscedasticity. The autocorrelation test was not performed because the data used was in Cross-Section form.

3. Results

3.1. Classic Assumption Test

The first step taken by the researcher was to test the classical hypotheses in the form of a normality test, multicollinearity test, and heteroscedasticity test. The autocorrelation test was not performed because the data used was Cross-Section data. After being tested, the test results show that the data used in 2019 and 2021 is free from the classic hypothesis test.

3.2. F Test

The F test is used to determine the effect of all dependent variables on the independent variables simultaneously. After being tested, the following results were obtained:

Table 1. F Test Result

	F-Statistic	P-Value
2019	23.177	0.000
2021	24.690	0.000

Source: Processed Data

In the data used, the F-Table value is 2.66. In 2019, since the F-Statistics 2019 value is higher than the F-Table 2019 value (23.177 > 2.66) and the P-Value is lower than the level (0.000 < 0.05), it can be concluded that the estimated regression of The study model is appropriate and able to simultaneously explain the Decentralization Fund, Vertical Fiscal Imbalance, Civil Service Capital Expenditure and Human Growth Index capable of affecting growth economy before the Covid-19 pandemic. In 2021, since the value of F-Statistics2021 is greater than the value of F-Table2021 (24690 > 2.66) and the value of P-Value is also lower than the level of (0.000<0.05), it can be concluded that the estimated regression model of the study is appropriate and able to simultaneously explain that decentralization funds, vertical fiscal imbalance, civil service capital expenditure, and growth index can affect economic growth during the Covid-19 pandemic.

3.3. Coefficient of Determination Test (R^2)

The coefficient of determination test is used to determine the importance of the proportion of the influence of the model. After being tested, the following results were obtained:

Table 2: Coefficient of Determination Test Result

	Adjusted R-Square
2019	0.737
2021	0.750

Source: Processed Data

From Table 2, it can be seen that the adjusted R-Squared 2019 value is 0.737. This explains the proportion of the influence of the variables of the Decentralized Fund, the vertical fiscal imbalance, the investment expenditure in the civil service, and the human growth index on the economic growth of 73.7%. However, the excess, which is 26.3%, is influenced by other variables not included in this study. Then in 2021, the adjusted R-Squared2021 value was found, which was 0.750. This explains the proportion of the effect of the Decentralization Fund, Vertical Fiscal Imbalance, Civil Service Capital Expenditure, and Human Growth Index variables on the economic growth of 75%. However, the 25% overshoot is influenced by other variables that are not included in this study.

3.4. T Test

The t-test is used to partially determine the effect of all dependent variables on the independent variables. After being tested, the following results were obtained:

Table 3: t Test Result

	2019		**2021**	
	Coefficient	**P-Value**	**Coefficient**	**P-Value**
Constant	-607187.96	0.000	-618705.59	0.000
DF	-3.292	0.299	-6.716	0.727
VFI	302641.705	0.030	-5315.912	0.964
PSCE	151.071	0.000	205.366	0.000
HDI	6024.361	0.004	7031.520	0.002

Source: Processed data

Based on the results of the t-test in Table 3, it can be concluded that in 2019, the Decentralization Fund variable does not affect economic growth. Meanwhile, the variables of vertical fiscal imbalance, civil service capital expenditure, and human development index have a significant positive effect on economic growth. Meanwhile, in 2021, the Decentralization Fund and Vertical Fiscal Imbalance variables do not affect economic growth. While the civil service capital expenditure and human development index variables have a significant positive effect on economic growth.

4. Discussion

In 2019 and 2021, the Decentralization Fund has no effect because, in East Java Province, Surabaya City is the largest contributor to the economy, accounting for 25% of the total East Java economy. According to Emil Elestianto Dardak as Deputy Governor of East Java Province, Surabaya is the largest contributor to East Java's economy with a record 25%. Also, one of the highest local revenue in East Java is supported by the payment of motor vehicle tax. And the largest motor vehicle users in East Java Province are in Surabaya. This causes an imbalance as the city of Surabaya has a high regional source of income. So that the city of Surabaya becomes an independent city compared to the other districts/cities of the province of East Java (Kurnia, 2022; Tim detikcom, 2021). Therefore, data for the Decentralization Fund in each regency/city of East Java Province becomes unbalanced as Surabaya city dominates compared to other regencies/cities.

In 2019, vertical fiscal has an effect on economic growth. This shows that the more money transferred by the central government to local governments, which makes the government more supported, it actually increases economic growth. Of course, in accordance with the previous explanation, namely the purpose of giving money from the central government to local governments for the benefit of regional development. Therefore, before the Covid-19 pandemic, being supported by the regional government to the central government made the regional economic growth increase.

In 2021, vertical fiscal has no effect on economic growth. This shows that the spending budget is for other things than that used for the developing economy during the Covid-19 pandemic. At the time of the Cabinet Meeting on January 6, 2021, with the agenda of Evaluation of the Implementation of the 2020 State Budget and the Implementation of the 2021 State Budget Policy, the President had taken a policy of providing free Covid-19 vaccines for the community and instructed all levels of the cabinet, ministries, institutions, and local governments to prioritize programs vaccination in the 2021 Fiscal Year. Following up on the directives of the President of the Republic of Indonesia, the Minister of Finance then submitted a letter with the number S-30/MK.02/2021 dated 12 January 2021 on the Refocussing and Reallocation of Ministries/Institutions Expenditures for the 2021 Fiscal Year to the Ministers and Institutional Leaders as Users Budget (Kementrian Keuangan, 2021). In addition, with this budget, the central government provides assistance. Various assistance programs have been carried out such as *Program Kartu Sembako, Program Keluarga Harapan (PKH), Bansos Tunai, Program Kartu Pekerja, Program Indonesia Pintar (PIP), Bantuan Langsung Tunai (BLT), Bantuan Pangan Non Tunai/Beras Sejahtera (BPNT/Rastra), Penerima Bantuan Iuran-Jaminan Kesehatan Nasional (PBI-JKN)* and Electric Discount (Indriyani & Sulistiyawati, 2021). The impact of the policy of refocusing and reallocating the state budget has made many other development programs postponed because state finances are focused on tackling Covid-19 (Ibrahim, 2021) (Saputra, 2021).

In 2019 and 2021, public service capital expenditure has a significant positive effect on economic growth. This is because Indonesia has a large population. In developing countries, where there is a "surplus labor economy", development capital cannot depend solely on the availability or possibility of availability of investment funds. Such development, in addition to being too costly, will also encounter obstacles if at some point the sources of investment become limited, both from the government and from the community. Also, a large population as a human resource should be used as an advantage, not the other way around. A very large population, if it can be nurtured and deployed as an efficient workforce, will be an important development capital that will greatly benefit development efforts in all fields (Safri, 2016). Therefore, before and during the Covid-19 pandemic, utility capital expenditure remains high in East Java Province as the government still needs funds to encourage its people to build a better economy.

In 2019 and 2021, the Human Development Index has a significant positive effect on economic growth. Indeed, the Human Development Index (HDI) is an indicator that can be used to measure the level of physical and non-physical quality of a population. The physical quality is reflected in life expectancy, while non-physical quality is obtained by a combination of average years of schooling and literacy rates (Muqorrobin & Soejoto, 2017). The increase in the human development index will boost the regional economy, especially in the industrial sector. Because the increase in the human development index indicates an increase in the quality of existing human resources. The human development index will encourage industry to increase its production and eventually the level of public consumption will also increase (Izzah, 2015). Therefore, before and during the Covid-19 pandemic, the human development index remains an important element to increase economic growth. Moreover, in Table 3, it can be seen that the coefficient in 2021 is the highest. This indicates that when the Covid-19 pandemic becomes the most important problem to overcome.

5. Conclusion

The economy of East Java experienced a very sharp decline when it entered the Covid-19 pandemic, so it is necessary to study the comparison of economic growth which is related to decentralization. The results of this study indicate that the Decentralization Fund does not affect economic growth before and during the Covid-19 pandemic. Furthermore, public service capital expenditure and the human development index have a significant positive influence on economic growth before and during the Covid-19 pandemic. While vertical fiscal imbalance has a positive influence on economic growth before the Covid-19 pandemic, during the Covid-19 pandemic vertical fiscal imbalance does not affect economic growth.

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The Influence of Net Profit Margin and Debt to Asset Ratio on Profit Growth: Case Study of Coal Mining Subsector Companies Listed on the Indonesia Stock Exchange in 2017-2021

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Abstract
Coal companies use a lot of their assets in carrying out their operational activities, the company is expected to be able to provide benefits to society. This study aims to examine the effect of Net Profit Margin and Debt to Asset Ratio on profit growth in coal mining sub-sector companies listed on the Indonesia Stock Exchange. This type of research is a quantitative method using a descriptive approach and associative problem formulation. Secondary data collection, in the form of financial reports from IDX. Withdrawal of samples using purposive sampling method. The samples studied were 19 coal mining sub-sector companies whose data was processed from 2017-2021. The analytical method used is multiple linear regression analysis using SPSS 24. The results show that partially Net Profit Margin has no significant effect on profit growth and Debt to Asset Ratio has a negative and significant effect on profit growth. Furthermore, Net Profit Margin and Debt to Asset Ratio simultaneously have a positive and significant effect on profit growth.

Keywords: Net Profit Margin (NPM), Debt to Asset Ratio (DAR), and Profit Growth

1. Research Background

Every company in running a business has a goal, namely for the welfare of its owners (shareholders). Current economic development is inseparable from scientific and technological advances that are running very fast, resulting in increasingly fierce business and business competition. The company is said to be good if it is able to maintain the company's position so that management is required to manage performance effectively and efficiently to face competition.

One of the efforts to maintain the company's position is to effectively and efficiently manage important functions within the company, including the ability to meet financial obligations and operations in a stable manner and to be able to maintain the continuity of its business growth. Shareholders want operating activities to produce an increasing profit trend every year, but due to certain conditions that occur, they experience a declining profit trend. Profit growth is defined as an increase or decrease in company profits in a certain period. The company's profit growth is important because it will determine the rate of return to shareholders or potential investors in planning whether to invest or not.

Investors will be interested in investing in companies that have good profit growth every year. The information needed to see the level of profit growth of a company is the financial statements. Financial statements are records of a company's financial information for a certain period that can be used by investors as a basis for investing.

Management's ability to manage policies related to the company's operational activities plays an important role in increasing company profits (Ningsih & Utiyati, 2020). To determine the results of profit growth, namely by calculating the difference in net profit for a certain year with the previous year's net profit divided by the previous year's net profit. The measure that is often used in determining whether or not a company is successful is the profit it generates (Kulsum, 2021).

According to CNBN Indonesia (2022) that the coal industry has an important role for the country's economy because of its role as a provider of energy resources that are very necessary for economic growth. Indonesia is a country with abundant natural wealth. One of Indonesia's natural products, which is the largest export commodity, is coal (Nathanael, 2021). Indonesia is one of the largest coal producers and exporters in the world. According to CNBN Indonesia (2022) there are also several commodities that are included in Indonesia's leading export commodities. The following is data on Indonesia's leading export commodities in the last five years.

Table 1: Volume of Indonesia's Leading Export Commodities in millions of tons

Export Commodities	2017	2018	2019	2020	2021
Palm Oil	28,77	29,3	29,5	27,3	26,9
Coal	364	402	478	434	482
Iron and Steel	4,37	5,42	6,31	9,24	13,81
Rubber	2,92	2,74	2,44	2,21	2,28
Coffee	0,464	0,277	0,356	0,376	0,385
Footwear	0,132	0,141	0,126	0,165	0,228

Source: www.bps.go.id

Based on table 1, the most exports are from the coal mining sub-sector. Where this volume is only to be sent abroad. While the total volume of recorded coal production including domestic data and coal selling prices that have occurred over the last five years is as follows:

Table 2: Production Volume, Export, Domestic and Coal Prices in millions of tons

Description	2017	2018	2019	2020	2021
Production	461	557	616	565	610
Export	364	402	478	434	482
Domestic	97	155	138	131	128
Price (HBA) (USD/ton)	85,9	99,0	77,9	58,2	121,5

Source: www.modi.esdm.go.id and www.minerba.esdm.go.id

According to Indonesia Investments, it is known that Indonesia has experienced increases and decreases in the amount of domestic coal production, exports and sales. However, a high production volume does not necessarily reflect high profit growth because it is influenced by the unstable selling price of the products produced. Indonesia exports coal ranging from 70% to 80% of total coal production, the rest is sold in the domestic market. Domestic coal sales are not significant because domestic coal consumption is relatively small. The Reference Coal Price (HBA) used to determine the selling price fluctuates. The following is data from several companies from the results of ratio measurements that will be used as measuring tools.

Table 3: Several Companies in the Coal Mining Sub-Sector with Net Profit Margin Level

Company Name	*Net Profit Margin*				
	2017	2018	2019	2020	2021
Baramulti Suksessarana Tbk	21,10%	15,57%	7,29%	9,21%	29,67%
Bayan Resources Tbk	31,67%	31,27%	16,83%	24,69%	44,38%
Golden Energy Mines Tbk	15,81%	9,62%	6,03%	9,03%	22,32%
Indo Tambangraya Megah Tbk	14,96%	12,89%	7,37%	3,19%	22,89%
Bukit Asam (Persero) Tbk	23,35%	24,19%	18,54%	13,90%	27,47%

Source: www.idx.co.id (processed, 2022)

Based on table 3 the level of net profit margin in coal mining sub-sector companies listed on the Indonesia Stock Exchange, there are several companies whose records fluctuate every year. So, it can be seen that there has been a decrease in the net profit margin from 2018 to 2020 but will increase in 2021. From the table it can be seen that the phenomenon of the problem in terms of net profit margin has decreased allegedly due to a decrease in sales and followed by a decrease in net profit.

Table 4: Several Companies in the Coal Mining Sub-Sector with the Level of Debt to Asset Ratio

Company Name	*Debt to Asset Ratio*				
	2017	2018	2019	2020	2021
Baramulti Suksessarana Tbk	28,67%	38,69%	32,06%	27,71%	41,97%
Bayan Resources Tbk	41,99%	41,08%	51,56%	46,81%	23,45%
Golden Energy Mines Tbk	50,51%	54,95%	54,11%	57,06%	61,84%
Indo Tambangraya Megah Tbk	29,48%	32,78%	26,85%	26,96%	27,89%
Bukit Asam (Persero) Tbk	37,24%	32,69%	29,41%	29,59%	32,86%

Source: www.idx.co.id (processed, 2022)

Based on table 4, the level of debt to asset ratio in coal mining sub-sector companies listed on the Indonesia Stock Exchange, there are several companies whose records fluctuate every year. So, it can be seen that there has been a decrease in the debt to asset ratio, which is known as a problem phenomenon. The debt to asset ratio has decreased, presumably due to a decrease in total debt and followed by a decrease in total assets.

Table 5: Several Companies in the Coal Mining Sub-Sector with Profit Growth Rate

Company Name	Profit Growth				
	2017	2018	2019	2020	2021
Baramulti Suksessarana Tbk	2,05	-0,11	-0,58	0,016	5,80
Bayan Resources Tbk	17,92	0,66	-0,57	0,49	2,72

Golden Energy Mines Tbk	2,46	-0,11	-0,36	0,46	2,74
Indo Tambangraya Megah Tbk	0,95	0,09	-0,53	-0,70	11,71
Bukit Asam (Persero) Tbk	1,25	0,13	-0,21	-0,40	2,34

Source: www.idx.co.id (processed, 2022)

Based on table 5, there are several companies that have experienced a decline in profit growth due to increasingly fierce competition. The company's decreased profit value was also caused by economic factors from 2019 to 2020 caused by the Covid-19 pandemic which affected coal sales, especially exports because most countries closed their ports. Covid-19 has also caused the economy to shake, so several countries have corrected their energy, which has caused oversupply so prices have fallen. Then the competition factor at the world level which was unable to compete with China and India as the largest coal producing countries in the world resulted in Indonesia's growth being hampered.

Based on these facts, researchers are trying to research profit growth in the coal subsector, using financial statement analysis using a ratio approach (Rahman & Hanifa, 2020). This study uses two types of financial ratios consisting of profitability ratios and leverage ratios with measuring tools used net profit margin and debt to asset ratio.

Profitability ratios are used to measure management effectiveness based on overall results which are indicated by the size of the profit level obtained in relation to sales (Irham Fahmi, 2020). The ways to measure profitability include: net profit margin, gross profit margin, return on assets, return on equity, earnings per share and return on investment. Management effectiveness is demonstrated by the profit generated from sales and investment income. Net Profit Margin denotes net income on sales (Kasmir, 2021). The higher the net profit margin, which indicates a more productive company performance, it will increase investor confidence to invest. This ratio describes the percentage of net profit earned from each sale. The higher the ratio, the better the company's ability to get high profits (Ningsih & Utiyati, 2020).

The leverage ratio is defined as the company's ability to pay all of its obligations, both short term and long term if the company is dissolved or liquidated. The ways to measure leverage include: debt to asset ratio, debt to equity ratio, long term debt to equity, tangible asset debt coverage, current liabilities to net worth, times interest earned and fixed charge coverage (Kasmir, 2021). The leverage ratio illustrates how management uses capital funded from assets and debt.

The debt to asset ratio is used to find out how much the company's assets are financed by debt or how much the company's debt affects asset management (Kasmir, 2021). The high-low debt to asset ratio will affect the level of achievement of company profits. The lower the debt to asset ratio, the better it will be in influencing profit growth, conversely if the higher the debt to asset ratio, the lower the company's funding level will be so that it will be difficult to get funding from creditors to support operational activities which will have an impact on decreasing company profits (Purwitasari & Soekotjo, 2019).

The influence of net profit margin and debt to asset ratio on profit growth has also been proven from several previous studies. Fina and Nugi (2021) examined the cement industry subsector which showed the results of the net profit margin variable had a positive and significant effect on profit growth and Lailatus Sa'adah's research, et al (2022) examined the food and beverage subsector companies which showed debt to asset ratio results positive and significant effect on profit growth. However, this is in contrast to Estininghadi's research (2019) examining companies in the property and real estate sector which showed that the results of the net profit margin variable did not significantly affect profit growth and Naomi's research, et al (2022) examined the automotive subsector which showed debt yields to asset ratio has no significant effect on profit growth.

This research is different from previous research conducted by the author in terms of the Coal Mining Subsector companies listed on the Indonesia Stock Exchange and taking research samples starting from 2017–2021.

Based on the phenomenon above, the researchers conducted research with the title "The Influence of Net Profit Margin and Debt to Asset Ratio on profit growth (Case Study in Coal Mining Subsector Companies Listed on the Indonesia Stock Exchange in 2017-2021)."

2. Problem Identification

Based on the background of the problem, the problem identification is:
1. How does the net profit margin affect profit growth.
2. What is the effect of the debt to asset ratio on profit growth.
3. What is the effect of net profit margin and debt to asset ratio on profit growth.

3. Theoretical Basis

3.1 Signaling Theory

Signaling theory is an action used by company management to provide signals or instructions to investors regarding company prospects that will influence investment decision making. This signal is in the form of information that explains management's efforts to realize the owner's wishes (Kusoy & Priyadi, 2020).

The purpose of the information provided will reduce the problem of information asymmetry between management and stakeholders. Information is an important element in providing notes or explanations about the past, present, or future of an entity's business continuity. Information with a growth rate of increase in profit each period is considered a positive signal, the higher the profit achieved indicates a good state of the company.

Conversely, information with decreased profits means that the company is in a bad condition, so it is considered a negative signal (Yuniarto, et al. 2022). The link between signal theory and profit growth lies in financial ratios which are macroeconomic indicators that will become signals and predictions that affect profit growth so that financial ratios can be used as a reference in assessing the condition of a company (Lestari, et al. 2020).

3.2 Analysis of Financial Ratios

3.2.1 Net Profit Margin

Net Profit Margin is a measure of profit by comparing the profit after interest and taxes compared to sales. This ratio shows the company's net income from sales (Kasmir, 2021).

Meanwhile, according to Irham Fahmi (2020) explains that:
"Net Profit Margin is also known as the ratio of revenue to sales. This ratio measures net profit after tax with sales. The higher the net profit margin, the better the operations of a company."

Net profit margin shows the level of efficiency of the company, namely the extent to which the company controls expenses or costs to earn income.
The formula used to find the net profit margin is as follows:

$$\textit{Net Profit Margin} = \frac{\textit{Earning After Interest and Tax}\ \text{(EAIT)}}{\textit{Sales}}$$

3.2.2 Debt to Asset Ratio

Debt to Asset Ratio is a debt ratio used to measure the ratio between total debt and total assets. In other words, how much the company's assets are financed by debt or how much the company's debt affects asset management (Kasmir, 2021).

Meanwhile, according to (Hery 2017) in (Chintya, 2019) explains that:
"The Debt to Asset Ratio is used to measure how much a company's assets are financed by debt or how much the company's debt affects asset financing. Debt to asset ratio or debt ratio or often known as the ratio of total debt to total assets is measured by comparing total debt and total assets.

A good debt to asset ratio must be below 1 or below 100%, which means that the lower the debt to asset ratio, the better the company's asset management. On the contrary, the higher the debt to asset ratio, the greater the debt-financed assets that will be borne by the company so that the company earns a low profit. This condition also shows that the company is financed by almost half of the debt. If the company intends to increase debt, the company needs to increase its equity first. Theoretically, if the company is liquidated it is still able to cover its debts with its assets (Kasmir, 2021).

The formula for finding the debt to asset ratio can be used as follows:

$$\textit{Debt to Asset Ratio} = \frac{\textit{Debt}}{\textit{Asset}} \times 100\%$$

3.2.3 Profit Growth

Profit is an indicator of the success of a business entity because it can be used as a measure of efficiency and effectiveness and is the main goal of a company. The definition of profit according to Pattiasina, et al (2018) is an increase in economic benefits in one accounting cycle in the form of an increase in assets or a decrease in liabilities which has an impact on increasing equity that does not come from capital contributions.

According to Harahap (2020) explains that: "Profit growth is a ratio that can describe the extent to which a company's ability to increase net profit compared to the previous year."

Positive profit growth reflects that the company can properly manage and utilize its resources to generate profits. Profit growth is the difference between the net profit of a certain year and the previous net profit divided by the previous year's net profit. The formula for profit growth is as follows:

$$\textit{Profit Growth} = \frac{\textit{Net Profit}_{1} - \textit{Net Profit}_{t-1}}{\textit{Net profit}_{t-1}}$$

Information:
t = Profit for the year
t-1 = Last year's profit

According to Angkoso (2006) in Panjaitan (2018) profit growth is influenced by several factors, namely:
1. “The Magnitude of Growth. The larger a company, the higher the precision of expected profit growth.
2. Company Age. Companies that have just been established lack experience in increasing profits, so the accuracy is still low.
3. Level of Leverage. If the company has a high level of debt, the higher the level of sales in the future, the higher the profit growth.
4. Sales Level. The level of sales in the past is high, the higher the level of sales in the future so that the profit growth is higher.
5. Profit Growth in the Past. The greater the past profit growth, the more uncertain future profits will be.

3.3 Research Framework

Based on the identification of the problem, the research framework can be described as follows:

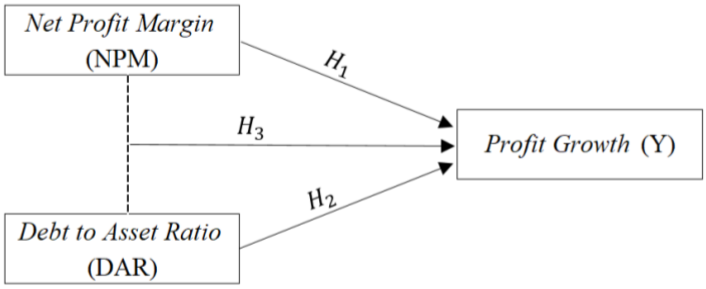

Figure 1: Schematic Research Framework

3.4 Hypothesis

Based on the research framework, the hypothesis set out in this study is:
H_1: Net profit margin has a positive and significant effect on profit growth.
H_2: Debt to asset ratio has a positive and significant effect on profit growth.
H_3: Net profit margin and debt to asset ratio have a positive and significant effect on profit growth.

4. Type of Research

The type of research used in this study is the quantitative research method. Research data in the form of numbers and analysis using statistics. According to Sugiyono (2021:16-17) quantitative research is stated as follows:
"Quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used to examine certain populations or samples, collecting data using research instruments, analyzing data is quantitative/statistical, with the aim of testing established hypotheses."

In this study the authors used a descriptive research approach and associative problem formulation. According to Sugiyono (2021:64) the meaning of the descriptive problem formulation is:
"A formulation of the problem relating to the question of the existence of independent variables, either only on one variable or more (stand-alone variables)".

So, in this study researchers did not make comparisons of these variables to other samples, and looked for the relationship between these variables and other variables.

The meaning of the associative problem formulation put forward by Sugiyono (2021: 65), is:
"The associative problem formulation is a research problem formulation that asks the relationship between two or more variables."

Associative research is research that is used to determine the relationship between two or more variables, a causal relationship.

The purpose of choosing quantitative, descriptive and associative research methods is to obtain a systematic description of the research and obtain accurate facts, characteristics and relationships related to the phenomenon being studied either simultaneously or partially.

4.1 Types of Data

The type of data used in this study is secondary data in the form of financial statements of coal mining sub-sector companies listed on the Indonesia Stock Exchange for 2017-2021.

4.2 Data Sources

Sources of data used in this study were obtained through:

1. Secondary data, namely financial reports that have been audited and published on the website of the Indonesia Stock Exchange (IDX) from www.idx.co.id and websites of related companies.
2. Books, scientific journals and various papers, news and research sites on the internet that support research data.

5. Population, Sampling Technique and Sample

The population in this study are all coal mining sub-sector companies listed on the Indonesia Stock Exchange in 2017-2021 with a total population of 23 companies.

Table 6: Population of Coal Mining Sub-Sector Companies Listed on the Indonesia Stock Exchange (IDX)

No	Code	Company Name
1	ADRO	Adaro Energy Tbk
2	ARII	Atlas Resources Tbk
3	ATPK	Bara Jaya International Tbk
4	BOSS	Borneo Olah Sarana Sukses Tbk
5	BORN	Borneo Lumbung Energi & Metal Tbk
6	BSSR	Baramulti Suksessarana Tbk
7	BUMI	Bumi Resources Tbk
8	BYAN	Bayan Resources Tbk
9	DEWA	Darma Henwa Tbk
10	DOID	Delta Dunia Makmur Tbk
11	DSSA	Dian Swastatika Sentosa Tbk
12	FIRE	Alfa Energi Investama Tbk
13	GEMS	Golden Energy Mines Tbk
14	HRUM	Harum Energy Tbk
15	INDY	Indika Energy Tbk
16	ITMG	Indo Tambangraya Megah Tbk
17	KKGI	Resource Alam Indonesia Tbk
18	MBAP	Mitrabara Adiperdana Tbk
19	MYOH	Samindo Resources Tbk
20	PTBA	Bukit Asam (Persero) Tbk
21	PTRO	Petrosea Tbk
22	SMMT	Golden Eagle Energy Tbk
23	TOBA	Toba Bara Sejahtera Tbk

Source: www.idx.co.id (Data processed)

Then a sample will be drawn from the population. The sampling technique used in this study is non-probability sampling. The nonprobability sample used in this research is purposive sampling. The several criteria determined in the selection of samples are:

a. Coal mining sub-sector companies listed on the Indonesia Stock Exchange in 2017-2021 consecutively.
b. Coal mining sub-sector company with an IPO before 2017-2021.
c. Companies in the coal mining sub-sector that experienced delisting in 2017-2021.

Based on the established criteria, the sample selection process is as follows:

Table 7: Sampling Results

No	Description	Total
1	Number of coal mining sub-sector companies listed on the Indonesia Stock Exchange 2017–2021	23
2	Number of coal mining sub-sector companies that conducted IPO after 2017	-2
3	Number of companies in the coal mining sub-sector that experienced delisting in 2017–2021	-2
	The number of companies used as samples is	19
	Number of observations (year)	5
	Total Sample	95

Source: www.idx.co.id (Data processed)

Based on the sample selection criteria in table 7, a total of 19 companies were obtained with a 5-year observation year so that 95 data were obtained. The following is a list of companies used as samples:

Table 8: List of Company Samples

No	Code	Company Name
1	ADRO	Adaro Energy Tbk
2	ARII	Atlas Resources Tbk
3	BSSR	Baramulti Suksessarana Tbk
4	BUMI	Bumi Resources Tbk
5	BYAN	Bayan Resources Tbk
6	DEWA	Darma Henwa Tbk
7	DOID	Delta Dunia Makmur Tbk
8	DSSA	Dian Swastatika Sentosa Tbk
9	GEMS	Golden Energy Mines Tbk
10	HRUM	Harum Energy Tbk
11	INDY	Indika Energy Tbk
12	ITMG	Indo Tambangraya Megah Tbk
13	KKGI	Resource Alam Indonesia Tbk
14	MBAP	Mitrabara Adiperdana Tbk
15	MYOH	Samindo Resources Tbk
16	PTBA	Bukit Asam (Persero) Tbk
17	PTRO	Petrosea Tbk
18	SMMT	Golden Eagle Energy Tbk
19	TOBA	Toba Bara Sejahtera Tbk

Source: www.idx.co.id (Data processed)

6. Operational Variables

Based on the research title and explanation related to the variables contained in this study, the research variables along with their concepts and indicators are as follows:

Table 9: Operational Research Variables

Variable	Concept	Indicator	Scale
Net Profit Margin (X_1)	Net Profit Margin is a measure of profit by comparing profit between profit after interest and taxes compared to sales (Kasmir, 2021: 202).	$NPM = \frac{EAIT}{Sales} \times 100\%$	Ratio
Debt to Asset Ratio (X_2)	Debt to Asset Ratio is a debt ratio used to measure the ratio between total debt and total assets (Kasmir, 2021:158).	$DAR = \frac{Debt}{\text{Total } Asset} \times 100\%$	Ratio
Profit Growth (Y)	Profit growth is a ratio that can describe the extent to which a company's ability to increase net income compared to the previous year (Harahap, 2020:310)	$\text{Profit Growth} = \frac{NP_t - NP_{t-1}}{NP_{t-1}}$ NP : Net Profit t : Current Year t-1 : last year	Ratio

Data analysis in the study used tools with SPSS software version 24.0. To get accurate and unbiased results, the researchers used the classical assumption test.

6.1 Descriptive Statistics

The data in this study were analyzed using descriptive statistical data analysis. Descriptive statistics are data analysis by describing or describing data with the intention of not concluding generally accepted data (Sugiyono, 2021).

6.2 Selection of Statistical Tests

To use multiple regression analysis, there are several classical assumptions that must be met. Therefore, classical assumptions are made first so that multiple regression analysis can be used in this study.

6.2.1 Classical Assumption Test

The classic assumption test used is the data normality test, multicollinearity test, heteroscedasticity test and autocorrelation test using SPSS version 24 software. The following is an explanation of the classic assumption test used:

1. ***Data Normality Test***
The normality test used in this study is by using the Kolmogorov-Smirnov test (K-S). Guidelines used in decision making can be seen from:
a. If the value is significant or probability <0.05 then the data distribution is not normal.
b. If the value is significant or probability > 0.05 then the data distribution is normal.
Then the hypothesis used:
H_0: Residual data is normally distributed.
H_a: Residual data is not normally distributed.

2. ***Multicollinearity Test***

In the regression model, the method used to determine the presence or absence of multicollinearity is as follows:

a. If there is a fairly high correlation between the independent variables (above 0.90), then this is an indication of multicollinearity.
b. Tolerance value and variance inflation factor (VIF).

These two measures show each independent variable that is explained by other variables. The Cutoff value that is commonly used to indicate the presence of multicollinearity is a tolerance value <0.10 or a VIF value > 10.

3. ***Heteroscedasticity Test***

To see whether there is heteroscedasticity according to Ghozali (2018) is as follows: "If there is a certain pattern, such as the dots that form a certain regular pattern (wavy, widened then narrowed), then it indicates that heteroscedasticity has occurred. Whereas if there is no clear pattern, and the dots spread above and below the number 0 on the Y axis, then there is no heteroscedasticity."

The purpose of this test is to test whether there are dissimilar variables in the regression model from the residuals of one observation to another. One method that can be used to detect symptoms of heteroscedasticity is using squared residuals with independent (independent) variables.

4. ***Autocorrelation Test***

According to Ghozali (2018) explains that to detect the presence or absence of autocorrelation symptoms, it can be detected by the Durbin-Watson test (DW Test), namely:

Table 10: Durbin-Watson Statistical Test

If	Decision	Null Hypothesis
$0 < d < dl$	Reject	There is no positive autocorrelation
$dl \leq d \leq du$	No Decision	There is no positive autocorrelation
$4 - dl < d < 4$	Reject	There is no negative autocorrelation
$4 - du \leq d \leq 4 – dl$	No Decision	There is no negative autocorrelation
$du < d < 4 – du$	Not Rejected	There is no positive or negative autocorrelation

Source: Iman Ghozali (2018)

6.2.2 Multiple Linear Regression Analysis

The multiple analysis design used in this study is as follows:

$$\textbf{Profit growth} = \mathbf{a + b_1NPM + b_2DAR}$$

Information:

Profit Growth	= Profit Growth
a	= Constant or price X=0
b_1b_2	= Regression coefficient
NPM	= Net Profit Margin
DAR	= Debt to Asset Ratio

6.2.3 Correlation Analysis

In this study, multiple correlation analysis was carried out, which was used to determine the strength or weakness of the relationship between two or more independent variables together with one dependent variable. In the correlation analysis what is sought is the correlation coefficient number which states the degree of relationship between the independent variable and the dependent variable. According to Sugiyono (2021) to find out the state of the correlation used with the following criteria or guidelines:

Table 11: Guidelines for Interpreting Correlation Coefficients

Coefficient Intervals	Relationship Level
0,00 - 0,199	Very Low
0,20 - 0,399	Low
0,40 - 0,599	Currently
0,60 - 0,799	Strong
0,80 - 1,000	Very Strong

Source: Sugiyono (2021)

6.2.4 Analysis of the Coefficient of Determination

The coefficient of determination formula is as follows:

$$\mathbf{Kd = r^2 \times 100\%}$$

Information:
Kd = Coefficient of determination
r = Correlation coefficient value

6.2.5 Hypothesis Conclusions

The next step to find out whether the hypothesis is accepted or rejected, what needs to be done is to do hypothesis testing which consists of the t test and F test.

1. ***Partial Regression Coefficient (t test)***
The t test is a statistical test to find out how far the influence of the independent variables individually explains the variation of the dependent variable. The test procedure after calculating the t count then compares the t count value with the t table. Drawing conclusions using t test statistics according to Sugiyono (2021) is as follows:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Information:
t = t test value
r = Correlation coefficient value
n = Number of samples

The significant level that will be used in this study is 5% (0.05) which means that it is likely that the results of drawing conclusions have a probability of 95% (0.95) or an error tolerance of 5% (0.05). The conclusions to be drawn are as follows:

a. If $t_{count} < t_{table}$ and significant level (α) > 0.05 then H0 is accepted Ha is rejected which means that partially the independent variable has no significant effect on the dependent variable.
b. If $t_{count} > t_{table}$ and significant level (α) <0.05 then H0 is rejected Ha is accepted which means that partially the independent variable has a significant effect on the dependent variable.

The design of the research hypothesis is as follows:
a. Net Profit Margins
H_{01}: $\beta_1 = 0$ Net Profit Margin has no significant positive effect on profit growth.
H_{a1}: $\beta_1 \neq 0$ Net Profit Margin has a significant positive effect on profit growth.
b. Debt to Asset Ratio
H_{02}: $\beta_2 = 0$ Debt to Asset Ratio has no significant positive effect on profit growth.
H_{a2}: $\beta_2 \neq 0$ Debt to Asset Ratio has a significant positive effect on profit growth.

2. ***Simultaneous Regression Coefficient (Test F)***

The F test is a statistical test to find out whether the independent variables simultaneously have an influence on the dependent variable. Drawing conclusions using F test statistics according to Sugiyono (20210 is as follows:

$$F = \frac{\frac{R^2}{k}}{(1 - R^2)\,/\,(n - k - 1)}$$

Information:
F = Significant relationship between the two variables
R^2 = Multiple correlation coefficient
k = Number of independent variables
n = Number of sample members

The hypothesis is tested by comparing the value of F_{count} with F_{table} using a list of F distribution tables with a degree of validity, namely (db) = n-k and the rate uses 5%, which means that the chance of a big or small risk when making a mistake is 0.05%, the comparison is as follows:

a. If $F_{count} < F_{table}$ then H_0 is accepted and Ha is rejected, meaning that there is no significant effect between net profit margin and debt to asset ratio on profit growth.
b. If $F_{count} > F_{table}$ then H_0 is rejected and Ha is accepted, meaning that there is a significant effect between net profit margin and debt to asset ratio on profit growth.

The design of the hypothesis in the study simultaneously (simultaneously) is as follows:

a. H_0: $\beta_1 = \beta_2 = 0$ Net Profit Margin and Debt to Asset Ratio have no significant effect on profit growth.
b. Ha: $\beta_1 \neq \beta_2 \neq 0$ Net Profit Margin and Debt to Asset Ratio significantly influence profit growth.

7. Results and Discussion

7.1 Research Results

1. Descriptive Statistical Test

Descriptive statistical test results.

Table 12: Descriptive Statistical Test Results Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
NPM	95	-74.05	1397.77	24.9200	143.59860
DAR	95	8.80	97.15	47.0898	22.88852
Profit Growth	95	-37.14	17.92	-.2656	5.49280
Valid N (listwise)	95				

Source: Output SPSS 24

Based on table 12 it shows that the Net Profit Margin has a minimum value of -74.05 and a maximum value of 1397.77 with an average value (mean) of 24.9200 and a standard deviation of 143.59860. The Debt to Asset Ratio has a minimum value of 8.80 and a maximum value of 97.15 with an average value (mean) of 47.0898 and a standard deviation of 22.88852. Whereas Profit Growth has a minimum value of -37.14 and a maximum value of 17.92 with an average (mean) value of -0.2656 and a standard deviation of 5.49280.

2. Classical Assumption Test

a. Data Normality Test Results

One-Sample Kolmogorov-Smirnov (K-S) results are as follows:

Table 13: Results of the Kolmogorov-Smirnov

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		95
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.95009923
Most Extreme Differences	Absolute	.048
	Positive	.048
	Negative	-.043
Test Statistic		.048
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Source: Output SPSS 24

Based on the results of data processing in table 13, it can be seen that the significant value is 0.200 > 0.05, so it can be concluded that the data in this study are normally distributed so that it can be continued in the next test.

b. Multicollinearity Test Results

The following results of multicollinearity testing are as follows:

Table 14: Multicollinearity Test Results

Coefficients [a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	NPM	.982	1.018
	DAR	.982	1.018

a. Dependent Variable: Profit growth

Source: Output SPSS 24

Based on table 14, it shows that the VIF value for the variable net profit margin and debt to asset ratio is 1.018. The VIF values of the two independent variables show numbers around 1 and do not exceed 10. Meanwhile, the tolerance values of the two independent variables show numbers more than 0.10. So, it can be concluded that the net profit margin and debt to asset ratio do not occur correlation between independent variables.

c. Heteroscedasticity Test Results

The following results of the heteroscedasticity test are as follows:

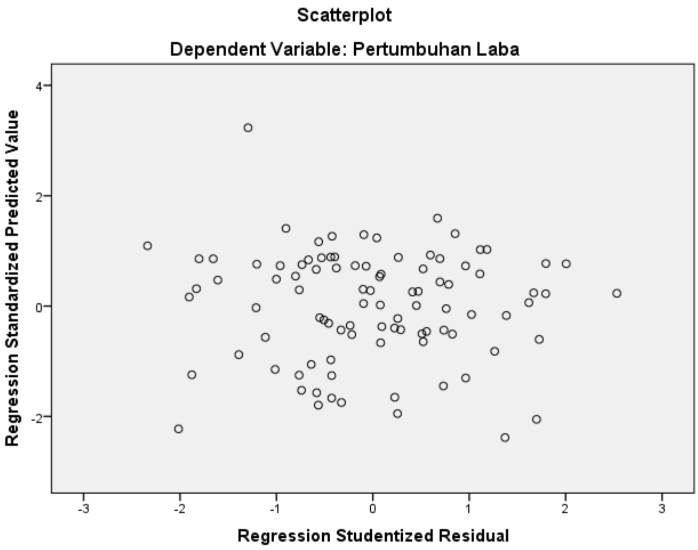

Figure 2: Heteroscedasticity Test Results

Source: SPSS Output Results 24

Based on Figure 2, it shows that the dots spread and do not form a specific pattern either above or below the number 0 on the Y axis. So the data used does not occur heteroscedasticity. So that the regression model is feasible to use to predict profit growth based on the inclusion of other independent variables, namely net profit margin and debt to asset ratio.

d. Autocorrelation Test Results

A good result is dU < d < 4-dU. The results of the autocorrelation test are as follows.

Table 15: Durbin-Watson Autocorrelation Test Results

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.277[a]	.077	.057	.9603709	1.997

a. Predictors: (Constant), DAR, NPM

b. Dependent Variable: Growth profit

Source: Hasil Output SPSS 24

From the results of the autocorrelation test in table 15, it shows that the Durbin-Watson value is 1.997. The results from the Durbin-Watson table with a significant value of 5% and with the number of samples (n) 95 data and the number of independent variables (k) are 2, the dU value obtained in the table is 1.7091 with a dL of 1.6233. Then the Durbin-Watson value is as follows.

dU< d < 4-dU 1.7091 < 1.997 < 4-1.7091 1.7091 < 1.997 < 2.291

This indicates that there is no positive or negative (accepted) autocorrelation. Based on the classical assumption test that has been carried out, it shows that the model under study has fulfilled the requirements and can be continued to carry out multiple linear regression testing.

Multiple Linear Regression Analysis

The following are the results of multiple linear regression analysis.

Table 16: Results of Multiple Linear Regression Analysis

Coefficients [a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	.495	.227		2.183	.032
	NPM	.001	.001	.146	1.448	.151
	DAR	-.011	.004	-.256	-2.528	.013

a. Dependent Variable: Profit Growth

Source: Output SPSS 24

Based on the results of multiple linear regression analysis in table 16, the multiple linear regression equation can be compiled as follows.

Profit Growth = 0.495 + 0.001NPM – 0.011DAR

The equation model above can be interpreted as follows.

1. A constant of 0.495 indicates that if the net profit margin and debt to asset ratio are 0, then the profit growth value is 0.495.
2. The coefficient value of the net profit margin variable is 0.001 and is positive, this indicates that the net profit margin has a unidirectional relationship with profit growth. So, under these conditions if the net profit margin variable increases by 1%, the profit growth variable will increase by 0.001 with the assumption that the other independent variables from the regression model are constant. In other words, if the value of the net profit margin increases, the value of profit growth will increase.
3. The coefficient value of the debt to asset ratio variable is -0.011 and is negative, this indicates that the debt to asset ratio has a non-directional relationship with profit growth. So, under these conditions if the debt to asset ratio variable increases by 1%, the profit growth variable will decrease by 0.011 with the assumption that the other independent variables from the regression model are constant. In other words, if the debt to asset ratio increases, the profit growth value will decrease.

Correlation Analysis

The results of the Pearson product moment correlation analysis are as follows.

Table 17: Correlation Analysis Results

Correlations

		NPM	DAR	Profit Growth
NPM	Pearson Correlation	1	.134	.063
	Sig. (2-tailed)		.194	.547
	N	95	95	95
DAR	Pearson Correlation	.134	1	-.259*
	Sig. (2-tailed)	.194		.011
	N	95	95	95
Profit Growth	Pearson Correlation	.063	-.259*	1
	Sig. (2-tailed)	.547	.011	
	N	95	95	95

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Output SPSS 24

Based on the results of testing the data above, it is interpreted as follows.

1. The value of the correlation coefficient (r) between net profit margin (X_1) and profit growth (Y) is 0.63. This means that the level of relationship between these two variables is strong because the value of r is

in the range of 0.60-0.799. The value of the correlation coefficient shows a positive number, which means that every increase in net profit margin will be accompanied by an increase in profit growth.

2. The value of the correlation coefficient (r) between the debt to asset ratio (X_2) and profit growth (Y) is -0.259. This means that the level of relationship between these two variables is low because the value of r is in the range of 0.20-0.399. The value of the correlation coefficient shows a negative number, which means that any increase in the debt to asset ratio will be accompanied by a decrease in profit growth.

Analysis of the Coefficient of Determination

Analysis of the coefficient of determination is used to test the ability of the independent variables, namely net profit margin and debt to asset ratio, to profit growth. From the results of data processing, the results of the coefficient of determination are as follows.

Table 18: Results of Determination Coefficient Analysis

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.277[a]	.077	.057	.9603709	1.997

a. Predictors: (Constant), DAR, NPM

b. Dependent Variable: Profit Growth

Source: *Output* SPSS 24

$$Kd = r^2 \times 100\%$$
$$= (0{,}277)^2 \times 100\%$$
$$= 7{,}67\%$$

Based on table 18 it can be seen that the coefficient of determination is 7.67% with an R Square value of 0.077 or 7.7%. This value indicates that the profit growth rate of 7.67% can be influenced by the net profit margin and debt to asset ratio. While the remaining 92.33% is influenced by other causes outside the model or other independent variables not examined.

Hypothesis Conclusion

1. Partial Hypothesis Test Results (t test)

Following are the results of partial data testing (t test).

Table 19: Test Results t

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.495	.227		2.183	.032
	NPM	.001	.001	.146	1.448	.151
	DAR	-.011	.004	-.256	-2.528	.013

a. Dependent Variable: Profit Growth

Source: Output SPSS 24

Based on table 19 shows that the t_{count} value for the variable net profit margin is 1.448 <1.985 and a significant value is 0.151 > 0.05, then H_0 is accepted and Ha is rejected which means that partially net profit margin has no significant effect on profit growth. Values that show positive indicate that the variable net profit margin has a relationship in the same direction as profit growth.

Next, for the results of the t-count test, the variable debt to asset ratio is -2.528 > 1.985 and a significant value is 0.013 <0.05, then H_0 is rejected, Ha is accepted, which means that partially the debt to asset ratio has a negative and significant effect on profit growth. Values that show negative indicate that the variable debt to asset ratio has a relationship in the opposite direction with profit growth.

2. Simultaneous Hypothesis Test Results (Test F)

The results of simultaneous data testing (F test).

Table 20: F Test Results

ANOVA [a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.046	2	3.523	3.820	.025[b]
	Residual	84.853	92	.922		
	Total	91.899	94			

a. Dependent Variable: Profit Growth

b. Predictors: (Constant), DAR, NPM

Source: Output SPSS 24

Table 20 shows that the F_{count} value for all variables is 3.820 > 3.09 with a simultaneous significant value of 0.025 <0.05. This means that H_0 is rejected and H_a is accepted. This means that the net profit margin and debt to asset ratio simultaneously have a positive and significant effect on profit growth.

8. Conclusions and Suggestions

8.1 Conclusion

Based on the results of research on the Effect of Net Profit Margin and Debt to Asset Ratio on Profit Growth in Coal Mining Subsector Companies listed on the Indonesia Stock Exchange in 2017-2021, the following conclusions can be drawn.

1. Partially, Net Profit Margin has no significant effect on profit growth in coal mining sub-sector companies listed on the Indonesia Stock Exchange in 2017-2021. This is evidenced by the results of the t test showing that the net profit margin has a t_{count} of 1.448 with a t_{table} of 1.985 ($t_{count} < t_{table}$) and a significant value of 0.151 > 0.05. This shows that the net profit value has no impact on the net profit margin value.
2. The Debt to Asset Ratio partially has a negative and significant effect on profit growth in coal mining sub-sector companies listed on the Indonesia Stock Exchange in 2017-2021. This is evidenced by the results of the t test indicating that the debt to asset ratio has a t_{count} of -2.528 with a t_{table} of 1.985 ($t_{count} > t_{table}$) and a significant value of 0.013 <0.05. This shows that if the company increases its debt policy, it will be difficult to increase profits and may even reduce profits so that the debt to asset ratio has a negative effect on profit growth.
3. Net Profit Margin and Debt to Asset Ratio simultaneously have a positive and significant effect on profit growth. This is evidenced by the results of the F test indicating that the debt to asset ratio has an F_{count} of 3.820 with a F_{table} of 3.09 ($F_{count} > F_{table}$) with a significant value of 0.025 <0.05. This shows that the higher the debt to asset ratio, the lower the company's profit growth rate because the profit earned is used to process the company's debts and the higher the company's net profit margin shows the higher the company's profit level resulting from company sales.

8.2. Suggestion

Based on the results of the research conducted, suggestions that can be given are as follows.

1. For the Company

a. The company pays more attention to the level of profitability, one of which is the net profit margin because high net profit indicates the company's ability to generate profits.

b. To overcome the high debt to asset ratio, companies should maximize the function of fixed assets because fixed assets provide benefits during the accounting period, so that after their useful life they are considered to have no more benefits for the company.
2. Investors or potential investors should pay attention to the net profit margin and debt to asset ratio before deciding to invest in a company because the net profit margin and debt to asset ratio values can indicate the amount of return and risk that investors will receive for their investment.
3. For future researchers, it is hoped that they can pay attention to other factors that can affect profit growth besides financial ratios and determine other sub-sectors that have more data.

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The Impact of Spiritual Marketing on Consumer Loyalty

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Abstract
Wardah is a pioneer of a cosmetic brand receiving a halal certificate from the Indonesian Ulema Council. Therefore, these products are compliant with Islamic principles. Indeed, Indonesian consumers, mainly Muslim, are expected to be loyal. Related to this situation, the company manufacturing Wardah products needs to choose the type of suitable marketing. For this reason, this research aims to examine and analyze the impact of spiritual marketing on consumer loyalty. To achieve this intention, the consumers of Wardah products in Jakarta perform as the population and samples. Because the population size is unidentified, the consumers are taken by purposive sampling. Also, the variance-based structural equation model and probability of t-statistic are utilized to analyze the data and test the hypothesis. Based on the response testing, this study concludes that spiritual marketing is needed to create loyal consumers.

Keywords: Consumer Loyalty, Spiritual Marketing, Wardah Products

1. Introduction

Indonesia is one of the sizeable Muslim countries worldwide (Hapsari, 2018). This situation stimulates several institutions to take this chance to market their goods and services based on Islamic principles; for example, banks (Kusumadewi & Lestari, 2017; Rini & Absah, 2017) and foods and restaurants (Khairy & Abidin, 2018). The other instances are hotels (Usman et al., 2020), tourist attractions (Yanuar et al., 2019), and the producers of cosmetic products (Suhartanto et al., 2020).

Similar to a non-religious-orientated company, the loyalty of consumers becomes the primary destination for the religious one. If this situation occurs, revenue from sales will be created. This firm can quickly get new customers at a low expense because of the recommendation to use its products from the existing loyal customers. In the end, this firm will sustain itself and be able to compete with others in the marketplace (Arslan, 2020).

Furthermore, to attain the loyalty of its customers, a firm with a divine perspective needs to focus on spiritual marketing (Kusumadewi & Lestari, 2017). Spiritual marketing is a religious concept associated with the execution of its corresponding values, i.e., openness, honesty, humility, trustworthiness, and morality (Bambang et al., 2021). These values must be implemented in product marketing, the choice of raw substances, and production phases (Hermawati et al., 2022).

Research focusing on the impact of spiritual marketing on consumer loyalty is already conducted. However, the results are not consistent yet. For example, Kusumadewi and Lestari (2017) and Rini and Absah (2017) demonstrate a positive effect. In their study, Suhartanto et al. (2020) find that the more religious people are, the more loyal they are to halal products. Adopting the marketing mix concepts associated with spirituality, Khairy and Abidin (2018) declare that a positive influence happens in spiritual promotion and place. Unfortunately, both product and price do not affect this loyalty. Also, Nurjannah et al. (2023) confirm this insignificant effect of spiritual marketing when studying the loyal consumers of *Bank Syariah Indonesia.*

Based on these varying results, this study wants to prove the effectiveness of spiritual marketing on the loyalty of consumers of Wardah products in Jakarta. Wardah is the brand for beauty products manufactured by Paragon Technology and Innovation Inc. for females (Lesmana & Ayu, 2019). It obtains the halal certificate for its goods for the first time domestically from the Indonesian Ulema Council and globally from the World Halal Council among competitive brands in Indonesia (Revitasari, 2022), like Revlon, L'Oréal, Silky Girls, La Tulipe, Maybelline (Lesmana & Ayu, 2019), Pixy, and Viva (Nyoko et al., 2020). According to its official website: https://www.wardahbeauty.com/en/product/list/sale, Wardah offers skincare, make-up, body care, and hair care to its consumers.

2. Research Methods

This study utilizes the independent variable: spiritual marketing, and the dependent variable: customer loyalty. Furthermore, the items to measure spiritual marketing and customer loyalty refer to Hermawati et al. (2022) and Suhartanto et al. (2020) one-to-one.

Table 1: Variable Definition

Variable	Definition	Items	Source of items
Spiritual marketing	The application of spiritual values in the business to distribute the company's products in the marketplace (Bambang et al., 2021)	When marketing Wardah products, the salesperson is: a. Truthful: what the person says about the products is proven (SM1) b. Polite and humble to customers (SM2). c. Well-organized and performing neatly in working (SM3). d. Non-discriminative in serving the customers (SM4).	Hermawati et al. (2022)
Customer loyalty	The dedication of customers to constantly buy the products based on a positive mindset (Kotler & Keller, 2015)	I love these Wardah cosmetic products more than the other products offered by the competitors (CL1) I suggest that my other recognized people utilize these Wardah cosmetic products (CL2). I will keep using these Wardah cosmetic products in the future (CL3).	Suhartanto et al. (2020)

Furthermore, these items are included in the questionnaire and distributed online to the consumers of Wardah products in Jakarta. Because the population size is unknown, the purposive sampling method is used to take the samples. According to Hartono (2012), this method applies some criteria. In this study context, the requirements

are that they have to live in Jakarta, be aged between 15 and 30, and have already purchased Wardah products within one month left.
Additionally, this study utilizes the structural equation based on variance to analyze their response to the items. It can be applied to the model with small samples (between 30 and 100) or large samples: above 200 (Sholihin & Ratmono, 2020). In this study, the model can be seen in the first equation.

$$CL = \beta_1 SM + \zeta \quad \text{(Equation 1)}$$

This structural equation model automatically uses a confirmatory analysis factor as the validation testing tool. This validity testing involves loading factors and average variance extraction (AVE) compared with 0.7 and 0.5, respectively. The respondents' answer is accurate if the loading factors and AVE are above these cut-off points (Sholihin & Ratmono, 2020).

Besides, the valid answer of respondents needs to pass the reliability test. Then, to facilitate this test, this study utilizes the Cronbach Alpha and composite reliability coefficients with a cut-off point of 0.7. The valid answer is reliable if these coefficients are higher than this point (Sholihin & Ratmono, 2020). By mentioning Ghozali (2021), this study utilizes R-square and Q-square to assess the model with this rule. The R-square's cut-off points to judge the determinants' strong, middle, and weak contributions are 0.67, 0.33, and 0.19. If Q-square is upper than 0, the model can powerfully predict.

3. Results And Discussion

3.1. The features of respondents

Based on the survey in December 2022, this research obtained 90 responsive customers using Wardah products, covering 65 females (72.22%) and 25 males (27.78%). Their number aged between 26 and 30 was 45 (50%), 20 and 25 was 40 (44.44%), and 16 and 20 was 5 (5.56%). Mostly, they preferred buying skincare (30 persons, 33.33%). The rest liked to purchase make-up products (28 persons, 31.11%), body care goods (15 persons, 16.67%), and hair care goods (17 persons, 18.89%) (see Table 2).

Table 2: The number of respondents based on gender, age, and the type of products preferred to purchase

Feature	Description	Total	Portion
Gender	Female	65	72.22%
	Male	25	27.78%
Age	16-20	5	5.56%
	20-25	40	44.44%
	26-30	45	50.00%
The type of products preferred to purchase	Skincare products	30	33.33%
	Make-up products	28	31.11%
	Body care products	15	16.67%
	Hair care products	17	18.89%

Source: Processed primary data

3.2. Validity and reliability testing results

Table 3 presents the validity and reliability testing results. For spiritual marketing, the loading factor of SM1, SM2, SM3, and SM4 is more significant than 0.7: 0.869, 0.937, 0.873, and 0.826, and AVE is higher than 0.5: 0.769. Because these values are above the required level, an accurate response to the items exists. The Cronbach Alpha and composite reliability coefficients are more significant than 0.7: 0.899 and 0.930; hence, the precise answer is reliable.

For consumer loyalty, the loading factor of CL1, CL2, and CL3 is more significant than 0.7: 0.841, 0.902, and 0.812, and AVE is higher than 0.5: 0.727. Because these values are above the required level, an accurate response to the items exists. The Cronbach Alpha and composite reliability coefficients are more significant than 0.7: 0.812 and 0.888; hence, the precise answer is reliable.

Table 3: Validity and Reliability Testing Result

Variables	Items	Loading factor	AVE	Cronbach Alpha coefficient	Composite reliability coefficient
Spiritual Marketing	SM1	0.869	0.769	0.899	0.930
	SM2	0.937			
	SM3	0.873			
	SM4	0.826			
Consumer Loyalty	CL1	0.841	0.727	0.812	0.888
	CL2	0.902			
	CL3	0.812			

Source: Modified Output of Smart PLS

3.3. The results for model estimation

Table 4 provides the result for model estimation with an R-square of 0.654, almost reaching 0.67. It means the contribution of spiritual marketing to consumer loyalty is slightly substantial. Also, the Q-square above 0: 0.462 shows that model has predictive relevancy. This study result demonstrates that spiritual marketing positively affects consumer loyalty, proven by the probability of the t-statistic less than 5%: 0.0000.

Table 4: The results for model estimation: The effect of spiritual marketing on consumer loyalty

Causal Association	Original Sample (O)	Standard Deviation (STDEV)	T-Statistic (|O/STDEV|)	Probability
SM → CL	0.809	0.059	13.645	0.000
R-square	0.654	Q-square	0.462	

Source: Modified Output of Smart PLS

4. Discussion

This research result shows that spiritual marketing positively influences consumers' loyalty to Wardah products. As products with the halal certificate, the firm producing Wardah can effectively market them to Indonesians, dominated by Muslims. Indeed, this circumstance encourages female Muslims to consume products to obey what the Al-Quran teaches. Hence, this result is in line with Kusumadewi and Lestari (2017), after investigating one-hundred depositors of the Shariah Mandiri Bank in Cirebon as the samples. Also, it supports Rini and Absah (2017), using two-hundred consumers from sixty-four Shariah banks in Medan branches. Besides, this study confirms Suhartanto et al. (2020), employing 457 adult females becoming halal cosmetics users in Bandung.

In this research context, to realize the loyalty of its customers, the firm producing Wardah products needs to keep spiritual values based on Islamic perspectives to market them. Therefore, the salespersons or employees serving consumers are expected to explain the halal aspect by denoting the ingredients in the products. Also, politeness and humbleness need to be owned by the employees to make the customers impressed. Furthermore, the employees have to serve the customers fairly, without seeing the difference based on gender, race, religion, and group. It is in line with the motto of the Republic of Indonesia: diversity in unity or *Bhinneka Tunggal Ika.*

5. Conclusion

The halal label is mandatory for the products marketed in Indonesia, the most prominent people with Islamic religion worldwide. As the producer of cosmetic products, Wardah uses this situation to be the pioneer in getting the label. As a result, spiritual marketing based on an Islamic perspective is needed. This study appears to examine the effectiveness of spiritual marketing in affecting the loyalty of consumers. After obtaining the responses from the survey in December 2022, this study analyzed them statistically and concluded that spiritual marketing could enhance loyalty.

This study is limited in some aspects. Firstly, it only utilizes one determinant of customer loyalty: spiritual marketing. Secondly, ninety respondents are used as the sample size. For the first limitation, the subsequent scholars can use other factors, such as emotional marketing and religiosity. Also, they can add satisfaction to mediate the influence of spiritual marketing and religiosity on loyalty. To overcome the second one, the following scholars can enhance the number of utilized samples to 200 or above as the requirement for theory verification. If this number is fulfilled, the structural equation model based on covariance can be employed. The way to achieve this condition is by taking the consumers as samples in other giant cities in Indonesia, like Surabaya, Medan, Bandung, and Semarang.

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A Conceptual Model of the Role of Perception of Celebrity Endorsement in Consumer Purchase Intention of MS Glow Beauty Products

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Abstract
This article aims to explain the influence of perception of celebrity endorser on purchase intention which is mediated by attitude towards ads and attitude towards brand. This study was moderated by the type of endorser tested in two groups, handsome vs. not handsome endorser types. Literature reviews made by several international journals with high reputation including research from Schouten et al. (2020) and Ha & Lam (2017). This article is to identify the variables used to build a conceptual model. The expected finding is that there is a positive relationship between perception of celebrity endorser, attitude towards ads and attitude towards brand on purchase intention which is moderated by type of endorser. This study also explains the dimensions of trustworthiness, expertise, and similarity that produce the perception of celebrity endorsers. Researchers hope this research can help marketers to design effective marketing strategies to influence potential consumers. This paper is also expected to contribute theoretically, practically and possibly can be used for future studies.

Keywords: Perception of Celebrity Endorser, Attitude Towards Ads, Attitude Towards Brand, Purchase Intention

1. Introduction

Social media users are not limited to individuals, rather social media can serve as a platform for organizations, businesses, goals or brands (Kim & Ko, 2012). Social Media can be used to create content and reach others. For businesses or brands, it can often be confusing to understand how they can influence and engage in conversations with their customers. Social media is a low-cost and easy-to-use marketing platform for promoting a brand to consumers. It is important to understand what factors influence consumers to recognize brands on social media and the effects of promotion on social media (McClure & Kyoung, 2020). When social media changes from a communication medium to a product marketing medium, it is important for brands to understand the influence of social media platforms on consumer attitudes and purchase intentions.

The last decade has seen major changes in the effectiveness of social media marketing marked by a shift towards celebrity endorsements (Bergkvist & Zhou, 2016). The growth of celebrity endorsement marketing accelerated with the emergence of COVID 19, where people are turning from offline to online for entertainment and virtual social experiences. In 2021 semester 1, e-commerce transactions grew by 63.4% to Rp. 186.7 trillion compared to the previous year (Badan Pusat Statistik, 2021). As a result, celebrity endorsement marketing has become an important part of digital marketing strategy as a touchpoint to reach target consumers. The selection of celebrities that are adjusted to the target market and other facilities that can support the buyer's decision-making process is used as a benchmark for companies in choosing promotional tools (Freire et al., 2018). Selection of endorsers, especially for beauty products, often uses celebrities who have good physical attractiveness to market these beauty products. But not all beauty products use beautiful or handsome celebrities for marketing their products.

The selection of celebrity in the advertising marketing of Ms Glow's beauty products is interesting to study. The advertising strategy chosen uses a famous Korean celebrity, namely Cha Eun Woo, who holds the title as a Korean actor with a handsome face, which is an interesting marketing technique (Kompas.com, 2022). On the other hand, Ms Glow also carried out a marketing strategy using a unique celebrity. The selection of celebrities such as Marshel Widianto, who has an unattractive face and appearance and is not a model who often appears for beauty products, tries to break people's perceptions that beauty models must be beautiful or handsome (Gusniar, 2020). Celebrity's background, namely as a comedian, has nothing to do with the products being marketed, namely beauty products. Ms Glow's beauty product wants to show consumers that one's looks and appearance are not the main thing because everyone has the right to take care of themselves. The effectiveness of the endorser depends on the intent he brings to the endorsement process (Mccrakcen, 1989; Hussain et al., 2020).

The MS Glow brand also has advantages in the local market in the world of beauty in the skincare category for various ages from children, adolescents, adults to the elderly. Their products can also be used not only for women but also produce products for men. The high market demand for MS Glow products is evidenced by the high sales figures compared to other local skincare products. MS Glow is the best-selling local skincare top brand with a total sales value of IDR 38.5 billion in the period 1-18 February 2021 (Compas.co.id, 2021). This proves the high number of MS Glow skincare sales in e-commerce. This shows a good market potential to advance the skincare market share in the local product category.

Perception of celebrity endorsers is a representation of consumer confidence that the celebrity has a good image and is suitable for advertising the product of a company brand, in this case the use of celebrity aims to gain greater consumer trust and marketing effectiveness (Goldsmith, et al., 2000; Freire et al., 2018; Schouten, 2020). Consumer perceptions of celebrity endorsements are based on celebrity dimensions that influence purchase intention, namely trustworthiness, expertise, similarity (Gauns et al., 2017). Consumer perceptions of the effectiveness of advertising with celebrity endorsers also aim to shape consumer attitudes that can influence purchase intentions.

Attitude towards ads is the feeling of consumers to judge whether certain advertisements are good or bad (Felix & Borges, 2014). The formation of an attitude towards ads is influenced by the content of the advertisement itself (Sallam & Algammash, 2016; Sarashadi & Amina, 2018). The effectiveness of advertising with celebrity endorsers aims to shape consumer attitudes that can influence purchase intentions. After receiving a stimulus from an advertisement, someone will tend to respond to how that person can behave towards the advertisement and trigger an intention to buy.

Attitude towards brand is the consumer's perception of trust and expertise in the brand (Felix & Borges, 2014; Felbert & Breuer, 2020). Attitude towards brand is a feeling that evaluates positively or negatively, good or bad, likes or dislikes a product (Sauro, 2015). Attitude towards the brand can be interpreted as the consumer's feelings towards the company's way to be trusted and able to fulfill its claims on the brand. The formation of an attitude towards a brand is also influenced by the effectiveness of advertisements using celebrity endorsers (Bergkvist & Zhou, 2016; Schouten et al., 2020).

Purchase intention is a process of consumer behavior towards certain products and consumers' willingness to buy these products based on their overall assessment (Kotler, 2016; Wang et al., 2017). Purchase intention is the desire of consumers to buy which is part of the process towards the purchase action. Celebrity endorsers can generate better opinions about advertisements and brands which tend to have a positive impact on consumer purchase intentions (Tanjung & Hudrasyah, 2016).

The use of 2 different celebrity appearances is interesting to study to investigate the effectiveness of the advertisements produced in influencing consumer purchase intentions. Referring to previous studies examined by Schouten et al. (2020) there are limitations to the study, namely only identifying the impact of celebrity support vs. influencers on advertising effectiveness (attitudes towards advertisements and products, and purchase intentions), moderated by the suitability of supporting products, so that they have not studied consumer perceptions of celebrity endorsers. In addition, this study investigates two potential mediators that underlie this relationship, namely identification (perceived similarity and identification of expectations) and credibility (trust and expertise). The results obtained show that participants identify more with influencers than celebrities, feel more like influencers than celebrities, and trust influencers more than celebrities. In terms of advertising effectiveness, similarity, identification of expectations, and trust mediate the relationship between the type of endorser and advertising effectiveness. The research conducted by Ha & Lam (2017) examines several factors that influence purchase intentions, namely celebrity endorsements and customer attitudes toward brands conducted on customers in Vietnam. The results showed that customer attitudes toward brands were positively influenced by three factors, namely celebrity compatibility with the brand/product, celebrity trust, and celebrity expertise. Attitude towards the brand also has a positive impact on customer purchase intentions. In a study by Schouten et al. (2020) and Ha & Lam (2017) are expected to be able to add other factors that influence purchase intention in the future with different methods and contexts.

Based on the explanation above, the authors conducted this research to see whether using two celebrities is an effective promotion for product or brand. So the authors conducted research to determine whether there is a positive relationship between perception of celebrity endorsement, attitude towards ads and attitude towards brand on purchase intention which is moderated by the type of endorser. This study also explains the dimensions of trustworthiness, expertise, and similarity that shape the perception of celebrity endorsement.

2. Literature Review and Hypothesis

2.1. Core Theory

The conceptual model in this study is based on cognitive psychology theory. According to Schiffman & Wisenblit (2019), cognitive psychology theory explains that consumer behavior consists of three components, namely cognitive, affective and conative. This cognitive component describes the knowledge and perception of an attitude object. Someone has confidence from what is seen or what is known. Furthermore, this affective component describes a person's feelings or emotions towards an object. Affective is a person's overall evaluation of an object whether it is good or bad, likes or dislikes. Then the last, namely the conative component describes a person's tendency to take certain actions related to objects. In this conative a person has an interest and action in a behavior so that consumers have a decision on that object. The application in the formation of the conceptual model is the perception of celebrity endorser which has the dimensions of trustworthiness, expertise, and similarity which is a cognitive psychology component that produces an affective component in the form of attitude towards ads and attitude towards brand and a conative component in the form of purchase intention which is moderated by the type of endorser.

2.2. Purchase Intentions

Purchase intention is a combination of consumer interest in purchasing products (Kim & Ko, 2012; Tanjung & Hudrasyah, 2016; Wang et al., 2017). Intention is an internal factor that influences consumer behavior, interest is a form of thought that is real from the reflection of consumer plans to buy a product (Goldsmith et al., 2000). According to Setiadi (2003), indicators of purchase intention are interest, attitude of paying attention to the product, and the desire to buy based on needs. Purchase intention is a stage carried out by consumers before planning to buy a product (Yeh & In, 2010; Kotler, 2016; Rachbini, 2018). Based on this opinion, buying interest can be interpreted as a desire to buy which is part of the process leading to purchasing actions carried out by a consumer. A successful endorser will create customer awareness for a product, so that they will form a positive attitude towards the brand and generate an intention to make a purchase (Sarashadi & Amina, 2018).

2.3. Perception of Celebrity Endorser

Perception of celebrity endorsers is the consumer's interpretation of a celebrity endorser through the senses that are influenced by internal and external factors of an endorser in conveying advertising messages (Ohanian, 1990; Solso et al., 2007; Gauns et al., 2017). Perception is a cognitive process experienced by everyone in receiving a stimulus and trying to understand a meaningful situation. Celebrity endorsers can bring consumers positive or negative perceptions of a product (Freire et al., 2018). Celebrity Endorser is defined as someone who conveys a message to consumers who can form opinions and then consumers will forward these opinions according to their respective perceptions. When a celebrity endorser advertises a product, the celebrity endorser's self-image will affect a company, brand or product. There are several dimensions of celebrity endorsers that can attract attention and can influence consumer perceptions to make purchasing decisions (Gauns et al., 2017). Several dimensions affect the perception of a celebrity endorser, namely trustworthiness, expertise, and similarity.

2.4. Trustworthiness, Expertise, Similarity

Trustworthiness refers to the honesty, integrity and trust of an endorser (Endorgen, 1999; Freire et al., 2018; Gusniar, 2020). Consumer preference for endorsers generally has the impression that the endorser is a reliable source of information. Whereas expertise is a process of how far a celebrity endorser is considered qualified enough to provide valid and accurate information in discussing certain subjects based on experience, quality, knowledge, expertise and skills (Rameez & Ahmed, 2014). The expertise possessed by the endorser must be able to have a positive and pleasant effect on consumers, so as to be able to influence the recipient of the information to consider purchasing. Meanwhile, the similarity dimension itself refers to similarities between celebrity endorsers and intended consumers (McCracken, 1989; Munnukka et al., 2016; Schouten et al., 2020). These similarities include similarities in nature, hobbies, needs, etc.

When a product is advertised by a celebrity who can be trusted, and has expertise and similarities with consumers, the effectiveness of advertising will be higher in influencing consumer attitudes (Kotler, 2016). Celebrities that consumers can trust tend to form positive attitudes toward advertisements and brands. Previous studies have explained that consumer perceptions of a good celebrity endorser have a positive effect on influencing attitudes toward advertising (Goldsmith et al., 2000). On the other hand, when consumers have a positive perception of the advertised celebrity endorser, a positive attitude towards the brand will be formed (Ohanian, 1990; Ha & Lam, 2017). Based on these guidelines, the hypothesis is conceptualized as follows:

H1: Perception of celebrity endorser has a positive effect on attitude towards ads
H2: Perception of celebrity endorser has a positive effect on attitude towards brand

2.5. Attitude Towards Ads

Attitude towards ads is a person's likes or dislikes for certain advertising objects (Arnould et al., 2005; Munnukka et al., 2016; Haryanto & Nusantara, 2018). After receiving a stimulus from an advertisement, someone will tend to respond to how that person can behave towards the advertisement. It can be said that attitude towards ads is a person's feelings of interest in an advertisement. When viewing an advertisement, consumers have a response or perception of the advertisement, thereby forming purchase intentions for the product (Jhally, 2003; Thomas & Johnson, 2017; Fam & Waller, 2006). Research by Haryanto & Nusantara (2018) also confirms that in the process of consumer behavior to buy, consumer buying interest is influenced by attitudes towards brands and attitudes towards advertisements. It can be concluded that the higher the positive attitude towards the advertisement, the higher the intention to buy the product. Based on these guidelines, the hypothesis is conceptualized as follows:

H3: Attitude towards ads has a positive effect on purchase intention

2.6. Attitude Towards Brands

Attitude towards the brand is a consumer evaluation of a brand as a whole after watching advertisements on brands that have a beneficial or detrimental impact on a brand (Sallam & Algammash, 2016; Ha & Lam, 2017). This understanding implies that the attitude towards the brand is a process of consumer learning towards the brand to evaluate the brand so that it will form a choice whether the brand is considered good or not good. Fournier (1998) and Wang et al. (2017) said that if a brand fulfills consumer desires, it will have an impact on psychological effects where consumers will tend to be loyal to a brand and will increase the desire to purchase the product. Many studies explain that in the process of behavior there is a significant and positive relationship between positive attitudes and purchase intentions towards brands. This shows that a higher positive attitude towards a brand means a higher purchase intention (Haryanto, 2014; McCormick, 2016; Ha & Lam, 2017). This means that the higher the positive attitude towards the brand, the higher the intention to buy the brand. Based on these guidelines, the hypothesis is conceptualized as follows:

H4: Attitude towards brand has a positive effect on purchase intention

2.7. Type of Endorser

Endorsers are advertisement supporters or also known as advertisement stars who support advertised products (Biswas et al., 2006; Wang et al., 2017; Sarashadi & Amina, 2018). Many factors are considered by producers in choosing the type of endorser according to the needs of advertising effectiveness. Various types of endorsers have their own charm to influence consumers and influence consumer buying behavior so that they can make purchasing decisions for advertised products. Ads delivered by endorsers must be able to form opinions that are in accordance with what the company wants (Kotler & Keller, 2016).

According to research by Yeh & In (2010) in an advertisement there is an influence of different types of endorsers on attitudes towards advertisements, attitudes towards brands and consumer purchase intentions. Although in another study conducted by Schouten et al. (2020) revealed that there was no direct effect of the type of endorser on advertising and product attitudes, but there were several mediating effects through trust, similarity and identification which could explain the relationship between the type of endorser and advertising effectiveness. Many previous studies have explained that there is a different effect on each type of endorser depending on the case (Tanjung & Hudrasyah, 2016; Zhu et al., 2019; von Felbert & Breuer, 2020). But there is no research that explains the type of endorser according to handsome vs not handsome appearance. So it is useful in this study to determine whether the type of endorser according to the appearance of handsome vs not handsome can moderate the relationship between perceptions of celebrity endorsers, attitudes towards advertising, attitudes towards brands and consumer purchase intentions. So that the hypothesis is conceptualized as follows:

H5: Type of endorser moderate the relationship between perception of celebrity endorser and attitude towards ads
H6: Type of endorser moderate the relationship between perception of celebrity endorser and attitude towards brand
H7: Type of endorser moderate the relationship between attitude towards ads and purchase intention
H8: Type of endorser moderate the relationship between attitude towards brand and purchase intention

Based on the development of the conceptualized hypothesis, FIGURE 1 below is the resulting conceptual model framework.

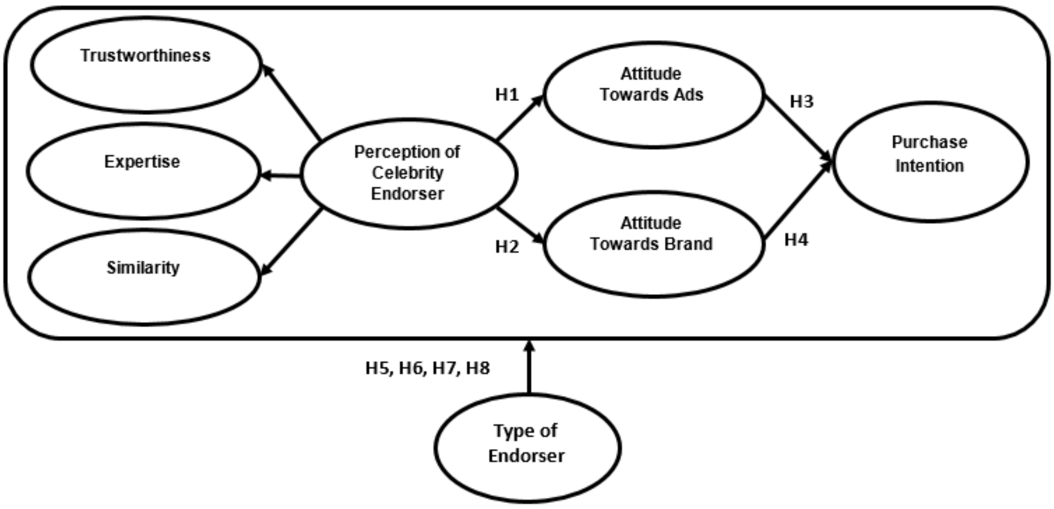

Figure 1 : A conceptual model that explains the relationship between perception of celebrity endorser and purchase intention mediated by attitude towards ads and attitude towards brand and moderated by type of endorser

Figure 1 explains that the dimensions behind the perception of a celebrity endorser include trustworthiness, expertise, and similarity to the endorser. When the information stimulus conveyed by the endorser has coherence with the values that exist within the individual, the perception will be easier to accept (Toha, 2003). When consumers begin to form positive perceptions of celebrity endorsers, it is hoped that this situation can form positive attitudes towards advertising and positive attitudes towards brands moderated by the type of endorser. Thus, attitudes towards advertising and attitudes towards brands play an important role in influencing purchase intentions which are moderated by the type of endorser (Felix & Borges, 2014).

3. Research Methodology

3.1. Research Design

This research uses a quantitative descriptive approach using an online survey method to reach more respondents because this research uses the consumer population in Indonesia. The survey method is a research method used in certain populations and samples and in collecting data using primary data using research instruments that are carried out in a systematic and structured manner with the aim of testing predetermined hypotheses (Cooper & Schindler, 2014). The data collection for this study used cross-sectional, because this research was only conducted at one time and described the situation at one time only.

3.2. Source of Data

The data sources used in this research are primary and secondary data. Primary data is data that is directly collected and analyzed by researchers themselves (Sekaran et al., 2016). The primary data in this study is the result of the direct responses of the respondents in answering the questions on each questionnaire instrument via Google Form. Secondary data in this study were obtained from literature reviews, journals, websites and previous research to find data or quotes from several definitions which were used as references as a theoretical basis.

3.3. Population, Sample and Sampling Technique

3.3.1. Population

The population that will be studied in this study are consumers in Indonesia who intend to purchase MS Glow products by viewing advertisements by Cha Eun Woo and Marshel Widianto. The population of this study uses consumers with an age range of 17-60 years. This population was taken in accordance with the age provisions for using MS Glow products, namely from 17 years old to the elderly. According to Sekaran et al. (2016) population is a group of people as a whole, as well as all events, things or interests in it that the researcher wants to investigate.

3.3.2. Sample

The sample in this study were consumers in Indonesia who saw advertisements by Cha Eun Woo and Marshel Widianto who specifically had the intention to buy MS Glow products who were in the age range of 17-60 years. The number of samples that will be used in this study is as many as 300 respondents with the aim that the results obtained have the desired level of accuracy. According to Hair et al. (2017) determining the minimum sample size for SEM is (Number of indicators + number of latent variables) x (5 to 10 times). This sample was divided according to the endorser type testing group, namely 150 respondents to Cha Eun Woo's ad and 150 respondents to Marshel Widianto's ad.

3.3.3. Sampling Technique

The sampling technique for this study used a purposive sampling technique. Purposive sampling is a technique for determining samples based on populations that have certain considerations or characteristics (Cooper & Schindler, 2014). Individuals who see advertisements by Cha Eun Woo and Marshel Widianto and have the intention to buy MS Glow products are the criteria for sampling size.

3.4. Data collection technique

Data collection was carried out using the questionnaire method, namely written questions that had been formulated beforehand. Data collection is shared online, via Whatsapp message, Instagram, Facebook, Twitter so that it reaches the intended target. The measurement scale used is the Likeart scale to find out how strong the respondents are in agreeing with the statements given (Sekaran et al., 2016). Respondents' answers were categorized using 5 points, namely:

a. Point 5 means Strongly Agree (SS)
b. Point 4 means Agree (S)
c. Point 3 means Neutral (N)
d. Point 2 means Disagree (TS)
e. Point 1 means Strongly Disagree (STS)

3.5. Data analysis

This study used a Structural Equation Model (SEM) with the Partial Least Square (PLS) program using SmartPLS 3 software. In this study, Multi Group SEM analysis was used because there were two groups of sample data in the study. The data sample groups used were the Cha Eun Woo ad group and the Marshel Widianto ad group. There are two sub-models in using SEM analysis, namely the measurement model (outer model) and the structural model (inner model). The measurement model explains how manifest variables represent latent variables. Evaluation of the measurement model (outer model) is carried out to assess the validity and reliability of the model. Meanwhile, the structural model (inner model) explains the strength between construct variables.

3.6. Outer Model

3.6.1. Validity test

Measuring whether or not the questionnaire is accepted can use a validity test. Validity assessment includes convergent validity and discriminant validity. The criteria for evaluating convergent validity and discriminatory validity are as follows:

a. Convergent Validity. Convergent validity is said to be fulfilled if two different instruments used to measure the same concept have highly correlated values (Sekaran & Bougie, 2016). Convergent validity test was carried out using the AVE (Average variance Extracted) value and outer loading. The expected value of outer loading > 0.7 is declared valid. Meanwhile, the AVE value is considered to explain more than half of the indicator variance if it has a value of 0.50 or higher.

b. Discriminant Validity. This value is the value of the cross loading factor which is useful for knowing whether the construct has adequate discriminant, namely by comparing the value of the outer loading on the intended construct it must be greater than the value of the cross loading with other constructs. If the cross loading value exceeds the outer loading value, this indicates that there is a problem with discriminant validity (Hair et al., 2017).

3.6.2. Reliability Test

Reliability testing is carried out to prove the accuracy, consistency, and precision of the instrument in measuring constructs. Testing the reliability of a construct with reflective indicators can be done by assessing Cronbach's Alpha and AVE (Average Variance Extracted). Consistent respondent answers characterize a reliable questionnaire. The results can be said to be reliable if the Cronbach alpha value is > 0.7 and the AVE (Average Variance Extracted) score is > 0.5 (Hair et al., 2017).

3.7. Inner Model

The assessment of the structural model (inner model) uses SEM by looking at the R-Square value for each endogenous latent variable as the predictive power of the structural model. The R-Square value is a goodness fit model test. Changes in the R-Square value are used to explain the effect of certain exogenous latent variables on endogenous variables, whether they have a substantive effect. The results of the R-Square represent the total variance of the constructs described by the model. The results are said to be strong if the R-Square is > 0.67 (Hair et al., 2017).

The Goodness of Fit (GOF) value is used to evaluate the inner model. The goodness of fit (GoF) index is an operational solution to problems because it can be interpreted as an index to validate models globally (Hair et al., 2017). Testing this test can be calculated using:

$$GoF = \sqrt{AVExR^2}$$

From these results it will show whether the model is fit or not by looking at the value, namely 0.10 = small, 0.25 = medium, 0.38 = large (Ghozali & Latan, 2015).

3.8. Hypothesis testing

Hypothesis testing can be done with the bootstrapping method. Hypothesis testing by looking at the probability value (p value) or t value in each hypothesis. The results can be seen in the statistical t value, if the results show t > 1.96, it can be concluded that there is a significant effect between variables. Another alternative can be seen if the p value score <0.05, it can be concluded that there is a significant influence between variables (Sekaran & Bougie, 2016).

3.9. Moderation Test

In this study, to test both groups of types of endorsers, the analysis model was carried out using the Multi Group Analysis Structural Equation Model. The Multi-Group Analysis stage was carried out to find out whether there is a significant difference in effect between the two types of endorsers. The test results can be seen from the results of the path coefficient difference scores and their significance (p value). If the p-value ≤ 0.05 then the difference in the parameters analyzed between groups is significant. And the p-value ≥ 0.05, the difference in the parameters analyzed between groups is not significant (Hair et al., 2017).

4. Conclusion

This conceptual model provides an alternative model that is different from previous research on the impact of celebrity vs. endorsement. influencers on advertising effectiveness, so they have not studied advertising effectiveness based on consumer perceptions of celebrity endorsers moderated by type of endorser based on handsome vs not handsome (Schouten et al., 2020). In addition, consumers consider the effectiveness of advertising using celebrity endorsers to produce positive consumer attitudes towards advertisements and brands so that they can trigger purchase intentions (Ha & Lam, 2017). The dimensions of trustworthiness, expertise, similarity which affect the perception of celebrity endorsers play an important role in purchasing decisions (Gauns et al., 2017). This model is a role model that can be used as a reference and applied to marketers to design effective advertising marketing strategies to influence potential consumers. Practically, this research provides an understanding for marketers about the role of perception of celebrity endorser on purchase intention by taking into account variables such as attitude towards ads and attitude towards brand.

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The Influence of Brand Image on Purchasing Decisions on IM3 Cellular Card User in Gorontalo

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Abstract
Currently, competition in the telecommunications operator (provider) business is very tight, this requires that every company or operator (provider) that issues various cellular cards compete with each other to win the competition. One of the basic advantages over the competition is the increasing number of customers who use the wrong card issued by the cellular phone company, assuming that the old customers do not switch to other cellular cards. The purpose of this study was to determine the impact of the Influence of IM3 Cellular Card Brand Image on Purchasing Satisfaction in Gorontalo. The analytical method used is path analysis or path analysis. Based on the results of this study, the first hypothesis proposed says that brand image (X) which consists of brand associations (X1), brand association support (X2), strength of brand associations (X3) and uniqueness of brand associations (X4) simultaneously has a positive effect and significant impact on purchasing decisions. Because competition is so fierce, the various attributes that have become IM3's brand image may change. As a result, the company, PT. Indosat.Tbk, should be able to keep it. This is in preparation for filtering out the fierce competition. Where there are many providers who, by bringing up the program as a type of offering that could happen, can displace the IM3 cellular card's brand image. In this study, brand association is a subvariable with little effect on purchasing decisions, so it is an opportunity for improvement.

Keywords: Brand Image, IM3 Cellular Card, Purchasing Decision, IM3 Cellular Card

1. Introduction

Currently, competition in the telecommunications operator (provider) business is very tight, this requires that every company or operator (provider) that issues various cellular cards compete with each other to win the competition. One of the basic advantages over the competition is the increasing number of customers who use the wrong card issued by the cellular phone company, assuming that the old customers do not switch to other cellular cards.

One factor that is often considered by consumers in deciding to buy is brand image. This is because brand image is important to define who the buyer is and becomes so important in deciding to buy something. Kotler and Armstrong (2012), brand image is a number of images, impressions and beliefs that a person has towards an object.

Brand image represents the overall consumer perception of a brand that is formed by information and consumer experience of a brand. Brand image is a series of consumer beliefs about a particular brand so that the brand association sticks in the minds of consumers. For companies, brand image will increase the efficiency and effectiveness of the company's marketing program, increase brand loyalty, increase price/profit margins, increase brand extensions, increase trade leverage, and increase competitive advantage.

Consumers are more likely to have made brand image (brand image) as the basis before consumers make purchases of a product/goods or services. With this statement, it is required that the company be able to create a more attractive brand image, and also be able to describe the functions and benefits of the goods or products in accordance with the wishes and needs of consumers, so that consumers will have a better perception of the image. the brand positively to the brand of a product. This is what should be suspected to be a factor that influences consumer purchasing decisions. As revealed by Rezki (2016) Brand image has a positive and significant influence on the decision to purchase IM3 prepaid cards PT Indosat, Tbk. This means that the IM3 Card is able to portray a good brand image in the cellular market, not just promising quality products, discount offers and product popularity, but making it happen. Fristiana (2012) thus says on the results of his research, that the variables of brand image affect consumer decisions.

PT. Indosat Tbk is one of the cellular network service providers in Indonesia that provides several types of products as a form of strategy to meet market wants and needs. One of the products from PT. Indosat Tbk is an IM3 Ooredoo internet starter card, where this starter card is now expanding and improving the quality of the 4G Plus network in 2018. Sales of IM3 Ooredoo internet starter cards are getting higher because the company continues to strive to build a growing customer base through increased network experience. PT. Indosat has targeted maximum achievements, and the targets to be achieved are first that an image is formed, for the image of young people, that life is not perfect, if you don't use a provider from IM3. Another target to be achieved is, where through various phenomena from this competition, so that PT. Indosat prioritizes the youth market which is considered a very dynamic market. Thus PT. Indosat is also more adaptable to change, as well as to the services of its products, PT. Indosat, in this case IM3, must be able to guarantee the needs and desires of its customers to keep buying these products. To guarantee this, IM3 focuses more on technology and value-added services, which means that the added value provided by this company, regarding the tariffs provided by customers, must be able to compete with other provider companies, in this case tariffs. which are super cheap, and the features available on the IM3 provider are more millennial-inspired to suit the needs of young people.

Based on the identification of the problems described above, the formulation of the problem posed is how much influence Brand image which consists of Brand Associations, Brand Association Support, Strength of Brand Associations, and Uniqueness of Brand Associations on IM3 Cellular Card Purchasing decisions with the aim of knowing the magnitude of the influence Brand image which consists of Brand Association, Brand Association Support, Brand Association Strength, and Brand Association Uniqueness towards IM3 Cellular Card Purchasing decisions.

2. Method

For the method in this study, using a survey research method. Survey research is meant by using the instrument in the questionnaire as a tool for data collection. According to Sugiyono (2010: 82) that the research method in this type of survey is a research method that is carried out based on a large number of populations or a small number of populations, but through data studied based on data from samples taken from that population.

The approach in this research uses quantitative research. Sugiyono (2010: 82) states that this type of quantitative research can be explained as a type of research that has a foundation on a type of positiveism philosophy, and is used to be able to research on certain populations or samples, and this quantitative research method is in the form of data related to numbers. – the numbers contained in the analysis using statistics. The population in this study is all consumers who use IM3 cellular cards, in this case, the people of Gorontalo. To get the desired number of samples and reflect the characteristics of the population, the number is done in the right way. So in this study through two factors of the sampling technique or the determination of the sampling. In this case, what is meant by the sample in this study is that some consumers use IM3 cellular cards, namely the people of Gorontalo. Because the population is very large, a sample is taken from this population to represent the population.

The technique of data collection that will be used or carried out in this study is observation or observation, namely where this technique will observe all activities or activities that are related or related to the problem to be studied. Then interviews, this interview technique was carried out by the author in order to obtain a series of data from respondents or informants which included all information from information and information through interview results. In this case is the people of Gorontalo. After that, the questionnaire was carried out by distributing a set list of questions/written statements to the respondents.

3. Results

Looking at the results of the analysis through statistical data processing as to be able to determine the level of validity and reliability of each variable, both the independent variable and the dependent variable, which contains the processed data. So the testing of the instrument in this study both in terms of its validity and reliability against 96 respondents as IM3 card users, if the research instrument is stated to be valid, it can be seen in the comparison that the r-count value is greater than the r-table value (rcount> rtable), and to see the results of the instrument is declared reliable, if when the Cronbach's Alpha value exceeds the reliable standard value of 0.6 (> 0.6).

3.1. Validity and Reliability of Brand Association Variables test (X1)

Based on the results of the validity and reliability tests on the Brand Association variable (X1), through a research sample of 96 respondents using the IM3 card, it can be shown in the following table:

Table 3.1: The result of Validity and Reliability of Brand Association Variables test (X1)

Variable	indicator	validity test			reliability test	
		r-count	rtable N-2	desc	Alpha	desc
Brand Association (X1)	X1.1	0.878	0.2006	Valid	0.888	> 0.60 = Reliable
	X1.2	0.907		Valid		
	X1.3	0.926		Valid		

Based on the results shown in the table above, it can be explained that all statement items contained in the research instrument for the Brand Association variable (X1), have shown valid results. This decision was taken because the value of the level of validity test for all instrument items from the r-count value is greater than the r-table value (r-count > r-table). As for the reliability test results on the Brand Association variable (X1), regarding all items contained in the research instrument, it can be seen that the value of the alpha coefficient is 0.888, meaning that it has exceeded the standard value of Cronbach's alpha which is 0.6. So, in the reliability test it was concluded that all items from the statement for the Brand Association variable (X1) were said to be reliable, because the value of Cronbach's Alpha was > 0.60

3.2. Validity and Reliability of Brand Association Support Variables test (X2)

Based on the results of the validity and reliability tests on the variable Brand Association Support (X2), through a research sample of 96 respondents using the IM3 card, it can be shown in the following table:

Table 3.2: The result of Validity and Reliability of Brand Association Support Variables test (X2)

Variable	indicator	validity test			reliability test	
		r-count	r_{table} N-2	desc	Alpha	desc
Brand Association Support (X2)	X2.1	0.777	0.2006	Valid	0.820	> 0,60 = Reliable
	X2.2	0.758		Valid		
	X2.3	0.830		Valid		
	X2.4	0.857		Valid		

Based on the results shown in the table above, it can be explained that all statement items contained in the research instrument for the Brand Association Support variable (X2), have shown valid results. This decision was taken because the value of the level of validity test for all instrument items from the r-count value is greater than the r-table value (r-count > r-table). As for the reliability test results on the Brand Association Support variable (X2), regarding all items contained in the research instrument, it can be seen that the value of the alpha coefficient is 0.820, meaning that it has exceeded the standard value of Cronbach's alpha which is 0.6. So, in the reliability test it was concluded that all items from the statement for the Brand Association Support variable (X2) were said to be reliable, because the value of Cronbach's Alpha was > 0.60

3.3. Validity and Reliability Variable Strength of Brand Association test (X3)

Based on the results of the validity and reliability tests on the Strength of Brand Association variable (X3), through a research sample of 96 respondents who used the IM3 card, it can be shown in the following table:

Table 3.3 The result of *Validity and Reliability Variable Strength of Brand Association test (X3)*

Variable	indicator	validity test			reliability test	
		r-count	r_{table} N-2	desc	Alpha	desc
Strength of Brand Association (X3)	X3.1	0.780	0.2006	Valid	0.828	> 0,60 = Reliable
	X3.2	0.771		Valid		
	X3.3	0.845		Valid		
	X3.4	0.853		Valid		

Based on the results shown in the table above, it can be explained that all statement items contained in the research instrument for the Strength of Brand Association variable (X3), have shown valid results. This decision was taken because the value of the level of validity test for all instrument items from the r-count value is greater than the r-table value (r-count > r-table). As for the reliability test results on the Strength of Brand Association variable (X3), regarding all items contained in the research instrument, it can be seen that the value of the alpha coefficient is 0.828, meaning that it has exceeded the standard value of Cronbach's alpha which is 0.6. So, in the reliability test it was concluded that all items from the statement for the Strength of Brand Association variable (X3) were said to be reliable, because the value of Cronbach's Alpha was > 0.60

3.4. Validity and Reliability Variable Uniqueness of Brand Association test (X4)

Based on the results of the validity and reliability tests on the Unique Brand Association variable (X4), through a research sample of 96 respondents using the IM3 card, it can be shown in the following table:

Table 3.4: The result of Validity and Reliability Variable Uniqueness of Brand Association test (X4)

Variable	indicator	validity test			reliability test	
		r-count	rtable N-2	desc	Alpha	desc
Unique Brand Association (X4)	X4.1	0.892	0.2006	Valid	0.745	> 0,60 = Reliable
	X4.2	0.893		Valid		

Based on the results shown in the table above, it can be explained that all statement items contained in the research instrument for the Brand Association Uniqueness variable (X4), have shown valid results. This decision was taken because the value of the level of validity test for all instrument items from the r-count value is greater than the r-table value (r-count > r-table). As for the results of the reliability test on the Unique Brand Association variable (X4), regarding all items contained in the research instrument, it can be seen that the value of the alpha coefficient is 0.745, meaning that it has exceeded the standard value of Cronbach's alpha which is 0.6. So, in the reliability test it was concluded that all items from the statement for the Unique Brand Association variable (X4) were said to be reliable, because the value of Cronbach's Alpha was > 0.60

3.5. Validity and Reliability of Purchase Decision Variables test (Y)

Based on the results of the validity and reliability tests on the Purchase Decision variable (Y), through a research sample of 96 respondents using the IM3 card, it can be shown in the following table:

Table 3.5: The result of Validity and Reliability of Purchase Decision Variables test (Y)

Variable	indicator	validity test			reliability test	
		r-count	rtable N-2	desc	Alpha	desc
Purchase Decision (Y)	Y1.1	0.685	0.2006	Valid	0.702	> 0,60 = Reliable
	Y1.2	0.703		Valid		
	Y1.3	0.676		Valid		
	Y1.4	0.672		Valid		
	Y1.5	0.642		Valid		

Based on the results shown in the table above, it can be explained that all statement items contained in the research instrument for the Decision variable (Y), have shown valid results. This decision was taken because the value of the level of validity test for all instrument items from the r-count value is greater than the r-table value (r-count > r-table). As for the reliability test results on the Purchase Decision variable (Y), regarding all items contained in the research instrument, it can be seen that the value of the alpha coefficient is 0.702, meaning that it has exceeded the standard value of Cronbach's alpha which is 0.6. So, in the reliability test it was concluded that all items from the statement for the Purchase Decision variable (Y) were said to be reliable, because the value of Cronbach's Alpha was > 0.60

3.5.1. Statistical Data Analysis

The results of statistical analysis in this study, using path analysis or better known as path analysis, it can be seen that the independent variables (independent) both simultaneously and partially can have a real (significant) influence on the dependent variable (dependent). Based on the results of statistical tests through processed data on 84 respondents, in this case, the customers or consumers in the study, using path analysis, the following equation is obtained:

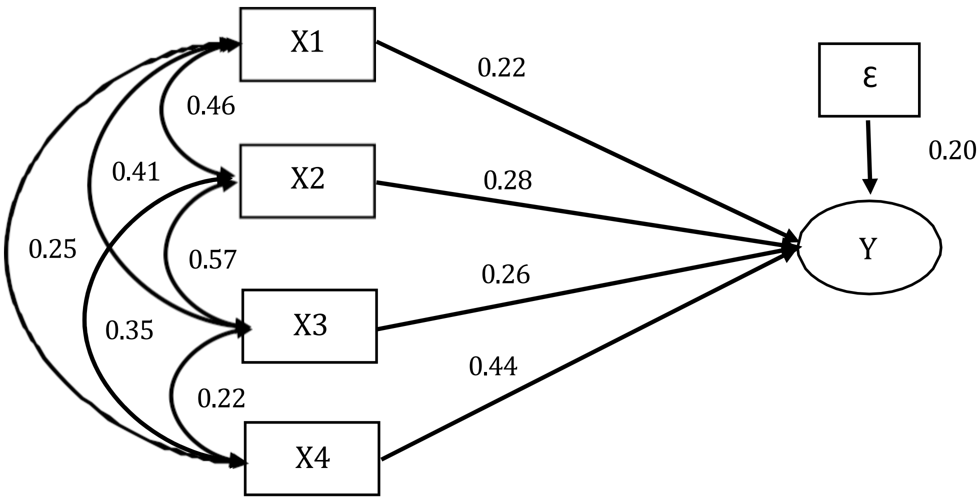
$$\mathbf{Y = 0.222X1 + 0.285X2 + 0.269X3 + 0.447X4 + 0.208\varepsilon}$$
$$\mathbf{With\ R2 = 0.792}$$

Based on the results of the equation values above, it has been shown that the coefficient of the independent variable, namely the Brand Association variable (X1), for this study, and the effect on Purchasing Decisions (Y) has been measured, it is concluded that there is a relationship between the two variables, where this relationship , is a relationship that has a positive level of influence. Based on the results of processed data, the value of the influence of the Brand Association variable (X1) directly on the Purchase Decision variable (Y) is 0.222 or 22.2%. As for the variable Brand Association Support (X2) based on the equation above, it is explained that the value seen has a relationship between Brand Association Support (X2) and Purchase Decision (Y). The relationship of this influence indicates that for the variable Brand Association Support (X2), which has been measured against the purchasing decision variable (Y), it can be concluded that the relationship between the two variables, namely Brand Association Support (X2) on Purchase Decision (Y), has a high level positive influence of 0.285 or with a percentage value of 28.5%. The Variable Strength of Brand Association (X3) based on the equation above, it is explained that the visible value has a relationship between the Strength of Brand Association (X3) and Purchase Decision (Y). The relationship of this effect indicates that for the Strength of Brand Association (X3) variable, which has been measured against the purchasing decision variable (Y), it can be concluded that the relationship between the two variables, namely the Strength of Brand Association (X3) on Purchase Decision (Y), has a high level a positive effect of 0.269 or with a percentage value of 26.9%.

Variable Uniqueness of Brand Association (X4) based on the equation above, it is explained that the visible value has a relationship between Uniqueness of Brand Association (X4) to Purchase Decision (Y). The relationship of this influence indicates that for the Uniqueness of Brand Association variable (X4), which has been measured against the purchasing decision variable (Y), it can be concluded that the relationship between the two variables, namely the Uniqueness of Brand Association (X4) on Purchasing Decisions (Y), has a level positive influence of 0.447 or with a percentage value of 44.7%.

In this study, based on the structural equation above, there are epsilon values or values from other variables, which were not examined in this study. The value of the epsilon variable (ε) is 0.208, and this value still looks very large. So it can be concluded that there are other variables that are not used in this study that have an influence on the Purchase Decision variable (Y) with a value of 0.208 or 20.8%. By looking at the value of this influence, further research is still very much needed for development in this study, for example, the variables such as the Quality Impression and Brand Awareness, (Riduansyah, M., Suharyono and Arifin, Z. (2016).

If we pay attention to the calculation results from the path analysis, which can be seen in the appendix, the test results from this analysis can be interpreted as having a coefficient of determination (R Square) of 0.792 (appendix 5), this means that there is around 79.2% the value that influences the purchase decision variable (Y) through the Brand Image Variable (X) which consists of Brand Association (X1), Brand Association Support (X2), Strength of Brand Association (X3) and Uniqueness of Brand Association (X4). Based on the explanation above, the results of data processing using a path analysis tool (path analysis), that the relationship between variables, both independent and dependent variables, can be seen through the image or path analysis below:



Picture 3.5.1: Relations Between Variables

Based on the path analysis image above, functional equations can be formed in the model simultaneously and partially, which can be summarized through the tabulation or table below:

Table 3.51 Composition of Brand Image Variable Influence (X) consisting of Brand Association (X1), Brand Association Support (X2), Strength of Brand Association (X3) and Uniqueness of Brand Association (X4) on Purchase Decision (Y)

Desc	**Contribution/Influence**			**Percentage**
	direct influence	**Indirect influence**		
		X1	**X2**	
X1 toward Y	0.222	-	-	22,2%
X2 toward Y	0.285	-	-	28.5%
X3 toward Y	0.269	-	-	26.9%
X4 toward Y	0.447	-	-	44.7%
The influence of Variables X1, X2, X3 and X4 on Y				79.2%
The influence of External Variables that are not examined				20.8%
Total				100%

3.5.2. Hypothesis Test

Hypothesis test must be in line with the expectations in this study, through proving the questions that have been formulated as problems in this study and the aims and objectives of this research, that the variable Brand Image (X) consists of Brand Association (X1), Brand Association Support (X2), Strength of Brand Association (X3) and Uniqueness of Brand Association (X4 influences the Purchase Decision (Y) of IM3 Cellular Cards based on the results of estimation through data. Then it can be shown the results of testing the hypotheses contained in this study, and explained briefly and the amount of the positive significance level value both simultaneously and partially for the effect between the independent variables namely Brand Image (X) consisting of Brand Association (X1), Brand Association Support (X2), Strength of Brand Association (X3) and Brand Association Uniqueness (X4) to the dependent variable namely Purchase Decision (Y), can be seen in the table below this:

Table 3.5.2: Test Estimation Results and the Magnitude of Effect of Variable X on Y

Influence Between Variables	**F-count value and T-count value**	**F-table and T-table values (n-2)**	**Sig value**	**Alpha (α)**	**Decision**	**Conclusion**
Y X1,X2,X3,X4	86.707	2.470	0.000	0.05	significant	Accepted
Y X1	4.014	1.663	0.000	0.05	significant	Accepted
Y X2	4.532	1.663	0.000	0.05	significant	Accepted
Y X3	4.520	1.663	0.000	0.05	significant	Accepted
Y X4	8.691	1.663	0.000	0.05	significant	Accepted

Note: If the Sig value < Alpha value (α), then the hypothesis is accepted

It is very clear the results that have been shown in table 3.5.2, to answer the question of proof in the formulation of the problem, as well as the expectations of the aims and objectives of this study, based on the data shown in the table above will be explained and explained the proof of the hypothesis, which reviews provisional conjectures for the research results found in this study, and the results will be explained through the elaboration of the test results as follows:

3.5.2.1. The influence of Brand Image (X) Consisting of Brand Association (X1), Brand Association Support (X2), Strength of Brand Association (X3) and Brand Association Uniqueness (X4) Simultaneously Have a Positive and Significant Influence on Purchase Decision (Y)

Based on the data from the results contained in table 3.5.2.1, it shows the total influence of the Brand Image Variable (X) consisting of Brand Association (X1), Brand Association Support (X2), Strength of Brand Association (X3) and Uniqueness of Brand Association (X4)) through a 95% confidence level, simultaneously has a positive and significant influence on the Purchase Decision (Y) IM3 Cellular Card. This is proven in the results of the Fcount test which shows a result of 86,707, while Ftable is 2,470 (Fcount > Ftable) (86,707 > 2,470). With a Sig value smaller than the Alpha (α) value, namely (0.000 < 0.05. So this, it can be interpreted, statistically that the Brand Image Variable (X) consists of Brand Association (X1), Brand Association Support (X2), Strength Brand Association (X3) and Brand Association Uniqueness (X4) simultaneously have a positive and significant influence on the Purchase Decision (Y) of IM3 Cellular Cards. So the first hypothesis has been proven, and accepted.

4. Discussion

Based on the estimation results of the findings of this study on respondents as many as 96 customers or consumers, it can be argued that, there is a simultaneous positive and significant direct effect between Brand Image (X) which consists of Brand Association (X1), Brand Association Support (X2), The strength of the Brand Association (X3) and the Uniqueness of the Brand Association (X4) simultaneously influence the decision to Purchase IM3 Cellular Cards. This is because all of the independent variables are very important for the company, and have the same opportunities in increasing purchasing decisions, especially in purchasing IM3 cellular cards. This means that, if all of these independent variables fulfill the desires based on the needs of consumers, then the purchasing decisions of consumers will also increase.

However, by looking at the results, it turns out that there are findings, there are other variables carried out in this study, but they have an influence on variable Y (Purchasing Decision). This variable is equated with the variable Impression of Quality and Brand Awareness, (Riduansyah, M., Suharyono and Arifin, Z. (2016). The findings of the influence on the significance of this research are also caused by several things, namely where the recognition of the need is carried out by the consumer has always been the consumer's way of making choices about the desired product, namely in making purchases of the IM3 cellular card. In this introduction, consumers have also indirectly searched for information, so that this becomes a consideration for consumers in deciding to buy IM3 cellular card.

So that in each of these considerations, consumers have also directly evaluated alternatively the various choices of the best card products for consumers to choose and use. After this is done, then the next thing, these consumers make purchasing decisions against p the product that the consumer chooses, it is taken by the consumer, because it has gone through a balance based on certain factors as the beliefs of the consumer himself. So thus, to carry out further evaluations after this purchase, it will directly ensure that there is satisfaction from consumers about the products used, and in this case the IM3 cellular card.

Statements on the findings above, as in the explanation of Kotler and Keller (2013) which put forward four stages in the buying process as a form of consumer decisions in making purchases, and this can also be influenced by several variables that have a strong influence in giving buying decision. The four stages of the process are first the consumer introduces his needs, meaning that the buying process begins with a problem or need felt by the consumer. Consumers perceive the difference between the desired state and the current situation to generate and activate the decision process. The second process is that consumers search for information on the product they want. This means that consumers will seek information about the need for the product they want through various sources such as advertisements, information from family or friends, or they can also ask community friends. The third stage of the process is the consumer evaluates the previous process. This means that once the information is obtained, consumers evaluate various alternative choices to meeting their needs. To assess consumer choice alternatives, there are five basic concepts that can be used to help understand the evaluation process, namely product characteristics, importance value, usability function, brand trust and level of preference. After the three processes above have fulfilled consumer desires, then for the fourth process stage, namely consumers make decisions in purchasing these products. This means that consumers who have made choices about various alternatives, usually buy the most preferred product, which forms a decision to buy. Through this stage, consumers will feel directly with the products used. So that after that the consumer will follow up on what is felt directly about the product used by evaluating the behavior in post-purchase. The stages of evaluating post-purchase products are the final stages of the entire process of making a purchasing decision for a product to be purchased. At this post-purchase, it is intended that at this stage the consumer will evaluate a product, if a product is judged to meet or exceed consumer expectations, the consumer will feel satisfied. If the consumer is satisfied, then the consumer is likely to make a repeat purchase. Conversely, if a product is assessed as lacking or unable to meet consumer expectations, consumers will feel dissatisfied. If the consumer is dissatisfied, he will look for alternative products. The results of this study are also in line with several previous studies, which among others said that brand image had become a crucial element that contributes to the success of a marketing organization, and if consumers do not have experience with a product, they tend to trust brands that are liked or known, and one strategy to attract consumers is prioritized on brand image factors as one of the triggers for consumer purchasing decisions (Schiffman and Kanuk, 2008). In field research as conducted by Abd.Rahman (2017), it has identified brand image which is an independent variable, which has had an influence on purchasing decisions in purchasing Fruit Tea.

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The Debate on Reforms of the WTO Appellate Process: A Proxy for a More Serious Discussion of the Future of the WTO

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Abstract
Thirty years after its founding, the WTO is experiencing unprecedented turmoil and uncertainty, as the United States has raised questions relating to its national sovereignty and expressed serious doubts about the effectiveness of multilateralism. Perhaps more importantly, United States representatives have questioned the fairness of Appellate procedures that appear to run counter to the interests of the United States. A recent dispute between Hong Kong and the United States over the question of the "branding" of goods emanating from the customs territory of Hong Kong has served as a "crisis point" or proxy to the larger dispute between the United States and China relating to needed reforms in the organization. How this dispute is resolved may go a long way in determining both the future of multilateralism and the participation of the United States in the World Trade Organization itself.

Keywords: GATT, WTO, ITO, Dispute Settlement, Consensus, Panels, Appellate Body

1. Introduction and Context

The conclusion of World War II saw the creation of three international institutions – the United Nations, the International Monetary Fund, and the World Bank—largely through the leadership of the United States —and the failure to create a fourth institution, the International Trade Organization—largely through the opposition, or perhaps more accurately, the failure of leadership on the part of the United States of America. The inability to create an institution dedicated to resolving issues relating to international trade would leave the General Agreements on Tariffs and Trade (GATT) as the forum for the discussion of trade liberalization and the reduction of worldwide tariffs—and the later discussion of issues such as providing protections of intellectual property, limiting state subsidies, and curtailing dumping—issues related to what has been termed as the "Third Industrial Revolution" (Rifkin, 2011). Eventually, when GATT was transformed into the World Trade Organization in 1995 as a result of the Marrakesh Agreement (Driessen, 1995) there would finally be an institution closely resembling the one envisioned fifty years earlier.

Now, almost thirty years later, the WTO is experiencing turmoil and uncertainty, as the United States has raised questions relating to its national sovereignty and expressed serious doubts about the effectiveness of multilateralism. Perhaps more importantly, United States representatives have questioned the fairness of procedures that appear to run counter to the interests of the United States. Recently, a dispute between Hong Kong and the United States over the question of the" branding" of goods emanating from the customs territory of Hong Kong has served as a "crisis point" or proxy to the larger dispute between the United States and China. How this dispute is resolved may go a long way in determining both the future of multilateralism and the participation of the United States in the World Trade Organization itself.

2. A Chronology of a Dispute

In 2011, Ron Kirk, who served as the United States Trade Representative (USTR) from 2009 to 2013, stated:

> The United States is an original member of the WTO and a steadfast supporter of the rules-based multilateral trading system that it governs. Working through the WTO, the United States is able to protect and advance the economic interests of American businesses and workers while opening foreign markets. These actions protect and create jobs and support economic growth here at home. The United States is also a world leader in securing the reduction of trade barriers to expand global economic opportunity, to raise standards of living, and to reduce poverty. The WTO agreements also provide a foundation for U.S. bilateral and regional agreements… (Office of United States Trade Representative, 2011).

Since this date, however, the enthusiasm of the United States has waned. In August of 2020, a notice appeared on the US Federal Register (2020) requiring that Hong Kong-made goods be re-labeled as "Made in China" in order to be permitted entry to US ports – a determination that made it clear that the United States did not consider Hong Kong a separate customs entity from Mainland China. The Federal Register (2020) states in "Country of Origin Marking of Products in Hong Kong":

> On July 14, 2020, the President issued Executive Order 13936 on Hong Kong Normalization. Pursuant to section 202 of the United States-Hong Kong Policy Act of 1992 (22 U.S.C. 5722), the President suspended the application of section 201(a) of the United States-Hong Kong Policy Act of 1992, as amended (22 U.S.C. 5721(a)), to certain statutes, including 19 U.S.C. 1304, due to the determination that Hong Kong is no longer sufficiently autonomous to justify differential treatment in relation to China. The President ordered that, within 15 days of the Executive Order, appropriate actions must be commenced by relevant agencies, consistent with applicable law [emphasis added].

As a member of the World Trade Organization, Hong Kong is designated by the official title "*Hong Kong, China*," insisting that its customs jurisdiction is operated independently of Beijing. The government of Hong Kong lodged a complaint to the WTO in late 2020, laying out seven specific rules of the global trading system that it said the United States had broken. Hong Kong asserted that US policy "undermined the Hong Kong brand" and placed an "unnecessary burden" on Hong Kong businesses exporting goods to the United States.

On October 30, 2020, Hong Kong requested formal "consultations" with the United States regarding "certain measures concerning the *origin marking requirement* applicable to goods produced in Hong Kong, China" (see World Trade Organization 2022a, DS597).
Hong Kong claimed that measures were inconsistent with

- Articles I:1, IX:1 and X:3(a) of the GATT 1994;
- Articles 2(c), 2(d) and 2(e) of the Agreement on Rules of Origin; and
- Article 2.1 of the TBT (Technical Barriers to Trade) Agreement.

On November 9, 2020, "the United States requested the Chair of the Dispute Settlement Body (DSB) of the World Trade Association to circulate to Members a communication where it indicated that the United States was willing to enter into consultations with Hong Kong, China, without prejudice to the US view that the measures imposed by the United States concern issues of national security [were] not susceptible to review or capable of resolution by WTO dispute settlement."

On November 13, 2020, the Russian Federation requested to join the consultations. Other nations similarly attempted to be a part of the process outlined in WTO protocols. On November 19, 2020, the United States requested the Chair of the DSB to circulate to Members a communication where it rejected the Russian Federation's request to join the consultations. The United States showed no interest in affording Russia with an opportunity to weigh in on the issues presented.

2.1. A Chronology of Panel and Appellate Body Proceedings in Relation to the U.S.-Hong Kong Dispute (World Trade Organization, 2022a)

The most recent dispute with Hong Kong arose after former President Trump signed a 2020 executive order which ended Hong Kong's "special trading status" with the United States, although Hong Kong remains a member of the WTO and claims protections under "normal trade" provisions of the WTO Charter.

On January 14, 2021, Hong Kong requested the establishment of a panel to resolve the dispute. Under the provisions of the WTO dispute settlement procedures, an independent body is established by the Dispute Settlement Body (DSB), consisting of three experts, to "examine and issue recommendations on a particular dispute in light of WTO provisions." At a meeting on January 25, 2021, the DSB temporarily deferred the establishment of a panel to a future date—perhaps in the hope that the matter could be resolved by the parties in the interim.

At its meeting on February 22, 2021, Brazil, Canada, China, the European Union, India, Japan, Korea, Norway, the Russian Federation, Singapore, Switzerland, Turkey, and Ukraine formally reserved their third-party rights, as "interested parties" to the Hong Kong-United States dispute.

On April 19, 2021, Hong Kong formally requested the Director-General to compose the panel. Ten days later, on April 29, 2021, the Director-General composed the panel.

On October 26, 2021, the Chair of the panel informed the DSB that the panel expected to issue its final report to the parties in the second quarter of 2022. However, on June 21, 2022, the Chair of the panel informed the DSB that due to the *complexity of the dispute*, the panel was now expected to issue its final report in the last quarter (October-December) of 2022.

On December 21, 2022, the panel report was circulated to Members.

Bermingham (2022) reported that the United States strongly rejected the ruling which was favorable to Hong Kong, criticizing its "flawed interpretation and conclusions," quoting Adam Hodge, a spokesperson for the Office of the United States Trade Representative. According to Bermingham (2022), Hodge stated that the United States does not intend to remove the marking requirement as a result of this report and that the U.S. will not cede its judgment or decision-making over essential security matters to the WTO. Hodge further stated that Mainland China's actions had eroded the autonomy and democratic and human rights in Hong Kong and were a threat to the national security interests of the United States (Hodge 2022).

These statements reflect the position of the United States that issues of national security cannot be reviewed in WTO dispute settlement, and that the WTO has no authority to second-guess the ability of a WTO member to respond to what it considers a threat to its security (Hodge 2022).

On the other hand, Hong Kong welcomed the ruling, which affirmed it as a separate customs territory from the Mainland. Stated Algernon Yau, the Secretary for Commerce and Development in Hong Kong, "The ruling has once again confirmed that the US has disregarded international trade rules, attempted to impose discriminatory and unfair requirements unilaterally, unreasonably suppressed Hong Kong products and enterprises, and politicized economic and trade issues."

The United States has reserved its right to appeal the case. However, ironically, since the United States has blocked any new appointments to the WTO's Appellate Body, there are currently no judges to hear appeals.

In a related development, concerning the continued trade war between China and the United States, earlier in December of 2022, the United States also announced that it would not abide by a WTO decision that tariffs that had been put in place during the Trump administration on steel and aluminum violated WTO obligations. As to this matter, United States Trade Representative Katherine Tai warned the WTO that it was skating on "very, very thin ice," because the decision "gets deep into creating requirements and parameters for what is or is not a legitimate national-security decision (Bermingham 2022).

A path moving forward is an open question at this time.

3. A Prelude to the WTO: The GATT

The General Agreement on Tariffs and Trade (GATT), also known as GATT 1947, was created in 1947 by twenty-three countries (see McKenzie, 2020). Hopewell (2021) commented:

> For over 70 years, US support for multilateral institutions has been a cornerstone of the liberal international economic order (LIEO). Nowhere is this more apparent than in the trade regime. As the dominant state in the international system, the United States played a central role in leading the construction of an open and rules-based multilateral trading system. The American hegemon 'ran the system,' providing leadership and facilitating cooperation among states. The rules of the multilateral trading system played a key role in fostering increasing economic integration and creating stable conditions for the functioning of global markets.

The original twenty-three GATT members were Australia, Belgium, Brazil, Burma (now Myanmar), Canada, Ceylon (now Sri Lanka), Chile, China, Cuba, Czechoslovakia (now the Czech Republic and Slovakia), France, India, Lebanon, Luxembourg, Netherlands, New Zealand, Norway, Pakistan, Southern Rhodesia (now Zimbabwe), Syria, South Africa, the United Kingdom, and the United States. When a proposed International Trade Organization (ITO), described below, never came into existence largely because of opposition in the United States Senate, the GATT "metamorphosed then into an international organization that administered the GATT agreement and [that] provided the forum where nations could promote trade liberalization" (Carter, Trimble, & Bradley, 2003, p. 498; see also Schott, 1990).

The GATT was designed to minimize barriers to international trade by eliminating or reducing quotas, tariffs, and state subsidies. The GATT was intended to resurrect economies that had been devastated after World War II, hopefully putting an end to a period of protectionism and economic hardship that led to World War II—paving the way for more than 70 years of economic growth, trade expansion, and increased globalization. Specifically, GATT member states assumed four fundamental obligations:

1. Apply trade barriers on a non-discriminatory basis;
2. Limit specific tariffs at the levels set forth in the GATT tariff schedules;
3. Refrain from undertaking activities circumventing trade concessions through the use of alternate barriers to trade; and
4. Settle trade conflicts through consultations and a special dispute process (see Hoekman & Mavroidis, 1994).

Discussions and negotiations undertaken under the auspices of the GATT were termed as "Rounds." The GATT held eight rounds from April 1947 to December 1993. The key objective of the GATT was "trade without discrimination." Every member of the GATT was to enjoy equality in trade with any other member. This principle is known as the "most-favored nation principle" [MFN] or in the alternative as "national treatment obligation," which has continued into the framework of the WTO as "normal trade relations" (see McRae, 2012). Article 1, paragraph 1 of the GATT states that "*Any advantage, favour, privilege or immunity granted by any contracting* *party to any product originating in or destined for any country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties"* (emphasis added). The practical application of the MFN principle was that once a country had negotiated a tariff reduction with another GATT Member (as a practical matter, that party is usually its most important trading partners), this same cut would automatically apply to all GATT signatories.

4. What Might Have Been? A Brief History of the Failed International Trade Organization (ITO) and its Relationship to the General Agreement on Tariffs and Trade (GATT)

The GATT was not expected to undertake the role of an independent international trade organization. The GATT was designed to function on a temporary or interim basis until such time as a permanent organization could be established. The International Trade Organization (ITO) was the name proposed for an international institution designed for the regulation of international trade and related matters.

The United States, in collaboration with several of its allies, led the effort to form the ITO in the period 1945 to 1948. The effort eventually failed due to the inaction of the United States Congress to support the measure. Because the ITO never came into existence, international trade continued to be managed through the GATT, and only after 1995, by the Word Trade Organization.

The Bretton Woods Conference, formally known as the *United Nations Monetary and Financial Conference*, was attended by 730 delegates from each of the forty-four allied nations in Bretton Woods, New Hampshire from July 1-22, 1944. The deliberations at the Conference would eventually lead to the creation of the International Monetary Fund (IMF), which came into formal existence in 1945 with twenty-nine member countries with the goal of reconstructing the international monetary system, and the World Bank (WB), initially designed to provide low interest loans to developing countries for the purpose of supporting country-specific development projects. At the same time, delegates to the Bretton Woods Conference also recognized the need for a comparable international institution for international trade to complement the work of these institutions (see Batt, 1949).

However, the Bretton Woods Conference was attended by expert representatives of finance ministries and not by representatives of trade ministries. The lack of technical expertise on the part of the delegates was cited as the reason a separate trade agreement was not negotiated at that time (Palmeter & Mavroidis, 2004).

Recognizing this fact, in December of 1945, the United States invited its war-time allies to enter into discussions in order to conclude a multilateral agreement for the reciprocal reduction of tariffs on goods. In July 1945, the US Congress had granted President Truman the authority to negotiate and conclude such an agreement. At the urging of the United States, the United Nations Economic and Social Committee (ECOSOC), one of the principal organs of the newly-created United Nations (Green, 1952), adopted a resolution in February of 1946, calling for a conference to draft a charter for an International Trade Organization (ITO).

A working or Preparatory Committee was established later in February 1946, which met for the first time in London in October 1946 to begin work on establishing a charter for the creation of an international trade organization. The work continued from April to November of 1947.

At the same time, eight countries (the United States, the United Kingdom, Canada, Australia, France, Belgium, the Netherlands, and Luxembourg) signed the "Protocol of Provisional Application of the General Agreement on Tariffs and Trade."

The founding document of the ITO was negotiated in Havana, Cuba from November 1947 to March 1948. The Havana Charter (known as the Final Act of the United Nations Conference on Trade and Employment) provided for the establishment of the ITO and set out the basic rules for international trade and other international economic matters. The Charter was signed by fifty-six countries, including the United States, on March 24, 1948. It provided for international cooperation in facilitating international trade and in establishing rules against anti-competitive business practices (United Nations Treaty Collection, 1948).

The Havana Charter was proposed by John Maynard Keynes, the "brainchild" of the creation of the International Monetary Fund (Batt, 2019). Its goal was to establish the ITO and a complementary financial institution to be called the International Clearing Union (ICU), and an international currency to be known as the bancor (see Schumacher, 1943). The Charter, however, never came into force, in part because in 1950, the Truman Administration announced that it would not submit the treaty to the United States Senate for its ratification, largely because Republicans, increasingly skeptical of U.S. involvement in international organizations, made it "harder for the Truman Administration to win approval for measures of trade liberalization" (Toye, 2003). The major argument raised against the new organization was that it interfered with U.S. sovereignty. Of special concern was the creation of the new international currency.

Reflecting on the enormous success and popularity of the European (Marshall) Recovery plan, supporters countered that "Without restoring world trade it is certain that rebuilding the European production will prove a futile palliative. It does no good to rebuild the factories, clear up ports, if the goods have nowhere to go…. The ITO is the only international instrument for achieving that goal within the framework of the United Nations" (Batt, 1949, p. 329). Batt, who had served as a member of the War Production Board during World War II, added: "Repudiation of the Charter would endanger the political leadership of this country. The Charter has become identified as an American project, and its success or failure will be considered as a success or failure for American leadership" (p. 229).

A little more than one year later, however, on December 6, 1950, President Truman announced that he would no longer seek Congressional approval of the ITO Charter. Because the United States had not signed on to the Charter, no other state ratified the treaty. Elements of the Charter would later become part of the GATT, but no longer under the auspices of a separate organization modeled on the United Nations, the International Monetary Fund, or the World Bank.

4.1. The GATT as the Instrument for Negotiations Relating to International Trade

With the failure to create an international organization specifically dedicated to considering and hopefully resolving issues relating to international trade, countries turned to the GATT to handle problems concerning trade relations. As a result, the GATT would over the years "transform itself" into a *de facto international organization* until such time as an institution such as the ITO could be established. That process would take another forty-five years.

As noted above, the GATT held eight rounds of meetings—the first beginning in April 1947, the last ending in December 1993 (see Irwin, 2009). Each of the Rounds resulted in significant achievements, which are summarized as follows.

- The first meeting (1947) took place in Geneva, Switzerland, and included twenty-three countries. The focus of this opening conference was on tariffs. The members established tariff concessions (reductions) amounting to more than US$10 billion globally.
- The second series of meetings began in April 1949 and were held in Annecy, France. Again, tariffs were the primary topic. Thirteen countries attended the second meeting, and they accomplished an additional 5,000 tariff concessions reducing tariffs.
- Starting in September 1950, the third series of GATT meetings occurred in Torquay, England. Thirty-eight countries participated, and almost 9,000 tariff concessions were agreed to, reducing tariff levels by as much as 25%.
- The fourth series of meeting took place in Geneva, Switzerland in 1956, attended by twenty-five countries, and resulted in a further reduction in worldwide tariffs—this time by US$2.5 billion. Japan was involved in the GATT for the first time in 1956.
- In 1964, GATT began to work toward curbing "predatory" pricing policies, known as dumping. An arrangement regarding international trade in textiles, of special concern to developing nations, known as the Multifibre Arrangement (MFA), came into force.

In the decade of the 1970s, certain non-tariff barriers (NTBs), as opposed to direct tariffs, began to achieve more prominence and recognition as serious impediments to free trade.

The Tokyo Round which took place between 1973 to 1979, resulted in a series of separate voluntary agreements or "Codes" on issues such as subsidies, technical barriers to trade, and government procurement (McRae & Thomas, 2017). These codes included agreements on Standards (thirty-eight individual states) (Middleton, 1980); the Subsidies Code (with twenty-four states, including the European Union as a single unit) (Stoler, 2010); and an Anti-Dumping Code (signed by twenty-five states) (see Yarrow, 1987; Lowenfeld, 1994). While these issues were vigorously debated, the Tokyo Round was essentially unable to satisfactorily resolve issues to the mutual satisfaction of both developed and developing nations—setting up the controversy that would continue to plague the WTO until today with the collapse of the Doha Round negotiations in 2015 (Editorial Board of the New York Times, 2016).

Exceptions to GATT rules were also recognized and could be granted through a waiver which gave parties the ability to implement "safeguard measures" that allow a nation to impose import restrictions or to increase a tariff in order to "prevent or limit serious injury to domestic producers" (Rai, 2011), or by claiming a balance-of-payments crisis (Petersmann, 1986). The formation of a customs union or other free trade areas also triggered exemptions from GATT rules. In addition, "developing nations" were exempted from many GATT obligations (Whalley, 1990) and were granted "special concessions" beyond normal MFN rules. These exemptions or exceptions have been similarly recognized under the WTO (see Leebron, 1996; Dreyfuss & Lowenfeld, 1996/1997) and are the subject of continued debate and controversy.

By almost all standards, the GATT was immensely successful. The average tariff rate fell from around 22% when the GATT was first signed in Geneva in 1947 to around 4 to 5% by the end of the Uruguay Round in 1993. However, the GATT still lacked a coherent institutional structure. In short, the GATT was a legal agreement or contract acting as an international organization. After its creation in 1995, the WTO would be afforded the full "privileges or immunities" accorded to the specialized agencies of the United Nations. While the WTO largely incorporated the principles of the GATT, it has proven to be better able to resolve issues relating to intellectual property through enacting the TRIPS Agreement (Taubman, Wagner, & Watal (eds.), 2012; Correa, 2020) and has incorporated a faster dispute settlement system, which is the main subject matter of this study.

4.2. Dispute Settlement in the GATT System

A review of the dispute settlement under the GATT is helpful for comparison purposes. Jackson, Davey, and Sykes (2002) outlined the dispute settlement procedures in the GATT system. Article XXIII was the GATT's principal dispute settlement provision, but contained "very little procedural detail," relying instead on improvising and developing "procedures through practice over the years." Initial procedures adopted under the GATT provided that parties would consider disputes at the Ministerial level at regular meetings or through the use of "working parties." In the 1950s, procedures were altered, and the practice became to use *panels* to consider disputes. A panel was composed of individuals (usually three in number) who would act in their individual capacities and not as representatives of their national interests in an effort to emphasize adjudication by independent decision-makers. As a practical matter, "the GATT system experienced some problems with delays and failures to adopt reports [at the GATT Council level] because of blocking tactics by losing parties that prevented a consensus in the GATT Council" (Jackson, Davey, & Sykes, 2002). The system of dispute resolution adopted under the WTO would attempt to address these perceived deficiencies found under the GATT.

5. Towards the WTO

GATT was expanded and refined over the years. By 1995, 125 nations were signatories to its agreements, which covered about 90% of global trade.

The last, and perhaps most important negotiations carried out under the GATT was the Uruguay Round, which lasted from 1986 to 1993, with agreements signed in 1994 creating the WTO (Srinivasan, 1998). The IMF Survey

(1994, pp. 2-3) presciently predicted noted that "The Final Act would, after ratification…, cut tariffs on industrial goods by an average of more than one-third, progressively liberalize trade in agricultural products, and convert the GATT from a provisional agreement into a formal international organization, to be called the World Trade Organization (WTO)."

In fact, the Uruguay Round achieved *many* notable successes. Tariffs on industrial goods were reduced on average by more than one-third; barriers to trade in agricultural products were significantly eased due to increasing pressures exerted by developing nations; rules were strengthened in the area of investments; and previously "uncovered areas," such as trade in services, textiles, clothing, and intellectual property, were brought under the auspices of the WTO. The WTO would also include a major dispute resolution mechanism (Jackson, 1998), representing a "substantial strengthening of what existed under the General Agreements on Tariffs and Trade (GATT)" (Carter, Trimble, & Bradley, 2003, p. 399)—or at least that was the expectation.

Carter, Trimble, and Bradley (2003) note that among the most important provisions of the Final Act's 550 pages include:
15 separate agreements, annexes decisions and understandings" that were designed to bring trade in agricultural products, services, textiles and clothing, and perhaps in hindsight more importantly, intellectual property within the aegis of the WRT. In addition, the agreement would attempt to rein in the use of governmental subsidies and countervailing measures, the use of certain "technical barriers," tighten antidumping rules and eliminate certain trade-related investment barriers; strengthen measures to open up government procurement to foreign competition; regulate the use of restrictive "safeguard measures;" and increase the transparency of national trade policies. In the context of this study, the Final Act also established procedures to strengthen and clarify the measures by which trade disputes among WTO members would be settled, known as the *"dispute-resolution system.*

The Council for Trade in Goods, established under the WTO. is now responsible for administering the functional areas of GATT. The Council consists of representatives from all WTO member countries (see Bolhofer, 2007). The Council embraces ten committees that address subject areas including:
- Agriculture
- Antidumping Practices
- Customs Valuation
- Import Licensing Procedures
- Information Technology
- Market Access
- Rules of Origin
- Safeguards
- Sanitary and Phytosanitary Measures
- Subsidies and Countervailing Measures
- Technical Barriers to Trade
- Trade-related Investment Measures (TRIMS)
- Working Party on State Trading Enterprises

In comparison to the GATT system, the new WTO dispute resolution procedures, which Reich (2018, p. 1) describes as the "Jewel in the Crown" of the WTO, are more centralized, streamlined, and specific. Interestingly, under the GATT, a decision of a panel had to be adopted by the consensus or agreement of the contracting parties, meaning that the *losing party* could oppose and thus thwart its adoption. In contrast, under the procedures of the WTO, there must be a consensus *against* adoption of the report of the panel (see Guan, 2014; O'Hara, 2021).

5.1. The WTO Dispute Settlement Understanding (DSU)

One of the most crucial functions of the WTO is found in the *Understanding on Rules and Procedures Governing the Settlement of Disputes* (Annex 2 to the WTO Agreement) (Alsharqawi, Alghathian, & Younes, 2020). The DSU states that the dispute settlement system "is a central element in providing security and predictability to the multilateral trading system." The DSU sets forth a "comprehensive statement of dispute settlement rules, building upon past GATT practices and is responsible for regulating dispute settlements under all covered WTO agreements."

The DSU is administered by the Dispute Settlement Body (DSB), which is the WTO General Council acting in a "specialized role" under a separate chair. As stated on the webpage of the WTO: "The General Council is the WTO's highest-level decision-making body in Geneva, meeting regularly to carry out the functions of the WTO. It has representatives (usually ambassadors or equivalent) from all member governments and has the authority to act on behalf of the ministerial conference which only meets about every two years."

Article 3 sets forth the philosophy of the WTO dispute settlement regime as follows:

> "Firstly, it recognized that the system serves to preserve the rights and obligations of Members and to clarify the existing provisions of the WTO agreement in accordance with the customary rules of interpretation of public international law.
> Secondly, it is agreed that the results of the dispute settlement process cannot add to or diminish the rights and obligations provided in the WTO agreements.
> Thirdly, several provisions highlight that the aim of dispute settlement process is to secure a positive solution to a dispute and that a solution that is acceptable to the parties and consistent with the WTO Agreements is clearly to be preferred.
> Fourthly, although the DSU provides for the eventuality of non-compliance, it is explicitly stated in DSU Article 3.7 that "the first objective of the dispute settlement mechanism is usually to secure the withdrawal of the measures concerned if these are found to be inconsistent with the provisions of any of the covered agreements. Retaliatory action is described as the last resort."

The website of the European Union, which has a collective membership of twenty-seven individual states, and which accounts for 14% of world trade in goods (Eurostat, 2022), adds that dispute resolution:

- Is an objective and effective means of settling disagreements between States or between investors and States on government measures/practice;
- Prevents unilateral actions and the escalation of diplomatic tensions, and contributes overall to peaceful international relations; and
- Clarifies the obligations of States under international law and develops a common understanding through case law.

5.2. DSU Procedures

There are four major phases of dispute settlement:

> First, the parties must attempt to resolve any differences through *consultations* (Klishch & Larionov, 2022);
> Second, if the process of consultations fails, a complaining party may demand that a *panel of independent experts* be established to rule on the dispute (Pauwelyn, 2019);
> Third, and newly established the DSU, is the possibility of an *appeal* by any party to the dispute to the Appellate Body;
> Finally, if the complaining party succeeds, the DSB is charged with "*monitoring the implementation of its recommendations.*" If the recommendations of the Appellate Body are not implemented, there is the possibility of negotiated compensation or the authorization to withdraw any concessions previously granted.

6. Consultations

The requirement of *consultations* stems from the hope that the parties can satisfactorily resolve a matter without having to invoke the more formal dispute settlement mechanisms. The manner in which the consultations are conducted is left to the parties to the dispute. Beyond that, the consultations are to be carried on in "good faith" and are to commence within 30 days of a request. Despite the facts that "the structure of consultations is undefined" and there are no defined rules under which the consultations are to take place, Jackson, Davey, and Sykes (2002) noted that "a significant number of cases end at the consultation stage (either through settlements or abandonment of a case)." If these consultations fail in their attempt at settlement within 90 days after the request, the complaining party *may* request that a panel be established. In reality, depending on the nature of the dispute, consultations may continue for more than 60 days.

Table 1 at the end of the article is provided to indicate the types of issues found in the requests for consultations during the 2021-2022 period.

7. Panel Process

The rights of a party to a dispute are set out in Article 6.1. As noted, if consultations fail to resolve a dispute within the 60-day period, a complainant may insist of the establishment of a dispute settlement panel. At the meeting following that at which the requests first appear on the DSB's agenda, the DSG is required to establish a panel unless there is a consensus in the DSB not to establish a panel.

The DSB meets as often as is necessary to adhere to the timeframes provided for in the DSU (Article 2.3 of the DSU). In practice, the DSB usually schedules one regular meeting per month. When a Member so requests, the Director-General convenes additional special meetings.

According to the website of the WTO (2022b), the general rule is for the DSB to take decisions by *consensus*. A consensus is defined as being achieved if no WTO Member, present at the meeting when the decision is taken, formally objects to the proposed decision. This means that the chairperson does not actively ask every delegation whether it supports the proposed decision, nor is there a formal vote.

On the contrary, the chairperson merely asks whether the decision can be adopted and if no one voices their opposition, the chairperson will announce that the decision has been taken or adopted. In other words, a delegation wishing to block a decision *is obliged to be present* and when the appropriate time arises, it must "raise its flag" and voice opposition. Any Member that does so is able to prevent the decision.

However, when the DSB establishes a panel, when it adopts a panel recommendation or an Appellate Body report, and when it authorizes retaliation, *the DSB must approve the decision unless there is a consensus against it.* This special decision-making procedure is commonly referred to as *"negative" or "reverse" consensus* (see Loaghaire, 2018).

At the three stages of the dispute settlement process (establishment, adoption, and retaliation), the DSB *must automatically decide to take the action ahead, unless there is a consensus not to do so.* This means that *one sole Member can always prevent this reverse consensus*; that is, one member can avoid the blocking of the decision being taken. To do so, a Member merely needs to insist that the decision be approved.

Because no Member (including the affected or interested parties) is excluded from participation in the decision-making process, the Member requesting the establishment of a panel, the adoption of the report, or the authorization of the suspension of concessions can ensure that its request is approved by merely placing it on the agenda of the DSB. In the case of the adoption of panel and Appellate Body reports, there is at least one party which, having initially prevailed in the dispute, has a strong interest in the adoption of the report(s). In other words, any Member intending to block the decision to adopt the report(s) must persuade *all* other WTO Members (including the adversarial party in the case) to join its opposition or at least to stay passive.

As a result, a negative consensus is largely a theoretical possibility and, to date, *has never occurred*. For this reason, there is a *quasi-automaticity* to these decisions in the DSB. This contrasts sharply with the situation that prevailed under GATT where panels could be established, their reports adopted, and retaliation authorized only on the basis of a *positive consensus*. Unlike GATT, the DSU thus provides no opportunity for blockage by individual Members in decision-making on important matters. Interestingly, the principle of a negative consensus does not appear elsewhere in the WTO decision-making framework other than in the dispute settlement system.

7.1. Establishing the Panel

Once the panel is established, it becomes necessary to select the three individuals who will serve as panelists. The DSU provides for the Secretariat to propose panel members to the parties, who are not to object to their selection “except for compelling reasons.” As a matter of practice, however, the parties to the dispute are free to reject proposed panelists. If the parties cannot reach agreement as to the members of the panel within 20 days of its establishment, any party may request the WTO Director-General to appoint the panel on its own authority. In the recent past, the Director-General has appointed members to nearly *one-half* of the panels that were created as a result of actions undertaken by parties to the dispute to reject a proposed panel member.

What are the criteria for membership on a panel? Article 8.1 of the DSU provides for the criteria for serving on a panel. These criteria establish three categories of panelists: current or former government officials, former officials of the Secretariat, and “trade academics” or lawyers who specialize in areas of international trade. Nationals of parties or third parties shall not serve as member of any constituted party to any dispute, absent the agreement of the parties. In the case of a dispute involving a developing country, one party must be from a developing country, if requested. As a practical matter, approximately 80% of individuals selected for the panels are in fact current or former government officials.

As a matter of stated policy, the DSU provides that panelists will serve in their individual capacities, and not as a representative of their government. Members are not permitted to give panel participants any instructions or seek to influence panel members in any way. The rules established by the DSB require that panelists be independent and impartial, shall avoid direct or indirect conflicts of interest and shall respect the confidentiality of the proceedings (World Trade Organization 1996)

7.2. How should a panel proceed?

The DSU [Article 7.1] provides for standard terms of reference which direct a panel to “Examine, in the light of the relevant provisions in [name of the covered agreement or agreements cited by the parties to the dispute], the matter referred to the DSB by [name of party]… and to make such findings as will assist the DSB in making the recommendations or in giving the rulings provided for in that/those agreements.” Article 11 provides that a panel shall make an “objective assessment” of the matter before it, including an “objective assessment of the facts of the case and the applicability of and conformity with the relevant WTO agreements.”

7.3. What Procedures Will the Panel Follow?

A panel will normally meet with the parties “shortly” after its selection in order to determine procedures and to establish a time schedule (see Horlick & Butterton, 2000). The DSU’s standard proposed timetable provides for two meetings between the panel and the parties to the dispute arranged to discuss the substantive issues in the case, usually preceded by written submissions. Interestingly, the DSU permits other members of the WTO to *intervene* as *“*third parties*”* and to present arguments to the panel as well (Covelli, 1999).

In terms of proof, the burden of proving any matter rests upon the party who asserts a particular claim or defense. Once a party meets its obligation to establish a *prima facie* case, the burden then shifts to the other party to rebut what can now be seen as a presumption. Disputes often revolve around disputed facts. In order to establish a factual basis for resolving a dispute, panels will proffer both oral and written questions to the parties. The parties will often produce “experts” in the relevant field (especially in a scientific or technical matter) or will submit affidavit evidence. The panel is charged with determining issues relating to consistency with established WTO rules, the justification for any action taken, whether a measure is “necessary” within the terms of any recognized exception, or whether a measure is based on or is “rationally related” to an assessment of the risk in the case of a measure relating to health that is in dispute.

As noted, under the GATT, decisions of the Council were made by consensus, which meant that any party to a dispute—including the losing party—could prevent the Council from adopting a panel report. If the report was not adopted by the Council, the report would therefore represent only the views of the individual panel members. This was seen as a major negative of the GATT settlement regime where a losing party was able to prevent the adoption of a panel report.

With the DSU came a fundamental change in the procedures relating to the adoption of a panel report. The possibility of “blockage” was eliminated in Article 16 which provides that a panel report shall be adopted *unless there is an appeal* or what is known as a reverse consensus— a *consensus not to adopt the report.*

8. Appellate Body

The change in the consensus rule was accompanied by the introduction of the right to appeal a panel decision (see Ala’i, 2019). The DSU creates a standing Appellate Body. The website of the WTO notes:

> “The Appellate Body is composed of seven Members who are appointed by the Dispute Settlement Body. Each Member of the Appellate Body is required to be a person of recognized authority, with demonstrated expertise in law, international trade and the subject-matter of the covered agreements generally. They are also required to be unaffiliated with any government and are to be broadly representative of the Membership of the WTO.”

The Appellate Body hears appeals of panel reports by three members (termed a *division*), although members of the Appellate Body will often exchange views with the other four members of the Appellate Body. Jackson, Davey, and Sykes (2002) state that “the members of in division that hears a particular appeal are selected by a secret procedure that is based on randomness, unpredictability, and the opportunity for all members to serve without regard to national origin.”

The Appellate Body is required to issue its report within 60 days (at most 90 days) from the date of the appeal, and its report is to be adopted *automatically* by the DSB within 30 days, absent consensus once again, as described above, not to do so.

The review of the Appellate Body is limited to issues of law and interpretation of law developed by the panel. The Appellate Body has the power to reverse, modify, or affirm panel decisions; however, the DSU does not include the possibility of remanding a case back to a panel for its re-consideration.

As a general rule, the Appellate Body relies heavily on close “textual interpretation” of WTO provisions, utilizing a standard statutory interpretation which looks to the “ordinary meaning” of the relevant terms so as not to interpret a provision so as to render it devoid of its intended meaning.

9. Implementation and Suspension of Concessions

Article 21.1 of the DSU provides: “Prompt compliance with recommendations or rulings of the DSB is essential in order to ensure the effective resolution of disputes to the benefit of all Members.” If the Appellate Body finds that a complaint is justified, the report will typically recommend that the offending member cease in its violation of WTO rules. This is normally accomplished by withdrawing the offending measure. After it adopts the report, the DSB is charged with monitoring whether its recommendations have been implemented. WTO protocols require that a losing party indicate what actions, if any, it plans to take in order to implement the panel’s recommendation. Should immediate implementation be impractical, implementation of the recommendation is required “within a reasonable time” (Article 21.3), either by the agreement of the parties or in the absence of an agreement, through arbitration. The period of implementation is not to exceed 15 months; however, the range of 8-10 months is the average time in which the recommendation is implemented.

If a recommendation is not implemented, the prevailing party may seek compensation from the non-compliant party or may rescind or suspend any concessions made to that member (Article 22.1).

Compensation and suspension of concessions, sometimes referred to as "retaliation," are viewed as temporary measures. Valles and McGivern (2000) note that:

The World Trade Organization (WTO) Agreement allows a complaining party to suspend concessions (or "retaliate") when a defending party has failed to comply with the decision of a dispute settlement panel or the Appellate Body. However, the text of the Agreement is ambiguous on two critical points:

(1) who determines whether a defending party has failed to comply; and
(2) when the right to retaliate arises.

There is, however, a clear preference for a withdrawal of any offending practice based on Article XVI.4 which provides: "Each member shall ensure the conformity of its laws, regulations and administrative procedures with its obligations as provided in the annexed agreements."

While Jackson, Davey, and Sykes (2002) reported that despite some variations, cases indicating non-compliance were an exception to an otherwise strong record of compliance.

10. The Current State of Dispute Settlement: Is the United States Responsible for the Breakdown in the WTO? Changing Attitudes Towards Multilateralism and the WTO

The WTO's *World Population Review* (2022) provides a balance of views regarding the WTO. "The WTO is viewed as having pros and cons. Supporters believe the WTO is beneficial to business and the global economy because it lowers barriers to trade and mediates trade disputes between member countries. Skeptics, however, believe that WTO widens the global wealth gap and undermines the principals of organic democracy, which ultimately harms domestic communities and human rights."

Interestingly, the United States has been the subject of more *negative decisions than any other WTO member*, suffering losses in about 90% of WTO claims filed against it. However, at the same time, the U.S. has also won 91% of the complaints it has filed against other countries.

It is no secret that former President Donald Trump was not a supporter of the WTO, stating that the organization too often ruled unfairly against the United States on matters essential to America's national security (see Horton & Hopewell, 2021). Ala'1 (2019, p. 86) commented:

> "President Trump's 2018 Trade Policy Agenda proclaims that '[t]he United States will not allow the WTO—or any other multilateral organization—to prevent us from taking actions that are essential to the economic well-being of the American people.' As part of this agenda, the United States has targeted the Appellate Body of the World Trade Organization (WTO) in particular. The United States claims that the Appellate Body has disregarded the rules as set by WTO Members and has adopted a 'non-text based interpretation' of WTO provisions through an 'activist approach.' The 2018 Trade Agenda concludes, '[t]he United States has grown increasingly concerned with the activist approach of the Appellate Body on procedural issues, interpretative approach, and substantive interpretations.'"

President Trump was especially critical of the WTO's failure to address credible evidence that China regularly used forced and slave labor (see US Department of State, 2021), practices clearly prohibited by WTO guidelines. President Trump's actions included vetoing the appointment of judges to the WTO courts that decide trade disputes (Gantz, 2018), blocking new appellate body members (Galbraith, 2019), and threatening to withdraw the United States from the organization entirely.

Hopewell (2021, p. 1025), however, offers this pointed criticism of the former President's actions:

> "Under President Trump, however, the United States not only abandoned its traditional leadership role in the multilateral trading system but launched an assault on the very system it had created and led. Discarding any commitment to multilateral cooperation or respect for the rule of law, the United States openly embraced the raw use of coercive power in trade: this included arbitrarily imposing tariffs on all of its major trading partners, launching a trade war with China, and threatening to withdraw from trade agreements to strong-arm other states into making concessions to its own

> interests. In short, the world's dominant power began behaving as a rogue state in the multilateral trading system. The American hegemon's blatant violation of the rules and principles of the multilateral trading system, combined with its repeated threats to withdraw from the WTO, plunged the latter—the primary institution intended to ensure stable and orderly trading relations in the global economy—into an existential crisis."

In contrast to the views of the Trump Administration, Swanson (2021) reports that President Biden has indicated a more cooperative stance toward the WTO. It should be noted that the Biden administration has indicated that the WTO is in need of significant reform, particularly starting with more streamlined dispute-settling processes and action upon a number of issues including China's trade practices and how best to distribute vaccines—which are protected intellectual property—during a global pandemic (Swanson 2021).

But are the views really that divergent?

The selection of a Director General or the appointment of Appellate judges may be seen as a proxy for a shifting view of the United States and many of its major allies that the WTO is failing to meet the promise of its founding in 1995.

According to Corporal (2018), writing for the Center for Strategic Studies, the WTO's dispute settlement function is at "risk of collapse." As was noted, for roughly two years, the United States has continued to block the appointment of any new judges to the WTO's Appellate Body due to complaints over alleged "judicial activism" within the Appellate Body and concerns raised by the United States relating to infringements on U.S. sovereignty. Efforts undertaken to initiate reforms in the dispute settlement system in response to U.S. demands which might result in breaking the impasse have thus far proven unsuccessful. In fact, the terms of two of the three remaining Appellate Body members have expired and the Appellate Body has lacked a quorum necessary to hear appeals, "grinding the dispute settlement system to a halt and throwing into doubt the WTO's role in enforcing multilateral trade rules."

The selection of the Director General as a result of the unexpected resignation of Roberto Azevedo before his term was set to expire prompted a serious reappraisal of U.S. participation in the WTO. With the election of Donald Trump's in 2016, the WTO had to contend with an administration that was overtly skeptical of the ability of the WTO to meet its core obligation to reduce trade barriers and to assure transparency and full compliance with WTO rules. This skepticism played out with the U.S. refusing to appoint judges to the organization's top dispute settlement panel, the Appellate Body, leaving it in a state of virtual paralysis.

However, the actions of former President Trump, described by some as "return to protectionism," are in line with policies espoused by prior U.S. administrations. In fact, the Obama administration began the practice of blocking Appellate Body candidates in 2011 when it refused to allow the reappointment of the U.S. nominee, Jennifer Hillman, on the grounds that "she had not upheld U.S. protectionist measures being challenged in WTO dispute settlement" (Charnovitz, 2016). In 2016, President Obama also prevented the reappointment of a Korean judge, Seung Wha Chang, arguing that he was "acting outside his mandate" by substituting his own judgment for that of the text and the clear intentions of the parties in siding with China in its successful challenge against countervailing duties imposed by the Obama Administration (Charnovitz, 2016).

The United States has argued that the WTO system itself is the real problem because it contains no standards or enforcement provisions relating to labor or the environment and has become the major "*catalyst for offshoring"* or moving jobs to places with lower labor and regulatory costs.

Critically, the U.S. believes the WTO has paid little attention to issues relating to *fair competition*, allowing China, in particular, to reap immense benefits from participation in a globalized trading system after its accession to the WTO in 2001 while maintaining anticompetitive practices such as the "golden share" (see Antonaki, 2022), the outright theft of U.S. intellectual property, allegedly engaging in currency manipulation (Gueorguiev, McDowell, & Steinberg, 2020), and other predatory practices including dumping and unfair subsidization to the detriment of U.S. interests while millions of working- and middle-class families throughout the industrial world have experienced severe economic dislocation “as the result of a global economic system that has consistently prioritized the free flow of goods and capital over other considerations” (Sutton & Green, 2020).

Sutton and Green (2020) have set forth an activist agenda for reforms of the current WTO system. They include undertaking actions providing for the well-being of workers; dealing with the “existential threat” of climate change; undertaking measures regulating excessive concentration of economic power, especially evidenced by China’s system of “state capitalism” (Petry, 2021) and the emergence of global economic *super-corporations*; and the extreme fragility of global supply chains, exacerbated by the lingering effects of the world-wide Covid pandemic especially in pharmaceutical production, food, electronics, and the automotive industry (see Xu, Elomri, Kerbache, & Elomri, 2020).

11. Conclusions and Observations

What are the parameters of potential WTO reforms?

It might surprise observers that two-thirds of the WTO’s 164 member states continue to claim “developing country” status, allowing them to take advantage of benefits and exemptions to WTO obligations not granted to advanced or developed economies (Weinhardt, 2020). Notes Gonzalez and Jung (2020), “To defend their commercial interests and resolve inevitable trade conflicts, [these countries] have actively and successfully used the WTO’s dispute settlement system.” A realistic system of economic classifications must be created to assure that countries who are able to fully comply with WTO rules should do so as fully as possible (see Gonzalez & Jung, 2020).

In addition, there needs to be a real “soul searching” reappraisal of the core premise that member states will engage in serious negotiations over trade matters. Corporal (2018), writing for the Center for Strategic and International Studies (CSIC), notes that “The failure of many countries, including major economies like China, to comply with notification and transparency obligations has made negotiating new rules and agreements even more difficult” (see also Ungphakorn, 2022). Ironically, certain members, most notably China, have taken advantage of the uncertainty at the WTO and continue to maintain blatantly discriminatory barriers targeting imports, to intervene in markets to support state-owned enterprises, and to fail to report state subsidies to the WTO accurately.

Some countries, most notably the United States, have continued to raise concerns with the WTO dispute settlement system— specifically the Appellate Body— where the United States maintains that decisions have been made beyond its original mandate, diminishing “the rights of WTO members by reinterpreting WTO agreements, despite WTO members having never agreed to those interpretations.”

The European Union (EU) has been especially active in suggesting reforms in the WTO system. The EU has put forth specific suggestions worth noting for reform including “leveling the playing field between member states by creating stronger rules and definitions governing state-owned enterprises and ‘market-distorting subsidies.’” The EU has also suggested “improving transparency and subsidy notifications from member states, removing investment barriers in service industries, and adopting specific rules to discourage forced technology transfers.” Notes the firm of Septoe & Johnson (2021): “Not only is trade vital for our economy; promoting rules-based international cooperation is the very essence of the European project. The EU must therefore play a leading role in creating momentum for meaningful WTO reform.”

Specifically, the firm of Septoe & Johnson (2021) states: that the Commission proposes that Members:

- continue negotiating new rules on digital trade, services and investment. These are deemed essential to adapt the rules to the digital transformation, and reflect the growing importance of services;
- create stricter rules on industrial subsidies as an essential step to countering competition distortions. An important objective in this regard is to significantly increase transparency and identify additional categories of prohibited subsidies, including those presumed to be injurious, and those supporting legitimate public goals while having minimal distortive impact on trade;

- create rules to regulate state-owned enterprises;
- further reflect on the potential role of new WTO rules to ensure the principle of competitive neutrality and promote a level playing field (for instance, addressing forced technology transfers to a government or competitor);
- update market access commitments and address imbalances between members' access; and
- unblock agricultural negotiations…."

The United States, the European Union, and Japan have begun *trilateral negotiations* relating to non-market practices, updating rules governing self-classification of developing country status, addressing concerns relating to "coercive technology transfers," industrial subsidies and state-owned enterprises, and other "non-market-oriented policies and practices of third countries."

One thing seems certain: Without serious reforms, one or more major economies could leave the WTO, leading to a proliferation of bilateral and regional trade agreements that may temporarily address member states' complaints, but only on a case-by-case basis. Corporal (2018) opines: "Those developments could extract a high cost on the global economy and severely diminish global growth and economic stability for years, if not decades." Perhaps more importantly, the demise of the WTO system could signal the reintroduction of a new round of trade barriers, a "loss of predictability and uncertainty for multinational companies and governments alike, and the absence of a credible venue to mediate trade disputes…."

A direct crisis was averted when Ngozi Okonjo-Iweala assumed the position of Director General. However, as Linscott (2021) noted: "A solution could involve a truly multilateral effort, with all … members—including the United States and China—coming together to revitalize the institutional foundations of the organization and resume the Appellate Body's effective system of resolving disputes and enforcing the results." But any "solution" must not solely be focused on administrative matters but must involve the real reforms suggested by Sutton and Green (2020) and the firm of Septoe & Johnson (2021) or the process will return the WTO to chaos, uncertainty, and perhaps the inevitable but regrettable withdrawal of the United States.

Table 1: Requests for Consultations

DS615 United States — Measures on Certain Semiconductor and other Products, and Related Services and Technologies
COMPLAINANT: CHINA
CONSULTATIONS REQUESTED: 12 DECEMBER 2022 CURRENT STATUS: IN CONSULTATIONS

DS614 Peru — Antidumping and countervailing measures on biodiesel from Argentina
SHORT TITLE: PERU — BIODIESEL (ARGENTINA)
COMPLAINANT: ARGENTINA
CONSULTATIONS REQUESTED: 2 SEPTEMBER 2022 CURRENT STATUS: IN CONSULTATIONS

DS613 European Union — Measures concerning the importation of citrus fruit from South Africa
SHORT TITLE: EU — CITRUS FRUIT (SOUTH AFRICA)
COMPLAINANT: SOUTH AFRICA
CONSULTATIONS REQUESTED: 27 JULY 2022 CURRENT STATUS: IN CONSULTATIONS

DS612 United Kingdom — Measures Relating to the Allocation of Contracts for Difference in Low Carbon Energy Generation
SHORT TITLE: UK — CFD (EU)
COMPLAINANT: EUROPEAN UNION
CONSULTATIONS REQUESTED: 28 MARCH 2022 CURRENT STATUS: IN CONSULTATIONS

DS611 China — Enforcement of Intellectual Property Rights
SHORT TITLE: CHINA — IPRS ENFORCEMENT (EU)
COMPLAINANT: EUROPEAN UNION
CONSULTATIONS REQUESTED: 18 FEBRUARY 2022 CURRENT STATUS: IN CONSULTATIONS

DS610 China — Measures Concerning Trade in Goods and Services
SHORT TITLE: CHINA — GOODS AND SERVICES (EU)
COMPLAINANT: EUROPEAN UNION
CONSULTATIONS REQUESTED: 27 JANUARY 2022 CURRENT STATUS: IN CONSULTATIONS

DS609 Egypt — Registration requirements relating to the importation of certain products
SHORT TITLE: EGYPT — IMPORT REGISTRATION REQUIREMENTS (EU)
COMPLAINANT: EUROPEAN UNION
CONSULTATIONS REQUESTED: 26 JANUARY 2022 CURRENT STATUS: IN CONSULTATIONS

DS608 Russian Federation — Measures Concerning the Exportation of Wood Products
SHORT TITLE: RUSSIA — WOOD (EU)
COMPLAINANT: EUROPEAN UNION
CONSULTATIONS REQUESTED: 20 JANUARY 2022 CURRENT STATUS: IN CONSULTATIONS

DS607 European Union — Measures Concerning the Importation of Certain Poultry Meat Preparations from Brazil
SHORT TITLE: EU — POULTRY MEAT PREPARATIONS (BRAZIL)
COMPLAINANT: BRAZIL
CONSULTATIONS REQUESTED: 8 NOVEMBER 2021 CURRENT STATUS: IN CONSULTATIONS

DS606 European Union — Provisional Anti-Dumping Duty on Mono-Ethylene Glycol from Saudi Arabia
SHORT TITLE: EU — PROVISIONAL AD DUTY ON MEG (SAUDI ARABIA)
COMPLAINANT: SAUDI ARABIA, KINGDOM OF
CONSULTATIONS REQUESTED: 17 AUGUST 2021 CURRENT STATUS: IN CONSULTATIONS

DS605 Dominican Republic — Anti-dumping measures on corrugated steel bars
SHORT TITLE: DOMINICAN REPUBLIC — AD ON STEEL BARS (COSTA RICA)
COMPLAINANT: COSTA RICA
CONSULTATIONS REQUESTED: 23 JULY 2021 CURRENT STATUS: PANEL COMPOSED

DS604 Russian Federation — Certain Measures Concerning Domestic and Foreign Products and Services
SHORT TITLE: RUSSIA — DOMESTIC AND FOREIGN PRODUCTS AND SERVICES
COMPLAINANT: EUROPEAN UNION
CONSULTATIONS REQUESTED: 22 JULY 2021 CURRENT STATUS: PANEL COMPOSED

DS603 Australia — Anti-Dumping and Countervailing Duty Measures on Certain Products from China
SHORT TITLE: AUSTRALIA — AD/CVD ON CERTAIN PRODUCTS (CHINA)
COMPLAINANT: CHINA
CONSULTATIONS REQUESTED: 24 JUNE 2021 CURRENT STATUS: PANEL COMPOSED

DS602 China — Anti-Dumping and Countervailing Duty Measures on Wine from Australia
SHORT TITLE: CHINA — AD/CVD ON WINE (AUSTRALIA)
COMPLAINANT: AUSTRALIA
CONSULTATIONS REQUESTED: 22 JUNE 2021 CURRENT STATUS: PANEL COMPOSED

DS601 China — Anti-Dumping measures on stainless steel products from Japan
SHORT TITLE: CHINA — AD ON STAINLESS STEEL (JAPAN)
COMPLAINANT: JAPAN
CONSULTATIONS REQUESTED: 11 JUNE 2021 CURRENT STATUS: PANEL COMPOSED

DS600 European Union and Certain Member States — Certain measures concerning palm oil and oil palm crop-based biofuels
SHORT TITLE: EU AND CERTAIN MEMBER STATES — PALM OIL (MALAYSIA)
COMPLAINANT: MALAYSIA
CONSULTATIONS REQUESTED: 15 JANUARY 2021 CURRENT STATUS: PANEL COMPOSED

DS599 Panama — Measures concerning the importation of certain products from Costa Rica
SHORT TITLE: PANAMA — IMPORT MEASURES (COSTA RICA)
COMPLAINANT: COSTA RICA
CONSULTATIONS REQUESTED: 11 JANUARY 2021 CURRENT STATUS: PANEL COMPOSED

TABLE OF ABBREVIATIONS	
DSB:	Dispute Settlement Body
DSU:	Dispute Settlement Understanding
ECOSOC:	Economic and Social Council
EU:	European Union
GATT:	General Agreement on Tariffs and Trade
IMF:	International Monetary Fund
ITO:	International Trade Organization
LIEO:	Liberal International Economic Order
MFA:	Multifibre Arrangement
MFN:	Most Favored Nation (GATT)
NTB:	Non-Tariff Barrier
NTR:	Normal Trade Relations (WTO)
TBT:	Technical Barrier to Trade
USTR:	United States Trade Representative
WB:	World Bank
WTO:	World Trade Organization

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Relevance of Management Support and Consideration in Augmenting Organizational Resilience: Evidence from Telecommunication Companies in Kenya

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Abstract
The emergence of crises and shocks in the last few decades has left devastating disruptions in businesses across the world. Such disruptions often lead to unexpected disorientation, low profitability and losses, stagnation, and in some cases liquidation of businesses. As a result, there have been continuous calls for developing systems within the business that would enable businesses to be resilient and absorb such shocks. Existing literature on organizational resilience has focused on the relationship between resilience and other constructs such as performance, efficiency, competitiveness, and productivity: Giving little or no attention to the role that management support consideration in attaining organizational resilience. The objective of the study was therefore to examine how management support and consideration affect organizational resilience in telecommunication companies in Kenya. The study was anchored on the Managerial Grid of Leadership Theory. A positivist research philosophy was adopted. The preferred research design was a quantitative descriptive approach and cross-sectional descriptive survey. The study population comprised 9,847 participants drawn from all 19 registered telecommunication companies in Kenya. From this population, a sample size of 384 respondents was selected using a stratified sampling technique. Primary data was used which was collected via structured questionnaires. Corrected data were analyzed using descriptive statistics and inferential analysis via correlation analysis and regression analysis. Hypothesis testing was based on regression results analysis. The predictive power of the model was tested using the coefficient of determination (R2), the fitness of the model was tested using Analysis of Variance (ANOVA) while the significance of management support and consideration in predicting organizational resilience was based on P-value in Student t-test at 0.05 significance level. Results showed that management support and consideration existed among telecommunication companies in Kenya. There was an agreement among the respondents that telecommunication companies in Kenya were resilient in the last five years. Correlational results revealed that management support and consideration had a positive correlation with organizational resilience. Hypothesis testing results established that there is a significant relationship between management support and consideration of organizational resilience in telecommunication companies in Kenya. Therefore, it was concluded that management support and consideration have a significant effect on organizational resilience in telecommunication companies in Kenya. The study thus recommends that organizational leaders should develop capacity-building programs, spur creativity, innovation, and organizational efficacy to accomplish the set corporate goals and gain resilience through robust business continuity plans among other relevant initiatives.

Keywords: Consideration, Management Support, Organizational Resilience

1. Introduction

The emergence of global crises such as the credit crisis of 1772 in Europe, the great depression of 1932; the Suez crisis (1956), the oil price shock of 1973, the international debt crisis (1982); the East Asian economic crisis of 1997-2001; the Russian economic crisis (1992-1997), the Latin American debt crisis (Mexico, Brazil and Argentina 1994-2002), the collapse of the U.S. Housing Market in 2006 and the global economic recession (2007-2009) often cause economic tsunamis. Besides the financial crisis such as the global COVID-19 crisis in 2020 and the oil crisis in 2022 have adversely affected the performance of many businesses subjecting their continuity at risk. The challenge is more pronounced in developing and less developed nations. It is noted that despite the observable decrease in commodity prices, inflation rates continue to accelerate in developing and least-developed countries due to their low levels of income and exposure to global financial shocks. Consequently, International players have called on leaders to develop resilient practices, especially in the fiscal space to enable organizations to provide safety nets for organizations and grow resilience both at the people and organizational levels.

The telecommunication industry is a key industry globally because it provides a pivotal point for all other sectors of the economy. For instance, Bhaskar, Bradley, Chattu, Adisesh, Nurtazina, Kyrykbayeva, and Ray (2020) noted that the telecoms have a critical role in diverse disaster interventions, such as the telemedicine concept witnessed during the COVID-19 pandemic, where it facilitated the “safety-net” in response to the global public health outbreak among other internet-driven interventions in other industries. Unfortunately, the telecommunication sector has not been spared by the crisis: and receiving an unparalleled failure rate globally when confronted by the disturbance in the operating landscape. This includes but is not limited to the 2008 global economic crisis according to Kruk and the Coronavirus pandemic that has changed the rules of the game (Wodak, 2021). As a result, the shocks have increased interest in organizational resilience and the role it plays during such trying times (Haldane, et al., 2017). Telecommunication companies in Pakistan and New Zealand are the notable sectors affected by crises globally (Khan, Rao-Nicholson, & Akhtar, et al., 2019). In the African continent, the development of the internet has provided opportunities for Africa the acceleration of economic growth and alleviation of poverty (Global monitor, 2020). However, it has brought new challenges by placing large demands on the underlying telecoms infrastructure and stiff competition from the more developed world.

A business is said to be resilient if it possesses the capacity to "bounce back" after undergoing stressors (Captain & Hammer, 2014). That is the firms’ structures are such that the organization can withstand shocks. For an organisation to be considered resilient, it should manifest adaptive capacity which requires a good level of flexibility in responding to needed change in times of crisis, an absorptive capacity that calls for forward flexible planning for improved learning and innovation, and a transformative capacity that includes process commitment to make structural changes that spur conscious decision-making during a crisis (Shannon, Tracey, Lane, Guy, Jill, 2017). Resilient organizations are less vulnerable to crises are better prepared, respond effectively, and are more adaptable when it comes to change (Blanchet, et al., 2017), and even in the face of challenges, their core services are maintained or minimally disrupted (Kieny, et al., 2014).

Khan, Rao-Nicholson, & Akhtar, et al. (2019) in the study of Pakistan’s telecommunication industry noted that the key areas of human resource management practices such as information sharing, job design, and total reward systems are critical enablers for employees’ resilience (Manning & Robertson, 2016; Bardoel, Pettit, De Cieri, & McMillan, 2014). Walker et al., (2014), in their study of New Zealand’s Infrastructure, telecommunications, water, waste services, and roading firms observed that work engagement influences adaptive resilience, and planned resilience. Coleman and Adim (2019) and Walker et al., (2014), for example, emphasize adaptive resilience in the context of uncertainty.

In times of economic crises, firms confront numerous pressures, which according to Rudrajeet, Håkan, & Heikki (2014) include the threat to their profitability, growth, and subsequently to their survival in the ever-changing business environment. The above dynamics call for greater internal resilience both at the people, and the corporate level. As a result, there is a need for good leadership in telecoms to achieve and sustain resilience. As such telecommunication companies’ leaders and management should provide a bigger picture of intended achievements and proposed processes to meet the broad goals of an organization (Sundnes, 2014). Such strategies should learn from past experiences and expertise, converting organizational needs into strategic action (Sundnes, 2014), especially at a time when the resilience of a firm is critical. The social learning proposition describes how people could develop resilient profiles (Everly, 2011), for example, by utilizing mentorship, to improve collective commitment to adopt the corporate mission, and learning about stress management practices, thus promoting creativity and innovation.

Leadership has poised as a key ingredient in the running of firms, especially to build resilient profiles noting that there are economic recessions that have rocked the global and different national markets, creating challenges for organizations looking to thrive in the long run (Kruk, et al., 2015). Organizations with good leaders can bring into play the necessary experience that goes a long way in fetching out the strengths of workers in telecommunication organizations. The workers, as a result, are motivated to voluntarily ensure efficacy in the application of the primary corporate strategies (Keter, 2015), especially for telecommunication organizations in growing economies like Kenya. Notably, the process of deploying strategy in Kenyan telecoms has faced several internal organization challenges thus stifling innovations needed for better strategy execution (Keter, 2015). This can be done by leveraging superior employee capabilities. To do so there is a need for organizational leaders to identify key competencies among their employees and support them to tap into more markets.

Enhanced supervisory support spurs positive perceptions and behaviors that appreciate change as the only constant (Ferreira et al., 2018); making informed relational adjustments at the workplace based on the degree of reciprocity and the quality of dyadic connections. These patterns of reciprocity create trade-offs and, in turn, strengthen the relationships that take care of the socio-emotional needs exhibited by the employees, efforts commitment, and loyalty; Positively influenced supervisory support satisfaction, fairness perception, positive mood, favorable job conditions, and organizational rewards (Caesens, Stinglhamber, Demoulin, & De Wilde, 2017), as well as inversely relating to work stress among other work-related challenges. As a result, when employees get adequate support from their superiors, they can discharge their mandate confidently which leads to better-performing telecommunication firms that exhibit resilience characteristics.

In addition, leaders should as a way of support, demonstrate creativity, and innovation to team members, noting that the leadership style or the leader in person is considered a meaningful capacity for enhancing the efficacy of the workers' level of contribution and accomplishment of corporate goals (Tyssen et al., 2014). Based on this argument, telecommunication companies can achieve resilience through training to develop competence among their employees. The Social Exchange Theory is alive to the fact that people and especially in the workplace assess and make a judgment about the quality of relational dyads that bring to light the perceived balance of exchange. The healthy perception that a firm takes up the socio-emotional burdens of the employees, through quality reward systems, improves loyalty anchoring on quality supervisory support, negatively impacting stress and other workplace encounters (Sutcliffe et al., 2016).

Perceived organizational support links directly to diverse workplace positive attitudes and behaviors, such as citizenship behavior and commitment according to Simosi (2012). Bowers et al. (2017) noted that a supportive team culture may enhance resilient team processes. Shared values and norms may promote mutuality in the workplace helping in the development of a shared identity among team members, which consequently can further enhance connectedness within teams (Shin et al., 2016). The organizational culture that values teamwork support and employee participation is known to immeasurably contribute to the progression of social ties in teams and the enhancement of mutual support during disturbances (Shin et al., 2016). However, McKinsey (2020) notes that organizational communications from the formal leader should consistently progress once the crisis has passed to offer a realistic and optimistic outlook to encourage multiple stakeholders, inspiring them to support structural recovery in a firm, preparing them adequately for the uncertain future of a possible next large-scale challenge.

1.1 Statement of the Problem

The recent global crisis such as the collapse of the U.S. housing market in 2006, the global economic recession in 2007, and COVID-19 in 2020 significantly affected businesses globally (Duchek, 2020). Such unprecedented crises and shocks lead to reduced profitability, slow or no growth, and in adverse cases collapse of the organizations. Therefore, if the situation is not arrested in time many organizations, especially in the telecommunication sector face survival threats. The telecommunication sector around the world has experienced a lot of disruptions resulting in business failures estimated to be between 70% and 86%. Such disruptions have resulted in massive resource wastage (Mueller-Jacobs & Tuckwell, 2012) such as loss of quality employees (Mukabi, Marwa & Kiragu, 2019).

The onset of COVID-19 in 2020 resulted in shocks across all sectors in Kenya including the telecommunication sector which compelled the government to intervene. Interventions initiated led to an increase in the number of mobile subscriptions to 57.0 million and mobile SIM penetration in the country to 119.9 percent. However, these benefits could be eroded if telecommunication companies do not develop resilience. As a result of the shocks and their resulting adverse effects, there has been increased interest globally in organizational resilience. According to Blanchet et al (2017), resilient organizations are less vulnerable to the crisis are better prepared, respond effectively, and are more adaptable when it comes to change. Thus, there is a need for firms to develop internal structures so that they can withstand shocks.

Existing literature on organizational resilience shows that most studies were conducted in different economies such as Turkey (Yamamoto & Şekeroğlu, 2011), New Zeeland (Girish, Mesbahuddin, Samuel & Orchiston, 2018), and Nigerian (Nnamdi, 2020). Although the studies provide an insightful contribution to the body of knowledge, the findings may not be generalized in the current study. Thus, there exist contextual gaps. The few studies in the local context (Soyres, Abdel, Cerruti, and Kiwara, 2018; Mukabi, Marwa & Kiragu, 2019; Wandabwa & Kilika, 2020) linked resilience to other constructs such as efficiency, performance, competitiveness, and productivity. However, existing literature has not considered the relevance of management support and consideration in achieving organizational resilience. Therefore, there are conceptual and empirical gaps in the study. The study sought to fill these gaps by examining how management support and consideration affect organizational resilience in telecommunication companies in Kenya.

1.2 Literature Review

Relevant literature is reviewed in this section with a view to finding the relationship between management support and consideration and organizational resilience. In this section, both theoretical and empirical literature are discussed.

1.2.1 Theoretical Review

The study was anchored on the Managerial Grid of Leadership Theory developed by Blake and Jane Mouton in 1964. According to the theory, there are five styles of leadership, and each is based on the concern for people and the concern for production. The theory is represented graphically on a grid where the vertical axis takes the ‘concern for people and the Y-Axis takes ‘concern for production. The X-axis tests the intensity with which a manager configures a leadership approach to determine the desired level for meeting the interests of the team members, including the aspect of personal development. The Y-axis, on the other hand, measures the degree in terms of deciding how best to achieve a given task by focusing on concrete objectives, high productivity, and organizational efficiency (Islam, Karunarathne & Tatiane). The grid generates five possible leadership styles as detailed in figure 1.

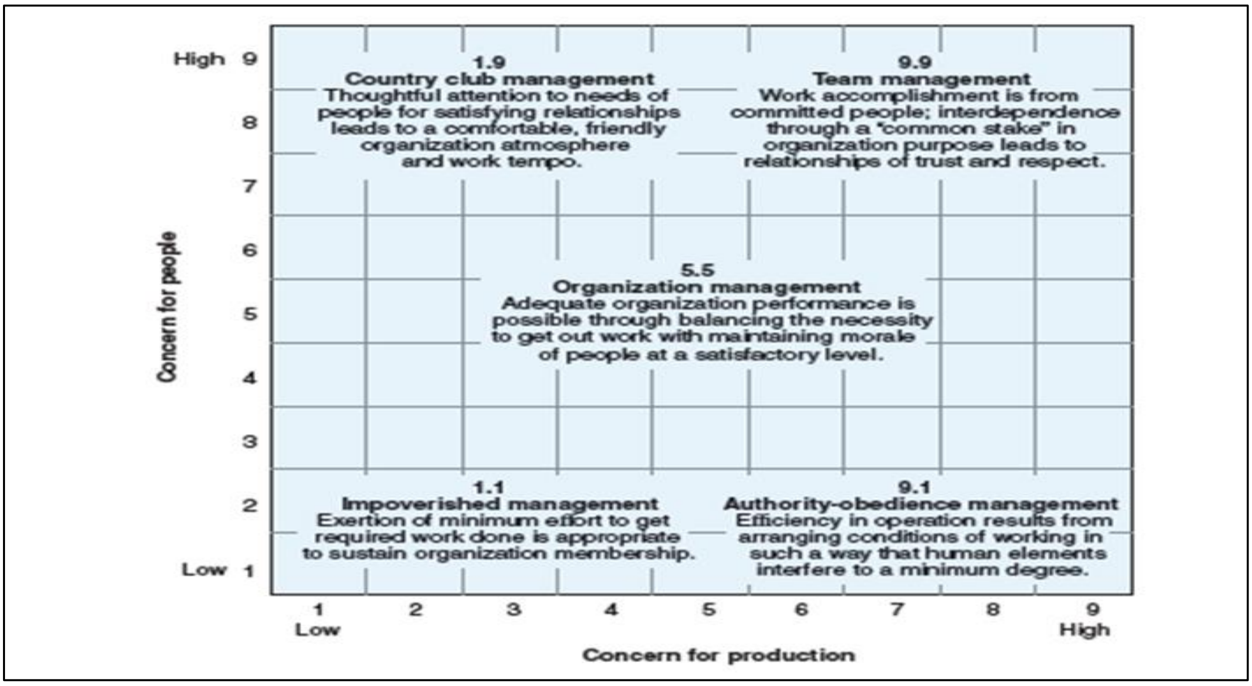

Figure 2.1: The Managerial Grid

Source: Blake, R. & Moulton, J. (1964). The Managerial Grid: The Key to Leadership Excellence. Houston, TX: Gulf Publishing Company

Country Club Style Leadership

The quadrant represented by the coordinates (1, 9) represents the Country Club Management or Club Style Leadership, where the manager is more focused on relationships to fulfill the concerns of the people. Such managers pay much consideration to the well-being of the employees, and their safety to fast-track the performance of a firm. The manager fears failure and jeopardy and correspondingly the manager are essentially powerless and helpless to discipline the staff when in error. The leaders fear that using more powers could jeopardize their relationships with their subordinates, eventually risking the aspect of productivity (Islam, et al., 2019).

The quadrant represented by the coordinates (9,1) represents managers concerned with production as the only goal where the manager engages more in task-oriented strategies combined with a low concern for people (Roy, 2019). In this sense, the manager provides the needed resources to perform and expects the employees to perform. The leader is rarely concerned about the needs of employees and therefore has little or no allowance for collaboration and cooperation and considers the workers as replaceable resources.

The quadrant represented by the coordinates (1,1) represents managers that delegates-and-disappears. It is thus often viewed as a "lazy" management approach with minimal concern for both people and production. Generally, the managers apply this style focusing more on preserving their job and seniority, avoiding any conflict situation. Such leaders are mostly ineffectual for the reason that they have less impetus for crafting systems and a favorable atmosphere for both production and meeting employees.

The team leadership represented by the coordinates (9,9) is a contribute-and-commit type of leadership where the manager gives high interest to both individuals and production consequently spurring high levels of motivation (Ahmed, 2019). The manager promotes teamwork at the workplace and has a high concern about strategies that would achieve high levels of employee commitment, making them feel valued as they get involved in realizing the corporate purpose and aspirations thus empowering the team leaders intentionally (Islam, et al., 2019). This type of leadership is likely to lead to a highly motivated labor force as a result of recognition and support from the leader. This study thus assumes that a good leader is a team leader and the voice of each team member is given a chance. Since the leader is concerned with employee commitment this approach would yield resilience.

The middle-of-the-road approach represented by the coordinates (5,5) is a type of leadership that rests in the middle of the grid by striking a balance between concern for people and production but without ambition. Such managers try to balance the aspirations and the needs of the employees and competing corporate goals, hoping to achieve acceptable performance (Roy, 2019). The leader likes to relax and build a friendly relationships with the subordinates (Islam, et al., 2019). This approach calls for a comprise of individual aspirations and those of the organization aimed at striking a balance between personal goals and organizational goals. Since the employees willingly pursue organizational goals optimal performance and resilience are likely to be achieved.

Based on the arguments presented in the theory, leaders should encourage the development of group cohesion through the tweaking of the work environment that increases task interdependence (Ullah and Dong Soo, 2013) and employees get the needed support from other both group members and the official leader. The leaders reduce role conflict and ambiguity to set expectations for the team members thereby increasing job satisfaction (Wood, and Fields, 2007). The theory is thus relevant in anchoring management support and consideration which calls for according employees to the needed support to enable them to achieve their personal goals and those of the firm.

The Managerial Grid of Leadership Theory has received incredible support and has been applied in research in various studies including a study by Darshani (2016) that sought to review the modes of conflict resolution in management and the managerial grid theory of leadership, Cho, et al., (2018) concerning the correlation between the types of leadership and an organization's level of performance in South Korea and Yücel, Karataş, and Aydın (2013) applied the managerial grid theory to investigate the interplay of the level of the school principal's leadership roles and organizational culture according to perceptions by teachers about the principals.

However, the theory has received criticism for being analogical to the proverbial double-edged sword, hence having some limitations which include. The model, for example, does not look at the internal and external context, constraints, and circumstances, and more dimensions of leadership can be relevant (Islam, et al., 2019). Despite the challenges, since the theory has been successfully adopted in other related studies, this study finds it appropriate in supporting management support and consideration as an antecedent for organization resilience.

1.2.2 Empirical Review

This section reviewed studies that have been carried out on the study variables. A few studies have been conducted on resilience and telecommunication companies. For instance, Williams et al. (2017) in a United States study on organizational response to adversity sought to determine how organizations and individuals anticipate responding to adversity. The study centered its focus on exploring the dynamic relationship between resilience and crisis, noting that leadership, time, complexity, and mindfulness are critical elements beyond individual organizations, and varying levels of social capital are key enablers of resilience. Also, quality community social networks among nearby firms provide possible access to valuable resources in difficult situations, among others emotional, and psychological support, and the information needed to tame the pangs of the disaster. The study highlights the need for social capital (Shepherd & Williams, 2014; Aldrich & Meyer, 2014) to support to energize recovery from adversity, especially in firms.

A study in telecommunication firms in Nigeria that focused on the interplay between organizational resilience, and ambidexterity applied cross-sectional research by Onwughalu & Amah (2017) revealed that, for survival and sustainability to happen, the leader's primary role is that of instituting structures that are consistently flexible, and permeable, allowing for continual alignment for business to remain responsive to changes in the operating business environment. This is possible through the encouragement of individual employees to divide their resources between demands of adaption and alignment referred to as ambidexterity in the context due to their conflicting call for attention by the employees. Arguably, organizations that are ambidextrous in their leadership support their staff to exhibit dynamic capabilities to drive resilience. The arguments in this study concur with the postulations made in the current study although they were conducted in different study contexts. However, the results may not be perfectly generalized since the study results were based on Spearman's Rank order correlation coefficient which only shows the nature relationship existing between the variables but does not show the effect that a variable has on the other as envisaged in the current study.

A study by Bavel, Baicker, Boggio, et al. (2020) in West Africa noted that leaders must not pursue interests that improve the sense of collective purpose which accelerates the team members to offer the needed support to one another, especially in a crisis. Consequently, telecommunication companies can achieve better results if there is goal congruence between the organization, management, and employees. Any conflict of interest hinders the firm from achieving its goals. Barasa, Mbau, and Gilson (2018) noted that leaders should support their constituents to develop organizational culture characterized by organizational learning from past experiences to build organizational resilience in companies drawn from Africa. The leaders should deploy support that enhances creativity and innovation at all levels in the organization.

Young and Jordan (2018) conducted a study on top management support aimed at determining the effect of management support on project success. Based on a descriptive research design, the study concluded that top management support is the most important critical success factor for project success. However, although the study findings reveal that top management support is important for project success, the study does not show whether the organisation becomes resilient as a result of the success of projects. There was thus a need to conduct the current study to examine the effects of management support and consideration on organisational resilience.

Chege and Gakobu (2017) studied the impact of diverse leadership styles on performance in the Kenyan telecommunication industry, observing that transformational and transactional leadership positively influenced organizational performance more than the laissez-faire type of leadership which posted a positive relationship with corporate performance. Further, transformational leadership practices are positively related to corporate performance, emphasizing the significance of role-modeling by leaders to the subordinates; inspiring them with challenging assignments at work and providing needed stimulation to guide their efforts to innovation, and creativity. However, the focus of the study was on performance while the current study focused on resilience.

Studying top management support, external expertise, and information systems implementation in small businesses in the United States of America, Thong, Yap & Raman (2016) concluded that top management support is a key recurrent factor critical for effective information systems implementation. They however noted that external information systems expertise such as consultants and vendors are more important owing to the unique nature of small businesses. However, the study was conducted in a different context from the current study presenting contextual gaps.

In a study on the influence of performance management on employee productivity in the civil service, Gichuki (2014) used a descriptive survey design to study 300 staffs at the immigration department of Kenya who were selected from a population of 1200 through random sampling. Results revealed that performance management systems significantly influenced employee productivity. The study noted that recognition for good performance based on performance appraisal improves the morale and productivity of employees. Similarly, training and development. Training and development promote and motivate staff to be creative. However, although the study showed the relevance of management support in improving the performance of the firm, the study did not consider the effect of management support on organisational resilience, presenting a conceptual gap.

2. Research Methodology

The section presents the methods used by the researcher in addressing the research problem. Specifically, the section contains the research philosophy adopted in the study, research design, study context, population, sampling technique, and sample size as well as data and analysis.

2.1 Research Philosophy

The adopted positivism philosophy proposes that factual knowledge is obtained through observation and is dependable. The positivism philosophy relies on quantifiable observations that lead to statistical analysis (Collins, 2010). The researcher has to be independent of the subjects and the knowledge (McCombes, 2019). In this study, the researcher was objective and remained independent of the subjects and used statistical tests to study the relationship between the study variables proving the applicability of positivism research philosophy.

2.2 Research Design

The study adopted a quantitative descriptive approach and a cross-sectional descriptive survey of telecommunication industry players in Kenya. The descriptive design aims to explain the population of interest, a situation, or a phenomenon accurately and systematically: Regarding the when, where, and how of a phenomenon of interest (Levers, 2013). Further, the design is an appropriate choice when the research's main focus is that of identifying frequencies, characteristics, and, trends, and categorization of happenings (Jovancic, 2020). The cross-sectional survey was preferred because the study conducted surveyed all telecommunication companies in Kenya.

2.3 Study Context and Population

The study population comprised all staffers of 19 registered telecommunication companies in Kenya, among them Safaricom PLC, the market leader, Airtel Networks Limited, Telkom Kenya Limited, Equitel, and Jamii Telecommunications Limited. The total population of the staff working for the 19 registered telecoms was 9,847 as shown in Table 1.

Table 1: Total Population

Firm	Total Employees	Subordinates	Senior Team
Safaricom Plc	5,500	5,448	52
Telkom Kenya	1,400	1,362	38
Airtel Networks Kenya	1,100	1,054	46
Jamii Telecommunications	287	273	14
Others	1,560	1,506	54
Total population of employees	9,847	9,643	204

Source: Source: Glassdoor (2021)

2.4 Sampling Technique and Sample Size

The study used a stratified disproportionate sampling technique to select a sample of 384 participants out of the total population of 9,847. The sample size comprised 304 subordinates and 80 senior management teams as shown in table 2. The stratified technique was used because the population was divided according to the company they worked for. Disproportionate sampling was adopted to allow drawing participants from the various segments of the population to take care of the under-represented population.

Table 2: Sample Size Distribution

Firm	Total Employees	Subordinates	Senior Team	Sample Subordinates	Sample Senior Team	Total Sample
Safaricom Plc	5,500	5,448	26	12	20	192
Telkom Kenya	1,400	1,362	9	43	15	58
Airtel Networks Kenya	1,100	1,054	23	33	18	51
Jamii Telecommunications	287	273	7	9	5	14
Others	1,560	1,506	27	47	21	69
Total	9,847	9,643	102	304	80	384

2.5 Data and Analysis

The study utilised primary data by using a blend of research questionnaires. The obtained data was analysed using descriptive statistics such as frequency mean score and standard deviation. Inferential analysis was conducted via correlation analysis (Pearson's product-moment correlation) as well as regression analysis. Correlation analysis sought to determine the nature and strength of the relationship existing between the variables while regression analysis was used to predict the variations in organizational resilience as a result of variations in management support and consideration. Hypothesis testing was based on regression results analysis. The predictive power of the model was tested using the coefficient of determination (R^2), the fitness of the model was tested using Analysis of Variance (ANOVA) while the significance of management support and consideration in predicting organizational resilience was based on P-value in Student t-test. A 0.05 significance level was considered in this study.

3. Research Findings

3.1 Response Rate

The study sample comprised 304 subordinates and 80 senior team members. Questionnaires were distributed to 304 subordinates and 80 senior teams. Out of the 304 questionnaires issued to subordinates, 230 were returned while a total of 49 questionnaires that were issued to the management team were returned making a total of 279 returned questionnaires. The response rate was as illustrated in Table 3.

Table 3: Response Rate

	Frequency	**Percentage**
Response	279	72.7%
Non-response	105	27.3%
Total	384	100%

	Targeted	**Response**	**Response rate**
Subordinates	304	230	75.7%
Senior Team	80	49	61.3%
Total	384	279	72.7%

From the results shown in table 3, it is established that the overall response rate was 72.7% with a 27.3% non-response rate. Further analysis showed that the response rate among the subordinates was 75.7% while that of the senior management team was 61.3%.

3.2 Demographic Characteristics of Respondents

This section covers the analysis of the demographic information of respondents. This includes age, gender, level of education, respondents' period of service, position in the organization, respondents' years in the current position, and team members.

Table 4: Respondents Characteristics

	Subordinates		**Senior Team**	
	Frequency	**Percent**	**Frequency**	**Percentage**
18–29 years	43	18.7%	2	4.1%
30-49 years	149	64.8%	33	67.3%
Above 50 years	38	16.5%	14	28.6%
Total	230	100.0%	49	100.0%

	Subordinates		**Senior Team**	
	Frequency	**Percent**	**Frequency**	**Percentage**
Male	94	40.9%	21	42.9%
Female	136	59.1%	28	57.1%
	230	100.0%	49	100.0%

	Subordinates Frequency	Percent	Senior Team Frequency	Percentage
High school	4	1.7%	0	0
College/Undergraduate	169	73.5%	19	38.8%
Post-graduate	57	24.8%	30	61.2%
Total	230	100.0%	49	100.0%

	Subordinates Frequency	Percent	Senior Team Frequency	Percentage
Below 1 year	18	7.8%	1	2.0%
1-3 years	89	38.7%	7	14.3%
4-5 years	62	27.0%	24	49.0%
Above 5 years	61	26.5%	17	34.7%
Total	230	100.0%	49	100.0%

Results show that the majority of the subordinates (64.8%) were aged between 30-49 years, 18.7% were aged between 18 and 29 years and 16.5% were over 50 years of age. Regarding the senior management team, results show that the majority (67.3%) were also aged between 30 and 49 years, 28.6% were over 50 years and 4.1% were aged between 18 and 29%. This implies that the majority of subordinates and senior teams in telecommunication companies were aged between 30-49 years. However, it is also noted that most of the subordinates in the telecommunication companies were aged between 18- and 49 years accounting for 83.5% of all employees in the company. This suggests that the junior staff category in the telecommunication industry is dominated by young people. However, among the senior management team, it was noted that the majority of staff were aged 30 years and above (95.9%) indicating that age could have been a critical factor for an employee to be recruited or promoted to senior management positions. Consequently, to progress to senior management levels, the age of the employee was considered.

On the gender, the findings show that majority of respondents were female with 136 (59.1%) among the subordinates and 28 (57.1%) among the senior management team. Male respondents were 94 (40.9%) subordinates and 21 (38.5%) in the senior management team. This implies that more females were available to respond to the research instrument. However, both males and females were represented in this study indicating that there was no bias on gender.

The results show that majority of respondents among the subordinates had a college/undergraduate level of education at 169 (73.5%). However, for the senior management team, it was observed that the majority of them 30 (61.2%) had post-graduate qualifications. This suggests that more skills were required at the management level and therefore the level of education was a key indicator for recruitment or promotion to the senior management level. These results also suggest that for assimilation into top management, education level may have been a critical requirement and, therefore, employees motivated to pursue higher education for progression to higher positions in the company.

At the same time, results showed that among the subordinates, 57 (24.8%) had post-graduate qualifications indicating that other than the basic qualifications, employees in telecommunication companies in Kenya sought to enhance their skills by furthering their education to master's level and post qualification certification. Among the senior management team, results showed that 19 (38.8%) had a certificate, diploma, or undergraduate degree as their highest level of education. However, it was also noted that among the subordinates, 4 (1.7%) had no post-basic education qualification with high school being their highest level of education. This means that some roles required very low skills which could be learned through apprenticeship.

Results for subordinates show that 38.7% have served in their organization for 1-3 years, 27.0% have served in their organization for 4-5 years 26.5% have been working in their organization for more than 5 years while another 7.8% have been working in their organisation for less than a year. Among the senior management team, the majority 24 (49.0%) have been working in their organisation for between 4 and 5 years, 17 (34.7%) have worked in their organization for more than 5 years, 7 (14.3%) have worked in their organization for 1 to 3 years and only 1 (2.6%) has worked in their organization for less than 1 year. This implies that the respondents have served in their organization for more than 1 year hence the likelihood that they understood their leaders: Increasing their ability to provide the information needed in this study.

3.3 Descriptive Characteristics

The respondents were required to indicate their level of agreement on the statements about shared leadership using the scale SD = strongly disagree, D = disagree, N = neutral, A = agree, SA = strongly agree. The results were presented in Table 5.

Table 5: Management Support and Consideration

		Subordinates			**Senior Team**	
Statements	**N**	**Mean**	**Std. Dev**	**N**	**Mean**	**Std. Dev**
The team members treat each other with courtesy.	230	3.99	1.307	49	4.69	.508
The organization’s work environment is supportive especially for team members who need help.	230	4.05	1.046	49	4.53	.544
Team members provided the needed encouragement to perform my tasks, especially when upset by the demands of work.	230	3.92	1.111	49	4.55	.647
The leader fosters a cohesive team atmosphere	230	4.11	1.003	49	4.53	.649
Aggregate	**230**	**4.018**	**1.117**	**49**	**4.575**	**0.587**

Results show that there was an aggregate mean score of 4.018 for subordinates and 4.575 for the senior management team indicating that there was an agreement among the respondents that management support and consideration were emphasised among telecommunication companies in Kenya as an anticipated ingredient for organizational resilience. The standard deviation of 1.117 and 0.587 for subordinates and the senior management team respectively suggested that there was more agreement among the senior management team than subordinates regarding the level of focus on management support and consideration in the firms.

Further, the subordinates and managers agreed the leader fosters a cohesive team atmosphere as shown by a mean of 4.11, the organization’s work environment is supportive especially for team members who need help as shown by a mean of 4.05, team members treat each other with courtesy as shown by a mean of 3.99 and team members provided the needed encouragement to perform my tasks, especially when upset by the demands of work as shown by a mean of 3.92. The findings concur with those of Barasa, Mbau, and Gilson (2018) who noted that leaders should support their constituents to develop organizational culture characterized by organizational learning from past experiences to build organizational resilience in companies drawn from Africa.

The leaders should deploy support that enhances creativity and innovation at all levels in the organization. Bowers et al. (2017) noted that a supportive team culture may enhance resilient team processes. Shared values and norms may promote mutuality in the workplace helping in the development of a shared identity among team members, which consequently can further enhance connectedness within teams (Shin et al., 2016). The organizational culture that values teamwork support and employee participation is known to immeasurably contribute to the progression of social ties in teams and the enhancement of mutual support during disturbances (Shin et al., 2016).

The study also descriptively analysed the responses given by respondents relating to resilience in their organisation. The results were summarised in table 6.

Table 6: Organization Resilience

Statements	Subordinates N	Subordinates Mean	Subordinates Std. Dev	Senior team N	Senior team Mean	Senior team Std. Dev
Adaptive Capacity						
The organization has robust systems in place to anticipate potential risks, threats, and vulnerabilities e.g., monitoring and evaluation.	230	3.87	.880	49	3.98	1.108
There exist policies that support the organization to adapt proactively.	230	3.83	1.116	49	4.37	.727
The organization has crisis-aware teams to support the identification of potential threats to the smooth flow of operations.	230	3.91	.974	49	4.31	.683
Aggregate	**230**	**3.870**	**0.990**	**49**	**4.220**	**0.839**
Absorptive Capacity						
The organization's operations allow forward flexible planning.	230	4.10	.855	49	4.33	.689
The operations have checks and balance to foster accountability at all levels.	230	4.13	.890	49	4.35	.694
The organization has a stable financial performance	230	4.22	.875	49	4.49	.681
The organization fosters a culture of learning to drive innovation	230	4.47	.745	49	4.47	.649
Aggregate	**230**	**4.230**	**0.841**	**49**	**4.410**	**0.678**
Transformative Capacity						
The firm's processes are committed to service delivery.	230	4.43	.725	49	4.49	.582
The management team encourages the use of quality data to inform decisions that lead to structural change.	230	4.27	.844	49	4.39	.702
When our programs are not effective in achieving our goals, we adjust accordingly through conscious decision-making.	230	4.27	.914	49	4.43	.764
Aggregate	**230**	**4.323**	**0.828**	**49**	**4.437**	**0.683**
Overall	**230**	**4.141**	**0.532**	**49**	**4.356**	**0.440**

The findings showed that the overall mean score for resilience among subordinates and senior management team were 4.141 and 4.356 indicating that there was an agreement among the respondents that telecommunication companies in Kenya were resilient in the last five years. On adaptive capacity, the results showed that there was an aggregate mean score of 3.870 for subordinates and 4.220 for the senior management teams indicating that there was an agreement among the respondents that adaptive capacity was emphasised among telecommunication companies in Kenya. The standard deviation of 0.990 and 0.839 for subordinates and the senior management teams respectively suggested that there was more agreement among the respondents regarding the level of emphasis on adaptive capacity in the organizations.

Further, the respondents agreed that the organization has crisis-aware teams to support the identification of potential threats to the smooth flow of operations as shown by a mean of 3.91, the organization has robust systems in place to anticipate potential risks, threats, and vulnerabilities e.g., monitoring and evaluation as shown by a mean of 3.87 and there exist policies that support the organization to adapt proactively as shown by a mean of 3.83.

On absorptive capacity, the results showed that there was an aggregate mean score of 4.230 for subordinates and 4.410 for the senior management team indicating that there was an agreement among the respondents that absorptive capacity was emphasised among telecommunication companies in Kenya. The standard deviation of 0.841 and 0.678 for subordinates and the senior management teams respectively suggested that there was more agreement among the respondents regarding the level of emphasis on absorptive capacity in the organizations.

Further, the respondents agreed that the organization fosters a culture of learning to drive innovation as shown by a mean of 4.47, the organization has stable financial performance as shown by a mean of 4.22, and the operations have checks and balance to foster accountability at all levels as shown by a mean of 4.13 and the organization's operations allow forward flexible planning as shown by a mean of 4.10.

On transformative capacity, the results showed that there was an aggregate mean score of 4.323 for subordinates and 4.437 for the senior management team indicating that there was an agreement among the respondents that transformative capacity was emphasized among telecommunication companies in Kenya. The standard deviation of 0.828 and 0.683 for subordinates and the senior management team respectively suggested that there was more agreement among the respondents regarding the level of emphasis on transformative capacity in the organizations. Further, the respondents agreed that the firm's processes are committed to service delivery as shown by a mean of 4.43, the management team encourages the use of quality data to inform decisions that lead to structural change as shown by a mean of 4.27, and when programs are not effective in achieving our goals, we adjust accordingly through conscious decision-making as shown by a mean of 4.27.

The findings concur with those of Mafabi, et al. (2012) who indicated that resilient firms support creativity and innovation, calling for leaders to develop an operating environment that spurs the willingness to offer innovative ideas because the staff believes that such actions would be highly regarded and rewarded by the firm. Further, resilient organizations nurture a culture of creativity by providing the needed resources for employees to experiment, gratifying innovation, tolerance for failure, and an atmosphere in which everyone feels safe to share fresh ideas.

3.4 Correlation Analysis

The product-moment correlation coefficient was used to determine the relationship between the study variables. Correlation results were as shown in Table 7.

Table 7: Correlational Analysis

		Organizational Resilience	Management and support consideration
Organizational Resilience	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	279	
Management support and consideration	Pearson Correlation	.167*	1
	Sig. (2-tailed)	.005	
	N	279	279

*. Correlation is significant at the 0.05 level (2-tailed).

The study revealed that a positive correlation existed between management support and consideration and organizational resilience among telecommunication companies in Kenya with a correlation coefficient of 0.167. The associated P-value of 0.005 indicates that the correlation between the variables was significant. The conclusion of Straatmann et al. (2016) that human beings react to change processes depending on how to support much support they receive which help them build positive perceptions resonates with the conclusions arrived at in this study.

Similarly, Ferreira et al. (2018) supported the argument that enhanced supervisory support spurs positive perceptions and behaviours among employees that lead to better performance.

3.5 Test of Hypothesis

Hypothesis testing was done through regression analysis. The significance of management support and consideration in influencing organizational resilience was based on P-values at 0.05 significance level. The third objective was to examine how management support and consideration affect organizational resilience in telecommunication companies in Kenya. The null hypothesis was that there is no significant relationship between management support and consideration and organizational resilience in telecommunication companies in Kenya. To test the hypothesis organizational resilience was regressed on management support and consideration. The model results were summarised in table 8.

Table 8: Hypothesis Testing Results for Management Support and Consideration

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.461[a]	.212	.197	.51437

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.371	1	5.371	20.301	.000[b]
	Residual	73.287	277	.265		
	Total	78.659	278			

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	3.320	.154		21.628	.000
	Management support and consideration	.164	.036	.261	4.506	.000

The results in table 8 show that the adjusted R^2 was 0.197 indicating that the model predicted 19.7% of all variations in organizational resilience of telecommunication companies in Kenya. The results also showed that the F-statistic for the model was 20.301 which was more than that of the F-critical (1,277=3.8752). The P-value for the model was $0.000<0.05$ indicating that the F-value was significant. The study, therefore, concluded that the model fit in predicting organizational resilience of telecommunication companies in Kenya.

The coefficient results showed that the model constant was 3.320 indicating that in the absence of management support and consideration, organizational resilience of telecommunication companies in Kenya would be equal to 3.320. Results also showed that the coefficient for management support and consideration was 0.164 indicating that holding all other factors constant, a unit increase in management support and consideration would lead to 0.164 units increase in organizational resilience of telecommunication companies in Kenya. The results further showed that the P-value for management support and consideration was $0.000<0.05$ indicating that management support and consideration was significant in predicting organizational resilience of telecommunication companies in Kenya. Since management support and consideration was significant, the study rejected the null hypothesis and concluded that there is a significant relationship between management support and consideration and organizational resilience of telecommunication companies in Kenya.

The findings relate to the demographic features of the respondents, the majority of the employees in the telecommunication companies were between 30-49 years. The employees of this age group are part of the management team in the organization. Therefore, they are aware that management support and consideration for their subordinates would help in the achievement of organizational resilience (Meintjes & Hofmeyr, 2018). Most of the employees in the telecommunication companies were female. Since female employees are risk averse as alluded by Nyamu (2012), they are likely to appreciate the need for management support and consideration for organizations to gain and sustain resilience through improved risk management practices. The results also showed that many of the employees had college/ undergraduate and postgraduate educational levels. This implies that the respondents were knowledgeable about how management support and consideration can be used to achieve organizational resilience.

The findings further showed that the majority of the respondents had served in their organization for more than one year implying that they understand how management support and consideration have been important in the achievement of organizational resilience. The majority of the employees had more than one year in their current working teams an indication that they have been working together to achieve organizational resilience through the support and consideration they are offered by the management of the telecommunication companies.

In line with the descriptive results, the average mean score was 4.018 for subordinates and 4.575 for managers an indication that the respondents agreed that management support and consideration is vital to the attainment of organizational resilience in telecommunication companies in Kenya. Consequently, management support and consideration can be enhanced through a cohesive team atmosphere, provision of support when needed by the team members, and encouraging team members to undertake their duties even when upset by work demands.

The results support the views of the Managerial Grid of Leadership Theory which provides for a contribute-and-commit type of leadership where the manager gives high interest to both individuals and production consequently spurring high levels of motivation. The manager promotes teamwork at the workplace and has a high concern about strategies that would achieve high levels of employee commitment, making them feel valued as they get involved in realizing the corporate purpose and aspirations and empowering the team leaders intentionally. Therefore, telecommunication companies can achieve their purpose if their leaders can promote teamwork in the workplace. This can be achieved through management support and consideration to ensure that the subordinates are committed to achieving organizational resilience.

The findings concur with the conclusions by Barasa et al. (2018) who noted that leaders should support their constituents to develop organizational culture characterized by organizational learning from past experiences to build organizational resilience in companies drawn from Africa. The leaders should deploy support that enhances creativity and innovation at all levels in the organization. Bowers et al. (2017) noted that a supportive team culture may enhance resilient team processes. Shared values and norms may promote mutuality in the workplace helping in the development of a shared identity among team members, which consequently can further enhance connectedness within teams (Shin et al., 2016). The organizational culture that values teamwork support and employee participation is known to immeasurably contribute to the progression of social ties in teams and the enhancement of mutual support during disturbances (Shin et al., 2016).

The results are consistent with correlational results that, a positive correlation existed between management support and consideration and with organizational resilience among telecommunication companies in Kenya with a correlation coefficient of 0.167. The relationship was statistically significant implying that management support and consideration is vital in building organizational resilience.

3.6 Conclusions

The third objective was to examine how management support and consideration affect organizational resilience in telecommunication companies in Kenya. The study revealed that team members treat each other with courtesy, the organization’s work environment is supportive especially for team members who need help, team members provided the needed encouragement to perform their tasks, especially when upset by the demands of work and leaders foster a cohesive team atmosphere. The correlational results revealed that management support and consideration had a positive correlation with organizational resilience. Hypothesis testing results established that there is a positive and significant relationship between management support and consideration of organizational resilience in telecommunication companies in Kenya. It was thus concluded that management support and consideration have a significant effect on organizational resilience in telecommunication companies in Kenya.

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Determinants Audit Report Delay and Its Effects on Investor Reaction in Public Companies in Indonesia

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Abstract
The audit report delay cause problems of performance appraisal for all audited companies following the investors' response negatively to the audited report. The consequences of these report delay make distrust of stakeholders, so the delay of audited report need to be minimized in order for all companies to be trusted in financial statement reports. The aim of this research is to explore the determinants of audit reporting delay in Indonesian stock exchange, especially on development boards. The exploration is then continued by examining the effects of audit report delay in order to respond to investors' negative impressions. Method of research used in this research is the exposure of facts on testing the application of GCG, financial performance. The factors used in this research were audit report delay and auditor's opinion, investor response proxy by share price. The outcome of the research indicates that GCG and legal compliance pressures have a negative and significant effect on audit reporting delay, while financial performance has a positive and significant impact on audit reporting delay, moderating factors such as legal compliance pressures and KAP size has no effect on audit reporting delay. Audit reporting delay and independent auditor reports affect investor response, while legal compliance pressure and financial performance through audit reporting delay affects investor response.

Keywords: Audit Reporting Delay, Legal Compliance Pressure, Restatement, Company Size, Number of Subsidiaries, Audit Firm Size, Auditor Opinion, Investor Reaction

1. Introduction

One of the obligations of issuers or public companies is to publish financial reports that have been prepared according to financial accounting standards in Indonesia and have also been audited by public accountants registered with the Indonesian Institute of Certified Public Accountants and the Financial Services Authority (OJK). financial audit to OJK. In OJK Regulation (POJK) Number 13/2017 dated 27 March 2017 concerning the Use of Public Accountants (AP) and Audit Firms (KAP), companies listed on the capital market are required to use audit firms registered with OJK and the determination is made through a meeting Annual General Shareholders (AGMS), based on recommendations from the audit committee and the board of commissioners. Auditors and companies listed on the capital market have a great responsibility to be able to submit their audited financial reports to OJK in a timely manner. This issue has received attention from the supervisory authorities. For example, the US Securities and Exchange Commission has gradually reduced the 10-K filing period for expedited audit submission of Financial Statements from 90 days after the end of the financial reporting year to 60 days over a three-year period. In accordance with the Financial Services Authority Regulation Number: 29/POJK/2016 concerning Submission of the Annual Report of Issuers or Public Companies, it is stated that every public company listed on the Indonesia Stock Exchange (IDX) is required to submit an annual report to the Financial Services Authority. no later than 4 (four) months after the end of the financial year or April 30 of the following year. OJK has revised regulations regarding the submission of annual financial reports.

Phenomena related to violations of provisions and delays in submitting audited financial reports to the IDX and OJK still occur. Initial observations of company data that have not submitted audited financial statements for the 2012 - 2020 financial year, companies that are late in submitting audit financial reports have decreased, which in the previous year (2015) 63 companies became 10 companies (2018), a significant decrease as a result of relaxation from end of March to end of April. As for the 2019 and 2020 audited financial reports, there was an increase in 80 companies and 96 companies respectively, data as of June 11, 2021. The Financial Services Authority provides relaxation regarding the submission of audited financial reports in line with the status of certain COVID-19 emergencies set by the government until May 31, 2020. (SP 18/DHMS/OJK/III/2020 dated March 18, 2020 regarding the press release OJK loosened the deadline for submitting audited financial reports as an effort to adjust to the emergency conditions due to the Corona virus in Indonesia).

Factors that affect the delay in audit reports are Good Corporate Governance, Financial Performance, Size of Public Accounting Firms. Factors that influence investor reactions are the delay in audit reports and independent auditor reports.

The object of research is companies in the mining, oil and gas industry sectors on the IDX development board due to the average delay in audit reports above 100 days and with an average share price of at least Rp.50 per share (observation period from 2014 to 2020).

Most of previous studies examined the cause of the delay in the audit report can come from good corporate governance, the issuer's financial performance is not good such as the amount of debt is greater than the total equity, accumulated losses, the number of subsidiaries and originating from the CPA such as the audit process and the expertise of auditors and public accounting firms, and legal compliance pressure as moderating. Investor reactions are influenced by one of them the delay in audit reports and independent auditor reports which have an impact on delaying the distribution of dividends received by investors, causing a tendency to sell their shares, which will affect decision making, as well as investor confidence in the company because this delay can indicate that the company is in a state of crisis, and in unfavorable financial condition, as well as may result in loss of relevance and usefulness of financial information This studied focus in Indonesia especially on the IDX and in the context of audit report delay, legal compliance pressure and investor reactions.

Therefore, this paper aims to study “Determinants of Audit Report Delay and Its Effect on Investor Reaction in Public Companies in Indonesia.”

2. Literature Review

2.1. Effect of good corporate governance on audit report delay

Good Corporate Governance (GCG) is a set of relationships between company management, the board of commissioners, shareholders and other stakeholders (OECD, 2005). GCG is basically concerned with the way all stakeholders strive to ensure that managers and other internal employees always take appropriate steps or adopt mechanisms that protect stakeholder interests.

GCG can affect the delay in the company's audit report. (Cohen & Leventis 2013), (Nor et al. 2010), (Ilaboya &

Christian, 2014), (Afify 2009), (Apadore & Noor 2013), (Hashim & Rahman 2011), (Azubike & Anggreh 2014), (Lailah, F. 2016) shows that, Good corporate governance has an effect on the delay in audit reports. Therefore, it could be hypothesized that:
Hypothesis 1: Good corporate governance affects the delay in audit reports.

2.2 Effect of legal compliance pressure on audit report delay

The pressure of legal compliance means the pressure of submission, obedience, the condition of a person being submissive to the rules of the game (law) that apply in this case the written law. This obedience or obedience is based on the awareness that written laws or statutory regulations have various kinds of juridical powers. With the pressure of legal compliance, the company has hope of a reward and an effort to avoid punishment that may arise if someone violates the provisions of the law.

Lailah, F (2016) shows that GCG has a significant effect on audit report delays (ARL) before and after using legal compliance as a moderating variable. Na'im (1999) proves that companies that do not comply with punctuality regulations are caused by low profitability, financial difficulties, insignificantly influencin behavior on (timeliness) of company financial reporting, Therefore, it could be hypothesized that:
Hypothesis 2: Legal compliance pressures affect the delay in audit reports.

2.3 The effect of good corporate governance moderated by legal compliance pressure on audit report delays

GCG monitors the work carried out by external auditors and puts pressure on legal compliance not to delay the financial reporting of public companies. SEC (regulators) in several countries have established regulations regarding the time limit for the presentation of financial statements in order to reduce delays in the presentation of financial statements by many public companies (Lambert et al. 2013). The Indonesia Stock Exchange has also set rules regarding the deadline for the presentation of financial statements for listed companies, which is April 30 of the following year after the date of the end of the financial statements. The deadline for presenting these financial statements is a pressure for companies to reduce audit report delays, because companies that do not comply with these regulations will be subject to sanctions (POJK No.29/POJK.04/2016. Therefore, it could be hypothesized that:
Hypothesis 3: Good corporate governance moderated by legal compliance pressure affects the delay in audit reports

2.4 Effect of financial performance on audit report delay

Financial performance, Vuko and Cular (2014), the results of the study show that there is a significant positive effect on the delay in audit reports. The results of the research by Sawitri & Budiartha (2018), Suparsada & Putri (2017) conclude that financial performance has a negative influence on the delay in submitting audited financial statements. Cullinan (2003) research results show that financial performance with audit report delays has a significant negative relationship. The auditor is responsible for upholding professional scepticism in all planning and conducting audits, in short the auditor must remain vigilant of the possibility of material misstatement whether due to fraud or errors in all planning and audit implementation. Therefore, it could be hypothesized that:
Hypothesis 4: Financial performance affects the delay in audit reports

2.5 The effect of the size of audit firm (KAP) on audit report delay

The size of an Audit Firm (KAP) can be measured based on the number of employees, number of clients, and reputation. Large Audit Firms have a large number of employees, can audit more efficiently and effectively, have a flexible schedule that allows them to complete audits on time, and have a stronger incentive to complete their audits faster in order to maintain their reputation. The size of the KAP is based on the number of partners in a KAP, which is divided into large, medium and small KAPs. The more the number of partners in one KAP, it can be said that the reputation of the KAP is getting higher because with many partners, there will be more opportunities to discuss among partners in solving audit cases and maintaining audit quality control standards so

that the audit quality is higher and more trusted by the public.
The KAP size measure of the length of delay in audit reports according to Ashton et al. (1989) Hossain and Taylor (1998) Ahmad and Kamarudin (2003); Che-Ahmad and Abidin (2008) found that there is a significant relationship between KAP size and audit report delay. Therefore, it could be hypothesized that:
Hypothesis 5: The size of audit firm will affect the delay in the audit report

2.6 Effect of late audit report on investor reaction.

The delay in audit reports can affect market participants to react more quickly in decision making so that the information has value in the eyes of investors. The longer the delay in the publication of the audited annual financial statements, the potential for economic uncertainty expected by the market will be.

The timely submission of audited financial reports is one of the prerequisites for increasing the company's stock market price on the Indonesia Stock Exchange. Givoly and Palmon (1982), Owusu-Ansah (2000) asserted that late submission of financial statements is the single most important determinant of the timeliness of submitting audited financial statements related to earnings information, which in turn, determines the market reaction to earnings information. The length of time for completion of the audit will affect the market reaction to delays in the submission of financial statements. Therefore, it could be hypothesized that:
Hypothesis 6: The delay in the audit report affects the reaction of investors

2.7 The effect of independent auditors' reports on investor reactions.

The Independent Auditor's Report (LAI) is issued in relation to the going concern paragraph (SA570, 2013) – going concern is generally included in the paragraph emphasizing a matter (emphasis on matters – eom) (SA706,2013). Based on signal theory, the company will provide a signal for users of financial statements in the form of information related to the company's financial performance, one of which is an independent auditor's report provided by a public accountant. The independent auditor's report with a going concern paragraph by the company is considered a negative signal for investors because the company is facing a problem that will have an impact on the survival of the company. The published information will provide a signal for users of financial statements, especially investors in making decisions.

The provision of an unqualified opinion with a going concern paragraph (SA570, 2013) – going concern - will affect the reaction of investors. The reaction of investors to the acceptance of going concern audit opinion. Blay and Geiger (2001) Herbohn, et al. (2007) Menon and Williams (2010) found that investors reacted significantly negatively to the acceptance of going concern audit opinions. Therefore, it could be hypothesized that:
Hypothesis 7: The independent auditor's report has an effect on investors' reactions.

2.8 The effect of Good Corporate Governance on investor reactions through delays in audit reports of public companies in Indonesia.

Good Corporate Governance on Investor reactions through delays in audit reports of public companies is one of the prerequisites for increasing the market price of company shares on the Indonesia Stock Exchange.

Givoly and Palmon (1982) asserted that Good Corporate Governance through audit report lag is one of the most important determinants of the timely submission of audited financial statements related to earnings information, which in turn, determines the market reaction to earnings information. The length of time for completion of the audit will affect the market reaction to delays in the submission of financial statements.

Owusu-Ansah (2000) states that timely financial reporting is important to mitigate insider trading and rumors in the capital markets of developing countries. So that investors can more quickly obtain financial information as a basis for decision making and adapt to capital market developments, especially in Indonesia. Therefore, it could be hypothesized that:
Hypothesis 8: Good Corporate Governance has an effect on investor reactions through delays in audit reports of

public companies in Indonesia.

2.9 Effect of legal compliance pressures on Investor Reaction through delays in audit reports of public companies in Indonesia.

The Financial Services Authority in several countries has set regulations regarding the deadline for submitting audited financial statements in order to reduce delays in the presentation of financial statements by many public companies (Lambert et al. 2013). Therefore, OJK has also set rules regarding the deadline for submitting audited financial reports for registered companies, which is April 30 of the following year after the end of the financial report date. The deadline for presenting these financial statements is a pressure for companies to reduce delays in audit reports of public companies in Indonesia, because companies that do not comply with these regulations will be subject to sanctions (POJK No.29/POJK.04/2016). To see the indirect effect, the legal compliance pressure variable is tested as a moderating variable. Therefore, it could be hypothesized that:

Hypothesis 9: Legal compliance pressures affect investor reactions through delays in audit reports of public companies in Indonesia.

2.10 The effect of good corporate governance is moderated by legal compliance pressures on investor reactions through delays in audit reports.

Good corporate governance moderated by legal compliance pressures has an influence on investor reactions through delays in audit reports. According to Fujianti (2016), good corporate governance moderated by legal compliance pressures has insignificant effect on investor reactions through delays in audit reports. Therefore, it could be hypothesized that:

Hypothesis 10: Good Corporate Governance moderated by legal compliance pressures affecting investor reactions through delays in audit reports of public companies in Indonesia.

2.11 Effect of financial performance on investor reactions through delays in audit reports of public companies in Indonesia.

Financial performance which is proxied by the Debt to Equity Ratio, Restatement, the number of subsidiaries and company size has an effect on investor reactions through delays in audit reports. The existence of information that is relevant to a stock encourages investor reactions that affect stock prices. But not all stock markets are efficient, but it could be in a weak or semi-efficient form.

Cullinan (2003) Kennedy et al. (2012) Vuko and Cular (2014), the results of the study show that financial performance through delays in audit reports has a significant effect on investor reactions. Therefore, it could be hypothesized that:

Hypothesis 11: Financial performance affects investors' reactions through delays in audit reports of public companies in Indonesia.

2.12 The effect of the size of audit firm on investor reactions through the delay in audit reports of public companies in Indonesia.

Pourali, et al. (2013) states that there is a positive effect of KAP size through delays in audit reports on investor reactions. When investors know that a company's financial statements have been audited by a public accounting firm, investors will trust the results of an independent audit report published by the company on the Stock Exchange. So the size of the public accounting firm has an indirect effect on investor reactions through delays in audit reports.

The size of the KAP, according to research, found a public accounting firm to be positive but not significant. (Türel & Tungcay, 2014), that late audit reporting is negatively related to the use of Big 4 auditors and unmodified audit opinion. (Lee, 2008). Based on the following research, it was found that the auditor's professional skills and auditor's educational background had a significant effect on the delay in reporting local government financial report audits. (Sutaryo & Laser, 2015). Apadore and Noor (2013) show that KAP size through delays in audit reports has no effect on investor reactions. Therefore, it could be hypothesized that:

Hypothesis 12: The size of the audit firm has an effect on investor reactions through the delay in audit reports of public companies in Indonesia

3. Method

This research is focused on empirically testing the hypothesis of the model developed based on the proposed theoretical model. Identification and integration of the determinant variables that affect the delay in audit reports such as good corporate governance, financial performance and the size of the public accounting firm. The moderating variable is legal compliance pressure. Furthermore, the effect of delay in audit reports on investor reactions with other endogenous variables is independent auditor reports.

The model on the determinant variables that affect the delay in audit reports such as good corporate governance, financial performance and the size of the public accounting firm. The moderating variable is legal compliance pressure. Furthermore, the effect of delay in audit reports on investor reactions with other endogenous variables is independent auditor reports as follows:

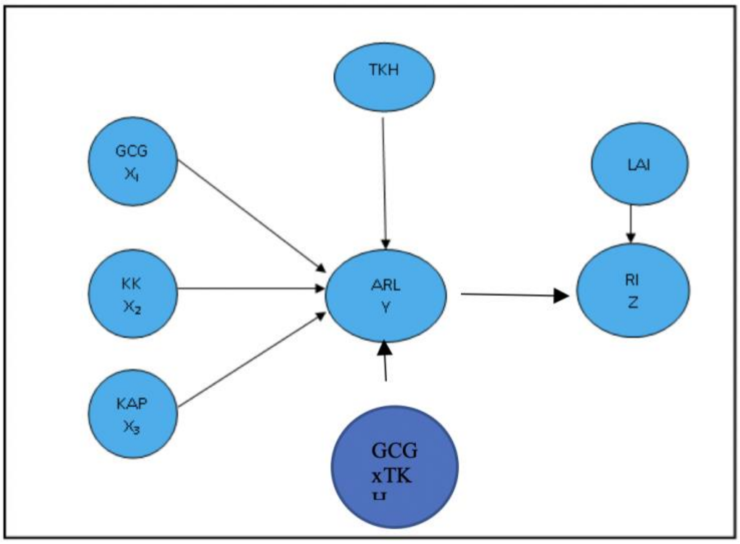

Figure 1: Model on the determinant variables

Fig. 1. Model on the determinant variables that affect the delay in audit reports such as good corporate governance, financial performance and the size of the public accounting firm. The moderating variable is legal compliance pressure. Furthermore, the effect of delay in audit reports on investor reactions with other endogenous variables is independent auditor reports.

A summary of variable operationalization can be seen in the following table :

Table 1: Variables Measurement, sub-variables and Operational Variables

No	Variable	Proxy	Indicator	Measurement	Scale
1.	delays in audit reports (ARL)		Length of Audit Completion	The date in the Independent Auditor's Report minus the financial year closing date. Ln Day Length	Nominal
2.	Good Corporate Governance (GCG)	DK	Board of commissioners size	∑ Board of commissioners	Nominal
		KKA	Audit committee expertise	∑ Audit committee expertise / ∑ Audit committee (%)	Ratio
3.	Legal compliance pressures (TKH)		Pressure from the Indonesia Stock Exchange and OJK which have set rules regarding the deadline for presentation of financial statements for registered companies	2 = On time 1 = Late	Ratio
4.	Financial performance (KK)	DER	Debt to equity ratio	$DER = \frac{Total\ Liabilitas}{Total\ Ekuitas}$	Ratio
		RES	Restatement	2= restatement 1= no restatement	Nominal
		SUB	Number of subsidiaries (*Subsidiary)*	∑ Number of subsidiarie.	Nominal
		UP	Total aset	Ln Total Aset	Nominal
5.	the size of the public accounting firm (KAP)		group number of partners in one public accounting firm	1=Partner 1, 2=Partner 2 s.d. 10, 3=Partner 11 s.d. 20, 4=Partner ≥ 20	Interval
6.	Independent auditor's report (LAI)		Independent Auditor's Report with going concern paragraphs	2= Opinion modification with going concern 1 = No	Nominal
7.	investor reactions (RI)	*PRICE*	Stock price	Stock price at the end of the month the financial statements are published.	Nominal

3.1. Research Hypothesis

The statistical hypothesis is expressed as follows:

- H_1: Good corporate governance has a positive and significant influence on the delay in audit reports.
- H_2: the pressure of legal compliance has a positive and significant influence on the delay in the audit report.
- H_3: Good corporate governance moderated by legal compliance pressures has a positive and significant influence on late audit reports.
- H_4: Financial performance has a positive and significant influence on audit report delays.
- H_5: Size of the public accounting firm has a positive and significant influence on the delay in audit reports.
- H_6: Delay in audit reports has a positive and significant influence on investor reactions.
- H_7: Independent auditor's report has a positive and significant influence on investor reactions.

- H_8: Good Corporate Governance has a positive and significant influence to investors' reactions through delays in audit reports.
- H_9: Legal compliance pressures have a positive and significant influence on investor reactions through delays in audit reports.
- H_{10}: Good Corporate Governance moderated by legal compliance pressures has a positive and significant influence on investor reactions through delays in audit reports.
- H_{11}: Financial performance has a positive and significant influence on investor reactions through delays in Audit Reports.

H_{12}: the size of the public accounting firm has a positive and significant influence on the reaction of investors through the delay in audit reports.

3.2. Methods

The research population is all companies listed on the Indonesia Stock Exchange (IDX) from 2014 to 2020 as many as 641 issuers listed on the IDX in 2014. In 2020 there are 70 companies that have not submitted audited financial statements, so the population after deducting those that have not submitted audited reports to 571 issuers. The target population of the research are companies in the mining, oil and gas industry (29), which are listed on the IDX in 2014. The total population of the research target is 33 companies, both on the main board and on the developer board. The research sample consists of 16 companies (issuers) listed on the development board, namely issuers are still in the early stages and have net tangible assets of at least ID 5 billion. According to the criteria determined from 29 companies in the mining, oil and gas industry, which are listed on the IDX development board, there are 15 companies in the sample with seven years of observation. So the total sample of this study amounted to 100. Data collection techniques using secondary data obtained from the sample company websites and audited financial reports that have been published on the IDX website and then processed or calculated to obtain research variables determined according to the background of the research problem, research questions, and research objectives to be realized. The data collected from secondary data is tabulated, then it will be processed using *SmartPLS3.0*.

The statistical tool used for evaluating and interpreting the secondary data into meaningful information for resulting analysis is PLS Structural Equation Modelling (SEM PLS- *SmartPLS3.0* program). Data analysis methods used are:

- Outer Model Analysis (Validity Test and Reliability Test)
- Inner Model Analysis (Determination-RSquare Adjusted Coefficient)
- Hypothesis Test (t test).

4. Result and Discussion

4.1. Outer Model Analysis

1) Convergent validity: Validity is the accuracy of an instrument in measuring what you want to measure, whether the instrument used to measure the construct can really measure the construct correctly. In this study, the loading factor limit of 0.6 will be used. The following is the SmartPLS3.0 output for the outer loadings generated in this study:

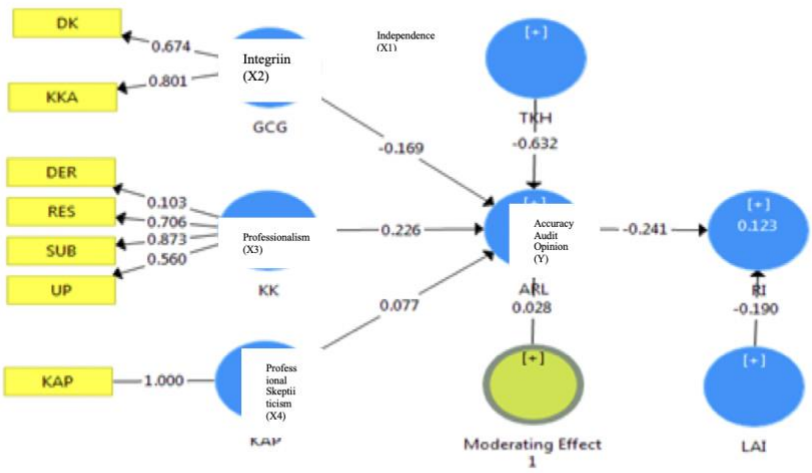

Figure 2: Outer loadings value

Based on the figure above, it is known that each of the research variable indicators has a value of outer loading > 0.7. There are also those whose indicator values are 0.5 – 0.6 which are still acceptable, except for the DER (Debt to Equity Ratio) indicator. All of the above data is considered sufficient to meet the convergent validity requirements, all indicators are declared feasible or valid for research use and can be used for further analysis. The audit committee expertise indicator from the financial performance variable outer loading is 0.801 and the subsidiary indicator from good corporate governance outer loading is 0.874, indicating that it is feasible or valid.

2) Discriminant Validity: Discriminant validity is done to ensure that each concept of each latent variable is different from other variables. Can fulfill discriminant validity if each loading value of each indicator of a latent variable has the largest loading value compared to other loading values on other latent variables. Here are the results of the discriminant validity of the SmartPLS program:

Table 2: Cross Loadings Value

	ARL	GCG	TKH	GCG * TKH	KK	KAP	LAI	RI
DK	-0.251	0.674	0.063	-0.042	0.151	-0.369	0.260	-0.019
KKA	-0.310	0.801	0.348	-0.218	-0.261	0.368	-0.050	0.240
TKH	-0.764	0.296	1.000	-0.369	-0.411	0.280	-0.271	0.247
GCG * TKH	0.291	-0.187	-0.369	1.000	0.043	-0.169	0.153	-0.069
DER	0.000	0.219	-0.006	-0.094	0.103	-0.090	0.169	-0.094
RES	0.331	-0.083	-0.268	0.028	0.706	-0.128	0.105	-0.225
SUB	0.458	-0.086	-0.372	0.028	0.873	-0.278	0.510	-0.281
UP	0.066	-0.029	-0.247	0.107	0.560	-0.252	0.204	-0.062
KAP	-0.176	0.051	0.280	-0.169	-0.278	1.000	-0.143	0.426
ARL	1.000	-0.380	-0.764	0.291	0.483	-0.176	0.311	-0.301
LAI	0.311	0.119	-0.271	0.153	0.420	-0.143	1.000	-0.265
RI	-0.301	0.167	0.247	-0.069	-0.310	0.426	-0.265	1.000

Based on table above, it can be seen that each indicator in the research variable has the largest cross loading value on the variables it forms compared to cross loading value on other variables. Based on the data above, the results obtained, it can be stated that the indicators used in this study have good discriminant validity in compiling their respective variables.

3) Reliability test: In this study reliability testing was carried out by two methods, namely Cronbach Alpha and Composite Reliability with each value> 0.70 so that the construct can be reliable.

Table 3: Reliability Test

	Composite Reliability	Cronbach's Alpha
Good Corporate Governance	0.71	0.18
Legal Compliance Pressure	1.00	1.00
GCG * Legal Compliance Pressure	1.00	1.00
Financial performance	0.68	0.48
Firm Size	1.00	1.00
ARL	1.00	1.00
Independent auditor's report	1.00	1.00
Investor Reaction	1.00	1.00

Based on the table above shows the reliability test results can be seen that the overall statement instrument used to measure the variables analysed in this study was declared reliable, this is seen from the Cronbach's Alpha and Composite Reliability values of all variables studied greater than 0.70, Except for Good Corporate Governance.

A. Inner Model Analysis

Following are the results of the coefficient of determination after being processed with the SmartPLS3.0 program which is presented in the table below:

Table 4: Determinant Coeficient

	R Square
ARL	0.652
Investor Reaction	0.123

Based on table above, it can be seen that the R-Square (R^2) value for the ARL variable is 0.652. Obtaining this value explains that the percentage of ARL can be explained as 65.2%. Then for the value of R-Square (R2), the investor reaction variable is 0.123. This value explains that the investor's reaction can be explained by 12.3%.

Based on the value Q-Square (Q^2) is 0.695. This shows the magnitude of the diversity of research data that can be explained by the research model is 69.5%. While the remaining 30.5% is explained by other factors that are outside the research model. Thus, from these results, this research model can be declared good.

B. Hypothesis Test

Table 5: Path Coeficient

	Path	P Values	Estimated	Result
H1	Good Corporate Governance -> ARL	0.04	-0.17	Accepted
H2	Legal Compliance Pressure -> ARL	0.00	-0.63	Accepted
H3	GCG * Legal Compliance Pressure -> ARL	0.66	0.03	Rejected
H4	Financial Performance -> ARL	0.01	0.23	Accepted
H5	Firm Size -> ARL	0.22	0.08	Rejected
H6	ARL-> Investor Reaction	0.01	-0.24	Accepted
H7	Independent auditor's report -> Investor Reaction	0.00	-0.19	Accepted
H8	GCG -> ARL -> IR	0.19	0.04	Rejected
H9	Legal Compliance Pressure -> ARL -> IR	0.01	0.15	Accepted
H10	GCG*Legal Compliance Pressure -> ARL -> IR	0.70	0.01	Rejected
H11	Financial Performance -> ARL -> IR	0.10	-0.06	Rejected
H12	KAP -> ARL -> IR	0.30	-0.02	Rejected

Based on table above, it can be seen that of all the hypotheses (H1 – H7) can be accepted because each of the effects shown has a P-Values <0.05. Except for GCG*TKH and public accounting firms. So it can be stated that the dependent variable has a significant direct effect, except for GCG*TKH and public accounting firms. Based on table above, it can be seen that of all the hypotheses(H8-H12), all of them were rejected because each of the effects shown had a P-Values 0.05. Except for the pressure of legal compliance through ARL through ARL, so it can be stated that the independent variable to the dependent through ARL does not have a significant indirect effect, except for the pressure of financial legal compliance through ARL

C. Good Corporate Governance has a negative effect on the audit report delays.

Based on the above table IV, it is found that GCG proxied by the board of commissioners and increased audit committee expertise will result in shortening the delay in audit reports. The results of this study are in line with the results of research by Faishal and Hadiprajitno (2015); (Hasim and Rahman 2011); and Fama and Jensen (1983).

Based on observations, it can be seen that the more members of the board of commissioners can reduce the delay in submitting audit reports, such as PT Energi Mega Persada Tbk, PT Delta Dunia Makmur Tbk and PT Alfa Energi Investama Tbk. Apart from that, the board of commissioners is an independent commissioner and also serves as chairman of the audit committee. In several listed companies, members of the commissioners have varied experiences, including retired bureaucrats, private companies and retired military/police personnel. So the board of commissioners in general has an influence in reducing the length of submission of audit reports.

The audit committee expertise (KKA) indicator has a significant effect because the audit committee is also a member of the independent commissioner, the chairman of the audit committee is also a member of the commissioner, and members of the audit committee are members appointed from outside the company. As chairman of the audit committee and member of the board of commissioners, he has expertise in accounting, finance and auditing. KKA has no significant negative effect on ARL. The results of this study are in line with the results of Beasley and Salterio (2001) research.

The board of commissioners together with the audit committee review the financial information that will be published by the Company for the authorities related to the financial statements, as well as review the Company's compliance with laws and regulations related to the Company's business activities.

D. Legal compliance pressures have a negative effect on audit report delays.

Based on the table IV above, with the increase in the variable of strong legal compliance pressure will reduce audit report delays (ARL). Indeed, with the submission rules and sanctions due to large delays, the level of compliance increases in the submission of audit reports. Issuers who submitted late audited financial reports had 56 (24.10%) observation periods, thus those who submitted audit reports on time had 176 observations or 76.80% of all observations. This is also accommodated by OJK, which has postponed the length of the Audit Report from 90 days to 120 days. However, a fine that is higher in nominal value is given. The results of this study are consistent with the research of Najihah and Ayoib (2012); Amirul and Md Salleh (2014) who show that the existence of regulations or standards can reduce audit report delays.

E. Good Corporate Governance moderated by legal compliance pressure has no effect on audit report delays.

Based on Table IV above, it is known that legal compliance pressure is not able to moderate Good Corporate Governance as proxied by the board of commissioners and the expertise of the audit committee on the Audit Report, because when viewed from the observed company data, about 24.25% of issuers are not compliant in submitting audit reports. Even though the issuer has been sanctioned, and GCG, in this case the board of commissioners and its organs, has not responded to sanctions from the financial authorities.

F. Financial performance has a positive and significant effect on audit report delays.

Based on Table IV above, the estimated value shown is positive indicating that an increase in unhealthy financial performance will lead to an increase in audit report delays (ARL). The large number of subsidiaries causes delays because each subsidiary must prepare financial statements that are audited by a public accounting firm. After completion of the audited financial statements of the subsidiaries, they are then sent to the parent company for consolidation. The consolidation process takes time because some of the subsidiary businesses are not the same as the parent business and in the consolidation process there is an activity to make an elimination journal so that double recording does not occur, especially in the income statement and other comprehensive income of each subsidiary. Consolidation of a subsidiary to an entity by itself will increase the size of the company (total assets), because there is a combination of assets.

Based on the observation of sample data, it can be seen that the more subsidiaries and the larger the total assets (company size) can increase the delay in submitting audit reports, such as PT Astrindo Nusantara Infrastruktur Tbk d/h Benakat Integra in 2019 the delay was 157 days and increased compared to last year and 2020 has not submitted an audit report. PT Bumi Resources Tbk delays from 83 days increased to 130 days in 2020, and PT Bumi Resources Mineral was originally delayed by 77 days in 2019 to 119 days in 2020. Related to the delay in audit reports of PT Bumi Resources Tbk and PT Bumi Resources Mineral Tbk both of them are still within the length of time for submission within the non-late period, with a reference of 120 days according to POJK. In general, subsidiaries are audited by a public accounting firm differently from the parent public accounting firm, as a result it can cause a lengthy audit process, because it takes more time to audit the consolidated financial statements.

G. The size of the Public Accounting Firm has no effect on the Audit Report delays.

Based on Table IV above, The size of the KAP does not affect the delay in audit reports, meaning that the size of the KAP partners does not affect the length of submission of audit reports, this is because the audit process for each public accounting firm is the same, namely using audit standards issued by IAPI. Besides that, the audit quality of each KAP for issuers is reviewed by the OJK and P2PK of the Ministry of Finance. So that audit quality for public companies can be maintained. KAPs with the right to audit issuers are evaluated by the OJK for their feasibility. This means that the KAP that audits issuers has passed the OJK assessment and the audit quality is good. The appointment of KAP to audit is carried out by the board of commissioners at the GMS. Thus which KAP is used does not affect the delay in the audit report. The delay in the audit report was caused by the issuer and caused the KAP to be late in submitting it. In completing the audit, there are stages where the audit results are discussed with the issuer's management. At this stage there is a delay in reaching an agreement, which has an impact on delays in the audit report. It is advisable for the auditor (KAP) in carrying out an audit engagement to be able to estimate the duration of audit completion. Thus issuers can reduce delays in submitting audit reports.
The results of this study are in line with the research of Boritz and Liu (2006); Lai (2019).

H. The delay in audit reports has a negative effect on investor reactions.

Based on Table IV above, From the results of hypothesis testing it is known that the delay in audit reports on investor reactions has a negative and significant effect. The estimated value which is shown to be negative indicates that the delay in the audit report has a relationship to the reverse investor reaction, that is, increasing the delay in the audit report will affect the reaction of investors so that it can be seen from the drop in the issuer's share price.

Based on the observation of sample data, it can be seen that issuer PT Baramulti Suksessarana Tbk share price of IDR 1,700 decreased from the previous year, PT Bumi Resources Tbk share price increased slightly from the previous year significantly to IDR 74. From the observation of the sample data it is known that the increase in delays in audit reports affects investor reactions where the issuer's share price has fallen from the previous year.

I. The independent auditor's report has a negative effect on investor reactions.

Based on Table IV above, From the results of the hypothesis test, it is known that the estimated value is shown to be negative, indicating that the independent auditor's report has a relationship with the reverse investor reaction, namely by having an independent auditor's report with a paragraph emphasizing one thing - business continuity - will affect investor reaction as seen from the issuer's share price falling. The sub-variable used in the investor reaction variable is stock price, while stock trading volume is not used because the results are negative and conflict with stock prices. Usually the stock price goes up and the volume also goes up.

From the observation of the sample data it is known that the increase in delays in the independent auditor's report affects investor reactions where the issuer's share price has fallen from the previous year. PT Atlas Resource

Indonesia Tbk's share price was Rp. 400 down from the previous year as well as PT Perdana Karya Perkasa Tbk's share price of Rp. 70 down from the previous year.

The independent auditor's report in the 2017 – 2020 audited financial report still uses the old form, namely the SA 700 version, for the 2021 financial year audit will use the independent audit report version SA700 (revised) where the report form will include an evaluation of business continuity issues, both issuers who are experiencing financial difficulties or not. Thus investors can read and evaluate the feasibility of investing in shares in the capital market

J. Good Corporate Governance has no effect on investor reactions through audit report delays.

Based on Table IV above, the estimated value shown is positive indicating that that Good Corporate Governance on investor reactions through delays in audit reports has an insignificant unidirectional relationship. So the increase or decrease in Good Corporate Governance through delays in audit reports has no effect on investor reactions, this is because investors in making decisions are based on information not only financial information but also non-financial information and rational decision making. The results of this study are also in line with the findings of Lestari and Nuryatno (2018).

K. Legal compliance pressure has a positive effect on investor reactions through audit report delays.

Based on Table IV above, From the results of the hypothesis testing, it is known that the pressure of legal compliance on investor reactions through delays in audit reports has a unidirectional relationship, that is, increasing pressure on legal compliance through delays in audit reports will significantly increase investor reactions. Legal compliance pressure will cause issuers to comply with the law so that they will submit audit reports on time or no later than the end of April of the following year, there are around 76.19% of issuers who are on time and have a significant effect on investor reactions, with signals of rising issuer stock prices.

The form of legal compliance pressure applied by the OJK is in the form of fines and also informing the public by conveying information about issuers who are late to the mass media (newspapers and IDX info). As well as letters addressed directly to the issuer. So issuers should comply with applicable regulations.

Increasing the number of regulations, raises new questions & responsibilities for executives. The reputational crisis triggered by the scandal has made organizations more sensitive to compliance issues. Therefore, in the digital era, violations of compliance quickly go viral in the public and receive severe penalties, both nationally and internationally. At all levels, the demands of companies to conduct business in accordance with the law are increasing. From authorities, investors and customers to suppliers, non-governmental organizations and the media, all stakeholders expect organizations to ensure compliance along the value chain.

Thus the variable pressure of legal compliance through delays in audit reports has a significant positive effect on investor reactions. This means that the presence of the variable pressure on legal compliance is proven to be able to reduce delays in audit reports and ultimately increase investor reactions. The results of this study are consistent with the research of Najihah and Ayoib (2012); Amirul and Md Salleh (2014) which show that the existence of regulations or standards can reduce audit reports.

L. Good Corporate Governance moderated by legal compliance pressures has no effect on investor reactions through audit report delays).

Based on Table IV above, From the results of hypothesis testing, it is known that Good Corporate Governance which is moderated by legal compliance pressure on investor reactions through late audit reports (ARL) has a unidirectional relationship, namely with increased Good Corporate Governance which is proxied by the board of commissioners and audit committee expertise through late audit reports (ARL) will increase investor reaction, but unable to moderate investor reaction. Investors do not react if the audit report is late, this is because investors in making informed decisions are not only financial information but also non-financial information and investor decision making is based on rationality.
Lestari and Nuryatno's research (2018) shows that Good Corporate Governance through the late audit report

variable has no effect on the investor reaction variable. This phenomenon occurs mainly because investors' decisions in the capital market are not only based on audit reports but also consider various external environmental factors related to the company, so that ARL does not affect share prices on the Indonesia Stock Exchange and does not change significantly.

M. Financial performance has no effect on investor reactions through audit report delays..

Based on Table IV above, From the results of hypothesis testing, it is known that financial performance proxied by debt to equity ratio, restatement, number of subsidiaries and company size to investor reactions through late audit reports (ARL) has no significant relationship with increased financial performance through late audit reports (ARL). has no effect on investor reactions, so the increase in financial performance has no effect through delays in audit reports on investor reactions.

N. The size of the Public Accounting Firm has no effect on investor reactions through the Audit Report delays.

Based on Table IV above, From the results of hypothesis testing, it is known that the size of public accounting firms to investor reactions through late audit reports has a unidirectional relationship, that is, increasing the size of public accounting firms through late audit reports (ARL) will increase investor reactions, and affect investor reactions not significantly. So big or small the size of the public accounting firm has no effect on investor reactions through delays in audit reports..

5. Conclusion

This study shows that Good Corporate Governance has a negative effect on the delay in audit reports, legal compliance pressures regulated and determined by the Financial Services Authority have an impact on shortening audit report delays, good corporate governance moderated legal compliance pressures does not strengthen the effect on audit report delays, Financial performance has a significant positive effect on the delay in the audit report, The size of the public accounting firm has no effect on the delay in the audit report, The delay in audit reports has a negative effect on investor reactions, The independent auditor's report has a negative effect on investor reactions, Good Corporate Governance through audit report delays has no effect on investor reactions, Legal compliance pressure through audit report delays has a significant positive effect on investor reactions, Good Corporate Governance moderated legal compliance pressures through audit report delays does not strengthen the effect on investor reactions, Financial performance through the delay in audit reports has no effect on investor reactions, The size of the public accounting firm through the delay in audit reports has no effect on investor reactions.

The recommendations Corporate to restructuring the number of subsidiaries. evaluate which subsidiaries are experiencing losses and deficits and need to be liquidated or merged into other subsidiaries, It is expected to increase paid-in capital, especially those with negative equity, carry out debt restructuring by reducing the principal debt or you can also convert debt into equity, and pay attention to the completion of financial reports with external auditors so that they can submit audit reports in accordance with a predetermined time, which is a minimum of 90 days.

OJK is expected to make maximum regulations on subsidiary companies that can be established by parent companies. The rule was made to nourish the parent company, expected to make regulations on the amount of debt that is reasonable for companies to obtain a maximum of 2X equity, and expected to review the policy regarding the reporting period considering that there are still many companies, especially the mining, oil and gas industry sectors, which are late in submitting their audit reports, until the report submission deadline is approaching.

Investors expected to look at the company's fundamental factors such as audited financial reports and pay attention to DER and the number of subsidiary companies, more in-depth analysis regarding the company whose shares will be purchased. Don't get involved in buying cheap stocks. Choose stocks that have strong fundamentals, If you have already purchased shares and the company is subject to suspension or delisting, then there are two options, namely selling the delisted shares on the negotiating market or waiting for the delisted company to buy back its shares, and diversify stock investment to reduce the impact of losses.

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Information on Cash Flow Statements and Stock Return

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Abstract
This research aims to test and analyze information from the cash flow statement on the share return. The cash flow intended is from operating, financing, and investing activities. Meanwhile, the shares utilized belong to the infrastructure, utility, and telecommunication companies listed on the Indonesian capital market between 2018 and 2021. Because this study uses the change in three cash flows, the secondary data from 2017 to 2021 based on the firm annual reports and the stock price at the end of these years are employed. Additionally, the t-statistics and their probability provided by a multiple regression model to statistically examine the hypotheses proposed are applied. Finally, this study concludes that the higher the cash flow from investing activities, the higher the stock return. However, the positive change in the financing cash flow tends to reduce this return. Meanwhile, this return is not affected by the cash flow from operating activities.

Keywords: Cash Flow Statement, Financing Activities, Investing Activities, Stock Return

1. Introduction

Fundamentally, stock price movement in the capital market is determined by the information from financial reports (Hartono, 2017; Herawati & Putra, 2018). This situation exists when the capital market is inefficient in semi-strong shape in the annual financial report publication (Azis et al., 2020; Hartono, 2017; Julyana et al., 2022; Njoroge et al., 2021; Pratama & Asyik, 2017). In this context, the market reaction is statistically influenced by the financial ratios: liquidity, solvability (Azis et al., 2020), and asset turnover (Pratama & Asyik, 2017). These financial ratios come from the calculation based on the income statement and balance sheet accounts, including accounts related to the change in retained earnings (Gitman & Zutter, 2015).

Besides the income statement, balance sheet, and retained earnings, another financial report component is the cash flow statement. This statement calculates the cash at the end of the period. The calculation utilizes the profits after tax, depreciation during the period, and the change in balance sheet accounts at the end of the period. Also, this statement is classified by the cash flow from three activities: operating, investing, and financing (Gitman & Zutter, 2015).

The research results testing the association between cash flow from the operating activities and stock return are inconstant. For instance, Bala (2017) and Muniroh and Yulianti (2021) display no relationship. In their study, Oroud et al. (2017), Dang et al. (2018), Utomo and Pamungkas (2018), Kasmiati and Sentosa (2019), and Kipngetich et al. (2021) exhibit a positive impact. Itan and Riana (2021) also confirm this sign after investigating the relationship between this cash flow and firm value based on Q-Tobin. Unfortunately, Ni et al. (2019) and Tunio et al. (2020) demonstrate a negative influence.

Similarly, this inconsistency happens in the relationship between cash flow from investment activities and stock return. For example, Bala (2017) affirms no effect. Moreover, Tunio et al. (2020) exhibit a positive impact. Unfortunately, Oroud et al. (2017), Utomo and Pamungkas (2018), Kasmiati and Sentosa (2019), Ni et al. (2019), Itan and Riana (2021), and Muniroh and Yulianti (2021) display a negative influence. This sign is confirmed by Itan and Riana (2021) after investigating the association between this cash flow and Q-Tobin as the proxy of firm value.

Also, different results exist when scholars try to prove the relationship between cash flow from financing activities and stock return. For instance, Bala (2017), Oroud et al. (2017), and Muniroh and Yulianti (2021) display no association. Meanwhile, Utomo and Pamungkas (2018), Kasmiati and Sentosa (2019), Ni et al. (2019), and Tunio et al. (2020) exhibit a positive impact. Unfortunately, Itan and Riana (2021) demonstrate a negative influence after investigating the relationship between this cash flow and firm value measured by Q-Tobin.

Based on these different results, this study examines the effect of cash flow from these three activities on stock return by employing the size and years as the control variable by taking the infrastructure, utility, and telecommunication companies listed on the Indonesian capital market. Indeed, according to Hanafi (2016), public investors expect this positive return in the capital market because of their wealth creation.

2. Literature Review and Hypothesis Development

2.1. The cash flow change from the operating activities and stock return

Cash flow from operating activities is cash inflow and outflow directly associated with the revenue from services and expenses related to the service delivered to the consumer. Specifically, the related accounts in financial statements are net profit after taxes, depreciation, current assets, and short-term liabilities (Gitman & Zutter, 2015). A positive change in this cash flow demonstrates that a firm can get additional net funds based on its operating activities. Therefore, public investors reward this situation by buying stock, elevating the stock price. This situation is confirmed by Oroud et al. (2017), Utomo and Pamungkas (2018), Kasmiati and Sentosa (2019), and Kipngetich et al. (2021), exhibiting a positive impact of this cash flow on share return. Based on this explanation, the first hypothesis is declared as follows.

H_1: The more significant the change in the cash flow from the operating activities, the bigger the stock return.

2.2. The cash flow change from the investing activities and stock return

Cash flow from investing activities is cash inflow and outflow directly associated with purchasing and selling fixed assets. Besides, investing stocks in other firms includes this activity. A decrease in this cash flow indicates the fund utilization of investing activities. (Gitman & Zutter, 2015). Public investors prefer these actions because they can generate profits leading to a positive difference in stock price (Kasmiati & Santosa, 2019). This circumstance is confirmed by Oroud et al. (2017), Utomo and Pamungkas (2018), Kasmiati and Sentosa (2019), Ni et al. (2019), Itan and Riana (2021), and Muniroh and Yulianti (2021), demonstrating a negative influence of this cash flow change on stock return. Based on this explanation, the second hypothesis is declared as follows.

H_2: The less significant the change in the cash flow from the investing activities, the bigger the stock return

2.3. The cash flow change from the financing activities and stock return

Cash flow from financing activities is cash inflow and outflow directly associated with long-term liabilities and equity transactions (Gitman & Zutter, 2015). The increase in this cash flow indicates that the company can accumulate external funds from the bank or public investor through the right issue. It demonstrates that the firm is still trusted by its creditors and shareholders; therefore, a positive price change happens. This situation is confirmed by Utomo and Pamungkas (2018), Kasmiati and Sentosa (2019), Ni et al. (2019), and Tunio et al. (2020), displaying a positive tendency of this cash flow change on stock return. Based on this explanation, the third hypothesis is declared as follows.

H_3: The more significant the change in the cash flow from the financing activities, the larger the stock return

3. Research Methods

3.1. Variable Definition

This research employs stock return as the dependent variable by dividing the stock price at the end of the year of the current period by the stock price at the previous period (RET). It refers to Kasmiati and Santosa (2019). Furthermore, this change in the cash flow from the operating, investing, and financing activities, symbolized by D_CFOA, D_CFIA, and D_CFFA, is utilized as three primary variables. Meanwhile, the firm size is measured by total revenue by denoting Hashmi (2020) as the control variable. Regarding the utilization of change in three cash flows, we adjust this revenue with a similar measurement. Also, the dummy of the years used is based on Ni et al. (2019) as the control variable.

3.2. Population and Sample

The population comes from the infrastructure, utility, and telecommunication companies continually listed on the Indonesia capital market between 2018 and 2021, with the market price at the end of December 2017. Based on this requirement, its population size (PS) is 52. Furthermore, the representing samples (RS) are calculated by the Slovin formula with an error margin of 10%. According to Suliyanto (2009), the technique is displayed in the subsequent first equation:

$$RS = \frac{PS}{1+(PS.em^2)} \quad \text{(Equation 1)}$$

Once utilizing this formula, the representative sample (RS) = $\frac{52}{1+(52\ x\ 10\%\ x\ 10\%)} = \frac{52}{1.52} = 34.21 \approx 34$ companies. After that, they are taken by the simple random sampling method, and their name can be seen in Table 1.

Table 1: The name of the companies performing as the samples

No.	Code	The name of the company
1.	PGAS	Pertamina Gas Negara
2.	POWR	Cikarang Listrindo
3.	RAJA	Rukun Raharja
4.	TGRA	Terregra Asia Energy
5.	CASS	Cardig Aero Services
6.	CMNP	Citra Marga Nusaphala Persada
7.	JSMR	Jasa Marga (Persero)
8.	KARW	ICTSI Jasa Prima
9.	META	Nusantara Infrastructure
10.	EXCL	XL Axiata
11.	FREN	Smartfren Telecom
12.	ISAT	Indosat
13.	TLKM	Telkom Indonesia (Persero)
14.	BIRD	Blue Bird

Table 1: The name of the companies performing as the samples

No.	Code	The name of the company
15.	BULL	Buana Lintas Lautan
16.	GIAA	Garuda Indonesia (Persero)
17.	HITS	Humpuss Intermoda Transportasi
18.	LEAD	Logindo Samudramakmur
19.	LRNA	Eka Sari Lorena Transport
20.	MBSS	Mitrabahtera Segara Sejati
21.	MIRA	Mitra International Resources
22.	NELY	Pelayaran Nelly Dwi Putri
23.	PTIS	Indo Straits
24.	SMDU	Sidomulyo Selaras
25.	SHIP	Sillo Maritime Perdana
26.	SOCI	Soechi Lines
27.	TAMU	Pelayaran Tamarin Samudra
28.	TAXI	Express Transindo Utama
29.	TPMA	Trans Power Marine
30.	BALI	Bali Towerindo Sentra
31.	BUKK	Bukaka Teknik Utama
32.	CENT	Centratama Telekomunikasi Indonesia
33.	TBIG	Tower Bersama Infrastructure
34.	TOWR	Sarana Menara Nusantara

3.3. Method to analyze the data

This study employs the regression model with pooling data based on variable position defined in section 3.1. With this model, the data used are cross-sectional and time-series (Gujarati et al., 2019). Therefore, the model with the variables can be seen in the following second equation.

$$RET_{it} = \beta_0 + \beta_1 D\_CFOA_{it} + \beta_2 D\_CFIA_{it} + \beta_3 D\_CFFA_{it} + \beta_4 DREV_{it} + \beta_5 D2019 + \beta_6 D2020 + \beta_7 D2021 + \varepsilon_{it} \quad \ldots. (2)$$

As an outstanding empirical model, the regression must meet classical assumptions: normality of residual, free from heteroskedasticity, multicollinearity, and autocorrelation. Furthermore, the Jarque-Bera statistic is used to examine the normality. Meanwhile, the Glesjer and variance inflation factor detect heteroskedasticity and multicollinearity. Finally, the Durbin-Watson statistic is employed to verify the autocorrelation (Gujarati et al., 2019).

4. Result And Discussion

4.1. The testing result of classical assumptions

Figure 1 displays the normality test result based on the Jarque-Bera statistic. In this figure, the probability of this statistic is 0.090471. Because this value is above the 5% significance level, the residuals are normally distributed, meeting the required normality assumption.

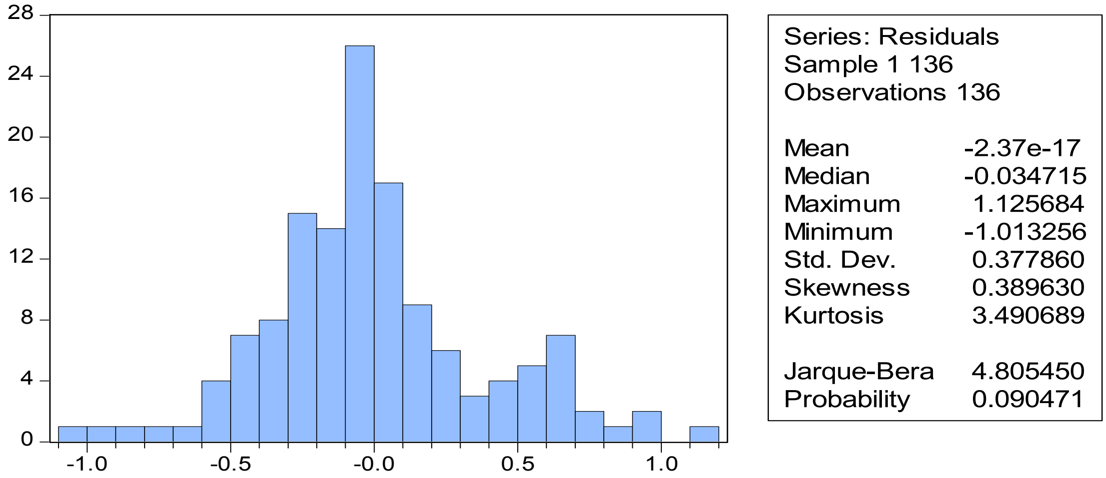

Figure 1: The normality test result based on the Jarque-Bera statistic

Source: The output of E-Views 6

Table 2 demonstrates the Glesjer heteroskedasticity testing result with the Chi-Square (7) probability based on Obs*R-square of 0.2208. This value is more significant than the 5% significance level. Therefore, by mentioning Gujarati et al. (2019), heteroskedasticity does not occur, achieving the required non-heteroskedasticity assumption.

Table 2: The Heteroskedasticity Testing Result based on Glejser

F-statistic	1.368262	Probability of F-statistic (7,128)	0.2242
Obs*R-squared	9.467987	Probability of Chi-Square(7)	0.2208
Scaled explained SS	10.75365	Probability of Chi-Square(7)	0.1497

Test Equation:
Dependent Variable: ARESID
Method: Least Squares
Date: 01/23/23 Time: 14:05
Sample: 1 136
Included observations: 136

Variable	Coefficient	Std. Error	t-Statistic	Probability
C	0.053044	0.086163	0.615619	0.5392
D_CFOA	0.002068	0.002411	0.857936	0.3925
D_CFIA	-0.000926	0.001425	-0.650066	0.5168
D_CFFA	0.002069	0.001995	1.037286	0.3016
D_REV	0.173625	0.067212	2.583252	0.0109
D2019	0.048002	0.060644	0.791541	0.4301
D2020	0.085198	0.062071	1.372571	0.1723
D2021	0.062834	0.061342	1.024321	0.3076

Source: The output of E-Views 6

Table 3 presents the multicollinearity detection result. Variance inflation factor (VIF) for the primary variables: D_CFOA, D_CFIA, and D_CFFA, and control variables: D_REV, D2019, D2020 and D2021 are below 10: 1.030, 1.041, 1.061, 1.080, 1.526, 1.599, and 1.562. Because of this circumstance, according to Gujarati et al. (2019), this model does not contain multicollinearity.

Table 3: The result of multicollinearity detection

Independent Variable	Collinearity Statistics	
	Tolerance	VIF
D_CFOA	0.971	1.030
D_CFIA	0.961	1.041
D_CFFA	0.943	1.061
D_REV	0.926	1.080
D2019	0.655	1.526
D2020	0.625	1.599
D2021	0.640	1.562

Source: The output of IBM SPSS 19

The autocorrelation testing result demonstrates the Durbin-Watson statistic of 2.126493 (see the fourth table). Because this value is between 1.5 and 2.5 as the rule of thumb, as explained by Kenton (2021), autocorrelation is unavailable.

3.4. *The estimation result of the regression model*

Table 4 exhibits the estimation result of the regression model. In this table, the probability of t-statistic for D_CFOA is higher than the 5% significance level: 0.7633. Hence, the first hypothesis is rejected: the cash flow from operating activities does not affect the stock return. The second and third hypotheses are recognized because the t-statistical probability for D_CFIA and D_CFFA is below the 5% significance level: 0.0034 and 0.0160. However, the regression coefficient is different: positive and negative. Therefore, the cash flow from investing and financing activities positively and negatively affect stock returns.

Table 4: The Estimation Result of Regression Model: The Influence of Cash Flow from Operating, Investing, and Financing Activities on Stock Return

Method: Least Squares
Date: 01/23/23 Time: 14:03
Sample: 1 136
Included observations: 136

Variable	Coefficient	Std. Error	t-Statistic	Probability
C	0.683273	0.134895	5.065217	0.0000
D_CFOA	-0.001139	0.003774	-0.301774	0.7633
D_CFIA	0.006662	0.002231	2.985971	0.0034
D_CFFA	-0.007626	0.003123	-2.441826	0.0160
D_REV	0.238360	0.105226	2.265225	0.0252
D2019	0.135419	0.094943	1.426317	0.1562
D2020	0.126231	0.097178	1.298971	0.1963
D2021	0.194504	0.096036	2.025324	0.0449
R-squared	0.167832	Mean dependent var		1.053866
Adjusted R-squared	0.122323	SD dependent var		0.414215
SE of regression	0.388055	Akaike info criterion		1.001682
Sum squared residual	19.27507	Schwarz criterion		1.173014
Log-likelihood	-60.11436	Hannan-Quinn criterion.		1.071307
F-statistic	3.687880	Durbin-Watson statistic		2.126493
Probability (F-statistic)	0.001155			

Source: The output of E-Views 6

3.5. *Discussion*

The first hypothesis testing outcome shows that cash flow from operating activities does not affect the stock return. Statistically, the inability of this cash flow change to affect this return is due to the slightest standard deviation:

8.9822914 (see Table 5): this change has the most minor value variation. Besides, it is supported by the bottommost mean towards 0: 0.456900 (see Table 5): the low differences cover the enormous differences; therefore, the overall change in these extra operating funds is insignificant. Based on this evidence, this study supports Bala (2017), utilizing financial investment banks listed on the Khartoum stock exchange, and Muniroh and Yulianti (2021), employing the food and beverage sub-sector companies listed on the Indonesian capital market.

Table 5: Mean and standard deviation for each primary variable measurement: D_CFOA, D_CFIA, and D_CFFA

Variable	N	Mean	Std. Deviation
D_CFOA	136	0.456900	8.9822914
D_CFIA	136	2.571942	15.2713094
D_CFFA	136	0.879503	11.0142962

Source: The output of IBM SPSS 19

The second hypothesis testing outcome demonstrates that the change in cash flow from investing activities positively influences stock return, which contradicts the proposed hypothesis. The growth in investing cash flow means reducing investment-related actions. This situation happens because the Covid-19 pandemic period is involved in this study: 2020-2021. During this pandemic, managers carefully spend money on investments. Indeed, public investors appreciate this effort by buying the stocks, leading to an upsurge in the stock price. Based on this fact, this study confirms Tunio et al. (2020).

The third hypothesis testing outcome demonstrates that cash flow from financing activities influences stock return negatively, which is in line with the proposed hypothesis. Although crossing the pandemic time, the company can still get trusted by creditors or public shareholders. Profits contributing to retained earnings, especially from telecommunication firms, add funding sources, growing the overall stock returns. Based on this fact, this study confirms Utomo and Pamungkas (2018), Kasmiati and Sentosa (2019), Ni et al. (2019), and Tunio et al. (2020).

4. Conclusion

As a part of the financial report, the information on the cash flow statement detects the final cash position based on the source and utilization. This flow comes from operational, investment, and financial activities. This study aims to prove the impact of three flows on stock return in the infrastructure, utilization, and telecommunication industry companies. Based on the statistical examination, this study effectively demonstrates that operating cash flow does not influence the stock return. Meanwhile, investment and financial cash flow affect this return positively and negatively, respectively.

This research has some boundaries. Firstly, it only involves three sources of cash flow affecting return factors. This situation can be improved by combining these factors with four primary financial ratios in one model. Secondly, it only covers the infrastructure, utility, and telecommunication companies and four years as the time observation. Indeed, the following scholars utilize non-financial companies as the population and samples within ten years.

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Inflation and Stock Market Returns: An Empirical Study of Sectoral Indices with Special Reference to India

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Abstract
In this study an attempt has been undertaken so as to establish the relationship between sectoral indices returns and inflation numbers. In order to achieve the objective of the study, all the sectoral indices have been taken in the study except two (02) indices because they were introduced in the National Stock Exchange in the recent past and, therefore, their data is not available for the whole reference period of the study. The indices that are in the study are, (CNX Auto Index, CNX Bank Index, CNX Energy Index, CNX Finance Index, CNX FMCG Index, CNX IT Index, CNX Metal Index, CNX MNC Index, CNX Pharma Index, CNX PSU Bank Index). The study took eight years of reference period throughout which all the indices that are included in the sample were available. The researchers have employed Pearson correlation method so as to establish the relationship between inflation and sectoral indices returns. The findings of the study put forth that most of the indices do possess statistically significant relationship with inflation numbers.

Keywords: Inflation, Stock Market Returns, Sectoral Indices

1. Introduction

Although inflation is a normal economic phenomenon yet it creates a lot of economic discomfort once it goes beyond a predetermined level and also distorts economic performance of a nation. It also brings about a decline in the value of the money, thereby, deteriorating the economic well being of common man. Higher levels of inflation influence the various macro-economic variables which in turn influence the index returns. The level of inflation manifests the stability of macro-economic variables in an economy. Therefore, every country wants to maintain the levels of inflation within the comfort zone so as to keep the economic growth story continuing.

India has emerged as one of the best-emerging economies in the world and has become an attractive destination for the international investors. The Indian economy has registered substantial economic growth for the last many years but for the last couple of years Inflation has taken centre stage for the rise in global oil prices, depreciation of the domestic currency, besides, fuelled by rise in food prices which pushed the situation from bad to worse, thereby, compelling the economic policy planners to put the various economic policies in a particular direction, despite, the decline in the Gross Domestic Product.

Stock market sectoral indices play a very significant role for they stand as a barometer of the economic health of a country. These sectoral indices manifest the direction of growth of each sector of the economy and, thereby, facilitating the investors in making their investment decisions. Stock indices are dynamic, therefore, they highlight the overall sate of the economy. Thus, in this study, an attempt has been made so as to find out the level of influence which inflation numbers hold over the index returns.

2. Review of Literature

Loannides, Katrakilidis and Lake (2002) Investigated the relationship between stock market returns and inflation rate over the period of 1985 to 2000. The findings of the study confirmed that there existed a negative relationship between inflation and stock market returns. Wei (2007) undertook a study to find relationship between unexpected inflation and stock returns. The results of the study put forth strong evidence that equity returns responds more negatively to unexpected inflation.

Adrangi, Chatrath and Sarvicente (2000) investigated the relationship between stock returns and inflation in emerging economy (Brail). The study concluded negative relationship between real stock return and inflation. Geyser and Lawies (2001) attempted to study the impact of inflation and stock prices. The findings put forth that the companies listed in the mining sector are negatively correlated against inflation, however, the companies from financial services, Information Technology and FMCG showed slightly positive correlation.

Zhao (1999) undertook the study and concluded that there exists statistically significant negative relationship between stock prices and inflation. Omran and pointon (2001) undertook an analysis to gauge the impact of inflation rate on stock market. The results confirm definite negative impact of inflation on stock market returns. Fama and Schwert(1997) put forth in their study that stock returns are negatively related to inflation because stock returns are positively related to real activity and real activity is negatively related to upward movements in the level of price.

Spyran (2001) analysed the relationship between stock returns and inflation. The results of the study show a negative relationship between stock returns and inflation. Choudary (1998) investigated the relationship between stock returns and inflation. They found a positive relationship between stock market returns and inflation.

Hess and Lee (1999) put forth in their study that the sign of correlation between stock prices and inflation depends on the nature of the shock creating inflation. They found that a positive monetary shock has a positive effect on stock prices and inflation. Graham (1996) undertook a study to analyse a correlation between stock returns and inflation. The findings of the study confirmed a positive relationship between inflation and stock returns. Chisti et.al. (2020) undertook a study to examine the relationship among macroeconomic variables and confirmed that there is a strong relationship among the macroeconomic variables. Khursheed et.al. (2014) made a study and the findings of the study affirm that there exists no causality relationship between the stock market prices and foreign exchange prices.

The study undertaken by Pearce and Roley (1985) concluded that there existed statistically insignificant relationship between stock returns and inflation. Hardon (1988) analysed the interdependence between stock returns and inflation and the findings of the study corroborates with the findings of Pearce and Roley by concluding that the two variables are not significantly related, thereby, suggesting that the relationship between the variables is not clear.

3. Need for the Study

A critical review of the studies referred above brings to fore that these studies put forth diverse findings as the studies of Loannides, Wei, Geyser, etc. confirm that there exists an inverse relationship between inflation and stock market returns. Contradicting to these findings, some of the studies reveal that inflation and stock market returns possess positive relationship. However, some of the conclusions drawn in the above mentioned studies confirm that there does not exist any statistically significant relationship between these two variables. Besides, the above reviewed studies do not take into consideration sectoral indices so as to find the level of impact inflation numbers have on these different sectoral indices. It is against these fundamental deviations in the results as well as limited focus of the studies that gave rise to the need for conducting the present study so as to come up with some findings that can facilitate the existing research literature.

4. Objectives of the Study

The present study has been undertaken so as to achieve the aforesaid objective.

- To ascertain the level of relationship that inflation numbers have with the stock market sectoral indices returns.

5. Hypothesis

H1: (Null Hypothesis) There exists statistically no significant relationship between stock indices returns and inflation.
Ho: (Alternate Hypothesis) There exists Statistically Significant relationship between stock indices returns and inflation.

6. Data Base and Research Methodology

So as to accomplish the objective of the study, the researchers have collected relevant data from the website of The National Stock Exchange of India and the official website of Reserve Bank of India. For the purpose of determining the relationship between sectoral indices and inflation numbers, the researchers have employed Pearson correlation method so as to establish the level of relationship between the variables under study. The reference period of the study comprises eight years.

7. Results and discussions

In order to achieve the objective of the study, the researchers have employed Pearson correlation method to ascertain the relationship between inflation numbers and indices returns. The findings obtained in the study are discussed under various heads which can be ascertained from the tables given below.

Table 1.1: Correlation Matrix

		INFLATION	AUTO INDEX	BANK INDEX	FINANCE INDEX	FMCG INDEX	IT INDEX	METAL INDEX	MNC INDEX	PHARMA INDEX	PSU BANK INDEX	ENERGY INDEX
INFLATION	PEARSON CORRELATION	1	.783*	.791*	.753*	.805*	.637	.617	.799*	.838**	.850**	.647
	SIG. (2-TAILED)		.021	.019	.031	.016	.090	.103	.017	.009	.008	.083
	N	8	8	8	8	8	8	8	8	8	8	8
AUTO INDEX	PEARSON CORRELATION	.783*	1	.876**	.852**	.900**	.965**	.686	.941**	.962**	.864**	.662
	SIG. (2-TAILED)	.021		.004	.007	.002	.000	.060	.000	.000	.006	.074
	N	8	8	8	8	8	8	8	8	8	8	8
BANK INDEX	PEARSON CORRELATION	.791*	.876**	1	.995**	.800*	.818*	.922**	.955**	.858**	.980**	.927**
	SIG. (2-TAILED)	.019	.004		.000	.017	.013	.001	.000	.006	.000	.001
	N	8	8	8	8	8	8	8	8	8	8	8
FINANCE INDEX	PEARSON CORRELATION	.753*	.852**	.995**	1	.799*	.796*	.932**	.952**	.840**	.959**	.946**
	SIG. (2-TAILED)	.031	.007	.000		.017	.018	.001	.000	.009	.000	.000
	N	8	8	8	8	8	8	8	8	8	8	8
FMCG INDEX	PEARSON CORRELATION	.805*	.900**	.800*	.799*	1	.815*	.562	.892**	.954**	.765*	.619
	SIG. (2-TAILED)	.016	.002	.017	.017		.014	.147	.003	.000	.027	.102
	N	8	8	8	8	8	8	8	8	8	8	8
IT INDEX	PEARSON CORRELATION	.637	.965**	.818*	.796*	.815*	1	.636	.890**	.890**	.780*	.591
	SIG. (2-TAILED)	.090	.000	.013	.018	.014		.090	.003	.003	.023	.123
	N	8	8	8	8	8	8	8	8	8	8	8
METAL INDEX	PEARSON CORRELATION	.617	.686	.922**	.932**	.562	.636	1	.845**	.635	.886**	.977**
	SIG. (2-TAILED)	.103	.060	.001	.001	.147	.090		.008	.091	.003	.000
	N	8	8	8	8	8	8	8	8	8	8	8
MNC INDEX	PEARSON CORRELATION	.799*	.941**	.955**	.952**	.892**	.890**	.845**	1	.907**	.911**	.851**
	SIG. (2-TAILED)	.017	.000	.000	.000	.003	.003	.008		.002	.002	.007
	N	8	8	8	8	8	8	8	8	8	8	8
PHARMA INDEX	PEARSON CORRELATION	.838**	.962**	.858**	.840**	.954**	.890**	.635	.907**	1	.853**	.638
	SIG. (2-TAILED)	.009	.000	.006	.009	.000	.003	.091	.002		.007	.089
	N	8	8	8	8	8	8	8	8	8	8	8
PSU BANK INDEX	PEARSON CORRELATION	.850**	.864**	.980**	.959**	.765*	.780*	.886**	.911**	.853**	1	.884**
	SIG. (2-TAILED)	.008	.006	.000	.000	.027	.023	.003	.002	.007		.004
	N	8	8	8	8	8	8	8	8	8	8	8
ENERGY INDEX	PEARSON CORRELATION	.647	.662	.927**	.946**	.619	.591	.977**	.851**	.638	.884**	1
	SIG. (2-TAILED)	.083	.074	.001	.000	.102	.123	.000	.007	.089	.004	
	N	8	8	8	8	8	8	8	8	8	8	8

*. Correlation is significant at the 0.05 level (2- tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The table 1:1 depicts the correlation of inflation with various sectoral indices as well as inter-sectoral and intra-sectoral relationship. From the table, it can be seen that the findings are not clear as some indices are depicting statistically significant relationship with inflation numbers while some indices do not show statistically significant relationship with the inflation numbers. The summary of the results is discussed under the following heads.

- **Auto Index**
  In the table 1:1 it can be seen that their does exist statistically significant relationship between auto index and inflation which stands at 0.783 at 0.05 significance level and the two tailed test stands at 0.021 which is less than the significance level, thereby, affirming the relationship between the two variables.
- **Bank Index**

  The correlation matrix in the table 1:1 signifies that the Bank Index is statistically related to the inflation numbers as the person method put forth relationship between the variable at 0.791 at 0.05 significance level and the t tailed test number stands at 0.019 which is less than the significance level that stands as confirmation of direct relationship between the variables.

- **Finance Index**

From the table 1:1 it is quite evident at 0.05 level of significance that the finance index returns are statistically correlated with the inflation numbers. The results obtained by using Pearson method stands at 0.753 and the two tailed test at 0.031 which is less than the 0.05 significance level. Thus, making it amply clear that the variable possess direct relationship with each other.

- **FMCG Index**

In the table 1:1 the FMCG Index depicts statistically significant relationship with the inflation numbers at significance level of 0.05 levels. The Pearson correlation method puts forth findings whereby the relationship stands at 0.805 and the two tailed test at 0.016 which is lesser than 0.05 level of significance.

- **IT Index**

From the correlation matrix in the table 1:1 the IT Index relationship with the inflation numbers is quite weak which is statistically insignificant as the two tailed test stands at 0.090 which is higher than the 0.05 level of significance which supports that IT Index does not follow the inflation numbers.

- **Metal Index**

The Metal Index in the correlation matrix signifies the weakest level of relationship between the two variables as the two tailed test stands at 0.103 which is higher than the 0.05 level of significance thereby negating any statistically significant relationship between inflation numbers and metal index.

- **MNC Index**

The results of the two tailed test signifies that MNC Index and inflation numbers hold statistically significant relationship as the two tailed test stands at 0.017 which is less than the 0.05 level of significance and the correlation also stands at 0.017 level, affirming, that there do exist a relationship between the variables.

- **Pharma Index**
  The Pharma Index in the correlation matrix not only depicts statistically significant relationship with the inflation numbers at 0.05 significance level but it also records statistically significant relationship at 0.01 level of significance as the two tailed test stands at 0.009 level which is less than the 0.01 level of significance.

- **PSU Bank Index**

The PSU Bank Index records statistically most significant relationship with the inflation numbers both at 0.05 level of significance level and 0.01 level as the two tailed test stands at 0.008 level which is lower than the 0.01 level of significance. The pearson correlation stands at 0.850 , thus , suggesting that the variables do possess statistically significant relationship.

- **Energy Index**

After taking into consideration the two tailed test reveals that the Energy Index do not posses statistically significant relationship with the inflation numbers as the two tailed test stands at 0.083 which is higher than 0.05 significance level , thus, confirming that the variables do not have statistically significant relationship.

8. Conclusion

From the above discussion it can be seen that some sectoral indices possess statistically significant relationship with inflation numbers while as some do not have any statistically significant relationship. The sectoral indices such as Pharma Index and PSU Bank Index signify statistically significant correlation both at 0.05 level of significance and at 0.01 level of significance. While as the sectoral indices such as Auto Index, Bank Index, Financial Index, FMGC Index and MNC Index possess statistically significant relationship at 0.05 level of significance. On the other hand, the Indices such as IT Index, Metal Index and Energy Index do not signify statistically significant relationship both at 0.05 and 0.01 levels of significance. Thus, it can be concluded that the inflation numbers do influence certain sectoral indices while there do not exist statistically significant relationship of inflation with some other sectoral indices in the sample.

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The Influence of Organizational Environment and Career Development on Organizational Citizenship Behaviour (OCB) in Employees with Organizational Commitment as An Intervening Variable

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Abstract
Organizational environment and career development are the factors that can realize organizational commitment and Organizational Citizenship Behavior (OCB). The purpose of this study was to see the influence of organizational environment and career development on organizational citizenship behavior (OCB) in employees with organizational commitment as an intervening variable. The category of this research is analytical descriptive with Path Analysis approach and analysis technique using SEM with PLS 3.0 application. Respondents in this study were employees at companies located in Jabodetabek with a total of 122 respondents. From the results of the study it was found that the work environment has no effect on organizational commitment, career development has an effect on organizational commitment, organizational commitment has an effect on Organizational Citizenship Behavior (OCB), organizational environment has no effect on employee OCB through organizational commitment, and career development has a significant effect on Organizational Citizenship Employee Behavior (OCB) through organizational commitment.

Keywords: Organizational Environment, Organizational Commitment, Career Development, Organizational Citizenship Behavior, Organizational Commitment

1. Introduction

Human Resources (HR) is an asset and has its own role in the organization to achieve goals. This problem is because humans act as guides and managers of other production supporting factors. Your contribution, your creativity and your commitment to the Organization are very useful in driving significant organizational development and change. That's why this person is also called the main capital of an organization whose very complex nature that must be managed as effectively as possible.

Human Resources can also be understood as employees, organizational motivation, who are trusted in implementing work activities for organizational success. Companies have a good chance of surviving and growing if they have the right employees, so constant efforts should be made by companies to find, select, train and develop staff. Meanwhile, workers need a company as a place to make a living, to fulfill their daily needs, and as a means of proving themselves. A highly efficient company is determined by the quality of the Human Resources that are incorporated. Companies need employees to deal with such rapid changes.

Human resources with various potentials, talents and creativity are an important asset in organizational life. Based on this, companies must be able to develop and increase the potential of their human resources in order to achieve success in the organization (Hapsari, 2015). Mass developments make the Company need a Company that has a passionate attitude at work, enthusiasm, and always works for the benefit of the company. Organizational citizenship behavior (OCB) is defined as behavior that is freely chosen by individuals where the behavior is not directly or explicitly recognized by the formal reward system and in aggregate increases the effectiveness of organizational functions (Organ et al., 2006). If employees in an organization have OCB, then they can control their own behavior so they are able to choose the best behavior for the benefit of their organization (Markoczy & Xin, in Hardaningtyas, 2005).

Sedarmayanti (2011) explains that the work environment is the whole of the tools and materials encountered, the surrounding environment in which a person works, his work methods, and work arrangements both as individuals and as a group. The rapidly developing work organization environment forces them to do so in dealing with change and preparing for the stages of dealing with these conditions. Shaiful and Ali (2015) emphasize that career development includes career planning and career management. Meanwhile, according to Singh and Singh (2010) career development includes two things. First, regarding the planning and implementation of career goals (career planning). Second, the design and implementation of career development programs by the organization. Meanwhile, organizational commitment reflects how an individual identifies himself with the organization and is bound by its goals. Strong commitment allows every employee to try to face the challenges and pressures that exist. According to Luthans (2011) defines organizational commitment as a strong desire to remain a member of a particular organization, the desire to try his hardest for the sake of the organization and a definite belief in and acceptance of the values and goals of the organization.

Companies in realizing having employees who have organizational citizenship behavior, the company needs to provide stimulants so that employees can grow this personality. In a company, if an employee feels comfortable and satisfied at work and within a certain period of time, they will show a behavior called organizational citizenship behavior (Organizational Citizenship Behavior). Organizational citizenship behavior (Organizational Citizenship Behavior) is basically a behavior that is based on personal desires and does not obtain or expect rewards in an organizational environment. This action is carried out outside the work obligations given by the company to employees. Which means that the behavior is based on personal and voluntary desires because of a high sense of belonging to the company.

Research on the factors that influence organizational commitment and Organizational Citizenship Behavior (OCB) has been carried out by many researchers before (Sukmawati et al, 2013; Rahmawati & Sulistyo, 2015). From several studies that have been conducted regarding the factors that influence organizational commitment and Organizational Citizenship Behavior (OCB), the results can be quite varied. Putra and Mardikaningsih (2022) explain that the work environment influences organizational commitment. Hidayat (2015) explains that career development has a positive effect on organizational commitment. However, according to Priyandini, Nurweni, and Hartati (2020), who explained that organizational commitment and work environment have no significant effect on the Organizational Citizenship Behavior (OCB) of employees of PT. Sport Glove Indonesia Wonosari Branch.

Udayana and Suwandana (2017) explain that organizational commitment has a positive and significant effect on Organizational Citizenship Behavior (OCB) at the Slippery Stone Bar and Restaurant. Also Hamza (2015) explains that organizational commitment has a significant effect on Organizational Citizenship Behavior (OCB) at PT. Sinar Puspita Abadi Banyu Putih Factory, Batang. Octaviani and Utami's research (2018) explains that career development has a positive and significant effect on Organizational Citizenship Behavior (OCB) of employees of PT. Woonan Music, Ngoro-Mojokerto. Meanwhile, Wulandari and Prayitno (2017) explain that the work environment influences Organizational Citizenship Behavior (OCB) with organizational commitment as an intervening variable. Meanwhile, Udayani and Sunariani (2018) explain that career development influences Organizational Citizenship Behavior (OCB) with organizational commitment as an intervening variable.
Based on the above background related to the organizational environment, career development and organizational commitment that can realize Organizational Citizenship Behavior (OCB). So this study aims to determine the effect of organizational environment and career development on Organizational Citizenship Behavior (OCB) with organizational commitment as an intervening variable.

1.1 Problem identification

This study identifies the problem as follows:

1. Lack of comfortable organizational environment within the company
2. Lack of career development opportunities provided by the company to its employees.
3. Lack of facilities and infrastructure provided by the company to support career development programs and patterns of career paths in the future.
4. Not willing to help co-workers who are unable to carry out their duties and obligations

1.2 Formulation of the problem

According to the background above, the problems that to be examined are Is there an influence of Organizational Environment (X1) on Organizational Commitment (Z)?, Is there an influence of Career development (X2) on Organizational Commitment (Z)?, Is there an effect of Organizational Commitment (Z)) on Organizational Citizenship Behavior (OCB) (Y) in Employees?, Is there any influence between organizational environment (X1) on Organizational Citizenship Behavior (OCB) (Y) with employee commitment (Z) as an intervening variable?, and Is there any influence between career development (X2) on Organizational Citizenship Behavior (OCB) (Y) with employee commitment (Z) as an intervening variable?

2. Theoretical Framework

2.1 Organizational environment

Susilowati and Basuki (2005) define the organizational environment as everything in the environment that can affect either directly or indirectly of a person or group of people in carrying out their activities. According to Widodo, 2016 (in Darmadi, 2020) states that the work environment is an environment where employees can carry out their daily tasks with all the work facilities and infrastructure needed to carry out these tasks. According to Nawawi (2003), the work environment is the condition or atmosphere of the workplace in an organization or company.

2.2 Career Development

According to Rivai (2014) career development is the process of increasing individual work achieved in order to achieve the desired career. Meanwhile, according to Samsudin in Isyanto (2013) career development is an effort to improve the technical, theoretical, conceptual, and moral abilities of employees according to the needs of the job or position through education and training. Dan Stone (in Kadarisman 2013) career development is a process and activity of preparing an employee for a position in an organization or company that will be carried out in the future.

2.3 Organizational Commitment

Organizational commitment is very important for an organization, because organizational commitment includes elements of loyalty to the company, involvement in work, and identification of organizational goals. Organizational commitment according to Colquiit, LaPine, and Wesson in Wibowo (2019) is the willingness of some employees to remain members of the organization. Organizational commitment affects whether an employee stays as a member of the organization or leaves the organization to find another job. According to Alwi in Nanda et al (2013) stated organizational commitment is the attitude of employees to remain in the organization and involved in efforts to achieve the mission, values and goals of the organization. Meanwhile, according to Moorhead and Griffin (2013) stated organizational commitment (organizational commitment) is an attitude that reflects the extent to which an individual knows and is bound to his organization.

2.4 Organizational Citizenship Behavior (OCB)

Organizational Citizenship Behavior (OCB) is an extra individual behavior, which is not directly or explicitly identifiable in a formal work system, and that in aggregate can increase the effectiveness of organizational functions. Kumar et al. (2009) defines OCB as individual behavior that contributes to the creation of organizational effectiveness and is not directly related to the organization's reward system. According to Mohammad, Habib, and Alias (2011) stated *that Organizational Citizenship Behavior (OCB) is an individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization* . OCB is defined as work related behavior that is not binding, is not related to the organization's formal reward system, and overall increases the effectiveness of organizational functions.

3. Methodology of the study

The category in this study is the analytical research category, which links the independent variables (exogenous variables) Organizational Environment (X1) and Career Development (X2) to the dependent variable (endogenous variable), Organizational Citizenship Behavior (OCB) (Y) with the intervening variable that is Organizational Commitment (Z).

The method used in this research is a quantitative descriptive method with a path analysis approach. Quantitative research methods were used to analyze the data obtained from the results of the questionnaire (questionnaire) on the objects and respondents of this study. This research approach is quantitative because it uses numbers, starting from data collection, interpretation of the data, and the appearance of the results. Meanwhile, based on the time dimension, this research is included in cross-sectional research because it was carried out at a certain time and was not compared to other studies.

The research consists of exogenous (independent) variables that Organizational Environment (X1) and Career Development (X2) to the dependent variable (endogenous variable), that Organizational Citizenship Behavior (OCB) (Y) with the intervening variable that Organizational Commitment (Z). This study used a purposive sampling technique. This study analyzed using SEM with smart PLS, so the sample used was 122 respondents. The research object is to analyze the influence of organizational environment and career development on organizational citizenship behavior (OCB) in employees with organizational commitment as an intervening variable. This research was conducted on employees who work for both private and public institutions in the Greater Jakarta area.

This study uses a written survey research technique that is compiled into a questionnaire form that is used as a research instrument for a sample of a population. Respondents will answer the questions used to obtain primary data by selecting answers that have been provided with a Likert scale.

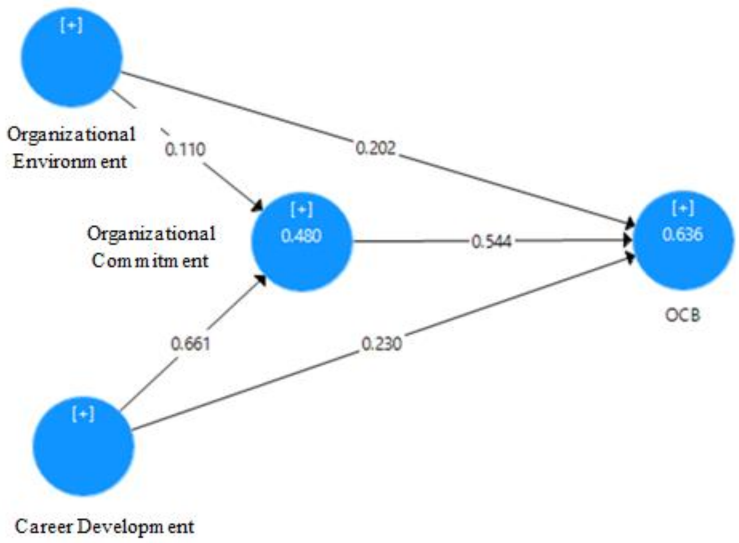
In this study the data analysis technique was used the structural inquiry modeling (SEM) analysis technique using the Partial Least Square (PLS) statistical software version 3.0. With the measurement model that; variant extract block, to see the relationship between indicators and latent constructs by calculating the total variance consisting of general, specific and error variances. The advantages of PLS analysis in the analytical method are not based on many assumptions, the data does not have to be multivariate normal distribution, it can be used in the same model, the sample does not have to be large.

4. Result and Discussion

4.1 Result of the study

This study aims to analyze the Influence of Organizational Environment and Career Development on Organizational Citizenship Behavior (OCB) in Employees with Organizational Commitment as an intervening variable. The source of the data obtained in this study was in the form of distributing questionnaires to 122 employees at public and private institutions in Jabodetabek. In this study the data analysis technique used was the structural inquiry modeling (SEM) analysis technique using the Partial Least Square (PLS) statistical software version 3.0.

In this study, the validity test used the convergent validity and discriminant validity methods with the help of Smart PLS 3.0. Before further conducting data analysis, the first step is to test the quality of the instrument, that the validity test and reliability test. The Path Analysis model as follows:



Picture 1: Path Analysis

Based on the picture above, the direct effect structural equation model obtained as follows :

$\hat{Z}$ = 0,110X1 + 0,661X2 + Ɛ

$\hat{Y}$ = 0,202 X1 + 0,230X2 + 0,544Z+ Ɛ

Description :

X1 = Organizational Environment

X2 = Career Development

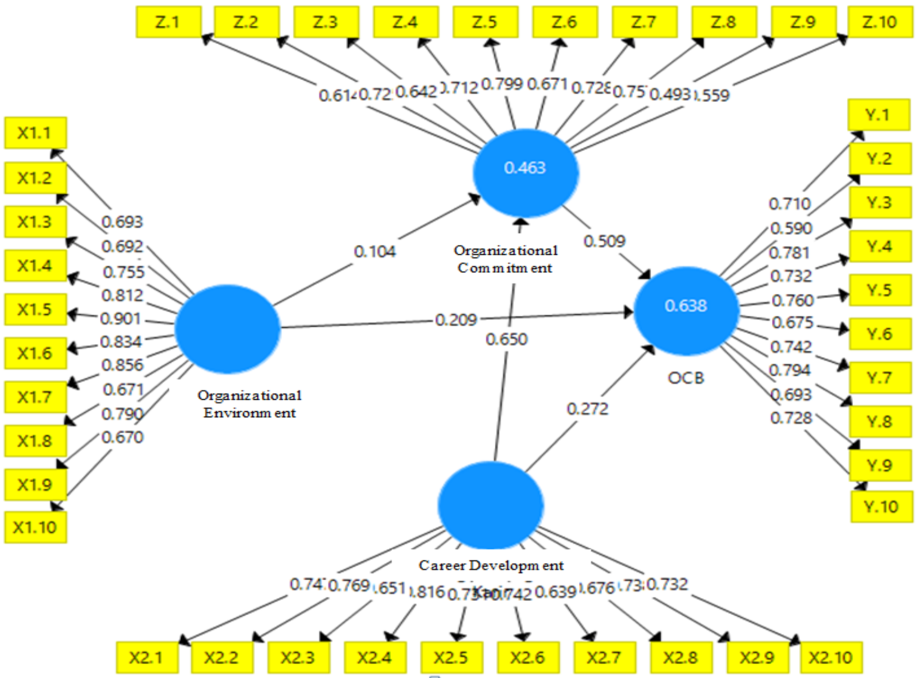
Z = Organizational Commitment

Y = *Organizational Citizenship Behavior* (OCB) of employee

The correlation coefficient value obtained between the organizational environment and organizational commitment is 0.110. The positive correlation coefficient value indicates that the relationship that occurs between the two is unidirectional, meaning that the higher the organizational environment, the impact on increasing organizational commitment is 0.110 points. The correlation coefficient value obtained between career development and organizational commitment is 0.661. The positive correlation coefficient value indicates that the relationship that occurs between the two is unidirectional, meaning that the higher the career development, the impact on increasing organizational commitment is 0.661 points.

The correlation coefficient value obtained between the organizational environment and employee Organizational Citizenship Behavior (OCB) is 0.202. The positive correlation coefficient value indicates that the relationship that occurs between the two is unidirectional, meaning that the higher the organizational environment, the more organizational citizenship behavior (OCB) of employees will increase by 0.202 points. The correlation coefficient value obtained between career development and employee Organizational Citizenship Behavior (OCB) is 0.230. The positive correlation coefficient value indicates that the relationship that occurs between the two is unidirectional, meaning that the higher the career development, the impact on the increasing Organizational Citizenship Behavior (OCB) of employees is 0.230 points. The correlation coefficient value obtained between organizational commitment and employee Organizational Citizenship Behavior (OCB) is 0.230. The positive correlation coefficient value indicates that the relationship that occurs between the two is unidirectional, meaning that the higher the organizational commitment, the more organizational citizenship behavior (OCB) of employees will increase by 0.544 points.

The results of this research data processing are based on the values contained in the SEM analysis with the limit value of hypothesis testing. The following is a table of t-values and a model image of the complete model test results and you can see direct and indirect relationships, that are:



Picture 2: Full Result of Structural Model (Standardied Output) – Bootstraping

Table 1: Summary of direct and indirect effect

	T Statistics (|O/STDEV|)	P Values	T Statistics (|O/STDEV|)	P Values
	Direct		**Indirect**	
Organizational_Commitment -> OCB	9.038	**0.000**		

Organizational_Environment -> Organizational Commitment	1.677	**0.094**		
Career_Development -> Organizational_Commitment	10.879	**0.000**		
Organizational_Environment -> Organizational_Commitment -> OCB			1.628	**0.104**
Career_Development -> Organizational_Commitment -> OCB			6.740	**0.000**

4.1.2 Discussion

Based on the previous problem formulation and can also be seen in table 1, in this study there are five hypotheses, with 3 hypotheses of the direct influence of the organizational environment and career development on organizational commitment, and organizational commitment to Organizational Citizenship Behavior (OCB). Then 2 indirect influence hypotheses, those are the influence of the organizational environment and career development on Organizational Citizenship Behavior (OCB) with organizational commitment as an intervening.

H1: Organizational environment influences organizational commitment
The results of the hypothesis test obtained the path coefficient value between the organizational environment and employee Organizational Commitment of 0.110 and the value of the t statistic = 1.677. The calculated t value is smaller than the t table (1.96) and the p-value is 0.094 which is greater than the significance level of 0.05, then H1 is rejected, this means that the organizational environment has no effect on employee organizational commitment. So it can be seen that the corporate environment in Jabodetabek has not been able to influence employees to have a commitment to the company. So the company needs to improve the quality of the work environment to be able to provide comfort for employees. This research is not in line with Putra and Mardikaningsih (2022) who state that the performance environment influences organizational commitment.

H2: Career Development influences organizational commitment
The results of the hypothesis test showed that the path coefficient between career development and organizational commitment was 0.661 and the t statistic = 10.879. The calculated t value is greater than t table (1.96) and the p-value is 0.000 less than the significance level of 0.05, then H2 is accepted, this means that career development has a positive and significant effect on organizational commitment. So it can be seen that career development in companies in Jabodetabek can influence employees to have a commitment to the company. Clear and planned career development makes employees challenged to live it so that it will lead to a strong commitment to the company. This research is in line with Hidayat (2015) who stated that career development affects organizational commitment.

H3: organizational commitment influences Organizational Citizenship Behavior (OCB) employee
The results of the hypothesis test showed that the path coefficient value between organizational commitment to Organizational Citizenship Behavior (OCB) was 0.544 and the t statistic value = 9.038. The calculated t value is greater than t table (1.96) and the p-value is 0.000 which is less than the significance level of 0.05, then H3 is accepted, this means that organizational commitment has a positive and significant effect on employee OCB. So it can be seen that the commitment of employees in companies located in Jabodetabek can cause Organizational Citizenship Behavior (OCB) in the employees themselves. This research is supported by Hamza (2015) who states that commitment has a significant effect on Organizational Citizenship Behavior (OCB) at PT. Sinar Puspita Abadi Banyu Putih Batang Factory. However, this is not in line with Priyandini, Nurweni, and Hartati (2020) who stated that organizational commitment has no significant effect on the Organizational Citizenship Behavior (OCB) of employees of PT. Sport Glove Indonesia, Wonosari Branch. It is also not in line with

Udayana and Suwandana (2017) which stated that organizational commitment has a positive and significant effect on Organizational Citizenship Behavior (OCB) of employees at the Slippert Stone Bar and Restaurant.

H4: Organizational environment influences Organizational Citizenship Behavior (OCB) employee through organizational commitment

The results of the hypothesis test obtained path coefficient values between Organizational Environment and Organizational Citizenship Behavior (OCB) through organizational commitment of 0.060 and the value of t statistic = 1.628. The calculated t value is smaller than the t table (1.96) and the p-value is 0.104 which is greater than the significance level of 0.05, then H4 is rejected, this means that the organizational environment does not affect employee OCB through organizational commitment. Thus the organizational commitment variable did not work out to be between the organizational environment and the employee's Organizational Citizenship Behavior (OCB). So it can be seen that even though through organizational commitment it turns out that the corporate environment in Jabodetabek cannot bring about Organizational Citizenship Behavior (OCB) among employees in Jabodetabek companies. This research is in line with Priyandini, Nurweni, and Hartati (2020) who stated that the work environment has no significant effect on the Organizational Citizenship Behavior (OCB) of employees of PT. Sport Glove Indonesia, Wonosari Branch. However, this is not in line with Prayitno (2017) who state that the organizational environment influences Organizational Citizenship Behavior (OCB) with commitment as an intervening variable.

H5: Career Development influnces Organizational Citizenship Behavior (OCB) employee through organizational commitment

The results of the hypothesis test obtained path coefficient values between career development and Organizational Citizenship Behavior (OCB) through organizational commitment of 0.359 and the value of t statistic = 6.740. The calculated t value is greater than t table (1.96) and the p-value of 0.000 is less than the significance level of 0.05, then H5 is accepted, this means that career development has a significant effect on Organizational Citizenship Behavior (OCB) of employees through organizational commitment. Thus the variable of organizational commitment has succeeded in becoming between the organizational environment and employee OCB. So it can be seen that through organizational commitment, career development in Jabodetabek companies can bring about Organizational Citizenship Behavior (OCB) among employees in Jabodetabek companies. This research is supported by Udayani and Sunariani (2018) who state that career development influences Organizational Citizenship Behavior (OCB) with organizational commitment as an intervening variable. It is also in line with Octaviani and Utami (2018) which stated that career development has a positive and significant effect on Organizational Citizenship Behavior (OCB) of employees of PT. Woonan Music Ngoro-Mojokerto.

5. Conclusion and Suggestion

5.1 Conclusion

Organizational environment and career development are factors that can realize organizational commitment and Organizational Citizenship Behavior (OCB). The results of this study concluded that the organizational environment has no effect on organizational commitment. So that the corporate environment in Jabodetabek has not been able to influence employees to have a commitment to the company. Career development influences organizational commitment. So that career development in companies in Jabodetabek can influence employees to have a commitment to the company. The results of the study also state that organizational commitment influences Organizational Citizenship Behavior (OCB). So that the commitment that employees have in companies located in Jabodetabek can cause Organizational Citizenship Behavior (OCB) in the employees themselves. Organizational commitment failed to become an intervening influence of the organizational environment on Organizational Citizenship Behavior (OCB) of employees. So even though through organizational commitment it turns out that the corporate environment in Jabodetabek cannot bring about Organizational Citizenship Behavior (OCB) in employees. And organizational commitment has succeeded in becoming an intervening influence of career development on Organizational Citizenship Behavior (OCB). So that through organizational commitment, career development in companies located in Jabodetabek can bring about Organizational Citizenship Behavior (OCB) in employees.

5.1.2 Suggestion

Companies to be able to have employees who have Organizational Citizenship Behavior (OCB) need to improve the quality of the organizational environment. With a comfortable organizational environment that provides satisfaction and enthusiasm, employees will be more committed to the company. So the company needs to continue to improve the facilities and infrastructure as well as the stability of the company which creates a conducive working atmosphere. Employees who are committed to the company will manifest Organizational Citizenship Behavior (OCB).

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Assessing the Welfare Effects of Rising Prices of Animal-Derived Sources of Food on Urban Households in Indonesia

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Abstract
Animal-derived food is a major source of protein for urban households in Indonesia. Rise in animal-derived food prices reduces consumption, causing households to consume less food than the recommended amount which can lead to serious health deficiencies that has serious implications for health and well-being in the long-run. The effects of rising prices of animal-derived protein source on urban households' welfare is examined in this study. The Quadratic Almost Ideal Demand System model is used to analyze household consumption patterns, while the welfare effects of rising prices is measured using compensating and equivalent variation. The data for this study came from the 2021 National Socio-Economic Survey (Susenas), which included 112,569 households. Price elasticity of demand reveals that fish was the most responsive to changes in price while eggs were the least. Based on income elasticity of demand, all animal-derived sources of protein were found to be luxurious except for eggs which were found to be a normal good. The welfare exercise found that increase in prices resulted in approximately Rp. 23,262 per month in welfare loss when there is no substitution. However, when there is substitution, welfare loss as measured by CV was Rp. 22,308 and EV was Rp. 21,052 per month. Urban households were found to experience the most welfare loss from price increase of eggs but the least from fish. It was also found that when urban households are able to substitute when prices increase, the welfare impact is smaller than when they are not able to do so. Hence, policy aimed at diversifying urban households' consumption patterns when it comes to protein consumption is suggested as a means of attaining protein food and nutrition security.

Keywords: Food Price, Indonesia, QUAIDS, Urban, Welfare

1. Introduction

Food is one of the most basic and essential needs of an individual or household. However, over the last two decades, there have been substantial increases in global food prices, especially between 2006 and 2008 where the global food price crisis has led to international food price index nearly doubling (Nguyen and Jolly 2013, Azzam and Rettab 2012, Warr and Yusuf 2014). According to data from the Food and Agriculture Organization (2022), in 2006 the world food price index was 72.6 but increased to around 117.5 in 2008, or by around 61.9%. There was major increase in the global price of cereals (93.3%), vegetable oils (100.1%), dairy (93.3%), and meat

(17.3%) between 2006 and 2008 (FAO 2022). Over the last five years, 2018 to 2022, world food prices have continued to show positive increases annually. In 2018, the world food price index was reported to be 95.9 and increased to 145.8 in 2022 (FAO 2022). This represents a more than 55% increase in global food prices between 2018 and 2022. Two core mandates of the Sustainable Development Goals (SDGs) are to eliminate hunger and poverty; hence, it is of paramount importance that safe, nutritious, and affordable foods are available for consumption by the populace in order to foster food sovereignty and food and nutrition security. In addition, Azzam and Rettab (2012) ascertain that consumers are entitled to a maintained level of food welfare even when prices increase, hence, they must be compensated for any lost welfare brought about by increasing food prices.

Food price increase has serious implications towards food and nutrition security and poverty in the developing world, hence, there must be policy interventions by governments and policymakers with the primary goal of safeguarding consumer welfare. According to Attanasio *et al.* (2013), rising food prices has serious implication regarding the welfare of poor households since their food consumption level might have already be at subsistence level. Increase in food prices also put extra strain on poor households and increases their vulnerability to food insecurity (Gregory and Coleman-Jensen 2013, Amolegbe *et al.* 2021). Increases in food prices also increase poverty in various countries in the world (Headey and Martin 2016, Warr *et al.* 2014, Vu and Glewwe 2011, Dhahri and Omri 2020). Warr and Yusuf (2014) notes that food price increase affects poverty in two opposing instances. Firstly, when food prices increase poor households in both rural and urban areas are affected negatively since a large portion of their income is allocated towards food expenditure. Secondly, in developing nations, many poor farmers and non-farmers live in rural areas and benefit from price increases. This is because most of the poor residing in rural areas engage mainly in agriculture which means that they directly benefit from higher prices for agricultural products. However, it is not easily determined which of these two competing effects dominates (Warr and Yusuf 2014).

Indonesia is a developing country that depends heavily on international trade of agricultural products to meet the nutritional demands of its population (Forgenie and Khoiriyah 2023). Major staple food items such as cereals, cassava, soybean, sugar, and beef are imported (Hadi and Chung 2022, Warr and Yusuf 2014). Major staple food items such as cereals, cassava, soybean, sugar, and beef are imported (Hadi and Chung 2022, Warr and Yusuf 2014). Prior to the COVID-19 pandemic, Indonesia was experiencing rapid economic growth, however, recent statistics reveal that GDP in the first quarter of 2020 has slowed down to around 3% (Paramashanti 2020). Recent data from the Asian Development Bank suggest that around 22 million Indonesians had already experienced hunger between 2016 and 2018. Decline in GDP growth and shock placed on the global food system as a result of the COVID-19 pandemic could result in an increase in the prevalence of hunger in Indonesia in the future. This can be amplified by volatile food prices in Indonesia which would negatively affect household welfare in urban areas.

Households with higher income levels tend to have smaller food expenditures than those with lower levels (Regmi and Meade 2013, Baker *et al.* 2020). According to Khoiriyah *et al.* (2020), household food expenditure makes up a significant portion of total household expenditure in both rural (55.8%) and urban (44.2%) households. Over the last two decades, global animal protein consumption has increased by around 58% (Whitnall and Pitts 2019). In 2018, Indonesia accounted for 3% of global protein consumption, which has more than doubled between 1998 and 2018 (Whitnall and Pitts 2019). However, the Central Statistics Agency in 2021 reports that expenditure on animal protein in Indonesia is quite low due to low income and high animal protein prices. According to Ariningsih (2004), animal protein play a significant role in the development of a nations. Hence, it is of paramount importance that animal protein consumption increase in Indonesia as it is essential in improving health and productivity of Indonesians in the long-term (Kharisma *et al.* 2020).

Studies focused on assessing the welfare impacts of rising prices of food on households have been carried out in several countries i.e. Groom and Tak (2015) and De Janvry and Sadoulet (2009) for India; Azzam and Rettab (2012) for the United Arab Emirates; Aftab *et al.* (2015) for Pakistan; Attanasio *et al.* (2013) and Avalos (2016) for Mexico; Allo *et al.* (2018) and Sa'diyah *et al.* for Indonesia; Ferreira *et al.* (2013) for Brazil; Tefera *et al.* (2012) and Shimeles and Woldemichael (2013) for Ethiopia; Dimova (2015) for Sub-Saharan Africa; Aftab *et al.* (2017) for South Asian Countries; Anríquez *et al.* (2013) for various countries; Cudjoe *et al.* (2010) for Ghana;

Layani *et al.* (2020) for Iran; Adoho and Gansey (2019) for Congo; Aghabeygi and Arfini (2020) for Italy; and De Janvry and Sadoulet (2010) for Guatemala. However, few studies have been done for Indonesia urban households regarding food price increases and changes in welfare. Thus, a study that focuses on assessing the welfare consequences associated with animal-derived protein price changes is essential to formulate policy strategies centered around improving household consumption, especially in urban areas.

This study aims to analyze prices and income and their effects on welfare in urban Indonesian households using the Quadratic Almost Ideal Demand System (QUAIDS) model and data from the National Socio-Economic Survey (Susenas) in March 2021. Compensating Variation (CV) and Equivalent Variation (EV) is used to analyze changes in welfare. The study will determine the amount of monetary compensation that must be given to households to negate the negative effects of price increases. Finally, the results are expected to be used as valuable information that can aid in improving urban household's animal-derived protein consumption to correspond with the national food sufficiency figure of 57 grams per day, especially for poor and almost-poor households in urban Indonesia.

2. Materials and Method

2.1. Model Specification: The Quadratic Almost Ideal Demand System Model

Studies on demand analysis are widely published in the empirical literature. Ever since Deaton and Muellbauer (1980) proposed the almost ideal demand system (AIDS) model, researchers have widely favored the specification over other functional forms due to the many attractive properties it possesses. Barnett and Seck (2008) highlights that the AIDS model aggregates perfectly over consumers, has a functional form which is consistent with known data, satisfies the axiom of choice, is rather easy to estimate, and allow the theoretical restrictions of homogeneity and symmetry to be imposed and tested empirically. Although many of the existing functionals forms in the literature possess many of the desirable properties noted above, only the AIDS model possess all of them at them same time (Barnett and Seck 2008, Deaton and Muellbauer 1980).

Despite the popularity of the traditional AIDS model in the empirical literature, researcher have proposed alternative specifications. Banks *et al.* (1997) added a quadratic expenditure term to the AIDS model which yielded a quadratic almost ideal demand system (QUAIDS) model. According to Banks *et al.* (1997), some preferences are quadratic in nature, therefore, the QUAIDS specification is more appropriate. The QUAIDS model is also theoretically consistent and possesses all of the desirable properties of the traditional AIDS model. This specification is widely used in household demand analysis studies, see Kharisma *et al.* (2020), Lakkakula *et al.* (2016), Khoiriyah *et al.* (2020), Layani *et al.* (2020), Tefera *et al.* (2012), Korir *et al.* (2018), Mustafa *et al.* (2022), Dybczak *et al.* (2014), Bronnmann *et al.* (2016), Rasyid (2022), Suárez-Varela (2020), Obisesan (2021), Guerrero-López *et al.* (2017). This study utilized the QUAIDS model to estimate demand for various animal protein source by urban households in Indonesia.

According to Banks *et al.* (1997), the share equation of the QUAIDS model is specified as follows:

$$w_i = \alpha_i + \sum_{j=1}^{n} \gamma_{ij} lnp_j + \beta_i ln\left[\frac{m}{a(p)}\right] + \frac{\lambda_i}{b(p)}\left\{ln\left[\frac{m}{a(p)}\right]\right\}^2 + \varepsilon_i \tag{1}$$

Where:
w_i is the household expenditure share of the *ith* animal-derived food group, given as follow:

$$w_i \equiv \frac{p_i q_i}{m} and \sum_{i=1}^{n} w_i = 1 \tag{2}$$

lnp_j = is the price of the jth animal food commodity group
m = is the household total expenditure for animal food
$ln(a(p))$ = is a price index, i.e., stone price index
$b(p)$ = price aggregator
ε_i = is a white noise error term

α_i, γ_{ij}, β_i and λ_i = are all parameters to be estimated in each share equation

To be consistent with classical demand theory, the theoretical restrictions of adding-up, homogeneity and symmetry are imposed during estimation as follows

Adding-up: $\sum_{i=1}^{n} \alpha_1 = 1,\ \sum_{i=1}^{n} \beta_1 = 0,\ \sum_{i=1}^{n} y_{ij} = 0,\ \sum_{i=1}^{n} \lambda_i = 0,$ (3)

Homogeneity: $\sum_{i=1}^{n} y_{ji} = 0$ (4)

Symmetry: $\gamma_{ji} = \gamma_{ij}$ (5)

The parameters of the QUAIDS model are estimated by iterated nonlinearly seemingly unrelated regression (ITNL-SUR) in Stata 17. To ensure that the variance-covariance matrix is not singular, one of the share equations is omitted during estimation, then the parameters of the omitted share equation are recovered using the adding-up restriction. Now that a theoretically consistent model is specified to estimate the demand parameters, price and income elasticities can be derived for protein derived from various animal foods. Marshallian or uncompensated price elasticities for each animal-derived food group are calculated using the formula

$$\varepsilon_{ii}^{M} = -\delta_{ii} + \frac{1}{w_i}\left(\gamma_{ij}\left[\beta_i + \acute{\eta}_i z + \frac{2\lambda_i}{b(p)c(p,z)} ln\left\{\frac{m}{\overline{m_o}(z)\alpha(p)}\right\}\right] * \left(\alpha_j + \sum_{1} \gamma_{ij} lnp_j\right) - \frac{(\beta_i + \acute{\eta}_i z)\lambda_i}{b(p)c(p,z)}\left[ln\left\{\frac{m}{\overline{m_o}(z)\alpha(p)}\right\}\right]^2\right) \quad (6)$$

Marshallian own-price elasticities generally measure changes in the quantity demanded as a result of changes in prices. Income elasticity of demand which measures the changes in demand brought about by changes in income is derived using the formula as follows:

$$\eta_i = 1 + \frac{1}{w_i}\left[\beta_i + \acute{\eta}_i z + \frac{2\lambda_i}{b(p)c(p,z)} ln\left\{\frac{m}{\overline{m_o}(z)\alpha(p)}\right\}\right] \quad (7)$$

Hicksian own-price elasticities are derived from the Slutsky equation using the formula below:

$$\varepsilon_{ii}^{H} = \varepsilon_{ii} + \eta_i w_i \quad (8)$$

2.2. Measuring Welfare Impact of Price Change: CV and EV

The concept of welfare is widely studied in the empirical literature; however, it has varying definition across disciplines. According to Greve (2008), in order to properly measure the state of welfare it is of paramount importance that a proper definition is established. From an economic perspective, welfare is defined as the contribution to consumer well-being that is derived from the consumption of goods and services that the income available can buy (Van Praag and Frijters 1999). Generally, welfare is linked to consumer's perception and utility they obtain from the use of income. Changes in the economic environment such as price increase or income reduction have serious implications towards consumer welfare, hence, must be studied.

In principle, consumer welfare can be measured in five ways - 1) Consumer's Surplus variation (CS); 2) Compensating Variation (CV); 3) Equivalent Variation (EV); 4) Laspeyres Variation (LV); and 5) Paasche Variation (PV). However, this study utilizes CV and EV to assess the welfare impact of rising food prices on urban households in Indonesia. Compensating variation is the adjustment in income that returns the household to the status quo level of utility after an economic change transpired. If the economic change is positive, for instance the price of a good decreases, CV is commonly regarded as the maximum a consumer or household is willing to pay in order to tolerate that economic change. However, when the economic change is negative, for instance the prices of a good increases, CV is the minimum amount of monetary compensation requires in order to tolerate the economic change. On the other hand, equivalent variation is the adjustment in income that changes the consumer or household's level of satisfaction equal to the status quo level of satisfaction that would occur if the economic change did not happen. When the economic change is positive, EV is regarded as the increase in income that would yield the same additional utility that would have happened if a price fall did not occur. Additionally, when there is a negative economic change, EV is regarded as the amount of income that would be taken from the consumer to lower utility to the level that would happen if the change did not occur.

The exact measure of the change in welfare can be described in terms of the cost function based on price differences. To measure changes in welfare related to price changes, a measure of CV can be attained by using Hicksian elasticities derived from QUAIDS model (Luong and Vu 2020, Vu and Glewwe 2011, De Janvry and Sadoulet 2009). According to Tefera *et al.* (2012), CV can be completely defined via the indirect utility function V as follows:

$$V(\ m^0 + CV, p_c^1 = V(m^0, p_c^0) \tag{9}$$

Where m is household expenditure or income, CV is the compensating variation and p_c is defined as a vector of prices for animal foods. The superscript 0 and 1 refers to before and after price changes, respectively. The representation of CV in equation (9) can be re-expressed using the expenditure or cost function, $e(u, p)$ where u is utility, as outlined below:

$$CV = e(u, p_i^1) - \ e(u_i^0, p_i^0) \tag{10}$$

If welfare after the price change is lower than before, then CV will be positive, however, if it is greater than before the price changes, then CV is negative. Since utility cannot be directly measured, the CV can be approximated using a second order Taylor expansion (Tefera *et al.* 2012, Luong and Vu 2020, Vu and Glewwe 2011) of the minimum expenditure function as follow:

$$\Delta \ln e = \sum_{i=1} w_i\, \Delta lnp_i \ + \frac{1}{2}\sum_{i=1}\sum_{j=1} w_i\, \varepsilon_{ij}^H\, \Delta lnp_i \Delta lnp_j \tag{11}$$

Where ε_{ij}^H is the compensated or Hicksian price elasticity of good i with respect to the price of good j. Equation (11) signifies that the impact that price change has upon a household is a function of the magnitude of the price change and also the relative importance of other food items (Luong and Vu 2020). A positive CV means an increase in the level of welfare (welfare gain); however, a negative value means a decrease in welfare (welfare loss) due to changes in prices. EV is also used to assess the impact of price increases on welfare using the following equation:

$$EV = \ -\sum_k x_k \Delta p_k - \frac{1}{2\sum_{kj} \frac{\partial x_k}{\partial p_j}} \Delta p_k \Delta p_j + \frac{1}{2}\sum_k x_k \Delta p_k \sum \frac{\partial x_k}{\partial m} \Delta p_k \tag{12}$$

EV rules are the same as the CV. If positive EV means an increase in welfare (welfare gain/better off), whereas if negative there is a decrease in welfare (welfare loss/worse off) due to price increases.

2.3. Data and Source

This study utilizes secondary data collected by BPS (Badan Pusat Statistik) in the form of household surveys, called Susenas (National Socio-economic Survey) for March 2021. The data is in the form of household consumption and expenditure on food and non-food items. The data is grouped into various food categories: cereals, tubers, fish/shrimp, meat, eggs and milk, vegetables, legumes, fruits, oil and coconut, beverage stuff, spices, miscellaneous food item, prepared food, and beverages. Food from animal source of protein were grouped into five categories - eggs (chicken eggs, local chicken eggs, and duck eggs), chicken (chicken meat), beef, fish (fish, shrimp, squid, and shellfish), and milk (milk powder and infant milk). The sample of this research is 112,569 households.

3. Results and Discussion

3.1. Household Protein Consumption Patterns in Urban Indonesia

All foods include protein, however the quality and amount of protein from animal and plant sources, such as fruit, varies. Urban households in Indonesia consumes a variety of protein-containing foods. The government in Indonesia has mandated that the minimum protein consumption per capita daily should be around 57 grams. This has been done in an effort to promote food and nutrition security of households in an effort to eradicate hunger and malnutrition as many households do not meet the daily required amount (Khoiriyah *et al.* 2020). Recent statistics ascertain that around 32% of households in Indonesia are regarded as food insecure since their caloric intake is below the recommended 2100 kcal daily. In addition, Karima and Achadi (2012) notes that around 44.1% of pregnant women lack adequate daily food consumption while 48.1% lack adequate protein consumption. Having adequate food for consumption plays a significant role in economic growth and development as the quality of labour diminishes as food quality and consumption patterns declines (Kearney 2010).

Based on per capita daily consumption of protein, cereals, prepared food and beverages, fish and shrimp, and legumes account for more than 75% of total protein consumption. According to Table 1, cereals were the primary source of protein in urban Indonesia where daily per capita consumption was around 18.91 grams followed by prepared foods and beverages (14.08 grams), fish and shrimp (7.03 grams), and legumes (5.44 grams). Protein from animal source such as meat accounted for around 7.24% of total daily consumption or 4.28 grams, while protein from milk and eggs was 4.18 grams or 7.07% of total daily consumption. All other foods consumed daily by urban households in Indonesia accounted small portions of total protein consumption. From Table 1, it is observed that oils and coconut account for only 0.25% or 0.15 grams per capita daily followed by fruits which was only 0.40 grams daily. Khoiriyah *et al.* (2020) notes that the lack of adequate protein consumption, especially from animal sources, has been exacerbated by rising food prices over the last five years. Price increase directly leads to changes in consumption patterns as the purchasing power of households diminish (Sa'diyah *et al.* 2019, Tefera *et al.* 2012).

Table 1: Protein Food Source and Gap to a Minimum Daily Requirement in Urban Indonesia

Food Groups	**Urban Households Income Group**			
	Low	**Middle**	**High**	**National**
	gram/cap/day			
Cereals	18.29	18.45	19.11	18.91
Tubers	0.17	0.22	0.36	0.31
Fish	3.70	4.99	7.99	7.03
Meat	1.03	2.04	5.29	4.28
Eggs and Milk	1.65	2.52	4.94	4.18
Vegetables	1.43	1.60	1.97	1.85
Legumes	4.15	4.82	5.76	5.44
Fruits	0.13	0.21	0.49	0.40
Oil and Coconut	0.12	0.13	0.16	0.15
Beverage Stuff	0.58	0.64	0.78	0.74
Spices	0.32	0.39	0.52	0.47
Miscellaneous Food Item	0.77	1.06	1.43	1.30
Prepared Foods and Beverages	5.68	8.38	16.65	14.08
Total Protein Consumption	38.00	45.44	65.43	59.14
Total Population (millions)	10.34	27.53	94.78	132.65
Min. Protein Requirement	57.00	57.00	57.00	57.00
Gap to Min. Protein Requirement	-19.00	-11.56	8.43	2.14
Gap to Min. Protein Requirement (%)	-33.33	-20.28	14.79	3.75

Source: Authors calculations based on Susenas, 2021

Table 1 also outlines protein consumption among three types of households based on income level in urban Indonesia – low, medium, and high. It can be observed that total protein consumption was relatively low in households with lower levels of income than those with medium and higher levels. Total daily per capita protein consumption by households with low levels of income was around 38 grams, 33.33% short of the recommend 57 grams. Households with medium levels of income consumed on average around 45.44 grams of protein daily which was around 20.28% less than the national recommended amount. In contrast, total per capita daily protein consumption among urban household with high levels of income was 65.43 grams, which was around 14.79% greater than the daily recommended amount. It is interesting to note that households with higher levels of income tend to consume more animal sources of protein than those with lower levels of income. For instance, households with low and medium levels of income consumer around 6.38 grams and 9.55 grams of protein from animal sources daily per capita whist households with lower levels of income consumes around 18.22 grams.

The data in Table 1 shows that protein from animal sources vary significantly among households in urban Indonesia with different levels of income as households with higher income levels consumes almost three times more protein from animal sources than households with lower levels of income. This reinforces the point by Sa'diyah *et al.* (2019) and Tefera *et al.* (2012) that households with higher levels of income are more likely to consume animal protein as they have the mean to do so. The data suggest that around 71% of the population in urban Indonesia can be considered to be food secure when it comes to protein consumption. When viewed nationally, Indonesian households consume more protein than the National Protein Recommended Dietary Allowance (RDA) of 57 gram per capita daily. The excess protein consumption of urban Indonesian households is 2.14 grams or about 3.75% above the RDA. That sounds so blissful. However, there is still around 29% of the population in urban Indonesia who do not meet the RDA currently which can have serious implications towards health, the labour force welfare and also economic growth and development.

3.2. Household Protein Expenditure Share

Table 2 highlights urban household in Indonesia tend to consume protein, especially those from animal sources after the consumption of cereals is fulfilled. Nationally, households in urban Indonesia allocate around 37.21% of their income towards cereal consumption. Households with low levels of income allocate most of their food expenditure, around 52.73%, towards cereal consumption while households with medium and high levels allocate around 45.32% and 33.60%, respectively. Protein from prepared foods and beverages account for almost 20% of national consumption, followed by fish and shrimp which was around 12.66%. On a national level, protein consumption from animal food sources accounts from around 24.47% of total urban household protein expenditure share. For low, medium, and high-income households, protein consumption expenditure share was around 16.33%, 19.95%, and 26.43%, respectively. Households with higher income tend to allocate more of their budget toward animal foods such as meat, fish and shrimp, and milk and eggs. This indicates that when household income increases, the household reduces cereal consumption and increases consumption of other foods, namely food/beverage and protein, especially animal sources of protein.

Table 2: Food Expenditure Share to Total Food

Food Groups	**Urban Households Income Group**			
	Low	**Medium**	**High**	**National**
	Proportion of Total Food (%)			
Cereals	52.73	45.32	33.60	37.21
Tubers	0.90	0.59	0.62	0.63
Fish	10.93	11.99	13.00	12.66
Meat	2.02	3.47	6.92	5.91
Eggs and milk	3.38	4.49	6.51	5.90
Vegetables	4.40	4.07	3.41	3.61
Legumes	9.06	9.38	8.58	8.77
Fruits	0.39	0.47	0.72	0.65
Oil and coconut	0.52	0.48	0.39	0.41
Beverage stuff	1.72	1.64	1.42	1.48
Spices	0.75	0.84	0.84	0.83
Miscellaneous food item	1.67	2.01	2.13	2.08
Prepared food and beverages	11.52	15.26	21.86	19.86
Total Food	100.00	100.00	100.00	100.00

Source: Authors calculations based on Susenas, 2021

Interestingly, the allocation of expenditure towards legumes such as beans and nuts was around 8.77% nationally. However, consumption expenditure allocation for legumes was greater in lower-income households than those with hight levels of income. For instance, for the study period, legumes accounted for around 9.06% of consumption expenditure share by low-income households while in high-income households' expenditure share was 8.58%, or 0.48% lower than poorer households. According to Huebbe and Rimbach (2020) and Kebede (2020), legumes are a cheap source of proteins, therefore, consumption tend to be higher in lower-income household than those with higher level.

3.3. Protein Prices in Urban Indonesia

In Indonesia, there is usually a direct relationship between price and quality of goods. Higher prices for an item most often suggest better quality. This assumption is used to discuss food quality, especially the quality of protein consumed by households in urban Indonesia. Table 3 presents the price per gram of protein paid by urban households at various income levels in Indonesia. In the cereal's food group, the difference in prices paid by households does not differ greatly between low, and medium households. However, it is suggested that households with higher income levels consume better quality cereals based on price paid. Likewise, with the legumes and other groups. However, for the meat group, high-income households consume meat that is almost double the quality paid by low-income households. Likewise, for fish and shrimp, and the egg and milk group. Thus, it can be suggested that the lower the poverty level of the households the better the quality of animal source of protein consumed. Poor households consume lower quality protein than non-poor households. Oil and coconut food group are the food with the highest price paid by households in urban Indonesia, followed by fruit groups which might be the reason for low consumption of these groups by households, especially in poor households.

Table 3: The Price of Protein for Indonesian Urban Households

Food Groups	**Urban Households Income Group**			
	Low	**Medium**	**High**	**National**
	Price per gram per capita (*Rp.)			
Cereals	2,397.11	2,514.72	3,302.12	3,074.45
Tubers	8,793.61	10,031.44	15,314.99	14,286.40
Fish	3,064.16	3,468.70	5,490.46	5,093.70
Meat	3,579.01	3,860.17	6,610.80	6,282.66
Eggs and milk	5,440.66	5,810.55	9,075.06	8,554.35
Vegetables	11,502.01	13,325.87	20,988.59	19,033.82
Legumes	1,560.59	1,617.92	2,243.17	2,087.82
Fruits	29,819.64	35,743.89	63,473.38	59,573.69
Oil and coconut	53,651.87	60,222.02	87,797.87	81,124.72
Beverage stuff	13,451.16	15,529.04	23,353.75	21,343.66
Spices	13,456.16	14,653.46	21,004.72	19,544.94
Miscellaneous food item	58,26.12	6,146.90	8,494.40	7,973.37
Prepared food and beverages	7,063.03	8,197.59	13,479.54	12,626.07

*Source: Authors calculations based on Susenas, 2021. *Indonesian Rupiah*

3.4. Own-price and Income Elasticities

Reliable price and income elasticities are vital for effective policy development as it can be used to understand the relationship between consumer demand and its determinants (Lokuge and Edirisinghe 2015). Demand elasticities can be used to facilitate the development of effective campaigns and marketing strategies that can help to improve consumer welfare or improve the firm's profits. Elasticity of demand measures the degree of responsiveness of demand due brought about by changes in one of its major determinants such as price or income. This only calculated price and income elasticities for animal food as a source of protein for urban households in Indonesia.

Price elasticity of demand looks at the relationship that exist been quantity demanded and the price of the good. Economic theory dictates that there is an inversed relationship between the quantity of a good demanded and its price, hence, it the own-price elasticity of demand is expected to be negative. However, economist usually interpret own-price elasticities in their absolute form whereby the negative sign is ignored and the ceteris paribus assumption is imposed. In classical economic theory, there are two types of price elasticities – Marshallian and Hicksian price elasticities. Marshallian or uncompensated price elasticities which has a price and income effect and measures the degree of responsiveness of the quantity demand and demand as a result of changes in prices and income, respectively. Hicksian or compensated elasticities are elasticities when there is only the effect of price changes. Hence, they are often referred to as elasticity of substitution. In addition, unlike Marshallian elasticities which have both price and income effects, Hicksian price elasticities only have price effect which means that their magnitude tends to be smaller than Marshallian elasticities. In terms of magnitude, an own-price elasticity value that is greater than unity is usually described as an elastic good while a good which an elasticity value less than unity is inelastic. For goods that are elastic, the quantity demanded tend to be very responsive to changes in price, however, the opposite is true for inelastic goods.

Table 4 presents Marshallian and Hicksian own-price elasticities for animal foods consumed as a source of protein by urban households in Indonesia. As expected, all calculated own-price elasticities are negative. This is in line with economic theory that price increase reduces demand or consumption. The analysis results also show that the Marshallian price elasticity is greater than the Hicksian. This is because as stated prior, Marshallian elasticities contain both price and income effects while Hicksian elasticities only contain a price effect. In the interest of brevity, only Marshallian own-price elasticities are interpreted since both Marshallian and Hicksian own-price elasticities have similar interpretations. In urban areas, the most elastic animal food is fish, followed by beef, milk, and chicken. For fish, it was found that a 1% increase in its price is expected to bring about a 1.979% decrease in the quantity of fish demanded by urban households on average. For beef, milk, and chicken, Marshallian elasticities suggest that a 1% increase in prices is expected to bring about on average a 1.975%, 1.561%, and 1.402% decrease in quantity demanded, respectively. The results show that for all animal sources of protein except eggs, quantity demand is highly responsive to price increases. Eggs were found to have inelastic demand since the Marshallian own-price elasticity was 0.749, which is interpreted as a 1% increase in egg price brings about a 0.749% decrease in quantity consumed on average. Eggs demand is not as responsive to price changes compared to other animal foods.

Table 4: Own-Price and Income Elasticities for Urban Households in Indonesia

Animal Food Groups	**Own-price Elasticity**		**Income Elasticity**
	Marshallian	**Hicksian**	
Eggs	-0.749	-0.518	0.476
Chicken	-1.402	-1.016	1.346
Beef	-1.975	-1.842	1.885
Fish	-1.979	-1.897	1.411
Milk	-1.561	-1.335	1.749

Source: Authors calculations based on Susenas, 2021

Table 4 also presented income elasticities for various animal foods. Income elasticities measures the degree of responsiveness of demand for a good which is brought about by changes in household income. If the calculated income elasticity is positive, then the good is said to be a normal good where increase in income brings about increase in consumption. However, if the income elasticity is negative then the good is inferior and increase in income brings about decrease in consumption as consumers substitute it for goods that are of higher quality. Furthermore, for normal goods, if the calculated income elasticity is greater than unity, then the good is said to be a luxury. The income elasticity of all animal food groups were found to be positive which means that they are all normal goods. Additionally, income elasticity suggest that all animal food is are luxuries except for eggs since their values are greater than unity. Beef was found to have an income elasticity of 1.885 which means that a 1% increase in household income is expected to bring about a 1.885% increase beef consumption. For milk, fish, chicken, and eggs, it was found that a 1% increase in household income is expected that a 1% increase in household income will bring about a 1.749%, 1.411%, 1.346%, and 0.476%, respectively. Therefore, it can be suggested that policies geared towards improve household income can prove to be beneficial in the long term with respects to improving household animal protein consumption so that the national daily requirement of 57 grams per capita is met in urban households.

3.5. Welfare Analysis

In several countries around the world, rising food prices reduce household welfare. Protein fulfilment is often used to measure the household welfare of a country. This paper analyses the impact of price increases on household welfare using CV and EV. The scenario of an increase in food prices used to see changes in welfare is an increase in the price of eggs by 20%, chicken, beef, and fresh fish by 10% each, and milk by 5%. The study looked at three scenarios – CV and EV without substitution, with substitution only and with substitution.

Table 5 presents changes in the CV and EV welfare for urban Indonesian households caused by increase in food prices. Firstly, it can be seen that when there are no substitutions, the cost of animal-derived protein food combined is Rp. 23,262 per month per household. The CV and EV value for this scenario is identical, Rp. 23,262. From a CV perspective, this means that households would need to receive this Rp. 23,262 per month of additional income to maintain their original level of welfare after a price increase. This suggests that a price increase in all animal-derived proteins would have a negative impact on household welfare, as they would need to spend more money to maintain their original level of consumption.

Table 5: CV and EV for urban household of Indonesia

Food Groups	**CV**			**EV**		
	W/O Subst.	**Subst. Only**	**W/ Subst.**	**W/O Subst.**	**Subst. Only**	**W/ Subst.**
	Rp. per month per household					
Eggs	-10,358	755	-9,603	-10,358	1,317	-9,041
Chicken	-6,680	154	-6,526	-6,680	514	-6,165
Beef	-2,268	52	-2,217	-2,268	175	-2,093
Fish	-817	-1	-818	-817	42	-775
Milk	-3,139	-4	-3,144	-3,139	161	-2,978
All Items	**-23, 262**	**956**	**-22,308**	**-23,262**	**22,029**	**-21,052**

Source: Authors calculations based on Susenas, 2021. W/O subst.=without substitution, W/subst.= with substitution

The results in table 5 show that for all five animal-derived food groups, households without a substitution option experience a larger welfare loss compared to households with substitution options. When substitutions are made, we can see that the CV of all food groups combined is reduced to Rp. 22,308 per month per household. This means that households would need to receive this amount of additional income to maintain their original level of utility after a price increase. Compared to the scenario where no substitutions were made, the CV value is smaller, which suggests that households are more resilient to price increases when substitutions are possible. This can also be seen by the fact that for most animal-derived food, CV was smaller when there was substitution. For example, for eggs, the CV for households without a substitution option is Rp. 10,358 per month per household, indicating that these households need to be compensated with this amount of extra income to maintain their pre-price welfare level. On the other hand, households with a substitution option experience a smaller levels of welfare loss, with a CV of Rp. 9,603 per month for eggs. This suggests that the ability to substitute for other food items reduces the negative impact of a price increase.

Similarly, the results show that for all animal-derived food groups, households with a substitution option experience a higher EV compared to households without a substitution option. The EV value for the scenario with substitutions is larger than the one without substitutions, with a value of Rp. 21,052 per month. This means that households could have the same level of utility with Rp. 21,052 per month less income if prices were reduced. This suggests that the impact of a price decrease is greater when substitutions are possible, as households can switch to cheaper alternatives to maintain their level of consumption. For instance, for eggs, the EV for households with a substitution option is around Rp. 1,317 per month, indicating that these households are willing to pay this amount to maintain their current consumption level of eggs despite the price increase. On the other hand, households without a substitution option experience a lower EV of Rp. -9,041 per month, suggesting that they are not willing to pay this amount to maintain their consumption level of eggs.

The results also show that the impact of a price increase varies across food groups. The highest welfare loss is for eggs, followed by chicken, beef, milk, and fish. This can be attributed to the different levels of substitutability between food items. Eggs, chicken, and beef are relatively close substitutes, while milk and fish are less substitutable. Therefore, the welfare loss for households with a substitution option is lower for eggs, chicken, and beef compared to milk and fish. The study's findings are consistent with the theory of demand, which states that the demand for a good depends on its price and the prices of other goods. In the case of animal-derived food, households have a substitution option between different food items, and a price increase in one food item will lead to a decrease in demand for that item and an increase in demand for substitutes. The results also suggest that households with a substitution option are more resilient to a price increase compared to households without a substitution option, highlighting the importance of promoting food diversification and increasing access to different food items.

The policy implications of the study are significant for Indonesia, where the majority of the population still relies on animal-derived food as a primary source of protein. The results suggest that a price increase in animal-derived food can have a significant negative impact on household welfare, especially for households without a substitution option. Therefore, policies aimed at stabilizing food prices and increasing the availability of different food items can help mitigate the negative impact of a price increase. One possible policy recommendation is to promote the diversification of food sources by promoting the consumption of plant-based protein sources, such as legumes and beans. This can reduce the reliance on animal-derived food and increase the availability of different food items. Additionally, policies aimed at increasing agricultural productivity can help reduce the cost of production and stabilize food prices. This can be achieved through investments in research and development, improving access to credit, and promoting the adoption of modern agricultural practices.

4. Concluding Remarks

This paper assessed the welfare impact of rising price of animal-derived food on urban Indonesian households using compensating and equivalent variation. The research data used secondary data in the form of the National Socio-Economic Survey (Susenas) data collected by the Central Bureau of Statistics (BPS), in 2021, totaling 112,569 households. The study calculated price and expenditure elasticities for various animal-derived foods. It was found that the most elastic animal-derived food in urban Indonesia was fish, followed by chicken, milk, beef, and eggs with demand elasticities of 1.979%, 1.975%, 1.561%, 1.402%, and 0.749%, respectively. Beef was the most income elastic with an income elasticity of 1.885%, followed by milk, fish, chicken, and eggs with income elasticities of 1.749%, 1.411%, 1.346%, and 0.476%, respectively. Estimation of CV and EV found that increase in animal-derived food prices reduces household welfare. In general, when prices increase and there is no substitution, household lose about Rp. 23,262 per month on average. However, when there is substitution, welfare loss based on CV is around Rp. 22, 308 while based on EV was around Rp. 21,052. In general, urban welfare loss was greater when there was substitution. Urban households experienced the most welfare loss from eggs which is plausible since eggs are widely consumed as it is a relatively cheap source of animal-derived protein. Fish saw the least welfare loss due to price increase as fish is already a relatively expensive commodity and is not as abundantly consumed as eggs for example. Considering that protein deficiency is permanent and has an impact on long-term mental decline, efforts are needed to stabilize the price of protein food so that the fulfilment of protein consumption according to the RDA is immediately met and protein food and nutrition security is achieved in urban households.

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Gaining Consumer Trust through Quality of Information and Interaction: An Empirical Study on Online Shopping

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Abstract
The unique characteristics of the online shopping environment generate greater uncertainty and high risk in online purchasing decisions. Therefore, building consumer trust is important in online shopping. This study aims to analyze the influence of information quality, interaction quality, and page design on consumer trust and the influence of trust on purchasing decisions. The five variables were measured using the Likert scale of 1 to 5. The data was collected using an online questionnaire distributed to 270 respondents. This study was analyzed based on the Structural Equation Modelling model using Smart PLS 3.0. The results showed that the quality of information and interaction are influential factors in building consumer trust in online transactions.

Keywords: Consumer Trust, Online Shopping, Web Quality, Shopping Behaviour

1. Introduction

During the pandemic, there was a change in shopping behavior (see also Alaimo et al., 2020; Moon et al., 2021). Online shopping is one of the alternatives to reduce the risk of contracting the virus (Grashuis et al., 2020; R. Y. Kim, 2020; Koch et al., 2020). As a result, interest in online shopping has increased significantly (Ali Taha et al., 2021). Many small to medium-sized companies are eyeing these online sales to widen their market share. An interesting phenomenon is seen in Indonesia; in 2021, as many as 72.75% of businesses began to switch to eCommerce (BPS, 2021). E-commerce transactions in Indonesia in 2021 reached 401 trillion rupiahs, and in 2022 it is estimated to rise 31.2 percent to 526 trillion rupiahs (Bisnis.com, 2022). This phenomenon shows the potential opportunities of the online market.

Positive growth in the online market should be followed by an increase in the quality of media used in marketing products. One of the concepts about web quality was put forward by Barnes & Vidgen (2006) which is expressed as usability, quality of information, and service interaction. Several studies have shown that the quality of the web will affect consumers' perception of a product (Chauhan et al., 2019; Patma et al., 2021; Tam & Oliveira, 2017).

In some previous studies, buying decisions were associated with marketing mix variables (see also Kotler & Keller, 2016) such as product, price, place, and promotion (see also Alwash et al., 2021; Kovač et al., 2021; Kung et al., 2021). In online purchases, there are risks and uncertainties when shopping, so there are other factors to consider, namely the quality of the web. Instead of conventional stores, web pages must guarantee communication and transaction processes that are as easy, clear, and fast as in conventional stores. Transactions can occur if the website has clear, accurate information and easy navigation (Davidaviciene et al., 2019; Grange & Barki, 2020; Leong et al., 2021).

The online store page is the key to the company's success, acting as a communication channel between the company and customers (Chen, 2017; Kleinlercher et al., 2018). However, some research shows the quality of a web affects the Trust of its users (Davidaviciene et al., 2019; Grange & Barki, 2020; Hsu et al., 2014; Tandon et al., 2018). This is mainly due to the unique characteristics of the online shopping environment that result in greater uncertainty and high risk in online purchasing decisions. For instance, consumers cannot hold, feel or taste the products before purchasing, which translates to risks.

To minimize the risk, some things need to be considered, first the availability of clear and complete information. According to Leong et al. (2021), the quality of information becomes an important factor in determining online purchases. Chen et al. (2021) also state the same thing, where good information quality will encourage impulsive buying. Online marketplaces allow consumers to gather information about the products they want to buy in detail, compare from a few online shops, or compare to the conventional market. Detailed, complete, and up-to-date information will lead to Trust in consumers, encouraging purchases. Some research shows that high Trust will positively affect buying intentions in online transactions (Jiang et al., 2019; Kamalul Ariffin et al., 2018; Li et al., 2020; Qalati et al., 2021; Tandon et al., 2018).

The second thing that should also be a concern is the quality of the interaction. Consumers who experience smooth navigation on a web page will tend to positively assess the page (Grange & Barki, 2020). In line with Patma et al. (2021) quality system has a positive and significant effect on the customer's shopping experience. Another thing that also needs attention is the appearance of the web. The aesthetics of the web will shape consumers' perception of the overall quality of the web (L. Jiang et al., 2016; Peng et al., 2017). Thus the quality of the web will create consumer comfort in shopping (see also Silitonga et al., 2020; Tseng & Wei, 2020; Wei et al., 2019).

Based on the research findings that have been put forward, it can be said that consumer trust in shopping online is influenced by the quality of information, interaction, and appearance of store pages. Furthermore, consumer trust will influence buying decisions.

2. Method

The respondents in this study included 270 18 to 45 years old consumers who had shopped online (at least once) through marketplaces. The age limits were used to take into account the consumption pattern of a person generally at the optimal stage within the productive age.

The data was collected using a questionnaire through Google Form. Through WhatsApp groups, questionnaires are distributed to students, government office workers, private offices, and non-working homemakers. The items on each latent variable were measured using five-point Likert scale (1 = "strongly disagree"; 5 = "strongly agree"). Before data collection, face validity is performed on the questionnaire, and a test of the validity and reliability of the construct is carried out. The items of each variable after the validity and reliability tests are expressed in Table 1.

Table 1: Item of Unobserved Variables

Unobserved variables	Item
Information Quality	Information complete on the web
	Information clear on the web
	Information always new on the web
	Information accuracy on the web
Interaction Quality	Navigation on the web that I visit is easy
	The web has adequate search facilities
	The link available on the web is always valid
	Transaction process and the response are given quickly
Page Design	Web appearance looks attractive
	The feature listed on the web are visible
	The font size on the web can be read clearly
	Interesting use of colors on the web
	The web uses the appropriate multimedia feature
Trust	I am sure the web that I am visiting provides adequate security features
	Every transaction process is a clear document dissertation
	I am sure that the seller found it on a trusted site
Buying Decision	I bought the product that I needed the most
	I buy products at the lowest prices
	I bought a product with the most positive testimonials on the web

Based on Barnes & Vidgen (2006), web quality was stated as Information Quality, Interaction Quality, and Usability. In this study, the Usability variable was expressed as Page Design. In addition, measurements of Trust were adopted by Kim & Park (2013), while the measurement of purchasing decisions was adopted by Kotler & Keller (2016). Because the data obtained is not distributed normally multivariate, the analysis used is component-based structural equation modeling using Smart PLS version 3 software (Hair et al., 2011). The research model is listed in Figure 1.

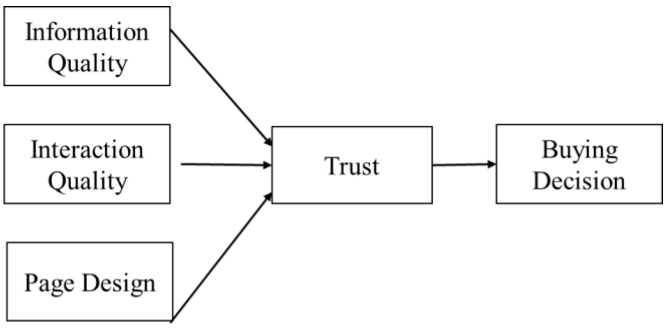

Figure 1: Hypothesis Model

3. Result

Table 2: Profile Respondent

		%
Gender	Male	28,9
	Female	71,1
Age	18-25	87.4
	26-35	7.4
	36-45	5.2
Occupation	Private Employees	23.4
	Bank Employees	14.6

	College student	58.9
	Housewife	3.1
Web Visited	Lazada	41.2
	Tokopedia	22.2
	Bukalapak	10.7
	Zalora	9.3
	Matahari Mall	7.3
	Others	9.3
Purchased Goods	Fashion	44.6
	Electronic	22.1
	Household appliance	7.0
	Travel	6.8
	Health	6.3
	Toys	5.5
	Others	7.6

In Table 2, most of the respondents in this study were women (71.1%). In addition, respondents to this study are classified as millennials, and 58.9% are students. In online shopping, most respondents visited the marketplace Lazada, and the most purchased items were the fashion.

Table 3: Validity and Reliability Test

Variables	**Reliability**			**Validity**
	Cronbach's Alpha	Rho A	Composite Reliability	Average Variance Extracted (AVE)
Page Design	0.861	0.879	0.899	0.642
Buying Decision	0.853	0.878	0.910	0.771
Trust	0.821	0.833	0.894	0.738
Information Quality	0.817	0.826	0.880	0.648
Interaction Quality	0.770	0.781	0.853	0.593

The validity and reliability tests of items are listed in Table 3. Following Hair et al. (2017), the AVE value is greater than 0.5, which states all variables are valid. In addition, Cronbach's Alpha, Rho A, and Composite Reliability are worth 0.7. Thus all variables are declared reliable (Hair et al., 2017).

Table 4: Model Fit

	Saturated Model	Estimated Model
SRMR	0.069	0.083
Chi-Square	562.067	574.851
NFI	0.782	0.777

The results of the model fit test are listed in Table 4. Standardized Root Mean Square (SRMR) is smaller than 0.08 and has an NFI value close to 1, indicating this model can be said to be fit. The outer loading value also reinforces it on all items greater than 0.7 (Hair et al., 2011).

Table 5: Path Coefficient

	Coefficient	Standard Deviation (STDEV)	TStatistics (|O/STDEV|)	P Values
Interaction Quality -> Trust	0.318	0.089	3.557	0.000
Information Quality -> Trust	0.270	0.078	3.477	0.001
Page Design -> Trust	0.059	0.639	0.523	0.523
Trust -> Buying Decision	0.201	0.066	3.049	0.002

Based on Table 5, it can be seen that the path coefficient of all variables is positive. The value of this positive coefficient can be interpreted to mean that the higher the quality of interaction, the quality of information, and page design will be the higher the consumer confidence. Likewise, the higher the Trust will be, the stronger the occurrence of online purchases. The effect of interaction quality and information quality on Trust is significant, characterized by a P-Value less than 0.05. Likewise, with the influence between trust and buying decisions. But page design does not have a significant effect on Trust.

Table 6: Coefficient of Determination

	R Square	R Square Adjusted
Trust	0.290	0.282
Buying Decision	0.040	0.037

The influence of interaction quality, information quality, and page design on Trust is expressed with an R Square value of 0.290 (Table 6). While the effect of Trust on buying decisions is very small, it is 0.04.

4. Discussion

Based on Table 5, it can be seen that interactions on the web will affect consumers' Trust in making purchases online. Interaction on the web must be understood by consumers, for example, in terms of ease of navigation. Complicated navigation will cause consumers to wait too long to complete a transaction because the page is not quickly moved to the next page. Instead, transactions can stop in the shopping cart. Davidaviciene et al. (2019), Qalati et al. (2021), and Grange & Barki (2020) show that the functionality of web pages is a factor that determines consumers' decision to buy online. In addition, a quick shopping response will lead to a positive shopping experience that will encourage someone to shop again (Svobodová & Rajchlová, 2020).

Another important thing that needs attention is the quality of information listed on the shopping page. This study showed that information quality affects consumer trust in online shopping (Table 5). This finding is in line with Chen et al. (2021); Leong et al. (2021); Grange & Barki (2020); Patma et al. (2021); Gautam & Sharma (2019), which stated that the quality of the information would encourage the occurrence of purchase intentions. Leong et al. (2021) revealed that the quality of the information would drive purchase intentions. Information about product descriptions that are vague, incomplete, and inaccurate causes consumers to distrust the page. Thus the quality of information plays an important role in building consumer trust (see also Qalati et al., 2021).

In this study, Page Design did not affect consumer trust in online shopping (Table 5). This result is contrary to Jiang et al. (2016); Peng et al. (2017), which state that the appearance of the web will affect consumer trust in shopping. For example, the inability of letters, unbalanced composition of writing and images, overly striking letter colors, or unattractive page designs will make consumers lazy to visit web pages. The findings of this study are also not in line with the findings of Davidaviciene et al. (2019), which stated that web page design would influence consumer decisions in buying products online. The findings of the study, which are different from other studies, are likely related to the profile of respondents, who are classified as millennials (Table 2). This generation is very used to digital things, so the appearance on a page is not something they consider to trust the site. To digital that the display is not something, they need to consider.

In Table 6, Information Quality, Interaction Quality, and Page Design affect consumer trust by 29%. The value of this correlation is relatively moderate (Hair et al., 2017)
The moderate correlation value can be interpreted to mean that the influence of the three independent variables on consumer trust is not strong enough.

This research is in line with several previous studies stating that the quality of the web will form a positive perception that will create convenience in online shopping (Jiang et al., 2016; Peng et al., 2017; Silitonga et al., 2020; Tseng & Wei, 2020; Wei et al., 2019).

Meanwhile, the influence of Trust in purchasing decisions is only 4%, which shows a weak correlation Hair et al. (2017). This finding aligns with Poon & Albaum (2019), which state that trusts are not good predictors of consumer behaviour. But this finding is different from Ha et al. (2019), Amoako et al. (2019), and Svobodová & Rajchlová (2020), who state that Trust is a factor that determines a person's intention to shop online. The differences in the findings of this study can be explained, among others, related to the types of goods that are mostly purchased, which are fashion and electronics (Table 2). Generally, consumers already have their brand for goods like this; in other words, there is already trust in a certain brand. Thus Trust in the store is not the main thing they should consider in shopping online.

5. Conclusion

Quality of Information and Interaction are the determining factors in building consumer trust in online transactions. Although Quality of Information, Quality of interaction, and Page Design have a 29% influence on Trust, this suggests that other factors need to be studied as determinants in building Trust in consumers. The findings of this study suggest that Trust is not a determining factor in online purchasing decisions.

Based on these findings, business people, especially MSMEs starting to switch from conventional stores to online stores, must design store pages with easy navigation, quick responses, complete, clear, and accurate information. Also, marketplace providers must provide a platform that allows business people to put information clearly and navigation easy to understand.

The downsides of this study do not limit it to certain types of products that are likely to provide different behaviours in online shopping.

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The Influence of Strategic Leadership, Organizational Learning, And Organizational Culture on Organizational Performance Through Organizational Citizenship Behavior in Timor-Leste National Police Using Structural Equation Modeling

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Abstract
The National Police of Timor Leste (PNTL) is in charge of the country's internal security. As a result, the PNTL, as an institution, should prepare dependable human resources to ensure the stability of the state by applicable regulations. The study's findings using the structural equation modeling (SEM) approach show that the organizational performance model fits the GoF criteria. Strategic Leadership, Organizational Learning, Organizational Culture, Organizational Citizenship Behavior, and Organizational Performance are all convergently and discriminantly valid and reliable indicators. The ability to manage change, build cooperation and a sense of belonging, and be visionary is the dominant indicators of strategic leadership. Systems thinking, mental models, learning teams, and personal mastery are the most important indicators of organizational learning. Bureaucratic culture, innovative culture, and supportive culture are the dominant indicators of Organizational Culture. Willingness to Tolerate without Complaint and Involvement in Organizational Functions are the dominant indicators of Organizational Citizenship Behavior. Service Quality, Responsibility, Accountability, and Productivity are the most important indicators of Organizational Performance. Organizational Citizenship Behavior, Strategic Leadership, Organizational Learning, and Organizational Culture all have an impact on organizational performance. Furthermore, Strategic Leadership, Organizational Learning, and Organizational Culture all have an impact on organizational citizenship behavior.

Keywords: Organizational Citizenship Behavior, Organizational Culture, Organizational Learning Organizational Performance, SEM, Strategic Leadership

1. Introduction

Polcia Nacional de Timor-Leste (PNTL) is the National Police of Timor Leste, which is responsible for the internal security of Timor Leste under the PNTL for Defense and Security (Ministério da Defesa e Segurança), especially the Secretariat of State for Security Affairs (Secretaria de Estado da Segurança). Now the PNTL is under the control of the PNTL Dalam Negeri (Ministério do Interior). The PNTL was established on March 27, 2000, when Timor-Leste was still under UN administration (UNTAET), with the Commissioner being the Superintendent (Superintendent) (BBC Indonesia, 2016). Human beings are the main concern in the Police Institution as an organization because humans play a significant role in an organization. So humans must be managed as employees and not as machines. Therefore, the organization must manage employees as the main and most important factor for its success. According to Wirman & Alwi (2014), the role of humans is very important in the achievement of organizational goals in both private and public organizations, so elements of the workforce or staff need to be given proper attention by management or leaders in each agency. Therefore, employees are given proper motivation to work well.

The concepts of universal policing, the duties and functions of the PNTL listed in the RDTL constitution and laws, and the philosophy adopted by the PNTL all point to the need to organize and develop police institutions that can answer the need for security and public order. Therefore, as an institution, the PNTL should prepare reliable human resources to ensure the stability of the country by applicable regulations (Fundasaun, 2014). Developing good human resources and using them appropriately can help government agencies become dynamic and achieve maximum work performance. Work motivation can be increased to get civil servants into professional government agencies (Solikin, 2019). The human resource development in question is the withdrawal, training, and promotion of positions or ranks. The performance of an institution such as the police, and the role of the leader, is one of the keys to the successful delivery of public services. Therefore, to realize the services of the police institution to the community, the performance of each member is needed professionally. This means that leaders in police institutions must be able to encourage their members to work at high levels of performance (Simamora, 2004).

Buentello et al. (2008), in "Exploring the Casual Relationship between Organizational Citizenship Behavior, Total Quality Management, and Performance," found that there is no direct relationship between Organizational Citizenship Behavior and Organizational Performance; in this case, Organizational Citizenship Behavior is not directly reflected in company performance. Yan & Yan (2013), in Leadership, Organizational Citizenship Behavior, and Innovation in Small Business: An Empirical Study, state that the different dimensions used in Organizational Citizenship Behavior will have different effects on different aspects of organizational performance. Podsakoff & MacKenzie (2006) say it consists of helping other employees without coercion (altruism), the performance of role requirements that exceed minimum standards (conscientiousness), voluntary participation and support for organizational functions both professionally and socially (civic virtue), and abstinence from making issues that can interfere in the work environment (sportsmanship). According to Filstad & Karp (2020), leadership as a practice requires the importance of structural, cultural, and contextual conditions, as well as the emerging and dynamic nature of leadership practices. Serfontein and Hough (2011), in the Relationship Between Strategic Leadership, Operational Strategy, and Organizational Performance, argue that strategic leadership has a significant effect on operational excellence and performance in business organizations in South Africa.

The method related to latent variables is structural equation modeling (SEM) (Brown, 2006; Awalk, 2009; Raykov & Marcoulides, 2006; Hair et al., 2010; Bollen, 1989). Black (2015), researched the quality of effective leadership in higher education. Gusmao et al. (2018) researched the effect of OCB on performance. N. Rusdi et al. (2018), SEM on business performance. This study examines the organizational performance of the PNTL in the Government of Timor-Leste by examining the influence of organizational performance resulting from strategic leadership, organizational learning, and organizational culture, with organizational citizenship behavior as an intervening variable using structural equation modeling (SEM). This research is expected to increase optimal performance by the principles of completing work by time, quantity, quality, planning, and cooperation determined by the institution or department. More efforts are needed, including strategic leadership that can become the driving force that drives change in organizations, efforts to increase the ability of employees through organizational learning, and maintaining a conducive organizational culture, which in turn can improve the performance of PNTL

2. Method

The data in this study used primary data, namely, a survey at the Timor-Leste PNTL Office. Exogenous latent variables consist of strategic leadership, organizational learning, organizational culture, intervening latent variables, namely organizational citizenship behavior, and endogenous latent variables, namely organizational performance. The questionnaires distributed contained several statement items related to the research variables. There are 5 alternative answers given according to the Likert scale, namely: 1 = Strongly Disagree; 2 = Disagree; 3 = Disagree; 4 = Agree; 5 = Strongly Agree. The research conceptual framework is presented in Figure 1.

Structural equation modeling is used to thoroughly explain the relationship between variables in the study (Hair Jr. et al., 2010). There are six steps in conducting SEM analysis, starting with establishing individual constructs, determining measurement models, assessing the reliability and validity of measurement models, determining structural models, assessing the validity of structural models, and making conclusions and recommendations (Otok et al., 2021. The stages of the analysis carried out are the evaluation of the measurement model, the goodness of fit, and the evaluation of the structural model. Evaluation of the measurement model, namely convergent validity, is used to determine the correlation between each indicator and its latent variables (Hidayat, 2022). Convergent validity is declared valid if the value of the standardized loading factor is greater than 0.5, while discriminant validity is seen from the root value of the average variance extracted (AVE), which is greater than 0.5 (Lefrandt et al., 2022). Composite reliability (C-R) is an indicator block that measures a construct and can be evaluated by measuring internal consistency. Composite reliability can be accepted for its level of reliability if the coefficient of the latent variable is greater than 0.7. After testing the validity and reliability of each latent variable, several prerequisites that must be met in structural modeling are the normal multivariate assumption, the assumption that there is no multicollinearity or singularity, and the assumption that there are no outliers (Hair Jr. et al., 2010). The next stage is making conclusions based on the results of hypothesis testing on structural coefficients and model fit.

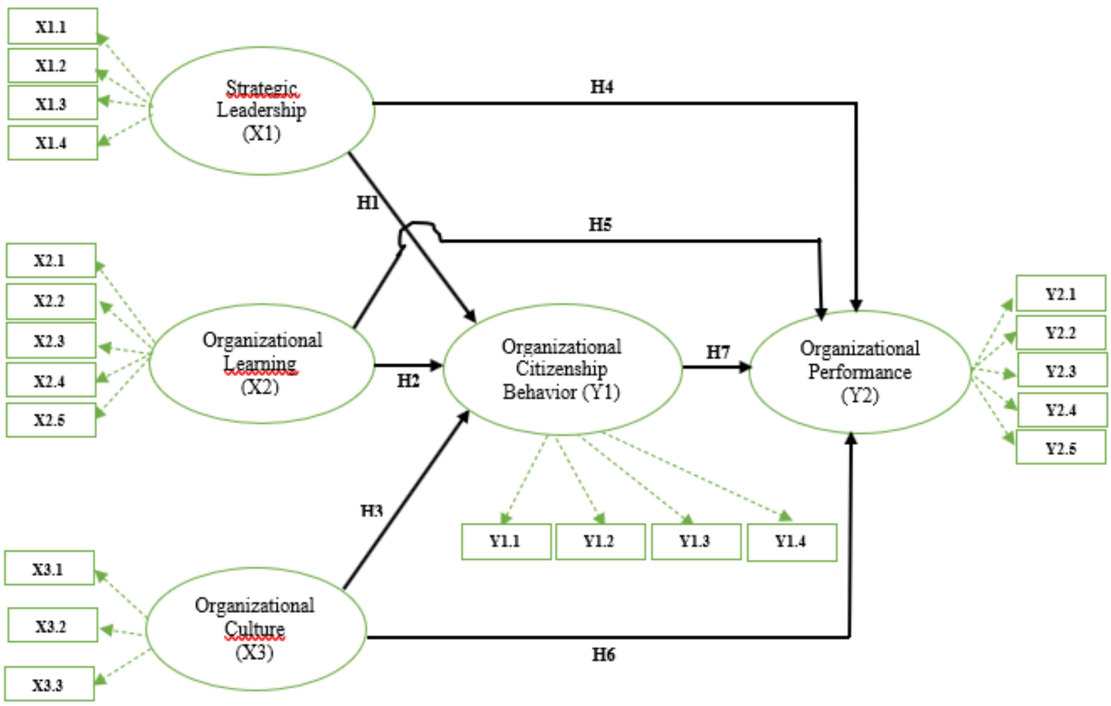

Figure 1: The impact of the strategic leadership conceptual model, organizational learning, and organizational culture on organizational performance with organizational citizenship Intervening variables in behavior

3. Results

The measurement model includes convergent validity test, discriminant validity and reliability test. In detail, the validity and reliability of each indicator and latent variable are presented in Table 1.

Table 1 shows that the latent variables Strategic Leadership (X1), Organizational Learning (X2), Organizational Culture (X3), Organizational Citizenship Behavior (Y1), and Organizational Performance (Y2) provide loading factors, AVE roots, and Composite Reliability (C-R) values above the cut-off value so that they can be said to be validly convergent, validly discriminant, and reliable. Likewise, for each indicator, all p-value variance errors are smaller than 0.05, so it can be said that all indicators and latent variables are reliable. Strategic Leadership (X1) is formed by the indicators of the ability to manage change (X1.2) (0.933), the ability to build cooperation and a sense of belonging (X1.3) (0.887), visionary thinking (X1.1) (0.786), and the ability to think strategically (X1.4) (0.635). Organizational learning (X2) is formed by the indicators system thinking (X2.1) (0.912), mental modeling (X2.2) (0.912), learning team (X2.4) (0.910), personal mastery (X2.3) (0.898ional Performance (Y2) provide loading factors, AVE roots, and Composite Reliability (C-R) values above the cut-off value so that they can be said to be validly convergent, validly discriminant, and reliable.

Likewise, for each indicator, all p-value variance errors are smaller than 0.05, so it can be said that all indicators and latent variables are reliable. Strategic Leadership (X1) is formed by the indicators of the ability to manage change (X1.2) (0.933), the ability to build cooperation and a sense of belonging (X1.3) (0.887), visionary thinking (X1.1) (0.786), and the ability to think strategically (X1.4) (0.635). Organizational learning (X2) is formed by the indicators system thinking (X2.1) (0.912), mental modeling (X2.2) (0.912), learning team (X2.4) (0.910), personal mastery (X2.3) (0.898), and shared vision (X2.5) (0.854). Organizational culture (X3) is formed by indicators of bureaucratic culture (X3.3) (0.950), innovative culture (X3.1) (0.922), and supportive culture (X3.2) (0.915). Organizational Citizenship Behavior (Y1) is formed by the indicators Willingness to Tolerate without Complaint (Y1.3) (0.977), Involvement in Organizational Functions (Y1.4) (0.977), Behavior Helping Colleagues (Y1.1) (0.853), and Behavior Complying with Work Rules and Procedures (Y1.2) (0.839). Organizational Performance (Y2) is formed by the indicators of Service Quality (Y2.2) (0.922), Responsibility (Y2.4) (0.921), Accountability (Y2.5) (0.921), Productivity (Y2.1) (0.913), and Responsiveness (Y2.3) (0.864).

Table 1: Testing the validity and reliability of research variables

Latent Variable	Indicator	p variance error	Loading (λ)	λ^2	$1 - \lambda^2$	C-R (AVE) [Root AVE]
Strategic Leadership (X1)	Visionary (X1.1)	0.000	0.786	0.618	0.382	0.888 (0.670) [0.818]
	Ability to manage change (X1.2)	0.000	0.933	0.870	0.130	
	Ability to build cooperation and a sense of belonging (X1.3)	0.000	0.887	0.787	0.213	
	Ability to think strategically (X1.4)	0.000	0.635	0.403	0.597	
Organizational Learning (X2)	Systems thinking (X2.1)	0.000	0.912	0.832	0.168	0.954 (0.805) [0.897]
	Mental Models (X2.2)	0.000	0.912	0.832	0.168	
	Personal mastery (X2.3)	0.000	0.898	0.806	0.194	
	Learning Team (X2.4)	0.000	0.910	0.828	0.172	
	Shared vision (X2.5)	0.000	0.854	0.729	0.271	
Organizational Culture (X3)	Innovative Culture (X3.1)	0.000	0.922	0.850	0.150	0.950 (0.863) [0.929]
	Supportive Culture (X3.2)	0.000	0.915	0.837	0.163	
	Bureaucratic culture (X3.3)	0.000	0.950	0.902	0.098	
Organizational Citizenship Behavior (Y1)	Behavior Helping Colleagues (Y1.1)	0.000	0.853	0.728	0.272	0.953 (0.835) [0.914]
	Behavior Complying with Work Rules and Procedures (Y1.2)	0.000	0.839	0.704	0.296	
	Willingness to Tolerate without Complaint (Y1.3)	0.001	0.977	0.955	0.045	

	Involvement in Organizational Functions (Y1.4)	0.002	0.977	0.955	0.045	
	Productivity (Y2.1)	0.000	0.913	0.834	0.166	
Organizational	Quality of service (Y2.2)	0.000	0.922	0.850	0.150	0.959
Performance	Responsiveness (Y2.3)	0.000	0.864	0.746	0.254	(0.825)
(Y2)	Responsibility (Y2.4)	0.000	0.921	0.848	0.152	[0.908]
	Accountability (Y2.5)	0.000	0.921	0.848	0.152	

After testing the validity and reliability of each latent variable, several prerequisites that must be met in structural modeling are the normal multivariate assumption, the assumption that there are no multicollinearity or singularity, and outliers. The results of the data normality test on all research variables give a multivariate critical ratio value of 1.710, and this value lies beyond -1.96 and 1.96, so it can be said that the data is normally distributed multivariate. Singularity can be seen in the determinant of the covariance matrix. The results of the study provide a determinant value of the sample covariance matrix of 0.107. This value is not close to zero, so it can be said that there is no singularity problem in the data being analyzed. Multicollinearity can be seen through the correlation between exogenous latent variables. The results of the study provide a p-value for each exogenous latent variable, namely: (X1 with X2 of 0.703), (X2 with X3 of 0.737), and (X1 with X3 of 0.704). This value is greater than a = 0.05, so it can be said that there is no multicollinearity problem in the data being analyzed. Outliers are observations that appear with extreme values in a univariate or multivariate manner. Outlier test results in this study are presented at Mahalanobis distance or Mahalanobis d-squared. The Mahalanobis value that is greater than the Chi-square table, or the p1 value of 0.001, is said to be an outlier observation. There were three outliers in this study, but because they accounted for less than 5% of the observations, it could be said that there were no outliers.

Furthermore, the form of the Organizational Performance model path diagram is presented as follows:

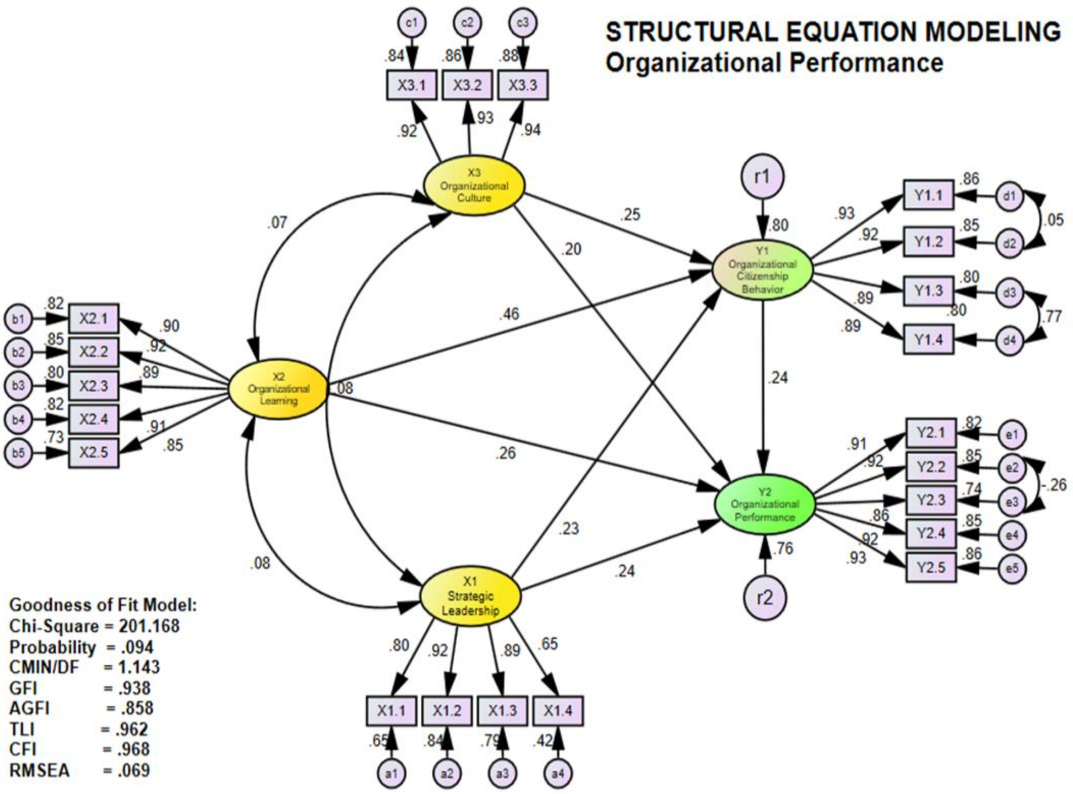

Figure 2: Strategic Leadership, Organizational Learning, and Organizational Culture Relationship Model to Organizational Performance with Organizational Citizenship Intervening variables in behavior

The complete results of testing the measurement model with the AMOS program can be seen in the following table:

Table 2: Results of Strategic Leadership, Organizational Learning, and Organizational Culture Testing Models on Organizational Performance with Organizational Citizenship Behavior of intervening variables

Goodness of Fit (GoF)	Cut–Off value	The calculation results	Infromation
Chi – Square	Expected to be small	201.168	$\chi2$ with df = 176 is 207.955 Good
Significance Probability	≥ 0,05	0.094	Good
RMSEA	≤ 0,08	0.069	Good
GFI	≥ 0,90	0.938	Good
AGFI	≥ 0,90	0.858	Marginal
CMIN/DF	≤ 2,00	1.143	Good
TLI	≥ 0,90	0.962	Good
CFI	≥ 0,90	0.968	Good

From the appropriate model, it can be interpreted for each path coefficient through the following structural equation:

$$Y_1 = 0.231X_1 + 0.463X_2 + 0.250X_3 \quad (1)$$

$$Y_2 = 0.239X_1 + 0.259X_2 + 0.200X_3 + 0.236Y_1 \quad (2)$$

with,

X_1 : Strategic Leadership
X_2 : Organizational Learning
X_3 : Organizational Culture
Y_1 : Organizational Citizenship Behavior
Y_2 : Organizational Performance

The path coefficient test in Figure 2 and the above equations are presented in detail in the following table:

Table 3: Results of Pathway Coefficient Testing of Strategic Leadership, Organizational Learning, and Organizational Culture Models on Organizational Performance with Organizational Citizenship Behavior intervening variables

Variables	**Coefficient**	**C.R.**	**Prob.**	**Information**
Strategic Leadership (X1)→ Organizational Citizenship Behavior (Y1)	0.231	2.259	0.024	Significant
Organizational Learning (X2)→ Organizational Citizenship Behavior (Y1)	0.463	4.311	0.000	Significant
Organizational Culture (X3)→ Organizational Citizenship Behavior (Y1)	0.250	2.700	0.007	Significant
Strategic Leadership (X1)→ Organizational Performance (Y2)	0.239	2.257	0.024	Significant
Organizational Learning (X2)→ Organizational Performance (Y2)	0.259	2.168	0.030	Significant
Organizational Culture (X3)→ Organizational Performance (Y2)	0.200	2.076	0.038	Significant
Organizational Citizenship Behavior (Y1) → Organizational Performance (Y2)	0.236	2.072	0.038	Significant

Based on Table 3, the interpretation of each path coefficient is as follows:

a. *The Influence of Strategic Leadership (X1) on Organizational Citizenship Behavior (Y1)*

Strategic leadership (X1) has a positive and significant effect on organizational citizenship behavior (Y1). This can be seen from the path coefficient, which has a positive sign of 0.231 with a C.R. equal to 2.259 and obtained a significance probability (p) of 0.024, which is smaller than the significance level (), which is determined at 0.05. Thus, strategic leadership (X1) has a direct effect on organizational citizenship behavior (Y1) of 0.231, which means that every time there is an increase in strategic leadership (X1), it will increase organizational citizenship behavior (Y1). This is by Sugiharjo (2020), Obiwuru et al. (2011), Khan et al. (2013), and Bagyo (2013), which state that effective leadership contributions to employee commitment and high employee citizenship behavior are influential factors in the success of OCB.

b. The Influence of Organizational Learning (X2) on Organizational Citizenship Behavior (Y1)

Organizational learning (X2) has a positive and significant effect on organizational citizenship behavior (Y1). This can be seen from the path coefficient, which has a positive sign of 0.463 with a C.R. equal to 4,311 and obtained a significance probability (p) of 0.000, which is smaller than the significance level (), which was determined at 0.05. Thus, organizational learning (X2) has a direct effect on organizational citizenship behavior (Y1) of 0.463, which means that every time there is an increase in organizational learning (X2), it will increase organizational citizenship behavior (Y1). This is to the research of Somech and Drach-Zahavy (2004), which states that organizational learning has a positive relationship with OCB that benefits the organization as a whole, and certain individuals.

c. The Influence of Organizational Culture (X3) on Organizational Citizenship Behavior (Y1)

Organizational culture (X3) has a positive and significant effect on organizational citizenship behavior (Y1). This can be seen from the path coefficient, which has a positive sign of 0.250 with a C.R. of 2,700 and a significance probability (p) of 0.007, which is smaller than the significance level (), which is determined at 0.05. Thus, organizational culture (X3) has a direct effect on organizational citizenship behavior (Y1) of 0.250, which means that every time there is an increase in organizational culture (X3), it will increase organizational citizenship behavior (Y1). This is in line with research conducted by Gusmau et al. (2018) and Guo et al. (2021), which state that organizational culture has a positive influence on organizational citizenship behavior and its indicators.

d. The Influence of Strategic Leadership (X1) on Organizational Performance (Y2)

Strategic leadership (X1) has a positive and significant effect on organizational performance (Y2). This can be seen from the path coefficient, which is positive at 0.239 with a C.R. equal to 2,259, and the obtained significance probability (p) of 0.024, which is smaller than the significance level (), which was determined at 0.05. Thus, strategic leadership (X1) has a direct effect on organizational performance (Y2) of 0.239, which means that every time there is an increase in strategic leadership (X1), it will increase organizational performance (Y2). This is in line with research conducted by Serfontein & Hought (2011) and Pazireh et al. (2014), which state that strategic leadership can have an effect on organizational performance through understanding work and environmental conditions and can build interaction with employees.

e. The Influence of Organizational Learning (X2) on Organizational Performance (Y2)

Organizational learning (X2) has a positive and significant effect on organizational performance (Y2). This can be seen from the path coefficient, which is positive at 0.259 with a C.R. of 2.168 and obtained a significance probability (p) of 0.030, which is smaller than the significance level (), which was determined at 0.05. Thus, organizational learning (X2) has a direct effect on organizational performance (Y2) of 0.259, which means that every time there is an increase in organizational learning (X2), it will increase organizational performance (Y2). This is in line with the results of research by Real et al. (2006), which states that organizational learning influences organizational performance.

f. The Influence of Organizational Culture (X3) on Organizational Performance (Y2)

Organizational culture (X3) has a positive and significant effect on organizational performance (Y2). This can be seen from the path coefficient, which has a positive sign of 0.200 with a C.R. of 2.076 and a significance probability (p) of 0.038, which is smaller than the significance level (), which is determined at 0.05. Thus, organizational culture (X3) has a direct effect on organizational performance (Y2) of 0.200, which means that every time there is an increase in organizational culture (X3), it will increase organizational performance (Y2). This is in line with the results of Darsana's research (2013), which states that organizational work culture influences performance.

g. The Influence of Organizational Citizenship Behavior (Y1) on Organizational Performance (Y2)

Organizational citizenship behavior (Y1) has a positive and significant effect on organizational performance (Y2). This can be seen from the path coefficient, which has a positive sign of 0.236 with a C.R. equal to 2.072 and obtained a significance probability (p) of 0.038, which is smaller than the significance level (), which was determined at 0.05. Thus, organizational citizenship behavior (Y1) has a direct effect on organizational performance (Y2) of 0.236, which means that every time there is an increase in organizational citizenship behavior (Y1), it will increase organizational performance (Y2). The results of this study are in line with research conducted by Kolade et al. (2014), Wang (2014), and Fitriastuti (2013), which states that organizational members are the most important resource in the organization.

4. Conclusion

Based on data analysis, results, and discussion, this research can be concluded as follows:

a. The organizational performance model with organizational citizenship behavior as an intervening variable based on the Timor Leste PNTL is a fit model based on the goodness of fit (GoF) criteria.
b. The dominant indicators of strategic leadership are the ability to manage change, the ability to build cooperation and a sense of belonging, and the ability to be visionary.
c. The dominant indicators in organizational learning are systems thinking, mental models, learning teams, and personal mastery.
d. The dominant indicators of organizational culture are bureaucratic culture, innovative culture, and supportive culture.
e. Dominant indicators of organizational citizenship behavior are willing to tolerate without complaining and involvement in organizational functions.
f. The dominant indicators of organizational performance are service quality, responsibility, accountability, and productivity.
g. Organizational performance is influenced by organizational citizenship behavior, strategic leadership, organizational learning, and organizational culture. Furthermore, organizational citizenship behavior is influenced by strategic leadership, organizational learning, and organizational culture.

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The Effect of Audit Report Lag, Leverage Ratio and Audit Tenure On Going Concern Audit Opinion: Empirical Study of Go Public Companies Listed on the Indonesia Stock Exchange in 2018-2020

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Abstract
Purpose: The aim of this research is to determine the audit report lag, leverage ratio and audit tenure on going-concern and appropriate audit opinions on go public companies listed on the Indonesia Stock Exchange (IDX). Design/methodology/approach: Method of research used in this research is the exposure of facts on testing the application of audit report lag, audit tenure and leverage ratio on going concern audit opinion. Findings: The outcome of the research indicates that audit report lag and audit tenure have a significant positive effect on going concern audit opinion, but the leverage ratio has insignificant effect on going concern audit opinion. Practical implications: The consequences of these going concern audit opinion make distrust of stakeholders, so the going concern audit opinion needs to be minimized in order for all companies to be trusted in financial statement reports. Originality/value: Empirical Study on all go public companies listed on the Indonesia Stock Exchange in 2018-2020.

Keywords: Audit Report Lag, Leverage Ratio, Audit Tenure, Audit Opinion - Going Concern

1. Introduction

Financial statements are one of the data and information for owners to see management's performance financially, but owners need an independent party in evaluating the data presented in financial reports. This independent party is what we know as an independent auditor. The independent auditor provides an independent opinion on the company's financial statements to conclude whether there is a material uncertainty about the entity's ability to continue as a going concern and also evaluate whether there is substantial doubt about the entity's ability to continue as a going concern within an appropriate period of time. The auditor acts as a mediator between management and owners and helps provide reasonable assurance on the financial statements that have been prepared by management.

Much research has been carried out, but the results of the research are very diverse. The results of the research conducted by Putri and Yuyetta (2021) audit report lag have a positive effect on going concern audit opinions, while the findings of research conducted by Mariana et al. (2018) audit report lag have a negative effect on going concern audit opinions. Research conducted by Simanjuntak et al. (2020) leverage ratio has a positive effect on going concern audit opinion, conversely the findings of research by Nugroho et al. (2018) leverage ratio variable has a negative effect on going concern audit opinion. Research conducted by Hasanuddin and Anwar (2019) tenure audits have a positive effect on acceptance of going concern audit opinions, but in the findings of research conducted by Oktaviani and Challen (2020) tenure audit variables have a negative effect on going concern audit opinions.

Going concern audit opinions is interesting to study because previous studies until now have used internal factor and external factor of the corporate. In this research we used audit report lag, leverage ratio, audit tenure as variable independent. Based on the phenomenon in table 1 audit opinions with going concern indicate that there are several problems in financial performance in public companies on the Indonesian Stock Exchange.

Table 1: Companies that have going concern audit opinions

NO	CODE	CORPORATION	AUDIT OPINION - GOING		
			2020	2019	2018
1	BTEL	PT Bakrie Telecom Tbk	√	√	√
2	DWGL	PT Dwi Guna Laksana Tbk	√	√	√
3	DSFI	PT Dharma Samudera Fishing Ind. Tbk	√	√	√
4	ENRG	PT Energi Mega Persada Tbk	√	√	√
5	ESSA	PT Surya Esa Perkasa Tbk	√	√	√
6	GLOB	PT Global Teleshop Tbk	√	√	√
7	IKAI	PT Intikeramik Alamasri Industri Tbk	√	√	√
8	INTA	PT Intraco Penta Tbk	√	√	√
9	LMPI	PT Langgeng Makmur Industri Tbk	√	√	√
10	MITI	PT Mitra Investindo Tbk	√	√	√
11	MTFN	PT Capitalinc Investment Tbk	√	√	√
12	POLY	PT Asia Pacific Fibers Tbk	√	√	√
13	PSKT	PT Red Planet Indonesia Tbk	√	√	√
14	SATU	PT Kota Satu Properti Tbk	√	√	√
15	SSTM	PT Sunson Textile Manufacturer Tbk	√	√	√
16	SULI	PT SLJ Global Tbk	√	√	√
17	TRIO	PT Trikomsel Oke Tbk	√	√	√

Source: www.idx.co.id, reprocessed

Based on the background of the problem in the previous paragraph, the researcher is interested in conducting research on the the factors that influence the going concern audit opinion in public companies in Indonesia in 2018 – 2020.

Research questions are as follows: a.) Does the audit report lag have an influence on the going concern audit opinion? b.) Does the leverage ratio have an influence on the going concern audit opinion? and c.) Does the tenure audit have an influence on the going concern audit opinion?

Research objectives to find out: a.) The effect of audit report lag on going concern audit opinion in companies listed on the Indonesia Stock Exchange, b) The Effect of leverage ratio on going concern audit opinion in companies listed on the Indonesia Stock Exchange, c) The Effect of audits tenure on going concern audit opinion in companies listed on the Indonesia Stock Exchange.

2. Theoretical Framework and Hypothesis Development

2.1. Theoretical Framework

2.1.1. Agency Theory

According to Agency Theory, the company is seen as a contract between management (as agent) and owner (as principal). Based on this theory, the original human characteristics will prioritize their own interests, management does not always act in the best interests of the owner, so management will tend to carry out profit engineering (earnings management). The misalignment of the agent's and principal's goals is a cost of the agency relationship. The sacrifices that arise from the agency relationship are called agency costs. (Jensen & Meckling,1976)

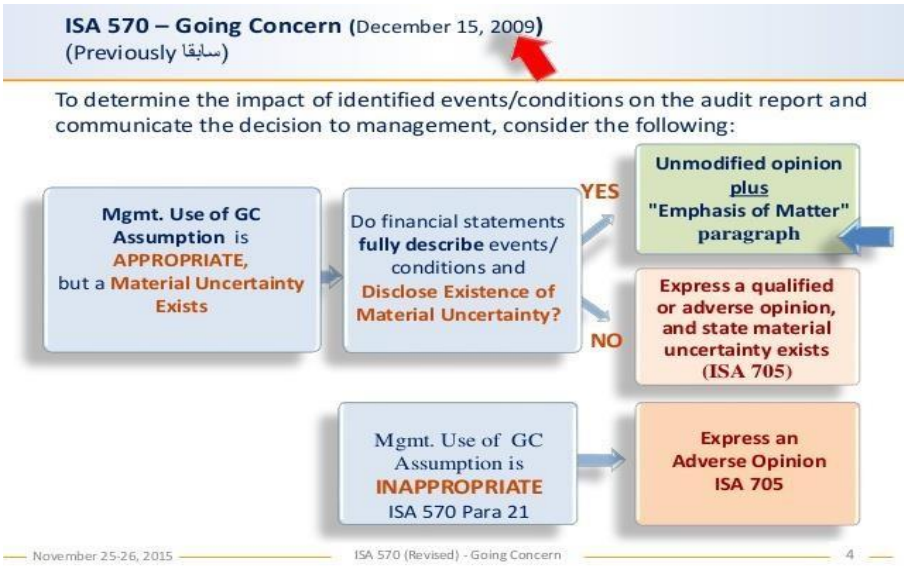
Agency relationships also cause information asymmetry. Information asymmetry that occurs between the owner (principal) and management will encourage earnings management. Management will manipulate the information to be presented to the owner because of conflicts of interest and information asymmetry. There are two types of information asymmetry, adverse selection and moral hazard (Scott, 2003). Adverse selection, management has more information than the owner about the company's prospects. Moral hazard, the owner does not know the activities carried out by the management.

2.1.2. Going Concern Audit Opinion

Going concern audit opinion is a modified audit opinion given by the auditor when there is doubt about the company's going concern ability or there is significant uncertainty over the company's viability in carrying out its operations (SPAP, 2011).

Auditing Standard (SA) 570 (IAPI, 2013:3) states that the auditor is responsible for obtaining sufficient and appropriate audit evidence regarding the appropriate use of the going concern assumption by management in preparing and presenting financial statements, and for concluding whether there is a material uncertainty about entity's ability to continue as a going concern. The auditor should consider whether there are events or conditions that are indicated to cast significant doubt on the entity's ability to continue as a going concern in the future. Whether these conditions or events are significant or not will depend on the circumstances, and some of them may only become significant if viewed together with other conditions or events.

Based on Auditing Standard (SA) 570 (IAPI 2013, SA 570: A2). The following are examples of events or conditions that may cast significant doubt about the going concern assumption: (1). Financial - for example, a net liability or net current liability position, a loan with a fixed repayment term nearing its maturity date without realistic prospects of renewal or redemption; or excessive reliance on short-term loans to fund long-term assets, negative operating cash flow, as indicated by historical or prospective financial reports, poor primary financial ratios, inability to repay creditors on due dates. (2). Operations - for example, management's intent to liquidate the entity or to cease operations, loss of key management without replacement, loss of a key market, key customer, franchise, license, or key supplier, labor difficulties, shortage of supplies of goods/materials, and the emergence of highly successful competitors, and (3). Others - for example, non-compliance with capital provisions or other statutory provisions, legal cases faced by the entity which, if successful, could result in claims against the entity that are unlikely to be fulfilled by the entity, changes in laws and regulations or government policies that are expected will have an adverse impact on the entity, and damage to assets caused by uninsured or underinsured natural disasters. Based on diagram below explained in detail ISA 570 revised.



2.1.3. Audit Report Lag

Audit Report Lag is the time span for completion of the financial statement audit as measured by the length of days needed to obtain the independent auditor's report from the closing date of the book to the date stated in the independent auditor's report (Dura and Nuryatno, 2015). (Wiguna, 2012) defines audit lag as the period of time in completing the audit until it is ready for publication

2.1.4. Leverage Ratio

Leverage is a ratio to measure a company's potential to settle all of its obligations (Utamiet et al. 2017). The performance of a company can be viewed through the leverage ratio, high leverage gives a signal that the company is on the verge of bankruptcy (Utami et al 2017). A company that has sufficient wealth or assets to finance all of its obligations or debts is referred to as a solvable company. But on the contrary, when a company does not have sufficient wealth or assets to pay its obligations or debts, then the company is an insovable company (Yuliyani and Erawati, 2017).

Based on the discussion above, so that leverage is the ratio used to measure how company assets are financed using debt originating from creditors and measures the ability of a company to fulfill all of its financial obligations if the company is to be liquidated.

The leverage ratio can be measured using the Debt to Equity Ratio (DER). The calculation of leverage uses the Debt to Equity Ratio scale with the following formula:

$$Debt\ to\ Equity\ Ratio\ (DER) = Total\ Debt/Total\ Equity\ x\ 100\%.$$

2.1.5. Audit Tenure

Audit tenure is the number of years in which the Public Accountant Firm conducts audit engagements with the same client. When a Public Accounting Firm has a long term relationship with its client, it encourages a better understanding of the client so that the auditor can be more sensitive with regard to the company's going concern issues.

Audit tenure is defined as the length of relationship or engagement between the auditor and his client as measured by the number of years (Arsianto and Rahardjo 2013). A long audit engagement will make the auditor lose his independence, so that the possibility of giving a going concern audit opinion will be difficult (Ulya 2012).

2.2. Hypothesis Development

2.2.1. Effect of Audit Report Lag on Going Concern Audit Opinion.

Research results by Widastri (2017) found that audit lag has a positive effect on going concern audit opinion. This research is reinforced by research by Imani et al (2017) which shows that audit lag has a positive effect on going concern audit opinion..
Hypothesis one: Audit Report Lag affects Going Concern Audit Opinion.

2.2.2. Effect of Leverage Ratio on Going Concern Audit Opinion.

Research by Aryantika and Rasmini's (2016), Pasaribu (2015) stated that leverage has a positive effect on going concern audit opinion. research by Aryantika and Rasmini (2016), Pasaribu (2015) the leverage ratio variable has a positive effect on going concern audit opinion. The greater the debt ratio of a company, the debt owned by a company will be even greater, so that the risk of failure of a company in paying its obligations or debts is higher. This makes the company more likely to get a going concern audit opinion.
Hypothesis two: Leverage Ratio affects Going Concern Audit Opinion

2.2.3. Effect of Audit Tenure on Going Concern Audit Opinion.

Research by Arsianto and Rahardjo's (2013) shows the results that Audit Tenure have a negative effect on going concern audit opinion. Research by Damanhuri and Putra (2020) Audit Tenure has a negative effect on going concern audit opinion. Yanuariska and Ardiati (2018), Saputra and Kustina (2018), Widya (2017), Krissindiastuti and Rasmini (2016), Nursasi and Maria (2015) show that Audit Tenure have a negative effect on going concern audit opinion..
Hypothesis three: Audit Tenure affects Going Concern Audit Opinion

3. Method

The research population is all companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2020. The research sample consists of 44 companies listed with three years of observation. Total sample of this study amounted to 108. Data collection techniques using secondary data obtained from the sample company websites and audited financial reports that have been published on the IDX website and then processed or calculated to obtain research variables determined according to the background of the research problem, research questions, and research objectives to be realized. The data collected from secondary data is tabulated, then it will be processed using *Eviews* 10.0.

Table 2: Operational Variable Definition

Variable	Indicator	Measurement
Audit report lag (Liwe et.al 2018)	ARL=Audit report date – FS date	Nominal
Leverage ratio (Zhou et al.,2018).	Debt to Equity Ratio	Ratio
Audit tenure. (Arsianto and Rahardjo 2013)	the length of the KAP relationship with the client company	Interval
going concern audit opinion ((SA 570 R - 2012)	1 = for auditees who receive a going concern audit opinion (GCAO). 0 = for auditees who receive non-going concern audit opinions (NGCAO).	Nominal

The statistical tool used for evaluating and interpreting the secondary data into meaningful information for resulting analysis is *Eviews 10*.0. Panel Data Estimation Method: the panel data regression analysis method aims to obtain an overview of the relationship between one variable and another. Panel data uses many companies and takes several years. There are three models used for panel data regression: common effect, fixed effect, and random effect.

Panel Data Regression Model Selection, Chow test testing to select the best approach between the Common Effect Model (CEM) and Fixed Effect Model (FEM) approaches that are most appropriate to use in estimating panel data. The Hausman test is used to determine whether a panel data model is better off using the Fixed Effect Model (FEM) or Random Effect Model (REM). The Lagrange Multiplier (LM) test is used to compare which model is the most appropriate between the Common Effect Model (CEM) or the Random Effect Model (REM).

The regression model developed to test the hypotheses that have been formulated in this study are:

$$\mathbf{OAGC = \alpha + \beta_1 ARL + \beta_2 LEV + \beta_3 AT + \epsilon}$$

4. Findings and Discussion

Table 3: Descriptive Statistics Results

	OAGC	C	ARL	LEV	AT
Median	1.00	1.00	87.00	1.00	2.00
Maximum	1.00	1.00	272.00	57.15	3.00
Minimum	0.00	1.00	11.00	-39.32	1.00
Std. Dev.	0.40	0.00	38.14	10.31	0.78

Source: Eviews versi 10.0

The going concern audit opinion variable has an average value of 0.79, a median value of 1.00 and a standard deviation of 0.40. The maximum value is 1.00 and the minimum value is 0.00.

The audit report lag variable has an average value of 97.91, a median value of 87.00 and a standard deviation of 38.14. The maximum value of 272.00 is owned by PT Trikomsel Oke Tbk in 2019. The minimum value is 11.00 owned by PT Dwi Guna Laksana Tbk in 2018.

The leverage variable has an average value of 2.25, a median value of 1.00 and a standard deviation of 10.31. The maximum value of 57.15 is owned by PT Capitalinc Investment Tbk in 2019. The minimum value is -39.32 owned by PT Capitalinc Investment Tbk in 2020.

The tenure audit variable has an average value of 1.77, a median value of 2.00 and a standard deviation of 0.78. The maximum value is 3.00. Minimum value 1.00.

4.1. Hypothesis testing

Based on the results of the Chow-test showed that the Fixed Effect model was selected. On the other hand, the results of the Hausman model test show that the Fixed Effect model is selected. These results prove that the selected panel model is Fixed Effect.

Table 4: Logistic Regression Results

Dependent Variable: OAGC
Method: ML - Binary Logit (Newton-Raphson / Marquardt steps)
Sample: 1 132
Included observations: 132

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	2.98	1.03	2.88	0.003
ARL	0.02	0.00	2.69	0.007
LEV	-0.01	0.02	-0.37	0.707
AT	1.28	0.39	3.26	0.001

Source: Eviews 10.0

Based on the results of the panel data regression test in table 5, the panel data regression equation is obtained as follows:

OAGC = 2.98 + 0.02 ARL - 0.01 LEV+ 1.28 AT + ϵ

Based on table 4 that audit report lag has a significant positive effect on going concern audit opinion. The results of the t test show that the audit report lag variable obtains a z-statistic value greater than tt able (2.69 > 1.98) and a probability smaller than the significance value (0.0070 <0.05), so it can be concluded that hypothesis one is accepted or there is significant effect between variable audit report lag with going concern audit opinion.

Based on table table 4 that leverage has no significant effect on going concern audit opinion. The results of the t test show that leverage obtains a z statistical value that is smaller than t table (-0.37 <1.98) and the probability is greater than the significance value (0.7078 > 0.05), so it can be concluded that hypothesis two is rejected or the variable leverage has no effect on going concern audit opinion

Based on table 4, that audit tenure has a significant positive effect on going concern audit opinion. The results of the t test show that the audit report lag variable obtains a z statistic value that is greater than t table (3.26 > 1.98) and the probability is smaller than the significance value (0.0011 <0.05), so it can be concluded that hypothesis three is accepted or there is a significant effect between tenure audit variables and going concern audit opinion.

Table 5: Determination Coefficient Test Results (Mc Fadden R Square)

McFadden R-squared	0.689	Mean dependent var	0.795
S.D. dependent var	0.704	S.E. of regression	0.365

Source: Eviews 10.0

Based on table 5 states that the Adjusted R-squared value is 0.68, meaning that the magnitude of the coefficient of determination in this study is 0.68. This means that the independent variable is able to explain the dependent variable only 68.0% and the remaining 42.0% is influenced by other independent variables. not investigated in this study.

5. Discussion

5.1. The Effect of Audit Report Lag on Going Concern Audit Opinion.

The results show that audit report lag has a significant positive effect on going concern audit opinion. This indicates that the longer the audit report lag, the going concern audit opinion will increase. The results of this study are in line with the results of research by Utama & Badera (2016) which revealed that audit report lag has a significant positive effect on acceptance of going concern audit opinions..

5.2. The Effext of Leverage Ratio on Going Concern Audit Opinion.

The results of the analysis state that the variable leverage has a negative effect on going concern audit opinion insignificant. This indicates that the greater the leverage ratio, the less likely it is to receive a going concern audit opinion. The results support the statements made from previous research by Kusumaningrum and Zulaikha (2019) which state that leverage has no significant effect on going concern audit opinions.

5.3. The Effect of Audit Tenure on Going Concern Audit Opinion.

The results of the analysis state that tenure audit has a significant positive effect on going concern audit opinion. This indicates that the longer the audit tenure, the go-in-concern audit opinion will increase. Research conducted by Syahputra and Yahya (2017) has research results that are in line with stating that tenure audits have a significant positive effect on going concern audit opinion.

6. Conclusion

The results show that Audit report lag has a significant positive effect on going concern audit opinion. Leverage has no effect on going concern audit opinion. The tenure audit has a significant positive effect on the going concern audit opinion.

The limitations that exist in this study are as follows: The research sample used was only 44 companies so that the data obtained was limited. The research period used in this study is only 3 years, namely 2018-2020. The leverage ratio variable has no significant effect, this is different from previous researchers who stated leverage had a significant positive effect on going concern audit opinion.

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A Review of Knowledge Management Orientation: Revisiting the Paradigm

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Abstract
This review asserts that knowledge management orientation is a vital strategic orientation for organizations seeking sustained competitiveness in the current business environment. The review emphasizes the importance of knowledge leadership as the primary driver of an organization's KMO strategy and the significance of identifying knowledge-based capabilities to enhance organizational competitiveness. Through the synthesis of relevant literature, the review highlights the essential role of knowledge management orientation in transforming knowledge-based capabilities into a competitive advantage. The review concludes by constructing a comprehensive KMO model that incorporates all the relevant variables, calling for further empirical research to test the model's efficacy and enhance its reliability and validity. Ultimately, the review highlights the importance of knowledge management orientation in driving organizational competitiveness .

Keywords: Knowledge Management Orientation, Knowledge Leadership, Knowledge-based Capabilities and Competitiveness.

1. Introduction

The unpredictability of the business environment has compelled organizations to seek long-term competitiveness strategies. Consequently, the subject of strategic orientation has garnered increasing attention among academicians and practitioners in the realm of strategic management. According to Hakala (2011), strategic orientation encompasses strategic management concepts that influence and guide an organization's endeavors, with the aim of ensuring sustainability and superior outcomes. In a similar vein, Gatignon and Xuereb, (1997), contend that strategic orientation is the primary approach adopted by firms towards certain behaviors aimed at gaining a competitive edge. In essence, strategic orientation reflects the managerial mindset towards competition and environmental factors. A review of previous research literature indicates that scholars have focused on four primary types of organizational strategic orientations as essential strategies for organizational survival: technology orientation, market orientation, entrepreneurial orientation, and learning orientation. These orientations are not mutually exclusive and may be concurrently employed (Hakala, 2011).

Strategic management literature has consistently emphasized the importance of knowledge management for organizational survival and growth. Esteemed scholars, such as Grant (1996) and Nonaka (2007), have highlighted the significance of knowledge as a critical resource. Additionally, a significant body of empirical research has shown a positive relationship between knowledge management and competitive advantage, as evidenced by studies conducted by scholars such as Mahdi et al. (2019) and Teixeira et al., (2018), among others. The main objective of this review is to propose knowledge management orientation as another essential strategic orientation that requires comprehensive exploration, building on the idea initially suggested by Wang et al. (2008). The review aims to emphasize the critical role that knowledge management plays in promoting organizational capabilities, and how it can be leveraged to achieve competitiveness in the business environment.
The proposed KMO view differs from other schools of thought by emphasizing knowledge management as the primary driver in the building of organizational long-term goals. According to Wang, Ahmed, & Rafiq (2008), knowledge management orientation (KMO) refers to the propensity in which daily organization activities are tailored towards knowledge collection and utilization. Knowledge management-oriented organizations are characterized by the constant adoption of knowledge management behavior and methods (Ghahroudi, Hoshino, & Ahmadpoury, 2019). Wang et al. (2008) further outline knowledge management orientation as a construct consisting of four main indicators: organizational Memory, knowledge sharing, knowledge absorption, and knowledge receptivity. Vij and Sharma (2004) perceive KMO as the merger of information technology, innovation, learning, and knowledge sharing. Hence, it is imperative that a comprehensive exploration of the existing literature be conducted to identify any crucial characteristics that may be integral to the formation of the knowledge management orientation (KMO) construct. Such an examination would enable researchers to identify key factors that contribute to the development of an efficacious KMO and its impact on organizational capabilities. The insights gained from this exercise can inform the design and implementation of effective KMO strategies, which would enable firms to attain a competitive advantage in the dynamic and complex business environment.

Over a substantial period, the four strategic orientations that were previously mentioned, namely entrepreneurial orientation (EO), learning orientation (LO), market orientation (MO), and technological orientation (TO), have significantly dominated the scholarly literature. These orientations have been subjected to extensive research and analysis, due to their fundamental role in shaping organizational strategies and outcomes. Entrepreneurial orientation requires that an organization's strategic decision-making process, managerial philosophies, and overall behavior align with certain entrepreneurship principles. The principles of entrepreneurial orientation are based on Miller's (1983) seminal work (Anderson et al., 2015). The learning orientation construct suggests that organizations that are aligned towards this strategy are more open-minded, flexible, and adaptable, and can respond to changes in their environment more effectively. These organizations tend to have a shared vision and a culture of continuous learning, which enables them to learn from their experiences and apply that learning to improve their performance. The work of Argyris, Senge, and Antonacopoulou has helped to deepen our understanding of the role that learning orientation plays in organizational performance.

Gummesson, (1991), observes that the concept of marketing orientation has a long history in literature, with the central idea being that the customer is pivotal to the success of a business. This perspective is reflected in a company's attitude towards the gathering, dissemination, and implementation of market intelligence to fulfil the needs of its consumers (Feng et al., 2019). Marketing orientation, therefore, involves actively promoting and supporting the collection and use of market intelligence to stay accustomed to the changing needs of customers. Technological orientation refers to an organization's proclivity towards technology, it is closely associated with innovation and product orientation. Organizations that are highly technologically oriented tend to focus on the production of new and advanced products, utilizing cutting-edge technology. These organizations place a greater emphasis on research and development activities. In contrast, organizations with a low technological orientation tend to prioritize conventional products and processes and may invest less in technology (Aloulou, 2019).

Organizations that embrace a knowledge management demonstrate a heightened awareness of the multifaceted factors that can exert a significant influence on their performance, ranging from technological shifts and competitive pressures to evolving institutional requirements and stakeholders' attitudes. By remaining cognizant of these crucial factors, companies can adopt a proactive and adaptable approach that enables them to achieve a competitive edge and enhance their overall performance. (Donate & Sánchez de Pablo, 2015). It is widely acknowledged that knowledge management plays a crucial role in the attainment of organizational success, however, there remains a dearth of research about the identification and integration of knowledge management orientation as a holistic strategic paradigm within organizations.

The knowledge-based view theory highlights the criticality of a firm's internal knowledge and intellectual capital as vital determinants of competitiveness (Grant, 1996). To fully realize the benefits of this theory, a company must adopt it as a comprehensive knowledge-based strategic orientation. This involves actively identifying and leveraging the company's knowledge assets, as well as investing in processes and systems that support the creation, dissemination, and application of knowledge throughout the organization. By adopting a knowledge-based perspective and integrating it into all aspects of strategic planning and decision-making, a firm can gain a competitive advantage by continuously improving its products, services, and processes through the effective use of its internal knowledge resources(Aydin & Dube, 2018a). However, Hajimohammadi et al., (2019), assert that Superior knowledge management, rather than a unique knowledge base, is often the key factor that enables some businesses to outperform their competitors. Therefore, firms must examine their knowledge and establish methods for further development and protection.

The current review is premised on the assumption that a systematic analysis of the relationship between knowledge management orientation and firm competitive advantage has not been comprehensively investigated. The paucity of interest in this topic may be attributed to several reasons. There is currently a lack of agreement on how to define and operationalize the concept of Knowledge Management Orientation (KMO). Multiple indicators have been used to measure KMO, employing various scales, which further compounds the issue. Additionally, the role and significance of other organizational factors such as knowledge-based capabilities and knowledge leadership have not been fully elucidated in the whole paradigm of knowledge management. Besides exploring the principles and aspects of the knowledge management concept, it is crucial to comprehend the potential moderating and mediating factors within and without the organization. In conclusion, although much of the literature on knowledge management stems from information science and technology studies rather than strategic management, it is vital to recognize knowledge as a critical strategic resource that should not be disregarded by scholars of strategic management. Hence, taking a strategic management perspective on knowledge management is imperative.

It is essential to provide an initial remark on the significance of knowledge leadership and knowledge-based factors, considering their critical role as variables in the KMO paradigm. These factors represent critical drivers of an organization's knowledge management approach, with a profound impact on its overall performance and competitive standing. A strategic focus on knowledge leadership and knowledge-based capabilities allows firms to develop a comprehensive KMO strategy. Leadership serves as the driving force that establishes the direction and vision for the organization, whereas capabilities represent the means to achieve these objectives. The goal of the review is to develop a framework that incorporates both knowledge leadership and knowledge-based capabilities. An organization's leadership is the process by which leaders influence others' attitudes, behaviors, and values toward organizational goals (O'Reilly et al., 2010). It is widely accepted that effective leadership is a key contributor to the success of an organization. In the context of knowledge management, leadership plays a particularly important role in facilitating the creation, sharing, and use of knowledge within the organization, this has led to the concept of knowledge leadership, which refers to the ability of leaders to promote and support knowledge management behaviors and practices within the organization (Boussenna & Elkharraz, 2021; Pellegrini et al., 2020; Ting et al., 2021). The current review appreciates the significant impact that leadership can have on organizational success, and thus believes that the potential moderating effect of knowledge leadership in the KMO paradigm is worthy of further investigation.

The knowledge-based theory suggests that when knowledge management processes are in line with organizational strategy, unique capabilities emerge. The distillation and identification of these unique capabilities have remained a subject of scholarly interrogation. The current review posits that the capabilities emanating from knowledge management processes are critical in building the pillars of organizational competitiveness. For this reason, the review seeks to unearth the possible immediate outcomes of knowledge management orientation attributes, thus identified as knowledge-based capabilities. Firms' competitiveness and performance are the outcomes of organizational-specific resources and capabilities (Barney, 1991; Teece et al., 1997; Wernerfelt, 1995).

O'Regan and Ghobadian, (2004), assert that organizational capabilities can either be unique or generic; unique capabilities are specific to organizations in a distinct competitive position, whereas generic capabilities are standard across organizations. The relationship between unique capabilities and competitiveness has attracted studies from different perspectives such as dynamic capabilities, organizational learning, and knowledge-based theory. The current competitive landscape, according to Kaur (2019), has shifted to knowledge-based competition, and organizational superiority lies not only in the possession of superior knowledge but also in leveraging it to develop superior knowledge-based capabilities and competencies.

The present review aims to address concerns related to theoretical ambiguity and impracticability by formulating a coherent framework that links the fundamental components of knowledge management orientation, knowledge-based capabilities, and competitive advantage. By synthesizing relevant literature on the knowledge-based view of the firm and various capabilities, the review seeks to underscore the significance of knowledge management activities in the transformation of knowledge-based capabilities into a source of competitive advantage. As such, the approach presented in this review will be denoted as knowledge management strategic orientation.

2. Problem Statement

Despite the abundance of literature on the impact of various strategic orientations on business performance, there has been a lack of focus on knowledge management orientation (KMO). While other orientations such as customer/marketing orientation, entrepreneurial orientation, learning orientation, and technological orientation have received extensive attention concerning organizational competitiveness, knowledge management orientation has largely been overlooked. This presents an opportunity for further investigation into the mechanics and ramifications of knowledge management orientation. Since the pioneering work on knowledge management orientation by Wang, Ahmed, and Rafiq, (2008), it has become apparent that KMO is a viable organizational strategy worthy of further investigation. Although the practical implications of knowledge management are significant, the existing literature is inconclusive and needs further refinement. This review suggests that knowledge management orientation should be further studied and interpreted as a strategic orientation typology.
The KMO framework aims to unite key components of knowledge management into a comprehensive and coherent agenda. However, the lack of research from strategic management experts on this topic is alarming. Despite significant academic attention given to knowledge management, its thorough examination as an organizational strategic orientation has been rare. Few studies have endeavored to expand on the concept, and empirical research is almost nonexistent.

The primary concern for many strategic management scholars is how to effectively integrate knowledge management into a comprehensive organizational strategy. There is a lack of clarity among researchers on how to incorporate previous frameworks of knowledge management parameters into a strategic orientation for the organization. This review aims to address this ambiguity by synthesizing multiple knowledge management-related narratives and building upon the hypotheses of previous scholars to create a unified strategic orientation centered on knowledge management. Previous research on knowledge management will serve as the foundation for the development of this proposed orientation.

Drucker, (1999), points out that knowledge and knowledge workers are the most valuable assets of an organization, and therefore, an organization's ability to exploit the intangible asset is more crucial than its ability to invest in the physical assets. However, Al Saifi, (2019), asserts that the knowledge asset is always in constant flux and requires a holistic understanding and elaborate systems for its management. According to Hitt, (1998), in the current economic age, businesses face a complex competitive landscape driven by technological revolution and globalization, knowledge must be recognized as a fundamental commodity, the rapid knowledge production and innovation is critical for organizational survival. Farooq and Vij, (2020), opine that the ability to locate and utilize opportunities is significantly higher in organizations with a good knowledge management orientation. Clearly, organizations have not given knowledge management the level of attention and importance it deserves. Knowledge Management strategic orientation could potentially be the remedy to the numerous challenges that organizations face today.

Wang et al (2008). proposed a KMO framework consisting of four pillars, namely knowledge absorption, organizational memory, knowledge sharing, and knowledge receptivity. However, there are other knowledge management paradigms in the strategic management literature that need to be considered for a thorough analysis. Furthermore, the literature does not state the criteria used by Wang et al. to select those four pillars. This review aims to strengthen the arguments of Wang et al. by evaluating other significant dimensions and their potential to be integrated into the model.

This review seeks to deepen the understanding of the interplay between knowledge management orientation (KMO), knowledge leadership, and knowledge-based capabilities by delving into their ideal elements. The review identifies the specific characteristics and practices that constitute effective KMO, and the key attributes of effective knowledge leaders. Additionally, the study aims to identify the specific types of knowledge-based capabilities that are most pertinent in the current context. By providing a comprehensive understanding of these ideal elements, the review offers valuable insights for organizations to optimize their knowledge management practices, foster effective knowledge leadership, and develop dynamic knowledge-based capabilities to improve their competitiveness in the marketplace.

In the next section, the paper proceeds as follows: a literature survey on the previous conceptualizations of the selected knowledge-related variables, and underpinning theories is undertaken. The third section and final section advance the author's prepositions based on the findings from section two.

3. Conceptual Review

The ensuing section scrutinizes the fundamental concept of knowledge management orientation, which serves as the bedrock of the review, and expounds on its interconnectedness with other related concepts, including knowledge leadership and knowledge-based capabilities. The paper underscores the significance of these variables in generating value and enhancing organizational competitiveness. The central objective of this section is to elucidate the precise meaning of the pertinent variables and to identify potential indicators for future empirical investigations. By providing a clear and concise definition of the variables and identifying indicators, this section paves the way for future empirical research, which has the potential to advance the current understanding of knowledge management and its implications for organizations.

3.1 Knowledge Management Orientation

The groundbreaking study by Wang et al. in 2008 outlined four key components of knowledge management orientation, namely organizational Memory, Knowledge Acquisition, Knowledge Sharing, and Knowledge Receptivity. Since then, a few other researchers have delved deeper into the concept and explored the significance of these dimensions in empirical investigations (Ghahroudi et al., 2019; Jian, 2013; Kmieciak & Michna, 2018; Ullah et al., 2019). According to Ghahroudi et al., (2019), in a study that investigated the impact of firms' knowledge management orientation on new product commercialization performance, it was found that knowledge management orientation positively affects aspects of new product commercialization, and that market orientation does not significantly mediate this relationship. The results of the study indicate that both market orientation and knowledge management orientation can improve new product commercialization performance.

In their 2013 study, Yazhou & Jian examined the relationships between knowledge management orientation, organizational innovation, and organizational performance. They found that knowledge management orientation had a positive impact on organizational performance, and that organizational innovation partially mediated this relationship. The study also analyzed the effects of four dimensions of knowledge management orientation on two dimensions of organizational innovation, as well as the effects of these dimensions on organizational performance. The results showed that the effects of organizational memory on organizational performance and administrative innovation were not significant, while the effects of other dimensions were significant.

Kmieciak and Michna (2018) conducted a study to empirically test the link between knowledge management orientation, competitive intensity, and the innovativeness of small and medium-sized enterprises (SMEs). They collected survey data from 120 Polish SMEs and analyzed the dimensions of knowledge management orientation, including organizational memory, knowledge sharing, knowledge absorption, and knowledge receptivity. The results of the study established a positive and significant relationship between knowledge management orientation and the innovativeness of SMEs. In particular, the study found that organizational memory has a direct effect on innovation. Interestingly, the study showed that competitive intensity does not moderate the relationship between knowledge management orientation and innovativeness. Overall, the study provided empirical evidence for the importance of knowledge management orientation for the innovativeness of SMEs. The authors recommended that SMEs looking to increase their innovativeness should focus on improving all four dimensions of knowledge management orientation. This study emphasizes the role of knowledge management in improving SMEs' competitiveness and innovation capacity.

Ullah et al., (2019) established that knowledge management orientation has a positive impact on organizational performance when considering the mediating role of organizational innovation and market orientation. Data was collected through a survey-based questionnaire of 343 employees from the Telecom sector in Pakistan, and SEM was applied to observe the research model. The results revealed that organizational innovation and market orientation have a significant impact on performance. Additionally, organizational innovation and market orientation were found to mediate the relationship between knowledge management orientation and organizational performance.

The KMO construct has also been conceptualized by other scholars, Farooq and Vij, (2019), in their perspective knowledge management orientation is a higher-order construct consisting of learning orientation, knowledge-sharing orientation, and information technology orientation. The results of this study established that the dimensions of knowledge management orientation, such as learning orientation, knowledge sharing orientation, and information technology orientation, are significantly related to the dimensions of entrepreneurial orientation, such as innovativeness, risk-taking, and proactiveness. The study aimed to look at the association between the dimensions of entrepreneurial orientation and knowledge management orientation in the manufacturing and service sectors of the National Capital Region and the state of Punjab, India. The survey method was employed with a sample of 276 key informants, and data were analyzed using the chi-square test. The study contributes to the knowledge management literature by providing empirical support for the knowledge-based view of the firm. Darroch and McNaughton, (2003) suggest that a knowledge management orientation (KMO) is like marketing orientation, but encompasses a wider range of information and dimensions, such as market-based information, technology, and internal financial information. They found that KMO consists of three components: knowledge responsiveness, knowledge acquisition, and knowledge dissemination. Their research showed that companies with a KMO tended to have improved innovation and financial performance.

In the literature review, various parameters have been utilized to signify dimensions of knowledge management orientation. This section aims to highlight some of the key indicators that have been utilized in previous studies. These indicators include but are not limited to, organizational memory, knowledge sharing, knowledge acquisition, knowledge receptivity, and learning orientation.

3.1.1 Organizational Memory

Organizational memory is an organization's collective knowledge and experience that is kept and retrieved through various mechanisms such as routines, processes, protocols, and documentation. Organizational memory has a significant impact on an organization's ability to learn, adapt, and innovate (Kmieciak, 2019).

A study by Cegarra-Navarro & Martelo-Landroguez, (2020) sort to examine the relationship between a company's intellectual capital, specifically its organizational memory, and its organizational agility, the researchers aimed to determine whether improving organizational memory leads to increased organizational agility. The study identified organizational memory as comprising validated routines and protocols for knowledge application, as well as unproven theories, rumors, and colloquial expressions that could be considered counter- knowledge. Using

SmartPLS 3.2.8, the study assessed whether the simultaneous growth of counter-knowledge and knowledge application hinders agility. The findings indicate that organizational memory can have a dual effect by enhancing knowledge application and enabling the spread of counter-knowledge. However, the emergence of counter-knowledge and knowledge application at the same time can lead to bad references and a degradation of organizational agility, which highlights the importance of effective management strategies for organizational memory.

Organizational memory is a critical precursor to organizational learning. The effectiveness of stored knowledge determines the success of organizational memory, as demonstrated in a study that examined the relationship between organizational memory and knowledge sharing in a medical services university. The organizational memory construct was broken down into four dimensions: personal, managerial, cultural, and research and development. All four dimensions were found to have a significant impact on knowledge sharing (Rastgoo, 2016).

A study by Almomani et al., (2019) examined the impact of organizational memory and knowledge management on marketing innovation and cost of quality. The results of the study showed that both organizational memory and knowledge management are significantly and positively related to market innovation and cost of quality. The study suggests that organizations that effectively manage and retain their knowledge and past experiences are more likely to generate innovative marketing ideas and reduce quality-related costs. The findings highlight the significance of organizational memory and knowledge management in organizational success, particularly in the construction industry. The study's outcomes provide important insights for managers and researchers to prioritize the construction, dissemination, and application of knowledge to enhance marketing innovation and cost of quality. Nonetheless, the study recognizes its limitations and calls for further research to broaden the conceptualization of organizational memory using more diverse populations and industries and to explore other potential relationships in the research model.

3.1.2 Knowledge Absorption

A literature search has demonstrated a robust interest in the subject of external knowledge acquisition and its implications for organizations. Building upon the seminal research of Cohen and Levinthal (1990), several strategic management scholars have undertaken extensive studies on the construct of absorptive capacity. Absorptive capacity, as a construct, pertains to a firm's capability to effectively identify, assimilate, and employ external knowledge for organizational benefit (Lichtenthaler, 2016). The majority of works from previous scholars have confirmed the positive effects of absorptive capacity on various firms' performance parameters; these parameters include innovation, labor productivity, marketing capabilities, and financial performance (da Costa et al., 2018; Kale et al., 2019; Liu et al., 2020).

Dahiyat, (2015), emphasizes that innovation and knowledge management should not be seen as independent of each other, instead, they should be viewed as intertwined and mutually beneficial. The author further states that KM practices constitute the generic elements of innovation that are critical in attaining competitive advantage. In an empirical study, the author observed that there were positive and significant relationships between the three knowledge management processes (acquisition, integration, and application,) and innovation. Furthermore, knowledge integration and knowledge application were found to have strong and significant mediation effects on the relationship between knowledge acquisition and innovation. This suggests that organizations would benefit from integrating and applying externally acquired knowledge to maximize their innovation performance.

Friesl's (2011) study aimed to evaluate the diverse approaches of knowledge acquisition and their possible influence on organizational performance. The research identified four separate strategies, namely low-key, mid-range, focus, and explorer, and suggested that the impact of these strategies on company performance might differ based on the arrangement of knowledge acquisition activities and the nature of the knowledge acquired.
According to Papa, Dezi, Gregori, Mueller, and Miglietta, (2018), knowledge acquisition has a positive effect on innovation performance, and that human resource management (HRM) can moderate this relationship. This conclusion was drawn from a study that surveyed 129 firms from various industries using a standardized questionnaire, and the hypotheses were tested using OLS (Ordinary Least Squares) regression models. The authors

suggest that the open innovation paradigm requires the integration of external knowledge and internal knowledge generated by employees. They propose that employees should seek out external expertise and integrate it with their internal understanding to improve products and practices.

A study conducted by Garcia Martinez, Zouaghi, Garcia Marco, and Robinson, (2019) that examined the causes of business failure determined that financial crises tend to augment the probability of business failure. Nevertheless, firms with high levels of research and development human capital are better equipped to endure uncertain financial conditions. Furthermore, the study revealed that cooperation with vertical partners serves to mitigate the impact of business failure in manufacturing sectors. The subtle message in this study is that external knowledge acquisition plays a critical role in mitigating business failure.

Environmental dynamism is a propellant of external knowledge acquisition. According to Kim, Li, Yoo, and Kim, (2020), this follows a study which found that dynamism, complexity, and hostility, all three environmental dimensions have positive effects on innovation and external knowledge acquisition and that external knowledge acquisition completely mediates the relationship between these environments and innovation. The study's results indicate that as the environment becomes more dynamic, firms are motivated to acquire new knowledge from the outside, which in turn enhances their ability to innovate.

A study of knowledge-based organizations in Malaysia found that the practices of knowledge acquisition and utilization had a positive impact on both strategic and operational improvement within the organization. In contrast, knowledge dissemination was found to have a positive effect only on strategic improvement. Furthermore, the study revealed that the size of the organization plays a role in moderating the relationship between knowledge management practices and performance outcomes (Jayasingam et al., 2013).

In a study that sort to examine the effects of two knowledge-driven strategies, internal knowledge development and external knowledge access through inter-firm relationships, on the performance of venture capital firms, De Clercq and Dimov, (2008) found that investing in industries where the firm has more knowledge and investing with more familiar external partners enhances investment performance. Furthermore, the study revealed that external knowledge access is particularly advantageous when the investment exposes gaps in the firm's expertise and it is more effective when there is an incongruity between what the firm knows and what it intends to do.

In another study, an effort was made to resolve contradictions in the literature regarding the relationship between knowledge sharing and absorptive capacity. The authors employed a systematic review of the literature, hypotheses testing, and structural equation modelling to assess the proposed model. The findings of the study reveal the nature of the relationship between knowledge sharing and absorptive capacity and that absorptive capacity is bi-dimensional, with the relationship between these two dimensions (realized and potential) dependents on knowledge sharing (Balle et al., 2020). This study further concludes that the quickness at which knowledge is shared within the organization determines its position among the competitors, and that the connection between individual knowledge and organizational knowledge is achieved through the knowledge sharing process, individual employees can propagate what is otherwise a tacit form of knowledge to the other employees

3.1.3 Knowledge Sharing

Knowledge sharing is defined as the process by which one-unit gains from the experience of another unit (Balle et al., 2020). Knowledge sharing is the process by which organizational knowledge is transmitted between employees in the organization, consequently, knowledge sharing is the act of availing knowledge to others in the organization. On the other hand, knowledge hiding is a deliberate attempt by an individual to refuse to give or obscure knowledge that has been asked for by another individual. An attitude of knowledge sharing has a great influence on organizational performance, previous scholars have noted that continual knowledge sharing is a common practice in high-performing organizations, whereas knowledge hiding prohibits organizational growth (Gagné et al., 2019).

A study by Muhammed & Zaim, (2020) examined the relationship between peer knowledge sharing and firms' financial and innovation performance, including the mechanism and the impact of leadership support on it. The results indicated that employee engagement and supportive leadership positively affected organizations' knowledge management success, innovation performance, and financial performance. The results of this study lend support to the notion that leadership plays a critical role in knowledge management processes, specifically in the context of peer knowledge sharing. It highlights the importance of leadership support in promoting peer knowledge sharing behaviors, and how it can positively impact the organizations' knowledge management success, innovation performance and financial performance. These findings are supported by the study conducted by Gui, Lei, and Le (2021) that established a positive relationship between knowledge sharing, leadership, and innovation.

Davenport and Prusak (2000) suggest that employees may be hesitant to share their knowledge due to concerns of losing power and social status within the organization, which could impede the overall knowledge sharing culture. To encourage knowledge sharing, it is important to create an environment where employees are encouraged to interact and share their knowledge with one another. Additionally, some scholars have suggested that when employees have high levels of job satisfaction, they are more likely to engage in knowledge sharing behaviors. Therefore, fostering a positive work environment and promoting job satisfaction can be crucial in stimulating knowledge sharing within an organization (Rafique & Mahmood, 2018).

Knowledge sharing can be broken down into two distinct processes: knowledge donating, which refers to individuals actively communicating or providing their personal intellectual capital to colleagues, and knowledge collecting, which refers to individuals actively seeking skills and information from colleagues (Lei et al., 2019). Using the terms "inbound" and "outbound", (Zhao, Jiang, Peng, and Hong, (2020), differentiates between the two processes of knowledge sharing. "Inbound" refers to individuals actively seeking skills and information from colleagues, while "outbound" refers to individuals actively communicating or providing their personal intellectual capital to colleagues.

3.1.4 Knowledge Receptivity

An organization's capacity and openness to receive and incorporate new knowledge from both internal and external sources is referred to as its "knowledge receptivity," which is a feature of the knowledge management orientation (Ullah et al., 2019). Knowledge receptivity signifies an organizational positive attitude toward new ideas and reflects the ease with which innovative ideas are adopted within a company, accordingly, knowledge receptivity illustrates the first stages in learning; hence, forms the beginning of a successful knowledge management process (Wang et al., 2009). It is crucial to cultivate and promote an organization's willingness to embrace unique experiences and expertise. This disposition can lead to increased innovation, improved problem- solving, and enhanced creativity, ultimately driving competitiveness. A culture of curiosity and exploration can enable organizations to effectively leverage their collective knowledge and expertise, contributing to long-term growth and sustainability in the business environment.

A positive attitude is attained when employees are encouraged to share ideas without ramifications. Lin, (2015), asserts that new ideas are accepted and integrated irrespective of the origin. Empirical examinations have shown that an organization 's willingness to accept new information is linked to the ability to innovate (Ullah et al., 2019).

Wang and Lin (2013) confirm that in Chinese firms that employ more than 50 people, knowledge receptivity has a positive effect on both technical and administrative innovations.

3.1.5 Knowledge Resources

Knowledge resources are a collection of internal assets and capabilities used by organizations to generate, disseminate, and exploit knowledge. Such resources include a diverse mix of tacit and explicit knowledge held by employees, intricate organizational structures and frameworks designed to foster knowledge sharing and creation, sophisticated technologies, and a comprehensive culture that prioritizes learning and innovation, allowing organizations to achieve and sustain a competitive advantage in today's dynamic and unpredictable business environment (Davenport & Prusak, 2000).

In an empirical study conducted to investigate the relationship between knowledge resources and innovation performance, the authors proposed that innovation capability plays a mediating role, and management commitment exerts a moderating effect on this relationship. The study's findings revealed that knowledge resources have both a direct and indirect positive impact on innovation performance through innovation capability. Furthermore, the research confirmed that management commitment moderates this relationship, albeit with some limitations. Overall, the study highlights how organizations can leverage their knowledge resources to achieve a competitive advantage through innovation (Urgal et al., 2013).

In another study that placed knowledge resources as a critical determinants of service recovery performance, researchers proposed that three distinct knowledge-based resources - Customer Orientation, Internal Orientation, and Technology Orientation - play essential roles in explaining variation in firms' recovery performance. Building upon this conceptualization, the present study employed multilevel analysis of data collected from 500 complaining customers nested in 100 firms to investigate the specific functions of Customer Orientation, Internal Orientation, and Technology Orientation in service recovery performance. The results indicate that while all three knowledge-based resources contribute to customers' recovery satisfaction, only human knowledge resources serve as a buffer against the adverse effects of service failures through the activation of confirmatory biases. Notably, the findings also suggest that technological orientation functions more effectively as a reactive resource for recovery rather than as a preventive resource. Overall, this study highlights the critical role of knowledge-based resources in optimizing firms' service recovery performance and underscores the unique and interdependent roles of customer orientation, internal orientation, and technology orientation (Mjahed Hammami et al., 2020).

The final study under the subject of knowledge resources is a study that sought to investigate the complex relationships between knowledge-based resources, market orientation, learning orientation, and innovation performance surveyed a sample of 135 firms across various industries in Turkey. The results validated the existence of significant associations between these constructs, with knowledge-based resources, learning orientation, and market orientation all demonstrating a noteworthy impact on innovation performance. Moreover, the study revealed that knowledge-based resources played a crucial mediating role in the relationship between learning orientation and innovation performance (Kaya & Patton, 2011).

3.1.5 Learning Orientation

Contemporary organizations confront a hyper-competitive business landscape, necessitating a robust focus on learning orientation to secure a sustainable competitive advantage. In a comprehensive research undertaking, Calantone et al., (2002) conducted in-depth interviews with senior executives and undertook a thorough literature review to identify four critical components of learning orientation: commitment to learning, a shared vision, open-mindedness mindset, and a culture of intra-organizational knowledge sharing. Through a diverse dataset drawn from various industries in the United States, the study evaluated the impact of learning orientation on firm innovativeness, which subsequently exerts a profound influence on the overall performance of the organization. The empirical findings effectively corroborate the theoretical predictions, thereby generating several intriguing insights that further enrich the scholarship on the topic.

Within the realm of knowledge management, learning orientation has been identified as a crucial component by several studies. Learning orientation can be described as a process of information acquisition, dissemination, and shared interpretation that enhances both individual and organizational effectiveness by directly influencing outcomes. Several scholars have characterized learning orientation as the process through which organizational members develop shared values and knowledge based on their past experiences. Essential components of this concept include organizational culture and values that foster a climate of continuous learning and development (Kaya & Patton, 2011).

3.3 Knowledge-Based Capabilities

Organizational capability is a multifaceted concept that encompasses a variety of strategic management perspectives and contextual considerations. It has been studied and conceptualized in several different ways, with a wide range of typologies being developed to capture its complexity and diversity. As put forth by Ning et al. (2006), knowledge-based capability is a construct that is defined as a knowledge system that can integrate and reconfigure the resources, knowledge, and capabilities that are both internal and external to the organization, to attain a state of congruity with the organization's external environment. This knowledge system is composed of two main components: core knowledge resources that contribute to the competitiveness of the organization, and knowledge operating capabilities that aid in the effectiveness and profitability of these knowledge resources. These operating capabilities, such as knowledge communication, innovation, culture, and learning, are highlighted as crucial for organizations to consider. Furthermore, Ning et al. suggest that knowledge capabilities act as a conduit between knowledge resources and organizational performance, serving as a link between the two.

The chronological assessment of previous literature related to capabilities reveals that 'strategic', 'dynamic', and 'core' are common adjectives used along with capabilities (Ray & Ramakrishnan, 2006). It is worth noting that within academic literature, the terminologies knowledge capabilities, dynamic knowledge capabilities, and knowledge management capabilities tend to be used interchangeably and can be overlapping in meaning. As a result, this analysis will consider all three concepts.

According to Kaur and Mehta (2016), knowledge management processes are a precursor to high-order dynamic capabilities, such as absorptive, innovative, and adaptive capabilities. These higher-order capabilities are preceded by knowledge acquisition, conversion, and application processes. In a later study, Kaur (2019) delves further into the concept of knowledge-based dynamic capabilities, which are a combination of first-order dynamic capabilities (knowledge acquisition, combination, and protection) and higher-order dynamic capabilities (adaptive, absorptive, and innovative). The study concludes that both knowledge process capabilities and high-order dynamic capabilities significantly impact a firm's competitive advantage, with the latter mediating the relationship between process capabilities and competitive advantage. Kaur (2022) argues that, despite the growing interest in knowledge-based dynamic capacities (KBDCs) as a theoretical lens in the literature, there is a lack of consistent conceptualization and systematization of the construct. This is a difficulty for researchers in the subject, as it inhibits their ability to completely comprehend and quantify the influence of KBDCs on organizational performance.

O'Regan and Ghobadian, (2004), segregates organizational capabilities into generic and unique capabilities generic capabilities are those that are considered as standard or common across an industry and do not necessarily provide a competitive advantage. Unique capabilities, on the other hand, are considered distinct and specific to a particular organization or industry and are considered the main source of competitiveness as they provide a strategic advantage over competitors. Helfat and Peteraf, (2003), propose a classification of capabilities into two types: operational and dynamic. Operational capabilities refer to the recurring patterns of activities that organizations undertake in fulfilling their regular obligations, while dynamic capabilities, as conceptualized by Teece et al., (1997), pertain to a firm's aptitude to aggregate, establish, and adapt internal and external competences to address rapidly changing conditions.

Wernerfelt, (1995) associates capabilities with resources that are directly related to competitive advantage; (Teece et al., 1997) concur with Wernerfelt but highlight the impact of the changing external environment. As posited by Aujirapongpan, Vadhanasindhu, Chandrachai, and Cooparat, (2010), there exists a paucity of substantive indicators within the literature pertaining to knowledge management capabilities. The authors proffer a conceptualization of KMC consisting of two broad dimensions: resource-based knowledge management capabilities and knowledge-based capabilities. The former, resource-based knowledge management capabilities are characterized as organizational structure, culture, and technology, while the latter, knowledge-based capabilities, are characterized by expertise capability, learning capability, and information capability. This framework endeavors to provide a more holistic understanding of KMC and its various components, which can serve as a guide for assessing the effectiveness of KM in different KM processes.

In a study that aimed to examine the impact of knowledge management capacities on a firm's competitive advantage and supply chain agility, Hu et al., (2022) assert that these capacities, including absorptive capacity, transformative capacity, and inventive capacity, have a significant effect on a firm's performance. The study collected data from 308 supply chain managers in Pakistan through questionnaires and found that inter-functional integration also played a role in moderating the relationship between supply chain agility and competitive advantage. The results provide strong evidence for the importance of these knowledge management capacities, supply chain agility, and inter-functional integration in enhancing a firm's performance.

According to Battor, Zairi, and Francis, (2008), a significant proportion of the market value of top companies can be attributed to knowledge-based capabilities. They identify key knowledge capabilities such as customer relationship management, market orientation, organizational learning, and innovation. These capabilities are seen as crucial for companies to compete effectively and drive value for shareholders.

In a study of supply chain management, Ogulin, Guzman, and Nuwangi, (2020) discovered that organizations must possess three distinct dimensions of knowledge capabilities to effectively manage their supply chains. These dimensions include exploitative, explorative, and ambidextrous capabilities. Exploitative capabilities involve the organization's ability to effectively use and leverage existing knowledge to improve efficiency and reduce costs. Explorative capabilities involve the organization's ability to generate new knowledge and insights through experimentation and innovation. Ambidextrous capabilities involve the organization's ability to effectively balance and integrate exploitative and explorative capabilities, allowing it to adapt to changing market conditions and customer needs. The study suggests that these three dimensions are crucial for organizations to effectively manage their supply chains, and that organizations that possess a strong balance of all three capabilities are more likely to be successful in the long term.

In Gold’s view, knowledge management capabilities are seen in the light information technology. Consequently, knowledge management capabilities consist of knowledge process capabilities (KPC) and knowledge infrastructure capabilities (KIC). Knowledge process capability is the ability of an organization to generate crucial strategic knowledge through a sequence of coordinated pursuits. KPC consists of acquisition, conversion, application, and protection. Knowledge infrastructure capability is a multidimensional construct comprised of three critical aspects of culture, structure, and technology (Gold et al., 2001) Previous scholars have investigated the relationship between KIC and organizational performance. Jasimuddin and Naqshbandi, (2019) established that high levels of KIC impact on absorptive capacity and open inbound innovation. Shehzad, Davis, and Ahmad, (2020) observed that KIC and KPC mediate the relationship between knowledge-oriented leadership and open innovation. Cui, Griffith, and Cavusgil, (2005) interrogated and concluded that knowledge management capabilities result from market dynamism and competitive intensity.

3.4 Knowledge Leadership

The study of strategic management often focuses on identifying the factors that lead to success within an organization, with many experts agreeing that strong leadership plays a crucial role in achieving this success (Dagnino et al., 2021). Leadership sets the track, oversees change, and determines the functions and capabilities for organizational performance and progress. In their study, Cavaleri et al., (2012) utilize the literary character of Frodo from J.R.R. Tolkien's Lord of the Rings trilogy as a paradigm for steadfast leadership. The authors posit that, akin to Frodo's journey to destroy the One Ring, the fulfillment of leadership tasks often necessitates the ability to forge ahead amidst hurdles and tribulations. The authors assert that leadership serves as a vital conduit for the attainment of organizational goals, and as such, it is indubitable that leaders exert a significant impact on the way organizations approach and engage with the knowledge paradigm.

The characterization of a leadership construct has perpetually settled on the dichotomy of transactional and transformational leadership components. It is now becoming clear that there is a need for a type of leadership that places a high emphasis on knowledge management procedures. Donate and Sánchez de Pablo, (2015) have labeled this type of leadership as knowledge-oriented leadership. It's worth noting that the terms "knowledge leadership" and "knowledge-oriented leadership" are used interchangeably in the literature. Knowledge-oriented leadership is defined as the propensity towards attitudes and actions on creating, sharing, and utilizing new knowledge in fulfilling organizational strategic goals (Gürlek & Çemberci, 2020). According to Latif et al., (2020), knowledge leadership is the company's capacity to integrate knowledge management activities with organizational strategy, discover knowledge opportunities, promote knowledge management values, and nurture learning is known as knowledge leadership. Following a rigorous assessment of many elements vital to the success of KM strategy in firms, Rehman and Iqbal, (2020) conclude that leadership and information technology infrastructure are the most substantial of all.

The identity of leadership behavior emphasizes the scope of knowledge acquisition, knowledge structuring and knowledge utilization in problem-solving as a superordinate indicator in leadership behavior (Lakshman, 2009). Knowledge Leaders create a psychological environment for the organization that allows employees to exercise knowledge skills, attain knowledge from the organization's practices and contribute to the organizational knowledge resources (Shamim et al., 2019). Knowledge leadership is the catalyst for the link between the components of an organization's intellectual capital management (Sadeghi & Rad, 2018).

Pellegrini et al., (2020) conducted a comprehensive desktop study on the relationship between knowledge management and leadership, exploring the literature published over the past 20 years through a bibliometric analysis and systematic literature review of 488 peer-reviewed articles. The study revealed the presence of four distinct clusters of themes, including human and relational aspects, systematic and performance aspects, contextual and contingent aspects, and cultural and learning aspects. The study emphasized the crucial role of leadership in the effective implementation of knowledge management processes, establishing that full involvement of individuals, effective leadership, and adequate motivation are essential for success. The study concluded that leadership is the most crucial enabler in the knowledge management process and offered valuable insights and a roadmap for future research in this area.

According to Zhang and Guo, (2019a), the focus of knowledge leadership is premised on three central facets: fundamental leadership elements of motivation and communication, relational strategies as well as methods and techniques for achieving successful knowledge management. The outcomes of knowledge leadership are noticed when team members become devoted to collective goals, become active in learning and knowledge activities. The employees also gain the ability to communicate information and learn across boundaries. Zhang and Guo, (2019), further posit that knowledge leadership can drive members' demand for cognition and epistemic drive, causing them to look for and acquire information and therefore make better use of the huge pool of knowledge resources. Based on their findings, Zhang, and Guo, (2019), argue that knowledge leadership serves as a moderator in the relationship between knowledge diversity and performance.

A study by Sadeghi and Rad, (2018) found that innovation is essential for organizations to stand out in today's competitive markets and that improving innovation performance is crucial for gaining a competitive advantage. The study, conducted in the Fars governor in Iran, explored the relationship between knowledge-based leadership, knowledge management, and innovation performance. The results showed a significant relationship between these three factors, with knowledge management and knowledge-based leadership positively impacting innovation performance. The study emphasizes the importance of knowledge management and knowledge-based leadership in promoting innovation and creating a competitive advantage.

In a study that explored the impact of knowledge-oriented leadership (KOL) on knowledge management (KM) behavior among employees in the hospitality sector, Shamim et al., (2019) assert that KOL has a positive effect on KM behavior, as well as on employee work attitudes such as affective commitment, creative self-efficacy, and work engagement. The study also established that work attitudes mediate the relationship between KOL and KM behavior, and that there is a direct positive effect of employee work attitudes on KM behavior. These findings contribute to the understanding of KOL and its connection to KM behavior and work attitudes among hospitality employees at the individual level.

Xia et al., (2019) conducted a study on the relationship between knowledge leadership, knowledge hiding, and the moderating effect of psychological ownership. The results showed an inverted U-shaped relationship between knowledge leadership and knowledge hiding, with employees exhibiting more knowledge hiding at moderate levels of knowledge leadership. Psychological ownership was found to play a significant role in this relationship, making the inverted U-shape more pronounced among employees with high psychological ownership. The study highlights the importance of considering both the level of knowledge leadership and employees' psychological ownership in managing knowledge in the workplace and contributes to the existing literature on leadership and knowledge management.

To comprehend the relationship between different leadership styles and knowledge acquisition, Politis (2001) classified leadership into five distinct categories: self-management leadership behavior, transformational leadership, transactional leadership, initiating structure, and consideration leadership behavior. The study's findings confirmed that self-management leadership behavior, transformational leadership, and consideration leadership promote knowledge acquisition behavior within organizations.

Transformational leadership is a key driving force for knowledge sharing processes, this is confirmed in a study by Gui et al., (2021), that analyzed the relationship between transformational leadership and innovation. The study found that knowledge sharing behaviors play a significant role in the relationship between transformational leadership and both radical and incremental innovation, with knowledge collecting having a greater effect on incremental innovation and knowledge donating having a greater effect on radical innovation. The study also found that knowledge-centered culture enhances the effects of transformational leadership on knowledge sharing behaviors and innovation capabilities. The results suggest that managers should prioritize transformational leadership to improve employees' knowledge sharing behaviors and the firm's innovation capability. The study provides valuable insights into the impact of KS behaviors on innovation and the importance of knowledge centered culture in enhancing the effects of transformational leadership.

The integration of transformational and transactional leadership behaviors in the knowledge leadership construct, as described by Donate and Sánchez de Pablo (2015), highlights the importance of balancing both individual-focused and task-oriented approaches in effective knowledge leadership. Transformational leadership, with its emphasis on idealized influence, inspirational motivation, intellectual stimulation, and personal recognition, focuses on the development and motivation of individuals. Transactional leadership, on the other hand, places greater emphasis on task accomplishment and is motivated by rewards and penalties. By incorporating aspects of both transformational and transactional leadership, the knowledge leadership construct seeks to balance the needs of both the individual and the task, thereby promoting effective knowledge management.

3.4 Competitive advantage

The quest for competitive advantage has long been a subject of inquiry in the realm of strategic management scholarship. Researchers have been meticulous in their efforts to identify the factors that confer a distinct advantage to firms in their respective markets. The common thread that runs through all theories of strategic management is the identification of these determinants of competitiveness (Sigalas, 2015). The literature posits that superior performance is the result of a competitive advantage position and that the reasons for such performance are always tied to this advantage. It is the aim of strategic management research to uncover how firms may attain such superiority over their competitors. This objective, often referred to as the "Holy Grail" of the field, is predicated on the understanding that competitive advantage is derived from an organization's agility and its ability to effectively respond to the ever-evolving demands of the marketplace. Therefore, the current review asserts that a knowledge management orientation is a critical factor in achieving a competitive advantage.
Porter (1985) defines competitive advantage as an organization's ability to churn out superior products at a relatively lower price than the competition and thus attaining a market leadership position. Wang, (2014) suggests that a firm attains a competitive advantage position when it acquires attributes that permit it to outshine its competitors. Barney, (1991) asserts that a firm attains a competitive advantage by implementing value-creating strategies unique and unattainable for other firms. According to Mahdi et al., (2019), competitive advantage is the ability of a corporation to generate more economic worth than its competitors, the availability and utilization of resources play a major role. Kaur & Mehta, (2016b), define competitive advantage as the capacity to maintain a

growing market share by providing superior products and services while enjoying a faster rate of sales revenue and profit growth than competitors in the industry.

Dagnino et al., (2021)appreciates the literature from Peteraf (1993) and observe that a firm's competitive advantage position can result from three types of rents: Chamberlinian, Ricardian, and Schumpeterian. Chamberlinian or Monopoly rents are derived from a secure market position free from competition, while Ricardian rents are produced by the firm's specific resources, such as leadership, knowledge, or organizational culture, that result from intangible, internal contributions. The fundamental assumption of Schumpeterian rents is the organization's ability to innovate and maintain competitiveness through its dynamic capabilities. The Ricardian and Schumpeterian perspectives both describe the connection between Knowledge Management Orientation (KMO) and competitive advantage.

Sigalas, (2015) observe that, despite a voluminous amount of literature about competitive advantage, a definitive definition of the concept has remained elusive. Furthermore, they point out several drawbacks and fallacies in its conceptualization. In a subsequent observation, Sigalas and Papadakis (2018) emphasize that competitive advantage does not necessarily equate to superior performance, and caution against the interchangeable use of these terms. As a result, it can be concluded that an organization may achieve superior performance without necessarily possessing a competitive advantage, and conversely, possess a competitive advantage without necessarily achieving superior performance. Hence, the operationalization and measures of competitive advantage must be distinguished from those of performance (Sigalas & Papadakis, 2018).

Further scrutiny of the literature reveals that Porter’s (1985) conceptualization has dominated past studies, he proposes cost leadership, differentiation, and focus as the strategies of competitive advantage. The cost leadership strategy allows the firm to pursue variables that allow it to keep minimum low unit costs. A differentiation strategy is premised on building an exclusive image or value for a services or products. Porter observes that by ingeniously pursuing the three strategies businesses can achieve a significant and lasting competitive advantage over their competitors Porter (1985) further pinpoint conditions that necessitate competition to include demand conditions, factor conditions, supporting and related industries, firm structure, rivalry and strategy as responsible considerations that necessitate competition; consequently, how a firm navigates through these conditions determines its competitiveness and position in the industry.

Kaur & Mehta, (2016 notice that early approaches in explaining competitive advantage highlighted the importance of external forces that can prevent entry and make existence unfavorable in terms of cost for rivals. According to these approaches, competitiveness was based on leveraging privileged market positions. Nonetheless, with the advent of emerging paradigms such as the resource-based view, dynamic Capability View, and knowledge-based view the emphasis progressively switched to the investigation of the impact of internal firm elements in boosting organizational competitiveness.

The relationship between knowledge management and competitive advantage has been a subject of extensive research in the field of strategy, particularly regarding its characterization, precursors, outcomes, and potential moderating and mediating relationships. There is a consensus among researchers that knowledge plays a crucial role in fostering a firm's competitiveness. Most authors agree that the processes of knowledge management have a significant impact on the (Mahdi et al., 2019) attainment of sustainable competitive advantage this includes (Hajimohammadi et al., 2019; Hu et al., 2022; Mahdi et al., 2019).

The attainment of competitiveness is determined by the firm's ability to leverage capability differentials; knowledge management is recognized as a plausible capability differential for attaining competitive advantage. Hajimohammadi et al.,(2019) contend that the prompt and efficient exchange of information is important for success in today's global, integrated economy. Sustainable competitive advantage is now based on the effective channeling of intellectual capital rather than physical and financial assets.

Shodiya, (2021 conducted an empirical study to examine the effect of knowledge management on the competitive advantage of Nigerian consumer goods businesses. The study utilized a survey research design and analyzed data from 384 management staff members of six major consumer goods firms through descriptive statistics and covariance-based structural equation modeling. The findings indicated that the components of knowledge management, including acquisition, sharing, creation, codification, and retention, had a significant positive impact on the competitiveness of these companies. The results emphasized the importance of effective knowledge management in enhancing the competitiveness of consumer goods businesses.

Wahyono, (2019), suggests that the competitiveness of companies depends on their capacity to combine internal information generated by physical and human capital and their ability to absorb extra knowledge from external sources. This follows a study that he conducted to investigate the mediating effect of product innovation on the relationship between knowledge management and competitive advantage in small and medium enterprises (SMEs) in the food product industry in Riau and Central Java, Indonesia. The study employed a quantitative approach and analyzed data from 238 business units using structural equation modeling and a first-order factor analysis. The results indicated that product innovation acted as a mediator between knowledge management and competitive advantage, with higher knowledge management leading to increased competitiveness through improved product innovation. Additionally, the study found that knowledge management had a positive and significant impact on product innovation. These findings suggest that better knowledge management by SME entrepreneurs in the food product industry can lead to enhanced product innovation and increased competitiveness.

Given the empirical evidence available, it can be concluded that competitiveness is attainable through functional knowledge management. As such, the pursuit of competitive advantage is preceded by a well-designed knowledge management strategy.

4. Theoretical Review

The foregoing section undertook a comprehensive review of the conceptual literature to ascertain the association between knowledge management orientation, knowledge-based capabilities, knowledge leadership, and organizational competitiveness. The analysis disclosed that the tripartite theories of Resource-Based View (RBV), Dynamic Capabilities (DC), and Knowledge-Based View (KBV) were consistently present in the discourse, while some investigations underscored leadership as a fundamental antecedent in the Knowledge management orientation paradigm. In this segment, a precise exposition of the theories is submitted.

It is important to understand that the RBV theory is closely linked to the knowledge-based view and dynamic capabilities theory. The RBV theory posits that an organization's resources and capabilities are the primary determinants of its competitive advantage. It emphasizes that an organization's unique set of resources, such as its people, technology, and other assets, can enable it to develop and sustain a competitive advantage over time. In this context, the knowledge-based view provides a theoretical framework for understanding knowledge as a critical resource, while dynamic capabilities offer a practical framework for utilizing this resource to respond to changes in the market environment. Together, the RBV theory, knowledge-based view, and dynamic capabilities theory offer a comprehensive perspective on how organizations can leverage their resources and capabilities to achieve and sustain a competitive advantage.

The significance of knowledge leadership as a moderator necessitates an understanding of relevant leadership theories. The various leadership theories, including transformational and transactional, offer distinct perspectives on the role of leaders and can provide valuable insights on the correlation between leadership and organizational variables. Effective knowledge leadership involves an in-depth comprehension of organizational knowledge assets and the ability to create strategies to utilize them. An all-encompassing grasp of leadership theories and their association with knowledge leadership can provide very useful insights into leveraging knowledge assets to achieve competitive advantage. Integrating knowledge leadership into existing theories can enhance understanding on how leadership can be effectively utilized to achieve competitive advantage through knowledge management orientation.

4.1 Resource-Based Theories

Resource-based theories constitute a set of comprehensive theories that scrutinize the intricate ways in which resources can impact a firm's competitive advantage and overall success. These theories assert that a firm's resources and capabilities are pivotal factors that determine its performance and that the type and caliber of resources that a firm possesses can significantly affect its competitiveness in the market. The three primary resource-based theories, namely, the Resource-Based View (RBV) Theory, Dynamic Capability Theory, and Knowledge-Based Theory, are tailored to focus on different facets of a firm's resources, such as their inherent value, scarcity, and potential to adapt and develop over time. By consolidating the three theories, a theoretical perspective on the knowledge management orientation paradigm is synthesized.

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The Resource-Based Theory has established itself as a dominant perspective in the field of strategic management. As noted by Baia et al., (2020), almost no issue of the Strategic Management Journal is published without at least one work utilizing the resource-based theory. Foss (2005) similarly highlights the pervasive use of the resource-based theory in the field of strategic management. The Resource-Based Theory is an approach that seeks to explain the disparities in competitive advantage and performance among organizations through their resources and capabilities. According to the theory, a firm's competitive advantage stems from its utilization of unique resources. These resources are central to the firm's value-adding strategies and the development of its core competencies as strategic assets. As external conditions in the environment evolve, the firm's resources provide a foundation for its longevity and success. The resource-based theory posits that it is through the effective deployment of these resources that a firm can attain a sustained competitive advantage.

Since the seminal works of Penrose (1959), several other scholars have delved into the conceptualizations and practical application of the theory. Penrose (1959), describes firms as a collection of productive resources that facilitate or restrict growth, the resources are combined in different ways to create various goods for sale. Penrose further argues that that understanding critical issues such as why firms are characterized by certain relatively steady product portfolios, diversification, and the pursuit of competitive strategies can only be understood in terms of underlying resource endowment and capabilities that make firms essentially heterogeneous and path-dependent enterprises. Penrose's work, "The Theory of the Growth of the Firm," has remained highly referenced in the field of resource, capabilities, and knowledge management approaches to business strategy. So much so, that Aujirapongpan et al., (2004) referred to it as the definitive reference in the field. By the mid-1990s the resource-based view had been a focus of strategic management literature owing to its cogent combination of economic rigor and management experience.

Wernerfelt 1984) is credited with coining the term "RBV" (Resource-Based View), which suggests that resources and products are intertwined and that firms should be analyzed based on their resources. This approach holds that resources determine a firm's strategic position, allowing it to occupy a relative position in comparison to other firms (Bertram, 2016). Prahalad and Hamel (1990) further emphasized the significance of core competencies in fostering growth and competitiveness within a firm, thereby bringing resource-based arguments to the forefront.

Building upon the earlier conceptualizations of the Resource-Based View (RBV) theory, Barney (1991) proposed that the key attributes of a firm's resources that contribute to its competitiveness are value, rarity, inimitability, and non-substitutability (VRIN). A valuable resource provides the firm with the means to take advantage of market opportunities and gain an edge over competitors. Rare resources are held by only a small number of firms in the industry, making them difficult to obtain. Imitable resources can be sustained for extended periods without being replicated by competitors, while non-substitutable resources are unique and cannot be replaced with any equivalent. In this light, knowledge management resources meet the criteria of VRIN-compliant resources and are essential for a firm's competitiveness.

A historical examination conducted by Bertram (2016) sheds light on Barney's (1991) impactful contribution to the Resource-Based View (RBV) theory. According to Bertram, Barney's view is grounded in the structure-conduct-performance paradigm, which posits that a firm's competitive advantage is tied to the distinctiveness and immobility of its resources. The RBV approach takes an intra-organizational perspective and suggests that performance is influenced by a firm's unique resources and capabilities, which are difficult to duplicate. This view is reinforced by a similar literature review by D'Oria et al., (2021) who trace the evolution of resource utilization and conclude that, in the early stages of the RBV's development, the mere possession of resources was the focus, but over time, the emphasis has shifted to the effective utilization of resources over mere possession.

Ciszewska-Mlinarič and Wasowska, (2015), assert that the Resource-Based View (RBV) is a well-established theory that provides valuable insights into various modern phenomena and has given rise to significant, interrelated perspectives such as the dynamic capability view, knowledge-based view, and natural resources-based view. The study of knowledge as a critical organizational resource can be traced back to the works of (Grant, (2016). Around this time, other researchers were also exploring the characteristics of resources, including some great work by Teece et al., (1997) on dynamic capabilities concept. In line with the RBV theory, dynamic capabilities play a critical role in enabling an organization to develop and utilize its resources effectively(Teece et al., 1997) . Dynamic capabilities refer to the organization's capacity to sense, seize, and reconfigure its resources and capabilities in response to changes in its environment. Sensing is the ability to identify potential opportunities and threats, seizing is the ability to deploy and utilize resources and competencies to exploit the identified opportunities and mitigate the identified threats, while reconfiguring represents the organizational efforts aimed at continuously renewing and redeploying resources and competencies in alignment with the strategic direction of the organization.

Teece (1997) further asserts that dynamic capabilities enable a firm to achieve and sustain superior performance by facilitating the development and implementation of new strategies and processes. They represent a critical aspect of a firm's overall competitive advantage, as they allow the firm to respond to new market opportunities and evolving customer needs in a timely and effective manner. Thus, dynamic capabilities are seen as a key determinant of a firm's ability to remain competitive in a rapidly changing business landscape.

In evolutionary economics and organizational theory, it is a reality that the cognitive abilities and physical resources that comprise a firm's strategy encourages certain choices over time, as it were, the knowledge and physical resources are central to organizational strategy selection. Knowledge based views (KBV) in strategy extends the resource-based thinking by arguing that knowledge is the key resource that enables new value creation, diversity, and competitive advantage (Grant, 2016).

The central distinguishing criteria between knowledge-based strategy and the resource-based view is that resource-based strategy only considers the firm's internal approach. Yet the fundamental idea is that the firm's distinctive qualities in terms of know-how and managerial competence are essential sources of long-term competitive advantage. Unique knowledge and superior organizational processes in one or more of the firm's value chain roles may allow the firm to profit from a resource advantage (Chen et al., 2020).

The view of knowledge as a resource creates a theoretical link between the RBV and the KBV. Grant, (2016), observes that the knowledge-based view (KBV) has had a substantial influence on academic thinking on the nature and functions of organizations, as well as the role and content of managerial activity. This, in turn, had a significant impact on organizational knowledge management processes and strategies, as well as how organizations should be built to maximize knowledge development and utilization.

The literature on strategic management links competitive advantage disparity to intangible resources. Aside from natural resource monopolies, intangible assets have a higher possibility of producing competitive advantage since they are often uncommon, socially complex, and difficult to imitate.(Chen et al., 2021) . In the same vein, it is worth noting that there is a body of knowledge management literature that links superior knowledge bases arising from organizational learning to superior firm performance, as well as presenting variations in knowledge inventories as a source of competitive advantage. A stronger knowledge base is related to greater strategic flexibility and a speedier response to changes in the environment. Another critical part of the company's KBV is the requirement for knowledge integration in all organizational processes. The ability to integrate and use knowledge has an impact on the relationship between organizational knowledge and a firm's competitive advantage (Shodiya, 2021).

Håkanson, (2010), opine that many of the core assumptions of the knowledge-based view have remained debatable. The basis of these misunderstandings is a lack of agreement on the definitions of key terms such as "knowledge," "competences," and "capabilities," as well as the opacity on the relevant level of analysis. Similarly, while some researchers believe that knowledge exists in individuals, most contributions have taken a group perspective. Similarly, Kaplan et al., (2001)had earlier on indicated that the knowledge-based theory appears to be a theoretical patchwork rather than a coherent frame of theoretical knowledge. In effect, empirical research is scarce, and we should not imagine a successful empirical effort unless we can resolve some of the more fundamental problems at this moment. Nonetheless, this perspective has been refuted by numerous empirical studies that have been conducted based on the KBV theory, and which have substantiated that the KBV theory is indeed corroborated by some empirical evidence.

The knowledge-based view and dynamic capabilities theory are complementary in nature, as they both emphasize the importance of knowledge and learning in enabling an organization to achieve and sustain a competitive advantage. The knowledge-based view provides a theoretical framework for understanding the role of knowledge in creating and sustaining a competitive advantage, while dynamic capabilities provide a practical framework for applying knowledge to respond to changes in the market environment.

4.3 Leadership theories

Scholars have claimed that a high-performance company calls for first-rate leadership and that there is no quick fix to compensate for weak leadership. Over the last several years, the concept of leadership has been common in strategic management discourse (Zumitzavan & Michie, 2015). Leadership theories have shifted away from personality, conduct, and situational aspects towards the interaction between a leader and his or her subordinates, which has become the focal point of evaluation. As a result, the theories are founded on social-exchange or relationship-based theory, which holds that both leaders and followers devote themselves to working together in attaining organizational goals. Transformational, ethical, authentic, and other “newer genre” theories were developed to address issues such as follower inspiration, leader vision and transparency, emotional effects, integrity and morality, customized attention, and intellectual stimulation (Hannah et al., 2014). Leadership is a complex and multifaceted phenomenon that involves leaders influencing and directing their followers towards specific goals, while mobilizing them to act in certain ways (Berraies & Zine El Abidine, 2019). While previous scholarship has predominantly focused on the dichotomy of transactional and transformational leadership styles, this section aims to examine the conceptualizations of these two leadership styles, with a particular focus on the critical attributes that are central to knowledge leadership.

Bass (1985) defines transformational leadership as superior leadership performance and a meaningful interaction between the leader and the workforce that develops a vision-driven change in followers going beyond short-term achievements and focuses on subordinates' higher order intrinsic needs. A transformational leader is one who raises the level of consciousness of followers regarding the importance and value of desired objectives and the techniques for achieving those outcomes. Transformational leaders are known for inspiring, stimulating, motivating, and encouraging their employees to achieve organizational goals. A transformational leader piques employees' interests, inspires them to work hard to achieve the organization's goals, and transcends their personal interests for the sake of the organization. Bass (1985) identifies four characteristics of transformational leadership style: inspirational motivation, idealized influence, intellectual stimulation, and individualized consideration.

Transactional leadership represents another style of leadership that emphasizes a mutually beneficial relationship between leaders or supervisors and their subordinates. Ugwu and Okore (2019) posit that transactional leaders must execute their tasks irrespective of the circumstances, with a predominant focus on control and authority. Transactional leadership is regarded to be highly effective at times of crisis, chaos, immaturity, and no-rules conditions (Ma & Jiang, 2018). Transactional leadership directs and advances organizational goals by explicitly defining everyone's position and tasks then relating these to incentives and sanctions. The intention of a transactional leader lies in exchanging something for something else, and such transactions constitute most of the connection between leaders and followers (Atapattu & Ranawake, 2017).

Previous studies tend to associate transformational leadership with knowledge management success. Certain empirical research shows that transformational leaders promote knowledge management methods more aggressively than transactional leaders (Birasnav et al., 2013; E.-J. Kim & Park, 2020). Imran Ilyas, Aslam, and Ubaid-Ur-Rahman, (2016)assert that transformational leadership may help a company move from a resource-based to a knowledge-based view as required by contemporary market dynamics, the active components in the process are organizational learning and knowledge management.

5. The Case for a Knowledge Management Orientation Model

In the preceding section, a comprehensive survey of the literature was undertaken regarding the knowledge management paradigm, with the aim of acquiring a more profound comprehension of the conceptual and theoretical complexities that are inherent in this field. These intricacies, to say the least, constitute critical components in the development of a model for knowledge management orientation. During this review, it became evident that there are three significant gaps in the existing scholarship. To begin with, there is a conspicuous absence of attention by scholars to the subject of knowledge management orientation as a viable organizational strategy despite its potential for driving organizational success in the knowledge economy, only a limited number of scholars have endeavored to bring this topic to the forefront of the discussion.

Additionally, given the multitude of conceptualizations and dimensions that constitute the subject of knowledge management, developing a coherent model of knowledge management orientation (KMO) requires a clear understanding of the subject matter and identification of the necessary indicators. This entails distilling the key concepts and components of knowledge management studies and identifying the most pertinent and effective indicators for measuring KMO. This section proceeds by selecting major indicators of KMO model. By following this approach, organizations can establish a comprehensive and actionable model of KMO, which enables them to evaluate their existing knowledge management practices and identify areas for improvement.

Finally, it is essential to include other organizational factors, such as knowledge leadership and knowledge-based capabilities, in the model to provide a more comprehensive and holistic understanding based on the knowledge-based view theory. It is worth noting that a comprehensive model must encompass both dominant moderator and mediator variables. In this instance, knowledge leadership serves as the moderator, while knowledge-based capabilities function as the mediator variable. Considering that the immediate output of knowledge management procedures is the development of knowledge-based capabilities, competitive advantage must be centered on the continual development of such knowledge-based capabilities.

The primary goal of this model is to provide a framework for understanding how organizations can leverage KMO as a strategic orientation to gain a competitive advantage. By examining the various components of KMO, including knowledge leadership and knowledge-based capabilities, and their impact on organizational performance, this model seeks to offer a thorough comprehension of how KMO can be effectively utilized to drive success. The review contends that KMO is a solid organizational strategic orientation that when combined with other organizational factors, can propel a company to competitiveness.

In line with the primary objective of the review, the present section generates propositions that will be taken into consideration for future empirical studies. These prepositions aim to identify the key factors that influence the efficacy of KMO and how they can be leveraged to achieve a competitive advantage. As discussed earlier, major variables under consideration include knowledge management orientation, knowledge leadership, knowledge-based capabilities, and competitive advantage.

5.1 Competitive Advantage as the proposed Outcome Variable

The foundation of strategic management scholarship oscillates around identifying ways to gain a sustainable competitive advantage in a particular industry. This paper proposes that a well-designed KMO model results in a competitive advantage. However, the proposed outcome variable "competitive advantage" is not a uniform concept, it has attracted various conceptualizations from the literature. The most significant consideration is how well a company performs relative to its competition with an emphasis on customer value propositions. Porter (1985) hypothesized that competitive advantage is achieved through cost leadership, differentiation or focus strategies. In their attempt to operationalize the concept of competitive advantage, Hwang et al., (2019) opine that competitive advantage is a challenging concept to define and even more difficult to quantify, consequently, competitive advantage can be a firm capability or a superior resource, such as a good location, desirable product, or well-known brand name, that allows the company to outperform the competition.

Further interrogation into the literature reveals that a multitude of indicators has been considered in delineating competitive advantage, items such as cost/ price leadership, quality leadership, time to market, rate of new products development, brand awareness, market share, technological differentiation, difficulty in imitation and comparative superiority have been used as measures of competitive advantage (Hosseini et al., 2018; Sachitra, 2016). The current review considers price leadership, quality leadership, delivery and dependability, time to market, better services compared to competitors and the rate of new product launches as the plausible indicators of competitive advantage.

5.2 Knowledge Management Orientation as the proposed Explanatory Variable

The review of the literature has revealed the significance of knowledge management to organizations. There is no doubt that the success of organizations depends on the critical dimensions of knowledge management. However, the challenge lies in the identification and selection of the important components of the KMO paradigm. While appreciating the seminal work from Wang et al., (2008), a few other scholars have attempted to further shed light on the concept of KMO. As earlier indicated, organizational memory, knowledge absorption, knowledge sharing, and knowledge receptivity are the key dimensions initially conceptualized by Wang et al (2008). The same dimensions have been put to test by Kmieciak and Michna, (2018) in an empirical study that sort to establish the link between each of the dimensions and innovativeness. The findings support the hypothesis that KMO has a significant impact on small- and medium-sized business (SMEs) innovation. Other authors who have used similar dimensions of KMO include but in different contexts include (Hussein, 2018; Lin, 2015; Tabar & Nemati, 2013; Ueasangkomsate et al., 2021).

As stated by (Farooq & Vij, 2019), knowledge management orientation refers to an organization's capacity to establish a conducive environment for effective learning, promote the dissemination of knowledge, and facilitate the storage of information. The author posits that the dimensions of knowledge management orientation include learning orientation, information technology orientation, and knowledge sharing orientation. In a study conducted by Ghahroudi et al., (2019) that sort to investigate the impact of knowledge management orientation (KMO) on new product commercialization, the authors examined three distinct dimensions of KMO: knowledge accountability, knowledge sharing, and knowledge acquisition.

Upon conducting an extensive review of the literature on knowledge management, this critique posits that knowledge resources, knowledge sharing, and learning orientation are the most pivotal dimensions of a knowledge management orientation variable. Although this view may diverge somewhat from other studies in the field, it is evident that these three dimensions encapsulate and interrelate with the other previously discussed dimensions. Thus, a more comprehensive and unified understanding of these variables is deemed essential. Knowledge resources are essential to effective knowledge management, and they include repositories, social networks, human capital, intellectual property, and infrastructure. Repositories, physical or digital, store and manage explicit knowledge, making it accessible and shareable. Social networks facilitate collaboration, knowledge sharing, and learning. Human capital is the knowledge, skills, and expertise of individuals that can be leveraged through training, mentoring, and collaboration. Intellectual property, including patents, trademarks, copyrights, and trade secrets, can provide organizations with a competitive advantage and support ongoing innovation. Infrastructure, which refers to the systems, processes, and technologies used to support the creation, storage, and dissemination of knowledge, provides the foundation for the effective identification and management of other knowledge resources (Gold et al., 2001).

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An evaluation of the literature highlights the importance of knowledge management infrastructure as a key component of any knowledge management strategy. Previous scholars have identified the various components of a knowledge management infrastructure. Gold, Malhotra, and Segars (2001) identify structure, culture, and technology as the main components that make up knowledge management infrastructure capabilities. The technological element revolves around the firm’s ability to avail itself of modern information technology systems.

The second critical indicator of the independent variable is knowledge sharing, Knowledge sharing is facilitated through three primary components: people, processes, and technology (Tangaraja et al., 2016). People are responsible for generating and transmitting knowledge, while processes provide structure and guidance for sharing knowledge, including the creation of communities of practice and organizational learning initiatives. Technology, such as collaboration platforms and knowledge management systems, supports and enhances the sharing of knowledge. Effective knowledge sharing requires a balance of these facets, allowing organizations to build a strong knowledge-sharing culture that supports ongoing capabilities.

The final indicator that is proposed for the KMO variable is organizational learning orientation. learning orientation is a critical facet of the KMO model, emphasizing an organization's unwavering commitment to continuous learning and improvement, the key aspects of learning orientation include a culture that values learning and innovation, access to resources that support learning, supportive leadership, and feedback mechanisms that encourage reflection and improvement. In a study conducted by Vega Martinez et al. (2020), the aim was to examine the impact of different dimensions of learning orientation on competitiveness. The study discovered that commitment to learning and shared vision were significant factors that influenced competitiveness. By prioritizing organizational learning, organizations can easily attain a competitive edge. According to Easterby-Smith & Prieto, (2008) learning orientation is attained when there is ongoing investment and commitment from the organization, including initiatives such as training and development programs, knowledge-sharing protocols, and feedback mechanisms that support continuous learning and improvement. A study by established that the two dimensions of learning orientation.

The three critical facets of effective knowledge management - knowledge sharing, knowledge resources, and organizational learning orientation are interdependent and crucial for organizations to leverage their knowledge assets effectively. Organizations can achieve sustainable competitive advantage by fostering a culture of innovation and knowledge-sharing, utilizing knowledge resources effectively, and prioritizing continuous learning and improvement. Such organizations can remain responsive and agile to changing market conditions, drive innovation, and achieve a sustained competitive advantage. Consequently, these principles underpin the following three propositions of the proposed model.

1. **Effective utilization of knowledge resources positively impacts an organization's competitive advantage.**

2. **Knowledge sharing has a positive influence on organizational competitive advantage.**
3. **Organizational learning orientation positively affects organizational competitive advantage.**

5.3 Knowledge Leadership as the Moderating Variable

Knowledge management remains a popular research topic in the strategic management arena. While research has concentrated on identifying the characteristics that promote or inhibit organizational knowledge management orientation, aspects of knowledge leadership have received less attention (Donate & Sánchez de Pablo, 2015; Lakshman, 2007; Shehzad et al., 2020), since the concept of leadership is one of the most researched organizational topics and is recognized as the pivot of organizational evolution. Scholars contend that a dynamic interface between leaders and followers is required to encourage and energize followers toward knowledge management procedures, as leaders can affect followers' attitude towards knowledge related activities (Atapattu & Ranawake, 2017).

While previous research has largely focused on external factors as determinants of organizational performance, there is evidence suggesting that internal components, such as leadership, may also play a moderating role (Donate & Sánchez de Pablo, 2015; Yang et al., 2014). Despite this, there remains a lack of consensus in the literature regarding which leadership style is most effective in supporting knowledge management practices, highlighting the need for further cross-cultural research on the topic (Denford et al., 2017; Naqshbandi & Jasimuddin, 2018; Valaei et al., 2017; Viitala, 2004). Scholars have referred to this type of leadership as "knowledge leadership," indicating that it is a distinct and advanced form of leadership, as it takes into consideration the crucial elements of knowledge management. While there is a wealth of literature on the concept of leadership, knowledge leadership has received relatively little attention from earlier scholars (Donate & Sánchez de Pablo, 2015; Shamim et al., 2019). Despite its importance as the foundation for organizational knowledge management capabilities, the dominant focus in research has been on transactional and transformational leadership, with less emphasis on knowledge leadership.

The knowledge leadership perspective is still at the infancy stage with rudimentary indicators and remains a rarely investigated concept (Shamim, Cang, & Yu, 2019). Donate and de Pablo (2015) evaluated the impact of knowledge leadership on four knowledge management processes and emphasized the importance of conducting additional research on the role of knowledge leadership in improving knowledge management processes. Latif, Afzal, Saqib, Sahibzada, & Alam, 2020), claim that a literature search on the web of science reveals only one study that attempted to investigate the role of knowledge leadership on project success. The shifting nature of leadership in the knowledge age necessitates the use of a variety of leadership styles that are adaptable to the requirements of knowledge-intensive enterprises (Gürlek & Çemberci, 2020).

Leadership behaviors have a significant impact on an organization's proclivity toward a certain strategic orientation (Jabbar & Hussein, 2017). Top-down, bureaucratic paradigms produced the leadership models of the previous century, these models were extremely effective in a physical production-based economy, but they are not well-suited to a more knowledge-based economy that is witnessed in the current times (Uhl-Bien et al., 2007).

Knowledge leaders place a premium on knowledge management and team learning. Furthermore, they establish a relational environment that emphasizes, cooperation, openness to experience, and trust to facilitate information and knowledge management (Xia et al., 2019) The current paper acknowledges the crucial power of knowledge leadership in business success. To this end, the paper posits that knowledge leadership facilitates knowledge management endeavors in organizations. By continuously seeking out new knowledge and applying it in innovative ways, a company can develop and improve its knowledge-based capabilities over time. This is an interesting and important area of study, as understanding the role that KMO plays in the development of knowledge-based capabilities and the impact it has on organizational competitiveness can provide valuable insights for practitioners and researchers alike.

In all successful knowledge management efforts, knowledge leadership plays a crucial role as the driving force behind the initiative. Donate & Sánchez de Pablo, (2015) propose that knowledge leadership is a blend of transactional and transformational leadership attributes. Because the two leadership styles present essential components in knowledge leadership, some elements are included as dimensions of knowledge leadership.

Knowledge leadership is the ability to identify, acquire, create, share, and apply knowledge to enhance decision-making and problem-solving, promote a culture of learning and knowledge-sharing, and use knowledge to gain a competitive advantage (Jakubik, 2007; O'Reilly, Caldwell, Chatman, Lapiz, & Self, 2010).Knowledge leadership is a comprehensive approach to knowledge management that actively creates and shares knowledge within the organization in addition to simply gathering and archiving information. This entails fostering an environment that rewards learning, experimentation, and taking risks as well as providing the tools and infrastructure required to support knowledge management. Additionally, knowledge leaders are essential for identifying and acquiring the knowledge required to support the organization's goals and objectives as well as for fostering an atmosphere in which staff members feel free to share their knowledge and expertise with others (Viitala, 2004).

The existing body of literature has established that leaders play a pivotal role in fostering knowledge management behavior among employees by creating a psychological climate that facilitates the utilization of their knowledge management abilities. This involves enabling the acquisition of knowledge from organizational resources and encouraging the sharing of tacit knowledge within the organization to contribute to organizational knowledge. Effective leaders provide a supportive environment that encourages knowledge sharing and innovation, thereby promoting a culture of continuous learning and improvement. By emphasizing the value of knowledge management and providing the necessary resources and support, leaders can facilitate the effective utilization of organizational knowledge, thereby driving growth and success. Furthermore, knowledge leaders instill a thirst for knowledge by presenting a clear and inspiring vision and providing guidance for future endeavors. Nonetheless, leaders can also be the barrier to knowledge management behavior in organizations (Kaplan et al., 2001; von Krogh et al., 2012). leadership is responsible for the development of knowledge management infrastructure that promote the knowledge management processes.

The current study further proposes that knowledge leadership involves a set of distinct abilities that individuals must possess to be considered knowledge leaders. These abilities are essential for effective knowledge management and utilization within organizations, and they form the necessary indicators of the knowledge leadership variable. Specifically, knowledge leaders must be able to identify and acquire relevant knowledge for the organization, create and share knowledge within the organization, apply and use knowledge to improve decision-making and problem-solving, foster a culture of learning and knowledge-sharing within the organization, and leverage knowledge to create a competitive advantage for the organization. By possessing these abilities, individuals can become effective knowledge leaders, driving innovation, growth, and success within their organizations. Based on the section the review proposes that.

4. **Knowledge leadership moderates the relationship between knowledge management orientation and competitive advantage**

5.4 Knowledge-Based Capabilities as the mediating Variable

The literature review has established that to connect a knowledge management orientation to competitiveness, various intermediate outcomes are necessary, known as knowledge-based capabilities. While the ultimate destination is critical, attention to these intermediary outcomes is also essential. Thus, the current review examines knowledge-based organizational capabilities from the perspective of a knowledge management orientation. By doing so, this review aims to provide a clear understanding of the role that knowledge-based capabilities play in achieving competitive advantage, highlighting the significance of these capabilities as an essential element of effective knowledge management.

An overall KMO strategy necessitates the inclusion of knowledge-based capabilities in the framework; however, the configurations and roles of knowledge-based capabilities remain scattered and ambiguous in the literature. There is a lack of consensus among researchers about the relationship between knowledge-based capabilities and knowledge management practices. Some researchers believe that knowledge-based capabilities drive knowledge management practices, while others believe that a company's knowledge management practices shape its knowledge-based capabilities (Kaur, 2022). Furthermore, the real dimensions of KBCs are still contentious, this necessitates a further examination of the literature to define dominant themes on the subject. In essence, various conceptualizations of knowledge-based capabilities have emerged. Scholars have offered differing perspectives and operationalizations of the concept, with some emphasizing its role in gaining competitiveness (Denford, 2013). Bindra, Srivastava, Sharma, and Ongsakul (2020) have also highlighted the diversity of perspectives on knowledge-based capabilities, emphasizing the need for further research to clarify and refine the concept.

The review recognizes knowledge-based capabilities as outcomes of knowledge processes and knowledge infrastructure capabilities. According to Aydin & Dube, (2018), knowledge management influences performance, at least indirectly, through intervention by other variables. This view is supported study by Hussein, (2018), in which it was established that knowledge management orientation does not have a direct effect on business performance. However, the study revealed that it does have an indirect effect on business performance through the mediating variable of innovation. Dahiyat, (2015), highlights the importance of knowledge integration and utilization in the relationship between knowledge acquisition and innovation performance. He critiques prior studies that assume a direct connection and neglect the role of mediation variables. According to Dahiyat, the lack of attention to these variables is a critical shortcoming of previous research in this area. By emphasizing the importance of knowledge integration and utilization, Dahiyat highlights the need to consider mediating variables in future studies to provide a more accurate understanding of the relationship between knowledge acquisition and innovation performance.

Considering this understanding, the current review posits that knowledge-based capabilities may serve as a potential mediation variable. Wang and Ahmed (2007) define capabilities as a company's ability to deploy resources in multiple ways, incorporating both explicit and tacit processes. The generic elements of knowledge-based capabilities, therefore, include innovative, adaptive, and absorptive capabilities. The selection of these attributes is based on various conceptualizations from prior scholars, reflecting their significance in enabling effective knowledge management and utilization within organizations. By considering knowledge-based capabilities as a potential mediation variable, this review aims to provide a more comprehensive understanding of the link between knowledge management orientation and organizational competitiveness, highlighting the importance of these capabilities in driving sustained success and growth. Citing the same indicators of innovative, adaptive, and absorptive capabilities, Kaur, and Mehta (2016) propose that knowledge process capabilities (KPCs) can be harnessed to develop higher-order dynamic capabilities, which have the potential to create competitive advantage for a company. By leveraging knowledge process capabilities and knowledge-based capabilities, organizations can enhance their ability to manage and utilize knowledge resources, leading to improved organizational performance and competitive advantage. The emphasis on the interplay between knowledge process capabilities and knowledge-based capabilities, and dynamic capabilities highlights the need for a more comprehensive understanding of the mechanisms and outcomes of knowledge management orientation, and the critical role it plays in driving sustained success and growth in organizations.

As mentioned earlier this review considers innovative, adaptive, and absorptive capabilities as the critical elements of knowledge-based capabilities. The 'innovation capability' of an organization can be defined as its ability to innovate, or more specifically, its "ability to continuously translate knowledge and ideas into novel products, processes, and systems for the benefit of the organization and its stakeholders" (Aas & Breunig, 2017) . According to Kaur and (Mehta, 2016), innovative capabilities are higher-order capabilities that result from a synthesis of various knowledge-related activities. Indeed, the study by Akhavan et al., (2016)) confirmed that innovation capabilities are outcomes of knowledge behaviors. Various other studies have outlined the significance role of knowledge management process and infrastructure variables on organizational innovation capabilities (Bashir & Farooq, 2019; Migdadi, 2021).

Organizational adaptability, or adaptive capability, has been a fundamental focus of organizational research. The antecedents and consequences of adaptive capability have been the primary emphasis of strategic management literature for a significant period. Gibson and Birkinshaw (2004), defined adaptive capability as "the capacity to quickly capitalize on emerging opportunities, adjust to volatile markets, and avoid complacency". Ployhart and Tunner, (2014), define organizational adaptive capability as the extent to which a company creates or responds to changing market demands or opportunities. To achieve adaptive capability, it is critical to have a thorough understanding of contextual organizational factors (Biedenbach & Müller, 2012). Consequently, knowledge management factors are of great significance, the current review posits that adaptive capability is one of the most critical components of knowledge-based capabilities.

Cohen and Levinthal (1990,) define absorptive capacity as 'a firm's capacity to recognize the value of new and external information, assimilate it, and utilize it to commercial purposes. According Biedenbach and Müller, (2012) the external knowledge acquisition is used in the three types of organizational learning processes: exploratory learning, exploitative learning, and transformative learning, the three learning processes are interconnected. It important to note that the ability to evaluate and apply outside knowledge is largely determined by previous existing knowledge levels. To this end, absorptive capability is an outcome of existing knowledge infrastructure and processes. Existing research has explored the drivers and antecedents of absorptive capability, according to Moos et al., (2013), knowledge management systems fully support absorptive capacity and absorptive capacity mediates the relationship between knowledge management systems and innovation. A few other scholars have also observed that knowledge related activities have a significant effect on an organization absorptive capability (Dabic et al., 2020; Valentim et al., 2016).

In conclusion, this systematic review proposes that an organization's adaptive, innovative, and absorptive capabilities act as key knowledge-based capabilities that mediate the relationship between Knowledge Management Outcomes (KMO) and competitive advantage. These capabilities enable organizations to leverage their knowledge assets effectively and create value from them, which, in turn, leads to a sustainable competitive edge. The final proposition is derived from this section, which states that.

5. **The knowledge-based capabilities, including adaptive, innovative, and absorptive capabilities, mediate the relationship between Knowledge Management Orientation and competitive advantage.**

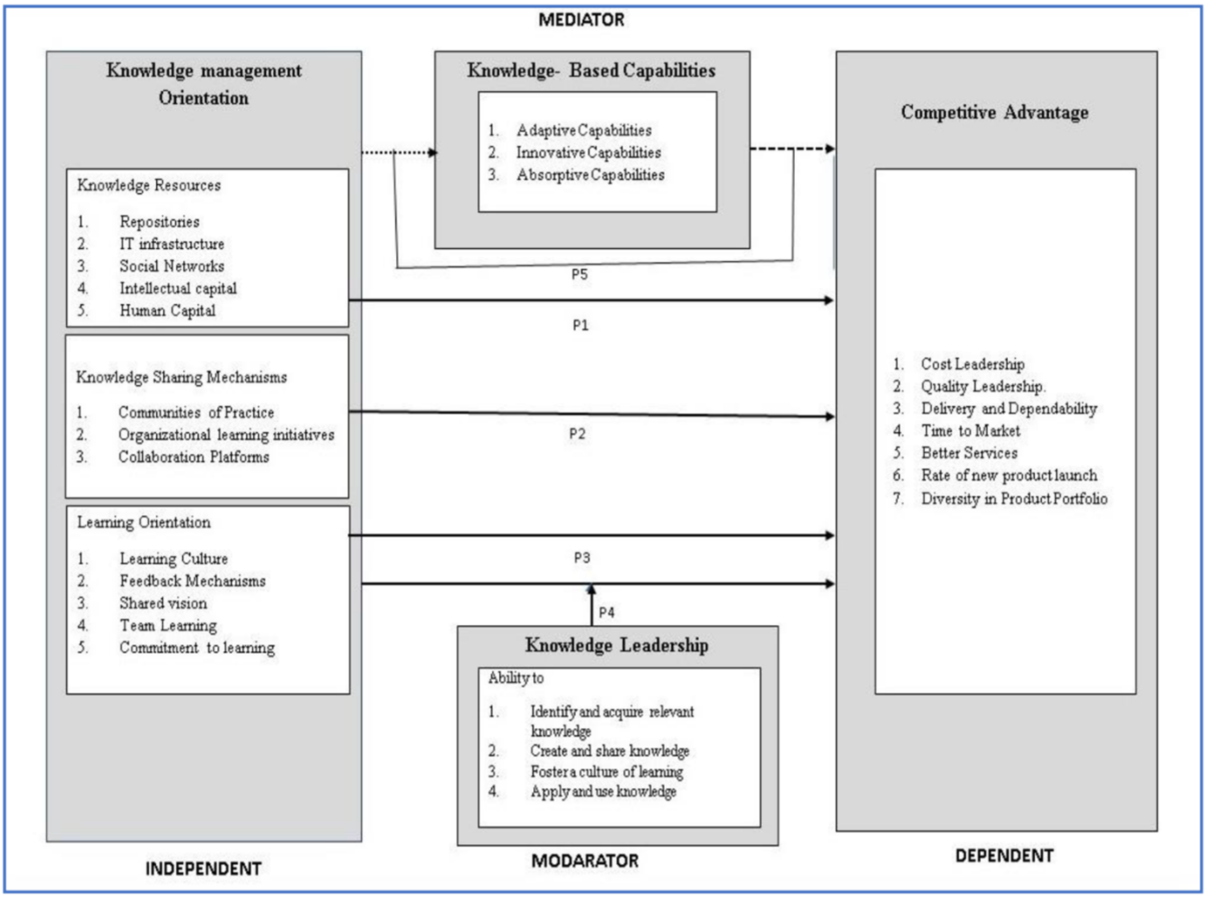

Figure 1: The KMO Conceptual Model

6. Conclusion

The primary objective of the review was to establish KMO as a strategic orientation, drawing upon previous scholarly attempts. To accomplish this objective, the review endeavored to define the concept with precision and to identify relevant indicators. As a result, knowledge resources, knowledge sharing, and learning orientation (LO) were identified as fitting indicators, while knowledge leadership and knowledge-based capabilities were established as the moderator and mediator variables, respectively. These findings culminated in the formulation of five propositions, offering a theoretical framework for the effective implementation of KMO.

However, it remains uncertain whether the proposed model will provide a panacea to the ambiguity that surrounds the literature on knowledge management and potentially offer a practical implementation approach to the plethora of studies. To achieve greater clarity and confidence in the proposed model, the author advocates for further empirical reviews. Such reviews could investigate the model's efficacy in diverse organizational settings and uncover potential limitations or areas for improvement. By conducting more rigorous and comprehensive studies, researchers can strengthen the reliability and validity of the proposed model and contribute to the development of more robust knowledge management strategies. Ultimately, this could yield practical and actionable insights that can be applied to organizations of all sizes and types.

By exploring the relationships and interactions between these variables, researchers can gain insights into how organizations can manage their knowledge resources to enhance their competitiveness and achieve sustainable success. Knowledge sharing involves exchanging information, experiences, best practices, and expertise through various methods of interaction among employees. Learning orientation involves fostering a culture of continuous learning and improvement through feedback mechanisms, shared vision and goals, team learning, and investing in employee development and training programs. These elements work together to establish a culture of continuous learning and improvement that drives unique knowledge-based capabilities and competitiveness within the organization.

In conclusion, KMO is an essential strategic orientation that, when combined with other strategic orientations, can significantly improve an organization's performance. As highlighted in this conceptual paper, the delineation of variables is critical for future strategic management scholars to develop a more nuanced understanding of KMO's impact on organizational performance. Overall, the KMO framework offers a valuable perspective for organizations seeking to cultivate a culture of knowledge management and continuous learning, which is increasingly critical in today's fast-paced and competitive business environment. The author posits that the KMO model has reached a level of maturity that warrants it being viewed as an equally crucial strategic orientation to other well-established models. This viewpoint is strengthened by extensive research that has validated the knowledge management paradigm as an avenue to competitiveness in contemporary organizations. Therefore, it is imperative that the knowledge management orientation model be given a prominent place at the higher table of strategic orientations, where it can be accorded the respect and recognition it rightly deserves.

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The Role of Social Media in Promoting Mobile Payment: A Qualitative Study of Consumers in Macao

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Abstract
The objective of this study is to identify the role of social media to promote mobile payment in Macao. Online focus groups were used for this study. There was a total of 18 participants attended online focus groups. The results showed that the age group of 18 to 30 used social media all the times and felt comfortable to receive promotion information of mobile payment through social media. Company can use social media in promoting mobile payment for age group 18-30, however, company needs to consider their concerned about the improvement of the existing mobile payment system such as offer a unified payment app in Macao and optimize the interface of mobile payment to be more user friendly. The age group of 31 to 49 did not have enough time to browse the information about mobile payment from social media. If a company can provide more attractive and engaging content helping consumers spend less time learning and browsing information, then social media can become an effective tool to promote mobile payments. The age group of 50-65 felt drawback about social media because they believed that there were a lot of fake information on the internet. To promote mobile payment for the 50-65 age group, free lectures, personal promotion, newspapers and TV are suggested.

Keywords: Mobile Payment, Perceived Usefulness, Perceived Ease of Use, Social Media, Adoption of Mobile Payment, Promotion of Mobile Payment, Focus Group

1. Introduction

According to the statistics report of the International Monetary Fund (IMF), Macao is one of the richest cities in Asia. In terms of per capita incomes and GDP per capita by purchasing power parity, Macao is one of the highest in the world (IMF, 2019). Macao has 662.9 thousand people, according to statistics, internet uses as a percentage of total population in Macao is 86.5% (Datareportal.com, 2022).

Regarding the uses of social media, 72.1 percent of residents surveyed use WeChat the most, compared to other websites and social networks like Facebook and YouTube. Among these interviewees, some 47.7 percent of them spend an average of one-hour daily to check WeChat. Around 19.2 percent of interviewees spend more than three hours a day on WeChat, 12.4 percent spend two to three hours to browse WeChat, and 16.1 percent use it for one to two hours (Macao Daily Times, 2017). Social media marketing is one of the biggest opportunities in marketing today (Luck et al., 2021). Social media marketing focuses on how to use social media such as Facebook, Instagram, Pinterest, YouTube, Tweeter and Snapchat. With the help of various social media marketing tools, marketers can understand the needs and interests of target audiences through various social media platforms, and promote ideas and products at low cost.

Mobile payment is defined as the transaction between two parties using mobile devices including wireless handsets, personal digital assistants (PDA), radio frequency (RF) devices, and near field communication (NFC) based devices (Ling, 2004; Chen and Nath, 2008). Mobile payment is a monetary payment for products or services through portable electronic devices such as tablets or mobile phones. Mobile payment technology can also be used to send money to friends or family members, for example using the PayPal app (Grand, 2021). Mobile payment has been very popular in Mainland China. In 2020, over 86% of the mobile internet users in China adopt mobile payment, representing a user base of over 852 million. In urban areas, the Mobile payment penetration rate is close to 90 percent (Slotta, 2021). *Macao* is a *Special Administrative Region* (MSAR) of the People's Republic of China. However, Macao is still behind in the adoption of mobile payments.

The COVID-19 pandemic may be an exogenous shock that eventually pushes consumer adoption to a tipping point (Hung, 2020; Immanuel et al. 2020). When the lockdowns began around the world, non-essential physical shopping changed to online shopping only, or the place of purchase changed to a contactless experience -- including mobile payments highly encouraged at checkout. Cash and plastic back-and-forth passage began and continued to be considered unhygienic. Such sudden and rapid changes in our daily lives even force consumers to feel more comfortable with various forms of payment technology. The promotion of the adoption of mobile payment seems the direction of now and future. In fact, the government of Macao and Hong Kong have distributed digital payment vouchers since 2020 and 2021 respectively to stimulate consumer spending for use at local businesses (Philips, 2021). The scheme in Macao is being supported by eight mobile payments platforms, namely, AiliPay (Macao), BOC Macao, CGB Pay, ICBC ePay, LusoPay, MPay, TAIFUNG Pay, UePay (Moura, 2021). However, do the Macao consumers accept mobile payment? How to promote the adoption of mobile payment through social media in Macao? These questions will be answered by achieving the following six objectives of this study:
1) to gain an understanding of the perception of mobile payment in Macao;
2) to investigate the perceived ease of use of mobile payment in Macao;
3) to investigate the perceived usefulness of mobile payment in Macao;
4) to explore the degree of acceptance of mobile payment in Macao;
5) to identify the role of social media to promote mobile payment in Macao; and
6) to find out the ways that can promote the adoption of mobile payment in Macao.

2. Literature review

The Technology Acceptance Model (Davis, 1989), or TAM, suggests that the use of information technology is related to some of the external variables, users' perception and users' behavioral intentions (see Figure 1). External variables such as users' internal beliefs, attitudes and intentions affect the people's perception of actual systems. Perceived usefulness refers to the extent to which an individual is subjectively aware that using a particular system would improve or facilitate his or her job improvement (Davis,1989; Hajiheydari and Ashkani, 2018; Qu et al., 2018). Perceived ease of use refers to the extent to which an individual considers that using a particular system would be easy. Previous research indicates that individuals' perceived usefulness positively affects their trust in a mobile information system (Afshan and Sharif, 2016; Kumar et al., 2018; Hung, 2019). Behavioral intention predicts a user's adoption of a particular system and its usage (Agrebi and Jallais, 2015; Davis, 1989), and behaviour intention is directly influenced by perceived usefulness and perceived ease of use, and is the prime determiniant for a user to accept or reject a system (Qu et al., 2018). The TAM model has become a leading model for predicting and explaining system acceptance, which is also considered adequate for analyzing the popularity of social network-based mobile payment tools (Qu et al., 2018).

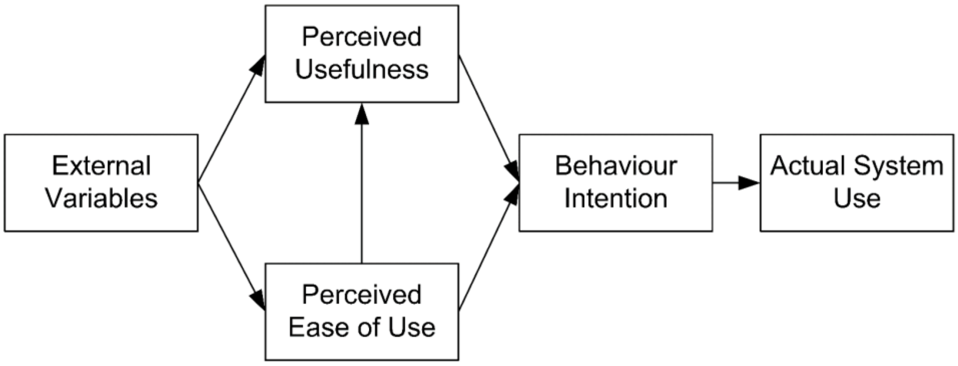

Figure 1: Conventional technology acceptance model
Source: Davis (1989)

Sharma and Bhatt (2018) state that social media have an absolute impact on perceived usefulness and perceived ease of use. Social media is very useful because it can help people make connections with others, easily get information about products and services as well as information about e-commerce companies, which can actually affect their behavioral intentions. The essence of social media focuses on two-way communication and interactivity. Social media is described as an online tool through which people can communicate with each other. It has become the standard word for online cultural exchanges and the primary form for individuals to participate on the Internet. By using social media, individuals are more closely connected than ever before. There are five social media most widely used in Macao: WeChat, Facebook, YouTube, Instagram, and Snapchat. As shown in Figure 2, there are total number of 439.6 thousand active social media users in Macao. Social media users represent 66.3% of the total population and 76.5% of social media users age over 13 (Datareportal.com, 2022).

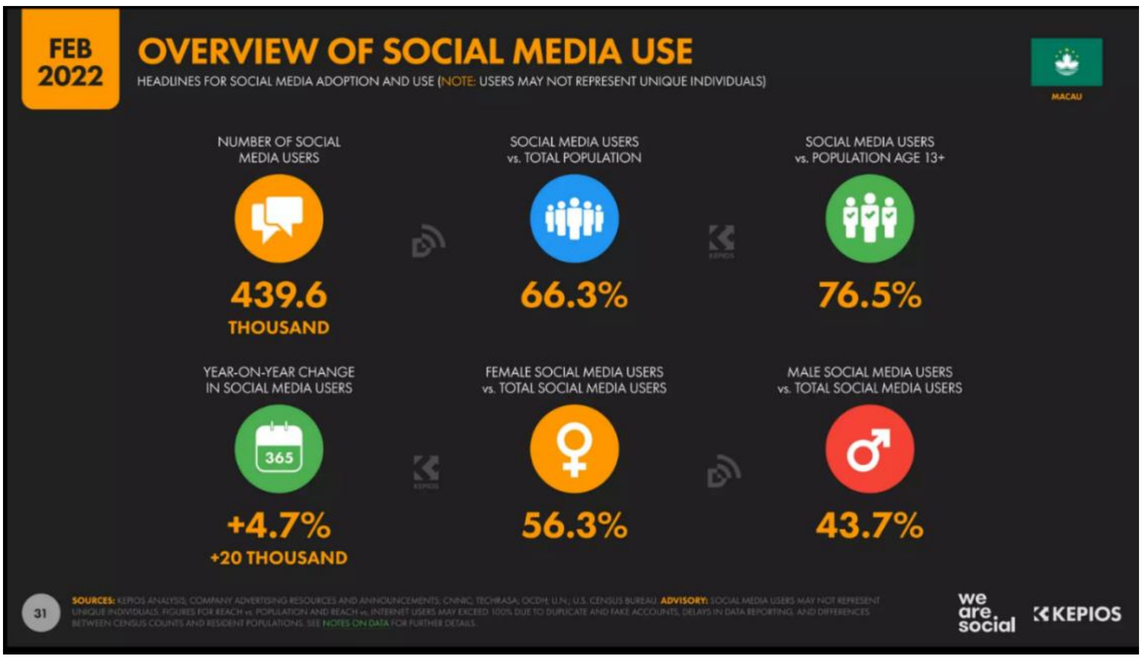

Figure 2: Macao's Social Media Overview 2022
Source: Datareportal.com (2022)

3. Methodology

This study used online focus groups method in order to obtain the qualitative data from the target groups of consumers in Macao, and to gain an in-depth understanding of mobile payments in Macao. The focus groups were used as a preliminary, explorative tool to identify some of the ways that respondents felt were of importance to promote the adoption of mobile payment in Macao. The group discussions focused on their knowledge, beliefs, experience and impressions towards mobile payments.

The study conducted a series of three focus groups to better understand how consumers in Macao perceive mobile payment and its adoption. There were eighteen respondents in total, and they were formed in groups according to their age: Group A aged from 18 - 30 years old; Group B aged from 31 - 49 years old; Group C aged range from 50 - 65 years old. Tables 1-3 present the composition of the focus groups. Each group consisted of six respondents led by a moderator who used a set of guided questions. Table 4 presents the twenty-one questions used and discussed. The questions were developed according to the TAM model and the research objectives for this study. The intent was for the groups to explore a range of topics including:

1. What are their knowledge of mobile payment in Macao?
2. Is mobile payment ease to use and useful?
3. What is the degree of acceptance or resistance towards mobile payment in Macao?
4. What is the role of social media in promoting mobile payment in Macao?
5. How to promote the adoption of mobile payment in Macao?

Table 1: Focus Group A

Group A (Age range from 18 - 30 years old) N=6					
	Age	Gender	Education level	Job Occupation	Income Level
A1	24	Male	University	Assistant engineer	MOP10,000-19,999
A2	30	Male	University	Clerk	MOP10,000-19,999
A3	27	Male	High school	Assistant engineer	MOP10,000-19,999
A4	23	Female	University	Freelancer	MOP 5,000-9,999
A5	25	Female	University	Technician in Facility Department	MOP10,000-19,999
A6	26	Female	University	Freelancer	MOP 5,000-9,999

Remark: MOP 1000 = US$124.5

Table 2: Focus Group B

Group B (Age range from 31 - 49 years old) N=6					
	Age	Gender	Education level	Job Occupation	Income Level
B1	41	Female	University	High school teacher	MOP30,000-39,999
B2	32	Female	High School	Clerk	MOP10,000-19,999
B3	35	Male	High School	Safety supervisor	MOP20,000-29,999
B4	33	Female	High School	Receptionist	MOP10,000-19,999
B5	31	Male	University	Engineer	MOP20,000-29,999
B6	45	Male	University	Project manager	MOP30,000-39,999

Remark: MOP 1000 = US$124.5

Table 3: Focus Group C

Group C (Age range from 50 - 65 years old) N=6					
	Age	Gender	Education level	Job Occupation	Income Level
C1	54	Female	Junior High School	Cashier in parking company	MOP10,000-19,999
C2	61	Male	Junior High School	Technician in Hotel	MOP10,000-19,999
C3	63	Female	Primary School	Housewife	MOP 5000 or below
C4	58	Female	Primary School	Housewife	MOP 5000 or below
C5	62	Male	Primary School	Freelancer	MOP10,000-19,999
C6	52	Female	Junior High School	Shuttle Bus Attendant	MOP10,000-19,999

Remark: MOP 1000 = US$124.

Table 4: Questions asked and objectives achieved through focus group

Questions Asked in the Focus Groups	Research objectives to achieve
1. Do you know what is the mobile payment?	1
2. Do you know what kinds of mobile payment service providers are available in Macao?	1
3. Did you use the mobile payment in Macao? How do you feel while you are using the mobile payment in Macao? Why?	4
4. How many times do you use the mobile payment in Macao? Everyday? Every week?	4
5. How do you use the mobile payment to settle the payment? Which mobile payment service do you prefer to use? Why? (such as BOC, MPay etc.)	4
6. Do you know social media tools such as WeChat, Facebook YouTube etc.?	5
7. Do you think social media tools such as WeChat, Facebook YouTube etc. that allow you to receive more useful information of mobile payment?	5
8. Do you think social media tools such as WeChat, Facebook, YouTube etc. allow you to know/recognize the ease of using mobile payment?	5
9. Do you think social media tools such as WeChat, Facebook, YouTube etc. allow you to learn the ease of using mobile payment?	5
10. Do you think mobile payment is very useful if this is easy to use?	2 & 3
11. Do you think mobile payment can bring you any kind of usefulness?	3
12. Do you think mobile payment is easy to use?	2
13. If you know the mobile payment is very useful, will you adopt?	4
14. If you know the mobile payment is easy to use, will you adopt?	4
15. What kind of promotion methods do you know?	6
16. What kind of promotion methods that can enhance the people use/recognize the mobile payment?	6
17. What kind of promotion methods that can attract the people use/use more/recognize the mobile payment? Suggest some effective ways.	6
18. What promotion methods that can help to generate a positive effect on the adoption of the mobile payment?	6
19. Do you think the necessity of mobile payment in Macao?	4
20. What kind of promotion methods that can help to increase the necessity of mobile payment in Macao?	6
21. Do you have any other suggestions to promote the mobile payment in Macao?	6

4. Results

4.1. Result of objective one: to gain an understanding of the perception of mobile payment in Macao

In order to gain an understanding of the basic knowledge of mobile payment in Macao, respondents were asked questions such as: "what is mobile payment?" and "what are the service providers of mobile payment?". Table 5 presents the results of the three groups of respondents.

All the respondents of groups A, B and C knew what mobile payment was. Group A and Group B were able to name the payment service providers that were available in Macao such as AiliPay (Macao), BOC Macao, CGB Pay, ICBC ePay, etc. One participant from group C did not know any service providers available in Macao.

Table 5: Participants' understanding of mobile payment in Macao

Questions	Number of respondents					
	Group A		Group B		Group C	
	Yes	No	Yes	No	Yes	No
1) Do you know what is the mobile payment?	6	0	6	0	6	0
2) Do you know what kinds of mobile payment service providers are available in Macao?	6 *MPay *Alipay *WeChat Pay *BOC Pay	0	6 *MPay *Alipay *WeChat Pay *BOC Pay	0	5 *MPay *Alipay	1

Group A: Aged from 18 - 30 years old; Total number (N) is 6.
Group B: Aged from 31 - 49 years old; Total number (N) is 6.
Group C: Aged from 50 - 65 years old; Total number (N) is 6.

4.2 Results of objectives two and three: to investigate the perceived ease of use and usefulness of mobile payment in Macao

Questions 10, 11 and 12 are related to the objectives 2 and 3. To investigate the perceived ease of use and usefulness of mobile payment in Macao, questions such as "Do you think mobile payment is very useful if this is easy to use?", "Do you think mobile payment is easy to use?" and "Do you think mobile payment can bring you any kind of usefulness?". The results are shown in Table 6.

Table 6: Participants' perceived ease of use and usefulness of mobile payment in Macao

Questions	Number of respondents					
	Group A		Group B		Group C	
	Yes	No	Yes	No	Yes	No
10. Do you think mobile payment is very useful if this is easy to use?	4	2	4	2	4	2
11. Do you think mobile payment can bring you any kind of usefulness?	6	0	4	2	2	4
12. Do you think mobile payment is easy to use?	6	0	2	4	3	3

Group A: Aged from 18 - 30 years old; Total number (N) is 6.
Group B: Aged from 31 - 49 years old; Total number (N) is 6.
Group C: Aged from 50 - 65 years old; Total number (N) is 6.

As shown in Table 6, all the participants of group A agreed that mobile payment is very useful and easy to use, because of the convenience of payment, exclusively discount offered by the service providers, avoidance of receiving fake money, bacteria free payment, payment can be settled when purchase on internet, and users are able to control the transaction.

"Mobile payment is useful. It can bring me convenient, I do not need to bring any cards and keep any changes. It can be used when I did not bring cash with me. I do not need to go to the cash withdrawal machine every time and afraid of receiving fake money. Mobile payment used to cooperate with different type of stores and provided QR code scanning payment, it can be more convenient and shorten the transaction time."

"The usage of mobile payment is very simple and easy. All you have to do is to create your own account and link up with your mobile phone number and set password, then recharge money there. This is easy to use because the

interface of the mobile payment app is simple, and the description of each function is clear. After using for once or twice, you can understand how to control it."

However, some of the participants of group B did not think mobile payment is very useful and easy to use, because some of them think that to pay by cash is faster than mobile payment, this is easy to give wrong amount of money when mobile payment apps improper operation, and mobile payment cannot be used if mobile phone is out of battery.

"Mobile payment is not easy to use and useful, it is easy to give the wrong amount of money when I did not operate probably, sometimes pay by cash is faster than mobile payment."

"Even though you do not need to bring wallet with you with the use of mobile payment, it will be bad if your mobile phone runs out of battery."

Some of the participants of group C shared that mobile payment is not useful because they get used to pay by cash, and they do not know how to use.

"Even though I know mobile payment is easy and useful, I prefer to pay by cash. I think this is not necessary in my life and I have already got used to pay by cash."

4.3 Results of objective four: to explore the degree of acceptance of mobile payment in Macao

As shown in Table 7, questions 3, 4, 5, 13, 14 & 19 were asked to explore the degree of acceptance of mobile payment in Macao.

Table 7: Participants' acceptance of mobile payment in Macao

Questions	Number of respondents					
	Group A		Group B		Group C	
	Yes	No	Yes	No	Yes	No
3. Did you use the mobile payment in Macao? How do you feel while you are using the mobile payment in Macao? Why?	6 *Feel good *Quick *Easy, no need to handle small change	0	5 *Convenience *Easy to add value and transfer money to friends	1 *Only trust currency	2 *Feel good *Enjoy coupon *Quick *Easy, no need to handle small change	4 *Do not know how to use *Complicated *Too convenience will be easy to spend more money *Stolen money if system goes wrong
4. How many times do you use the mobile payment in Macao? At least once per day → At least once per week → At least once per month →	 6	0	 2 2 1	1	 2	4
5. How do you use the mobile payment to settle the payment? Which mobile payment service do you prefer to use? Why? (such as BOC, MPay etc.)	6 MPay & BOC pay	0	5 MPay, BOC pay & Alipay	1	2 MPay	4
13. If you know the mobile payment is very useful, will you adopt?	6	0	5	1	2	4
14. If you know the mobile payment is easy to use, will	6	0	5	1	2	4

you adopt?						
19. Do you think the necessity of mobile payment in Macao?	5	1	4	2	2	4

Group A: Aged from 18 - 30 years old; Total number (N) is 6.
Group B: Aged from 31 - 49 years old; Total number (N) is 6.
Group C: Aged from 50 - 65 years old; Total number (N) is 6.

In the study of group A, all participants used mobile payment, they expressed that mobile payment is good to use, quickly to settle payment, and easy because they do not need to handle small change. They used mobile payment at least once per day. They preferred MPay and BOC Pay because of the discount offered by the service providers. They used mobile payment for purchasing daily necessaries such as food and dining out. They all agreed that mobile payment is necessity in their daily living.

"I adopted mobile payment because this is very convenience. It makes me feel fretted to bring my wallet and a bag to carry my wallet all the time. I would like to introduce mobile payment to my friends and family."

Results of group B showed that five out of six participants used mobile payment, and only one did not use because who trust on currency rather than mobile payment. They used mobile payment vary from at least once per day to once per month. Similar to the participants of group A, they preferred MPay, BOCpay and Alipay (Macao) because of the coupons and discounts. Furthermore, they are easy to register and operations are user friendly. Four participants expressed that mobile payment is necessary in Macao, but the key is how to make the local mobile payment system connected to the world is very important. If mobile payment is very easy to use and useful, 5 participants responded that they would adopted. One participant would not adopt because who does not interest in it.

"I will use mobile payment only if currency has totally replaced by the electronic payment"

In the study of group C, four participants did not adopt mobile payment because they do not know how to use, or think that this was very complicated to use. Whereas, some of them afraid that because this is too convenience to use, money will be spent easily. And they also worry that money would be stolen if the payment system goes wrong. The exiting users in this group used mobile payment at least once per day. They preferred only MPay because they do not know any other service providers and MPay offered purchasing coupons which is more value for money than pay by cash. They would use mobile payment for grocery shopping in the supermarkets and paying the bus fares. If mobile payment is very easy to use and useful, two participants responded that they would adopt, and three participants shared that they do not interest in it. Only two participants think that mobile payment is necessary in Macao.

"I do not prefer to adopt mobile payment because I am not young. The design of mobile payment is only for youngster but not me. I think mobile payment is not good because this is too convenient, people would easy to spend a lot of money within short time."

"I do not use mobile payment because this is too easy and care free, putting all amount of money on the internet is easy to be stolen, I worry about the security system of mobile payment."

4.4 Results of objective five: to identify the role of social media to promote mobile payment in Macao

As shown in Table 8, questions 6 to 9 helped to identify the role of social media to promote mobile payment in Macao.

Table 8: Participants identify the role of social media to promote mobile payment in Macao

Questions	Number of respondents					
	Group A		Group B		Group C	
	Yes	No	Yes	No	Yes	No

6. Do you know social media tools such as WeChat, Facebook YouTube etc.?	6	0	6	0	6	0
7. Do you think social media tools such as WeChat, Facebook YouTube etc. that allow you to receive more useful information of mobile payment?	6	0	3	3	2	4
8. Do you think social media tools such as WeChat, Facebook, YouTube etc. allow you to know/recognize the ease of using mobile payment?	6	0	6	0	1	5
9. Do you think social media tools such as WeChat, Facebook, YouTube etc. allow you to learn the ease of using mobile payment?	6	0	6	0	1	5

Group A: Aged from 18 - 30 years old; Total number (N) is 6.
Group B: Aged from 31 - 49 years old; Total number (N) is 6.
Group C: Aged from 50 - 65 years old; Total number (N) is 6.

Results showed that group A knows social media very well and they use it always. They used WeChat, Facebook, LINE and YouTube, amongst these WeChat frequently used by them. They chose different social media for different purposes. WeChat, WhatsApp and LINE are used for connecting with friends. YouTube is used for entertainment such as music and movies. They expressed that some useful information about mobile payment can be obtained through social media. They would use the videos from YouTube and Facebook to receive news and new offers about mobile payment. They all agreed that social media can help them to recognize the ease of use and learn about how to use mobile payment. In fact, there are so many people produce videos, teach audiences how to use mobile payment and upload the teaching videos on the social media. They can learn about it step by step without any problems.

"In fact, WeChat, Facebook and YouTube have good and sufficient information help you learn about the use of mobile payment."

"There are so many people make videos and teach people how to use mobile payment step by step, and I can follow it easily."

Similarly group B also feel comfortable with social media, participants of Group B reflected that both WeChat, Facebook, YouTube and Instagram are widely used, except when asking question 7, "Do you think social media tools such as WeChat, Facebook YouTube etc. that allow you to receive more useful information of mobile payment? Three of the participants express that even though they use social media, they do not actively browse the information from social media. In fact, they do not want to spend much time to search for the information about mobile payment, so they do not think it can help to receive useful information.

"Even though I use social media, but I do not actively search and browse the information about mobile payment."

Also, results showed that all the participants of group C know about different type of social media, they used WeChat, Facebook, YouTube and Tiktok, amongst these WeChat is preferred by them. Only two participants agreed that some useful information about mobile payment can be obtained through social media. The other four participants preferred newspaper and television to receive information of mobile payment because they think that there is so many fake news on the internet, the information source is not trustable. Almost all the participants disagreed that social media can help them to recognize the ease of use of mobile payment. To learn about how to use mobile payment, they would prefer face to face interaction, newspaper or television.

"I think that information on the newspapers and television is better than social media…. if people such as friends or my family members who are able to teach me face to face which will be better."

4.5 Results of objective six: to find out the ways to promote the adoption of mobile payment in Macao

As shown in Table 9, questions 15, 16, 17, 18, 20 & 21 were asked to provide suggestions that can promote the adoption of mobile payment in Macao. Both groups A, B & C know very well about different advertising and promotion methods such as broadcasting media (television), social media, print media (newspapers and magazines), discounts and coupons. Furthermore, participants from all groups agreed that social media, government support, discounts and coupons can help enhancing the promotion of mobile payment. However, participants from different groups suggested different ideas. Participants from group A, particularly concerned about the improvement of the existing mobile payment system such as offer unified payment apps, optimize the interface of mobile payment to be more user friendly.

"I think online advertising and social media ads can be used to promote mobile payment. To stimulate the uses of mobile payment is to unified the existing mobile payment apps into one, too many mobile payment apps make me confused and feel inconvenient."

Participants from group C thought that free lectures, face-to-face interaction and personal promotion are very important to them. Both participants from group A and B considered about the issues such as system security, protection of personal data and privacy are their key concerns.

Table 9: Participants suggest the ways to promote the adoption of mobile payment in Macao

Questions	Group A	Group B	Group C
15. What kind of promotion methods do you know?	*TV ad. *Billboard *Bus shop shelter ad. *Email ad. *Social media and online promotion *Word of mouth	*Newspapers *Magazines *Online ad *TV ad *Community promotion *Social media	*Newspapers *Magazines *TV ad *Radio *Social media *Personal promotion
16. What kind of promotion methods that can enhance the people use/recognize the mobile payment?	*Social media *Patronage reward	*Online ad *TV ad *Social media	*Newspapers ad *TV ad *Free lectures *Social media ad *Personal promotion
17. What kind of promotion methods that can attract the people use/use more/recognize the mobile payment? Suggest some effective ways.	*Community event *Poster *Discount *Free gifts	*Security & privacy *Discount	*Free lectures *Coupon & discount
18. What promotion methods that can help to generate a positive effect on the adoption of the mobile payment?	*Offer unified payment apps *Word of month *Offer more benefits *Money rebate or redeem	*Discount	*Free lectures *Coupon & discount
20. What kind of promotion methods that can help to increase the necessity of mobile payment in Macao?	*Government support *Word of mouth *Discount *Social media promotion	* Government support	*Government support *Word of mouth
21. Do you have any other suggestions to promote the mobile payment in Macao?	*Optimize the interface of mobile payment *Shorten maintenance time	*Simplified step and procedure when use	*Discount

	*Privacy protection		

Group A: Aged from 18 - 30 years old; Total number (N) is 6.
Group B: Aged from 31 - 49 years old; Total number (N) is 6.
Group C: Aged from 50 - 65 years old; Total number (N) is 6.

5. Conclusions and implications

The purpose of this research is to study the role of social media in promoting mobile payment in Macao. The conventional technology acceptance model (TAM) used as the base for this study. Social media tools have been infiltrated into the lives of different age groups. Therefore, the focus group research method has been used to explore the perception of participants in different age range. The three different age groups are: 1) 18-30; 2) 31-49; and 3) 50-65.

Regarding age group of 18 - 30 years old, they know very well about mobile payment, social media and different mobile payment service providers in Macao. They all agreed that mobile payment is very useful and easy to use. All participants have already adopted mobile payment. They think this is important in their daily living. Company can use social media for this age group because they use social media all the times. Indeed, they feel so comfortable to obtain useful information such as new offers and discount from social media about mobile payment. However, company needs to consider their concerned about the improvement of the existing mobile payment system such as offer a unified payment app in Macao, optimize the interface of mobile payment to be more user friendly.

When studying age group of 31 - 49 years old, it also found that all of them know very well about mobile payment, social media and different mobile payment service providers in Macao. Almost all participants have adopted mobile payment. However, company needs to pay attention that some of them do not think mobile payment is useful because they think that to pay by cash is more efficient and effective. Moreover, company needs to consider their concerns about how to make the local payment system connected to the world system, system security, protection of personal data and privacy issue. In fact, they used social media, but they do not have enough time to browse the information about mobile payment from social media. If company is able to deliver more engaging content, consume less time in learning and browsing the information, social media could be an effective tool for promoting mobile payment.

The results showed that age group of 50 - 65 years old did not think positively of social media tools effect on the perceived usefulness and ease of use of mobile payment. They feel drawback about social media because they believed that there are a lot of fake information on the internet, newspapers and televisions are more trustworthy for this group of people. They do not consider social media is the fastest and easiest way to deliver information. In fact, most of them did not adopt mobile payment because they think that this is so complicated to use. To teach them how to use and increase the usage rate, company can enhance on face-to-face interaction such as offering free lectures. To promote mobile payment, personal promotion, newspaper and television are suggested.

6. Limitations and future research directions

Similar to other research, there are several limitations in this study where require further effort to pay. Firstly, typically a number of people consist of five to eight participants are appropriate in conducting a focus group (Robinson, 1999). This study obtained 18 participants attended the three focus groups, and although fulfilling the requirement, further insights could be gained from a larger sample size. Secondly, in order to understand the perception and attitude of local consumers towards mobile payment, focus groups have been used to collect date for this research study, quantitative research study such as questionnaire with larger sample size is suggested. In addition, this study only focuses on Macao, similar research study can be conducted and data can be collected from different places around the worlds. And hence, the study results from different places in terms of the perceived usefulness and ease of use of mobile payment can be used to compare with one and another, a more insightful conclusion could be drawn.

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An Empirical Survey of Individualized Consideration on Talent Management Practices: Lessons from Insurance Companies in Kenya

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Abstract
This study aimed to determine how individualized consideration relates to talent management practices. Using a convergent mixed methods design, the study population consisted of 2832 senior, middle, and lower management staff, with a sample size of 384 selected using a stratified proportionate random approach. Data was collected using a structured questionnaire and document analysis from insurance companies and academic journals. Statistical Package for the Social Sciences version 24 was used to analyse collected data. Descriptive statistics included frequencies, percentages, means, and standard deviations, while inferential statistics included multiple statistics such as Chi-square for independence, while correlations and regression analysis were carried out to test the study hypotheses. The study findings were presented in tables and figures. Qualitative data was analysed through the use of thematic analysis and presented in prose form. The study found a significant positive relationship between individualized consideration and talent management practices. The study recommends that insurance company management in Kenya and beyond emphasize individualized consideration in their leadership style to improve talent acquisition, development, engagement, and retention.

Keywords: Individualized Consideration, Talent Management, Insurance Companies

1. Introduction

The insurance market in Kenya is critical in the future-proofing of corporate and individual investments, health and livelihoods. This expectation requires the insurance industry to effectively deal with disruptive market dynamics, especially the demand for talented workers. Extant literature has shown that leaders enact various leadership styles such as autocratic leadership, bureaucratic leadership, coach-style leadership, democratic leadership, laissez-faire leadership, strategic leadership, transactional leadership and transformational leadership style. Transformational leadership style multifactor leadership that involves influencing or impact followers (McCleskey, 2014; Nguyen et al., 2017). It enables a leader to articulate a compelling vision and, through charisma and moral appeal, brings social change such as institutional reforms (Ghasabeth, Soosay, & Reaiche, 2015).

Transformational leadership style has five facets of idealized influence attributed, idealized influence behaviour, inspirational motivation, intellectual stimulation and individualized consideration. Individualized consideration demonstrates a leader's ability to pay individualized attention to respective member. This study assessed the influence of individualized consideration relates to talent management practices in the insurance industry in Kenya. The insurance industry is a critical sector that provides insurance covers against various risks such as property damage, medical insurance cover, life assurance covers, and employment. Insurance companies play a significant role globally in providing insurance covers that protect against different risks (Al-Haraisa et al., 2021). However, insurance companies face various challenges such as competition for talent, new technologies, social changes, political changes, and economic changes. The industry has, therefore, depended on developing strategies to compete for a finite and shrinking pool of talented workers (Kajwang, 2022; Kim et al., 2018; Arrawatia & Dixit, 2017). Talent management practices are seen as an essential strategy to improve employee engagement and satisfaction, which can positively impact organizational performance (Dixit & Arrawatia, 2018; King & Vaiman, 2019). Talent management practices focus on improving the competencies of a selected pool of employees with the potential to enable an organization to meet its goals competitively (McDonnell et al., 2017).

In the United States of America, insurance companies have prioritized new markets and digitization over talent management practices (Catlin et al., 2020). This approach has led to over 43 percent of insurance companies experiencing challenges in talent recruitment, forcing them to hire from outside the industry at a higher cost (Shaw, 2021). Similarly, the United Kingdom's insurance industry is complacent regarding talent attraction and retention, with only 28 percent of employees having the necessary digital technology needed to transform the industry, despite the industry depending on technology to distribute its products (Welchman et al., 2022).

In Poland and Lithuania's life insurance industry, talent management practices were found to have an impact on insurance agent performance, with individual competencies being a critical factor (Janowski & Przekota, 2020). In the Nordic insurance industry, a significant challenge was a lack of talent due to global competition for talented workers, the exiting of the older generation from the industry, and the industry not being considered attractive by the young generation (Johannsdottir et al., 2014). In Australia, the insurance industry is experiencing talent challenges, particularly in digital technology, which has compelled insurance companies to pay a high premium to attract and retain talent (Wood, 2021). In China, the talent shortage is experienced across all sectors, including insurance, due to the exiting aging workforce and the shrinking skills in insurance, finance, and information technology (Wang & Sun, 2018). The major problem in Japan is not the lack of talent but how to identify specific talents (Nobutaka, 2021). In less developed jurisdictions such as India, dissatisfaction, lack of clear job roles, and inadequate compensation are significant challenges in the insurance industry (Yadav, 2019).

Therefore, to remain competitive and sustainable, insurance industry leaders should pay more attention to human resources, which is seen as a critical organizational resource. Talent management practices are essential strategies that can improve employee engagement and satisfaction, which can positively impact organizational performance (Al Aina & Atan, 2020). Organizational strategies such as delegation, communication, and talent development can help reduce costs associated with talent turnover.

Individualized consideration (IC) is one of the five dimensions of transformational leadership style (TLS) and is defined as a leader's ability to pay individualized attention to respective members (McCleskey, 2014; Nguyen et al., 2017; Afsar et al., 2017; Batista-Foguet et al., 2021). Transformational leaders who demonstrate IC are able to provide individualized support and guidance to their followers, which can lead to positive outcomes such as talent retention (Edirisooriya, 2020) and improved job satisfaction and individual performance (Braun et al., 2013). Research has shown that IC has a positive impact on talent management practices. For example, in South Africa, Mangisa, Schultz, and Van Hoek (2020) found that transformational leadership style positively influences talent acquisition and talent retention, with IC being one of the key components. Similarly, Edirisooriya (2020) found that IC, along with other transformational leadership dimensions, positively impacts talent retention in Sri Lanka. Overall, IC is an important aspect of transformational leadership style and has been shown to positively impact talent management practices, specifically talent retention. This study therefore sought to assess how the individualized consideration relates to talent management practices in the insurance industry in Kenya.

2. Statement of the Problem

Searching for talented workers to help insurance organizations navigate a complex and competitive business environment is a significant leader challenge (Al-Haraisa et al., 2021). Kenya is no exempt. For instance, despite legal, regulatory and technological investments, Kenya's insurance industry is still faced with insufficient talent attraction, talent retention, compliance with industry regulatory requirements, lack of products diversification, poor customer service, fraud and low insurance penetration rate at 2.4 percent compared to 17 percent in South Africa (IRA, 2019; Kigo & Gachunga, 2016; Azegele et al., 2021; Cytonn, 2021; PwC, 2020; Njuguna & Waithaka, 2020; Deloitte, 2020).

Moreover, studies carried out in Kenya have shown that the insurance industry continues to experience various talent management challenges. For example, the industry has a high employees' turnover (Azinga et al., 2019), a lack of critical talent pool (Deloitte, 2019), inadequate involvement of employees in decision making (Munge & Kitiabi, 2017), low investment in employee career development (Kigo & Gachunga, 2016), and a lack of strategic leadership (Otwori & Muturi, 2019).

From the extant literature, there is a conceptual gap where talent management dimensions have been conceptualized has differently as an outcome of individualized consideration in the insurance industry in Kenya (Nyokabi et al., 2017; Barasa & Kariuki, 2020; Njiiri et al., 2021). Individualized consideration involves leaders paying attention to the unique needs and development of their employees (Bass & Riggio, 2006). There is limited literature at the international and regional level on the relationship between the individualized considerations and talent management practices. Moreover, according to this researcher, non that exist has been conducted within the Kenya context, explicitly covering the insurance industry. While many variables have contributed to the gaps identified in the literature, the fundamental direction of this study was to bridge the gap by examining the relationship between individualized considerations and talent management practices in Kenya's insurance industry.

3. Objective of the Study

The objective of the study is to assess how individualized consideration influences talent management practices in the insurance industry in Kenya.

4. Research Hypothesis

It was hypothesised that:

Ho_1: There is no significant relationship between individualized consideration and talent management.

Ha_1: There is significant relationship between individualized consideration and talent management.

4. Literature Review

4.1. Individualization Consideration

Individualized consideration refers to how a leader appreciates the individual needs of every member of the team (Mir et al., 2020). As observed by Northouse (2022) and Mhatre and Riggio (2014), a leader who enacts individualized consideration behaviour provides a supportive climate and listens to the needs of individual members. Through individualized consideration, leaders train followers to engender fully, take care of the members' interests and be open to followers' needs (Northouse, 2022; Khan et al., 2016; Negussie & Demissie, 2013). As such, individualized consideration enables leaders to support and develop specific members' learning opportunities and to willingly coach and mentor members.

Teymournejad and Elghaei (2017) and Anthony (2017) have argued that a leader's coaching and mentorship process is through a structured and unscheduled conversation, work delegation and autonomy. Expanding on coaching and mentorship, Neupane (2015) postulates that leaders involved in coaching ensure individual needs are marked, a coaching plan developed and the leader continuously provides feedback, which ultimately enables employees to attain adequate skills, knowledge and attitudes. Mentorship focuses on guiding less experienced follower. Here, Arshad et al. (2021) postulate that mentorship allows a mentee to interact with the mentor, who then offers the mentee an opportunity to meet with other organization members, thus, making learning much more manageable.

Several studies on transformational leadership style suggest that individualized consideration behaviour has contributed to talent management practices, such as talent retention, job satisfaction and employee performance (Long, Yusof, Kowang & Heng, 2014; Mir et al., 2020). For example, Mir et al. (2020) examined talent retention as an emerging business concern. The objective of the study was to identify the factors that mediate between the transformational leader and workers' retention in the banking sector in Pakistan. The study revealed that individualized consideration positively mediated job satisfaction, psychological ownership and talent retention. The study emphasised the need for banking sector managers to improve talent retention by helping employees to appreciate their jobs through psychological ownership.

4.2. Talent Management Practices

Talent management practices have been a concern for practitioners and scholars (Al Aina & Atan, 2020). Talent management has traces in the 1860s, but it was not until the 1990s that McKinsey Group came up with the phrase "war for talent" (Al Aina & Atan, 2020). Despite the lack of a universal definition of talent management, its usage depends on the context (Al Aina & Atan, 2020). The concept is not consistent since each company has a different purpose for talent management (Guerci & Solari, 2012), and the term is interchangeably used to describe processes and outcomes (Salih & Alnaji, 2014). Talent management practices increase the value of human capital, and the aim is to retain employees who are considered talented (Jyoti & Rani, 2014; Isa & Ibrahim, 2014). Various scholars present divergent views on the dimensions of talent management practices (Ebrahim et al., 2021; Bibi, 2018; Rabbi et al., 2015; Ibidunni et al., 2016; Salau et al., 2018; Lyria et al., 2017; Dagogo & Ogechi, 2020).

Talent management practices are how an organization attracts, hires, develops, and retains the best people to hold strategic positions (Dessler, 2013). The essence of talent management practices is to create value for the organization by using internal talent to implement strategies to attain economic value in a competitive market (Jyoti & Rani, 2014; Pandy, 2017; Sparrow & Makram, 2015). Talent management practices, such as employer branding, reward, and development, can improve retention and competitiveness (Sheehan et al., 2018; Isa et al., 2018). The study will discuss talent management as multiple practices adopted by an organization to identify a pool of talented human resources to hold strategic positions for competitive advantage, operationalized through talent acquisition, talent development, talent engagement, and talent retention.

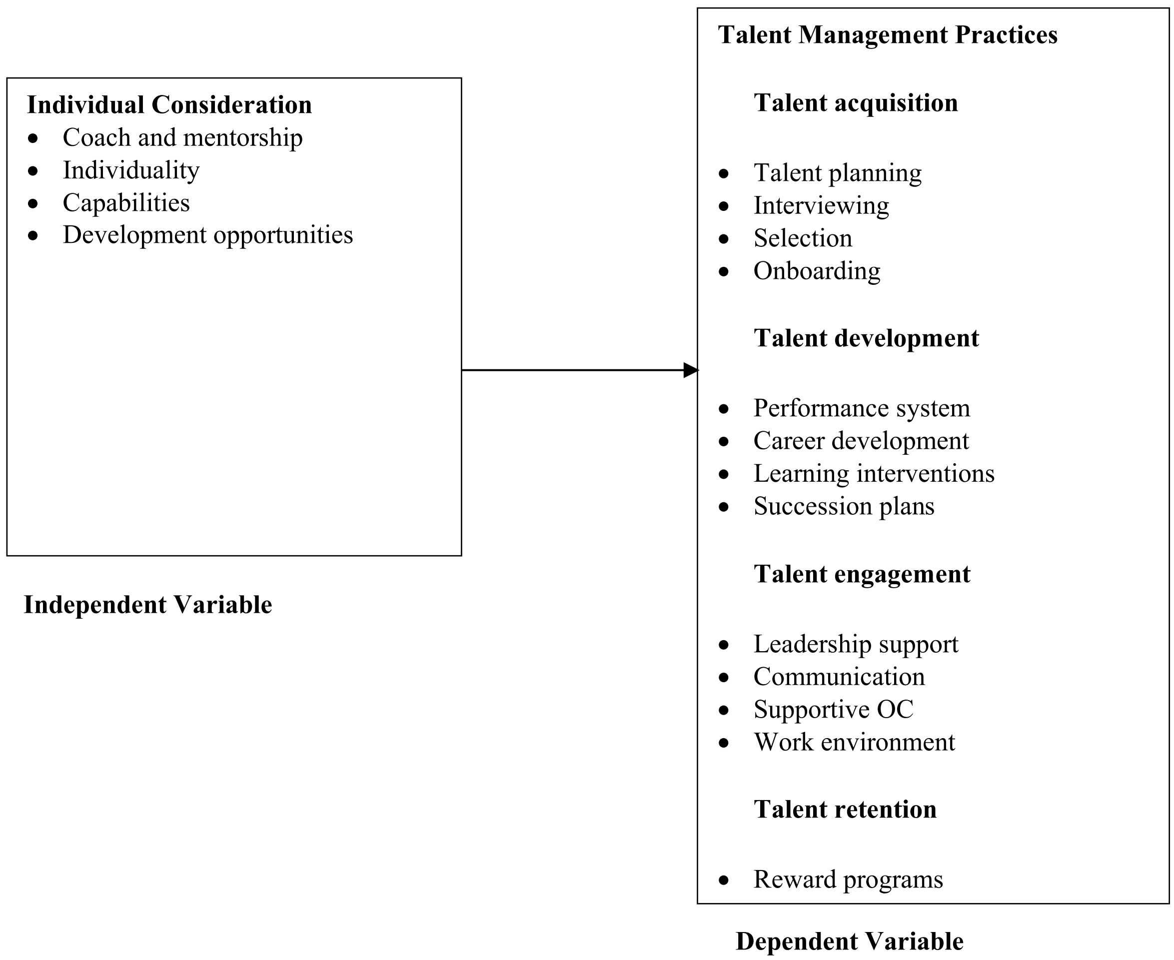
5. Theoretical Framework

5.1. Transformational Leadership Theory

Transformational leadership theorists believe that leaders inspire and motivate individuals to perform tasks that bring out the best of them and the whole team instead of self-interest (Northouse, 2022). The theory of transformational and transactional leadership was first introduced by Burns in 1978 and later developed by Bass in the 1980s (Kumar, 2018; Choi et al., 2016; Tengi et al., 2017; Ahmad et al., 2017). Burns argued that a transformational leader uplifts the morale of the followers and motivates them to enthusiastically carry out the common task for the good of all, while a transactional leader focuses mainly on follower's interests (Burns, 1978, as cited in Yukl, 2013). Bass disputed Burns's transformational and transactional leadership continuum arguments by postulating that influential leaders should apply transformational and transactional behaviours (Bass, 1985, as cited in Northouse, 2019; Kittikunchotiwut, 2019; Choi et al., 2016; Tafvelin, 2013).

Critiques of the transformational leadership theory have argued that it has not received sufficient qualitative research to expound on how it influences followers' feelings and optimism or how it increases followers' commitment to tasks (Northouse, 2022; Yulk, 2013). Odumeru and Ifeanyi (2013) maintain that the theory has relied only on the positive outcomes to businesses but ignored the negative effects it may have on employees such

as stress. Nonetheless, the choice of transformational leadership theory is informed by its association with various positive outcomes, making it essential to this study. Transformational leadership behaviours have positively impacted talent management variables such as employee engagement, job satisfaction, development, retention, and job performance (Osborne & Hammoud, 2017; Chianga & Lin, 2016; Karuri & Nahashon, 2015). Li et al. (2019) used transformational leadership theory to examine the effect of transformational leadership on employee innovation and work behaviour of multinational companies operating in China. Findings from the study indicated that transformational leadership sub-variables, such as trust, positively impact the engagement of employees to work. This theory was deemed relevant in supporting this study in relation to transformational leadership.
Conceptual Framework



6. Research Methodology

Research philosophy is about the nature, source and development of knowledge (Hughes & Sharrock, 2016). The choice of pragmatism is informed by its ontology perspective, which accommodates multiple views, and the epistemology perspective, which allows subjective interpretation of the phenomenon under investigation (Al-Ababneh, 2020). Research design is the researcher's strategy for collecting and analysing data to respond to research objectives (Kothari & Garg, 2014). This study adopted convergent parallel mixed methods because the design ability to collect both qualitative and quantitative data at the same time (Creswell, 2015). This was important in this study since it was aligned with the study pragmatism and also provided in depth understanding on how deployment of transformational leadership style affects talent management practices.

The target population was 2,832 senior management, mid-level management, and lower management of the 56 insurance companies legally operating in Kenya (IRA, 2021). The sample size of 384 was arrived at using Fisher

(1998, as cited in Jung, 2014) formula. A stratified proportionate random approach was applied to generate and arrive at the final sample from three strata of senior management, mid-level management, and lower management. The study used primary quantitative as well as primary qualitative data which was considered has information collected for the first time and not used in any other study before (Kumar, 2018; Johnston, 2014). This study collected data through a self-administered questionnaire. The questionnaire contained both open and closed-ended questions. To ensure the instrument is devoid of any ambiguities, pre-testing was done by submitting it to five experts in leadership and human resources management and their feedback was incorporated.

Descriptive statistics were used to summarize data and make general observations about the data on the relationship between transformational leadership style, and talent management practices in insurance industry in Kenya and the moderating role of organizational culture. Inferential data analysis was conducted by use of regression analysis and Pearson correlation coefficient analysis.

7. Research Findings

The sample size for the study was 384 senior, middle and lower management staff from 56 insurance companies legally operating in Kenya. The selected sample was issued with questionnaires. The returned questionnaires were cross-checked for accuracy and completeness and 299 were found to be valid and reliable and could be used for further analysis and reporting. The returned questionnaires formed a response rate of 77.9%. As explained by Sekaran and Bougie (2016), a response rate of 50% and above is adequate for analysis, 60% and above is good while that of 70% and above is excellent. The response rate of 77.9%, therefore, was excellent for further analysis and reporting the findings of this study.

7.1. Descriptive Analysis Results

Respondents were required to indicate the attribute that best described their immediate supervisors in a five-point scale where 1 represented not at all, 2 once in a while, 3 sometimes, 4 fairly often and 5 frequently.

7.2. Descriptive Analysis for Individualization Consideration

The first objective of the study was to assess how the individualized consideration relates to talent management practices. Respondents were, therefore, requested to give their feeling regarding their immediate supervisors' individualized consideration. The findings obtained were summarized using means and standard deviations presented in Table 1 below. The aggregate mean of 3.45 suggests that immediate supervisors of respondents in the insurance companies in Kenya sometimes intellectually stimulated their employees. This is seen by specific findings where respondents indicated that their supervisors fairly often helped them to develop their abilities (M= 3.70, SD= 1.148); and that they considered difference needs, abilities and aspirations from others (M= 3.51, SD= 1.091). They also indicated that sometimes, their supervisors treated them as individuals not just as members of a team (M= 3.36, SD= 1.255); and supervisors spent most of their time coaching and mentoring them (M= 3.24, SD= 1.090).

Based on these findings, one can conclude that these supervisors appreciated the individual needs of every member of their team, an attribute supported by Northouse (2019) and Mhatre and Riggio (2014) who observe that a leader who enacts individualized consideration behaviour provides a supportive climate and listens to the needs of individual members. Individualized consideration has also been shown to enable leaders to support and develop specific members' learning opportunities and willingly coach and mentor members. These findings agree with those of Long et al. (2014) that leaders should pay more attention to individual employee needs in order to attain motivation and satisfaction in the workplace. The findings also agree with Edirisooriya (2020) who finds that to attain high retention and improved productivity, managers need to understand and actively diagnose the development needs of their employees. Similarly, the findings confirm with Transformational leadership theorists, Bass, who in the 1980s postulated that leaders inspire and motivate their followers to perform tasks that bring out the best of individuals and the whole team, instead of self-interest.

Table 1: Descriptive Analysis for Individualization Consideration

	N	Mean	Std. Deviation
My supervisor helps me to develop my abilities.	299	3.70	1.148
My supervisor considers difference needs, abilities, and aspirations from others.	299	3.51	1.091
My supervisor treated me as an individual not just like a member of the team.	299	3.36	1.255
My supervisor spends most of the time coaching and mentoring us.	299	3.24	1.090
Aggregate Score		3.45	1.15

7.3. Descriptive Analysis for Talent Management Practices

The main objective of this study was to examine the relationship between individualized consideration, and talent management practices in insurance industry in Kenya while interrogating the moderating role of organizational culture in that relationship. Previous sections have focused on individualized consideration and organizational culture. This section focuses on talent management practices.

7.4. Talent Acquisition

Here, respondents were presented with statements on talent acquisition and requested to indicate their extent of agreement or disagreement with them. Table 6 below presents a summary of findings. An aggregate mean of 3.84 showed that the respondents agreed on talent acquisition efforts in their insurance companies. Specifically, respondents agreed that the leadership ensured that: appointed talent is effectively on-boarded (M= 3.85, SD= 1.003); critical positions are filled by talented employees (M= 3.84, SD= .965); there are updated workforce plans (M= 3.84, SD= 1.047); and a strong employer brand is built (M=3.84, SD= 1.015).

These findings agree with those of Deloitte (2016) who undertook a survey of human capital and found that the insurance companies in the past have relied on internal talent. The findings also support the assertion by the National Centre for the Middle Market [NCMM] (2016) that talent acquisition should start with workforce planning. Such a process forms a core business strategy and requires business leaders to carry out an internal assessment of talent status, compare what is within the organization, and develop talent acquisition action plans to bridge the gaps identified. The study also aligns with Rukunga and Nzulwa (2018) and Joseph and Sridevi (2015) who emphasize the need to develop long-term strategies to entice talent to the organization upon identification.

Table 6: Descriptive Analysis for Talent Acquisition

	N	Mean	Std. Deviation
Leadership ensure appointed talent is effectively on-boarded	299	3.85	1.003
Leadership ensures critical positions are filled by talented employees	299	3.84	.965
Leadership ensures there is updated workforce plans	299	3.84	1.047
Leadership has built a strong employer brand	299	3.84	1.015
Valid N (listwise)		3.84	1.01

7.5. Talent Development

This section presents respondents' extent of agreement or disagreement with statements provided on talent development. The findings are presented in Table 7 below. An aggregate mean of 3.69 suggests that the respondents agreed on average with talent development in their company. The findings specifically show that the respondents agreed, on average, that leadership was aware of and implemented performance management system (M= 3.86, SD= 1.045); that leadership has developed career development plans (M= 3.68, SD= 1.094); that there were elaborate learning interventions focused on talent management (M= 3.61, SD= 1.149); and that leadership ensured succession plan was implemented as core to business strategy (M= 3.61, SD= 1.130).

The findings align with those of Muyela and Kamaara (2021). who observed that talent development focuses on developing an individual's potential to hold key positions and that it contributes to employees' skills and enhances their ability to take more responsibilities. The findings also agree with Fernandes et al. (2022) that talent management practices, such as development, retention, and reward, positively relate to organizational performance. The study also revealed that talent development was the most critical factor that aids multinational organizational performance, and that organizational culture that supports talent development influenced organizational performance.

Table 7: Descriptive Analysis for Talent Development

	N	Mean	Std. Deviation
Leadership is aware of and implements performance management system	299	3.86	1.045
Leadership has developed career development plans	299	3.68	1.094
There are elaborate learning interventions focused on talent management	299	3.61	1.149
Leadership ensures succession plan is implemented as core to business strategy	299	3.61	1.130
Aggregate Score		3.69	1.10

7.6. Talent Engagement

This section presents respondents' extent of agreement or disagreement with statements provided in the questionnaire on talent engagement. The summarized findings are presented in Table 8 below. On average, the respondents agreed on talent engagement as shown by an aggregate mean of 3.75. The findings specifically showed that the respondents agreed that leadership provided both team and individualized to employee's support (M= 3.84, SD= .951); that organizational culture is concerned with values, ethics and morals that support both team and individualized success (M= 3.80, SD= .984); that the working environment was flexible to accommodate the changing needs (M= 3.79, SD= 1.015); and that there was open and honest conversation across the organization (M= 3.58, SD= 1.085).

These findings agree with those of Smythe (2016) who noted that employee engagement as a talent management practice can mitigate costs associated with recruitment, talent retention and talent development, and could assist in organizational change and strategy execution. The finding further aligns with the argument by Lee and Li (2020) that successful talent engagement requires that organizations should pay closer attention to corporate communication, where internal communication is freely and efficiently available to all employees, while providing them with opportunities and resources that can bring change.

Table 8: Descriptive analysis for Talent Engagement

	N	Mean	Std. Deviation
Leadership provides team, and individual support	299	3.84	.951
Organizational culture is concern with values, ethics, morals that support team and individual success	299	3.80	.984
Working environment is flexible to accommodate changing needs	299	3.79	1.015
There is open and honest conversation across the organization	299	3.58	1.085
Aggregate Score		3.75	1.01

7.7. Talent Retention

This section presents respondents' extent of agreement or disagreement with statements provided on talent retention. Table 9 below presents a summary of the findings obtained. From the findings, the respondents agreed on talent retention in their company as shown by an aggregate mean of 3.57. The findings show that the respondents agreed, on average, that leadership encouraged and demonstrated working across teams, and individualized support (M= 3.78, SD= 1.064); that leadership ensured that there was adequate workload management across the organization (M= 3.59, SD=1.056); that leadership encouraged and implemented individualized developmental and recognition plans (M= 3.58, SD= 1.103). The respondents were, however, neutral on the statement that there were well-funded reward and recognition programmes specific to talented workforce (M= 3.31, SD= 1.254).

These findings are consistent with those of Vizano et al. (2021) that employees who felt that the organization was providing them with a good reward invest more of their time and efforts in the organization. The findings also agree with the assertion by Bwowe and Marongwe (2018) that a reward system describes organizational policies and procedures on how to recognize employees for their performance. Also supported by these findings is Inegbedion et al. (2020) who find that adequate workload distribution can lead to improved skills and rewards; however, when employees view the same negatively, it can result in low productivity and turnover.

Table 9: Descriptive Analysis for Talent Retention

	N	Mean	Std. Deviation
Leadership encourages and demonstrates working across teams, and individualized support.	299	3.78	1.064
Leadership ensures there is adequate workload management across the organization.	299	3.59	1.056
Leadership encourages and implements individualized developmental and recognition plans	299	3.58	1.103
There is a well-funded reward and recognition programs specific to talented workforce.	299	3.31	1.254
Aggregate Score		3.57	1.12

7.8. Correlation Analysis

To determine the nature, strength and direction of relationship between study variables, correlation analysis was conducted. From the findings in Table 10, individualized consideration is seen to have a strong positive relationship with talent management practices (r= 0.552) Since the p-value (0.000) was less than the selected level of significance (0.05), it was concluded that the relationship between the two variables was significant. Here, if individualized consideration increases, talent management practices will also improve and vice versa. These findings agree with those of Ogola et al. (2017) who found that a positive correlation between individualized consideration and employees' performance at the workplace, and that individualized consideration was about the leader's ability to understand and appreciate individual employees' needs, such as coaching, mentorship and self-development. These findings are also similar to those of Chebon et al. (2019) and Datche and Mukulu (2015) studies in Kenya, which showed that individualized consideration positively affected employee performance and engagement. The findings also confirm Edirisooriya’s (2020) finding that individualized consideration had a positive and significant impact on the retention of talented workers.

Table 10: Correlation Analysis

		Talent Management	Individualization Consideration
Talent Management	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	299	
Individualization Consideration	Pearson Correlation	$.552^{**}$	1

	Sig. (2-tailed)	.000	
	N	299	299

7.9. Test of Hypothesis

The first objective of the study was to assess how the individualized consideration relates to talent management practices. The corresponding hypothesis was;
Ho_1: There is no significant relationship between individualized consideration and talent management.
Ha_1: There is significant relationship between individualized consideration and talent management.

Using univariate regression analysis, the study hypothesis was tested. From the model summary findings in Table 11 below, the r-squared for the relationship between individualized consideration and talent management practices was 0.304. This is an indication that at 95% confidence interval, 30.4% variation in talent management practices in insurance industry in Kenya can be attributed to changes in individualized consideration. Individualized consideration can, therefore, be used to explain 30.4% change in talent management practices in insurance industry in Kenya. The remaining 69.6% variation in talent management practices, however, suggests that there are other factors other than individualized consideration that explains talent management practices in insurance industry in Kenya.

Table 11: Model Summary for the Individualization Consideration on Talent Management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.552[a]	.304	.302	.66699

a. Predictors: (Constant), Individualization Consideration

The analysis of variance was used to determine whether the regression model is a good fit for the data. From the analysis of variance (ANOVA), findings in Table 12, the study found that Prob>$F_{1,297}$= 0.000 was less than the selected 0.05 level of significance. This suggests that the model as constituted was fit to predict talent management practices in insurance industry in Kenya. Further, the F-calculated, from the table (130.016) was greater than the F-critical, from f-distribution tables (3.873) supporting the findings that individualized consideration can be used to influence adoption of talent management practices in insurance industry in Kenya.

Table 12: ANOVA for Individualization Consideration on Talent Management Practices

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.841	1	57.841	130.016	.000[b]
	Residual	132.129	297	.445		
	Total	189.970	298			

a. Dependent Variable: Talent Management Practices
b. Predictors: (Constant), Individualization Consideration
From the results in table 13, the following regression model was fitted.
$Y = 2.098 + 0.469 X_1$
(X_1 is Individualization Consideration)

The coefficient results showed that the constant had a coefficient of 2.098, suggesting that if individualized consideration was held constant at zero, talent management practices in insurance industry in Kenya would be at 2.098 units. In addition, results showed that individualized consideration coefficient was 0.469, indicating that a unit increase in individualized consideration would result in a 0.469 improvement in talent management practices in insurance industry in Kenya. It was also noted that the P-value individualized consideration coefficient was 0.000, which is less than the set 0.05 significance level, indicating that intellectual stimulation was significant. Based on these results, the study rejected the null hypothesis and accepted the alternative that there is a strong, positive and significant relationship between individualized consideration and talent management practices.

Compared with multiple regression results it was established that individualized consideration had a higher effect on talent management practices in insurance industry in Kenya unilaterally (coefficient=0.469) as opposed to when it was combined with other variables (coefficient=0.300). The results suggest that in the presence of idealized influence attribute, idealized influence behaviour, inspirational motivation and intellectual stimulation, the effect of individualized consideration weakens.

These results were explained on the basis of descriptive results, correlation analysis, multiple regression analysis, univariate regression analysis, theoretical literature and the empirical literature review. On the basis of descriptive results, the study noted that on average, immediate supervisors in insurance industry in Kenya fairly often (Mean= 3.45) practiced individualized consideration aspect of transformational leadership style. Here, correlation analysis results showed that individualized consideration had a strong positive relationship with talent management practices. This was also supported by the regression results, which showed that individualized consideration had 30% influence on talent management practices when combined with other transformational leadership style dimensions. On its own, it had a 46.9% influence on talent management practices.

These findings are similar to Chebon et al. (2019) and Datche and Mukulu (2015) studies in Kenya, which showed that individualized consideration positively affects employee performance and engagement. It also agrees with those of Ogola et al. (2017) who found positive correlation between individualized consideration and employees' performance at the workplace. Edirisooriya (2020) had also reported that individualized consideration has a positive and significant impact on the retention of talented workers. The findings suggest that managers need to understand and actively diagnose the development needs of their employees in order also revealed that to attain high retention and improved productivity.

Table 13: Beta Coefficients for Individualization Consideration on Talent Management Practices

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.098	.147		14.269	.000
	Individualization Consideration	.469	.041	.552	11.402	.000

a. Dependent Variable: Talent Management Practices

8. Conclusions

The study findings showed that individualized consideration has positive influence on talent management practices in the insurance industry in Kenya. The influence was found to be significant. This meant that individualized consideration has positive significant influence on talent management practices in the insurance industry in Kenya. The study, therefore, rejects the null hypothesis “Ho_1 and accepts the alternative Ha_5: that there is significant relationship between individualized consideration and talent management.

9. Recommendations

Leaders are also advised to pay more attention to individual employee needs with the aim of attaining motivation and satisfaction in the workplace. Also, to drive the best performance from the employees, insurers should develop management programmes that recognize the efforts of individual employees, such as providing best-performing employees with bonuses and praise while encouraging them to be creative and innovative. There is also the need for managers to demonstrate the ability to empower employees to be innovative when coming up with solutions to problems.

10. Contributions of the Study to Knowledge

The study contribution to the body of knowledge is bifold, that is, from theoretical and empirical. From a theoretical perspective, the findings underpin the theoretical foundation of the study variables by providing empirical evidence on the suitability of Transformational Leadership Theory, Leader-Member Exchange Theory, Human Capital Theory, Resource-Based View, and Competing Value Frame Work in the context of insurance companies in Kenya. The study also contributed to better understanding of distinctive and jointly roles that the five dimensions of the Transformational Leadership style play in talent acquisition, development, engagement and retention.

With regard to empirical contributions, the study has added to the literature that links the transformational leadership style variable with all dimensions of talent management practices. From extant literature, major studies concentrated more on talent turnover, job satisfaction and less focus on talent management practices. This study has, therefore, contributed to the body of knowledge by demonstrating the relationship between transformational leadership style and talent management practices.

11. Suggestions for further research

The focus of this study was on insurance companies, meaning that the findings cannot be applied in other companies. The study, thus, suggests the replication of the same in other sectors, such as banking, to facilitate comparison and generalization of the findings.

This study was limited to transformational leadership style. There is, therefore, a need for other studies to focus on other leadership styles such as servant leadership, authentic leadership and leader-member exchange. Further research should be conducted on the influence of transformational leadership style on talent management practices' specific dimensions such as employee performance. Moreover, future could analyse whether our results are reproducible in individualistic cultures as compared to collectivistic cultures where social relationships are not crucial towards organizational success.

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Data Dashboarding in Accounting using Tableau

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Abstract
Data dashboarding, which involves organizing and visually displaying data in an easy to use interface to facilitate the processing of analyzing large, complex data sets, is an important tool in accounting decision making. This article discusses the role of data dashboarding in accounting and illustrates, using a worked example, how a data dashboard can be constructed in Tableau, a popular data visualization software.

Keywords: Dashboarding, Simulation, Tableau

1. Introduction and Background

Rapid advancements in information technology (IT) have significantly changed the nature of the work that accountants do (Pan et al., 2017; Nielsen 2018; AICPA, 2019; Seow et al., 2021). Specifically, one key aspect of accountants' work that has been significantly influenced by developments in IT relates to work involving data analytics, including in the area of data visualization and dashboarding (Janvrin et al. 2014; Pan et al. 2017). Data dashboarding involves organizing and visually displaying data in an easy to use interface to facilitate the processing of analyzing large, complex data sets (Janvrin et al. 2014).

The literature suggests that data dashboarding can play an important role in supporting decision making across a diverse range of tasks in the accounting setting, including in evaluating sales trends, performance management, management reporting, and detecting fraudulent transactions (Chaudhuri et al., 2011; Dilla et al., 2010; Yigitbasioglu & Velcu, 2012; Goh et al. 2021; The Institute of Internal Auditors 2022). Consistent with this stream of literature, Payne (2020) highlights that one of the key skills that accountants need to succeed in a digital economy is the ability to analyze and present data comfortably, including by employing the use of well-designed dashboards.

Therefore, it is important for accountants to develop skillsets in dashboarding to support decision making across a range of accounting settings and tasks. In this article, I introduce and illustrate, using a worked example, how accountants can create a dashboard that provides insights for accounting decision making. In particular, I extend the worked exampled introduced by Goh (2018) to illustrate how output obtained from a simulation model can be used to develop a dashboard to support accounting decision making. Using a dashboard to provide insights to the output obtained from a simulation model is appropriate and relevant given the wide range of analysis and considerations involved in accounting decision making that relies on simulation models (Ayres et al. 2017; Goh

2018). In the worked example, I create a dashboard using the Tableau Dashboard visualization software ("Tableau"). Tableau skills are among the most in-demand technology skillsets requested by employers (Hagen 2017; Kauflin 2017). It is a popular data visualization tool that is widely used, including in the accounting sector (Eaton and Baader 2018).

The remainder of this article is organized as follows. The second section provides a description of the simulation example used in the article and the third section illustrates how the data from the simulation example can be used to create a dashboard in Tableau. Finally, the fourth section concludes the article.

2. Simulation Example

Simulation is a mathematical technique for solving a problem by performing a large number of trial runs (called replications) and inferring a solution from the collective results of the trial runs. In simulation, uncertainty in a business situation is explicitly incorporated into a model via random variables.

The simulation example introduced in Goh's (2018) study looks at Baker Limited, a fictitious company which provides a health insurance plan to its customers. In particular, it examines how the company could use a simulation model to determine the potential profitability of an insurance scheme, given underlying uncertainty in specific aspects of its operating environment.[1] As part of the replication step of the simulation, 1,000 separate values for overall profits from the health insurance plan were computed by the simulation model. In this article, I extend the example used in Goh's (2018) study by creating a visual dashboard to provide insights from the 1,000 replicated company profit values.

3. Designing the Tableau Dashboard

I first prepare the data to be uploaded to Tableau by copying the replications of overall company profits obtained in cells A27:B1028 of Goh's (2018) example, and pasting them in cells A1:B1002 of a new Excel worksheet. I then save this Excel worksheet before uploading it to a new Tableau workbook[2], on which I will create the simulation dashboard. Exhibit 1 presents part of the data contained in the new Excel worksheet.

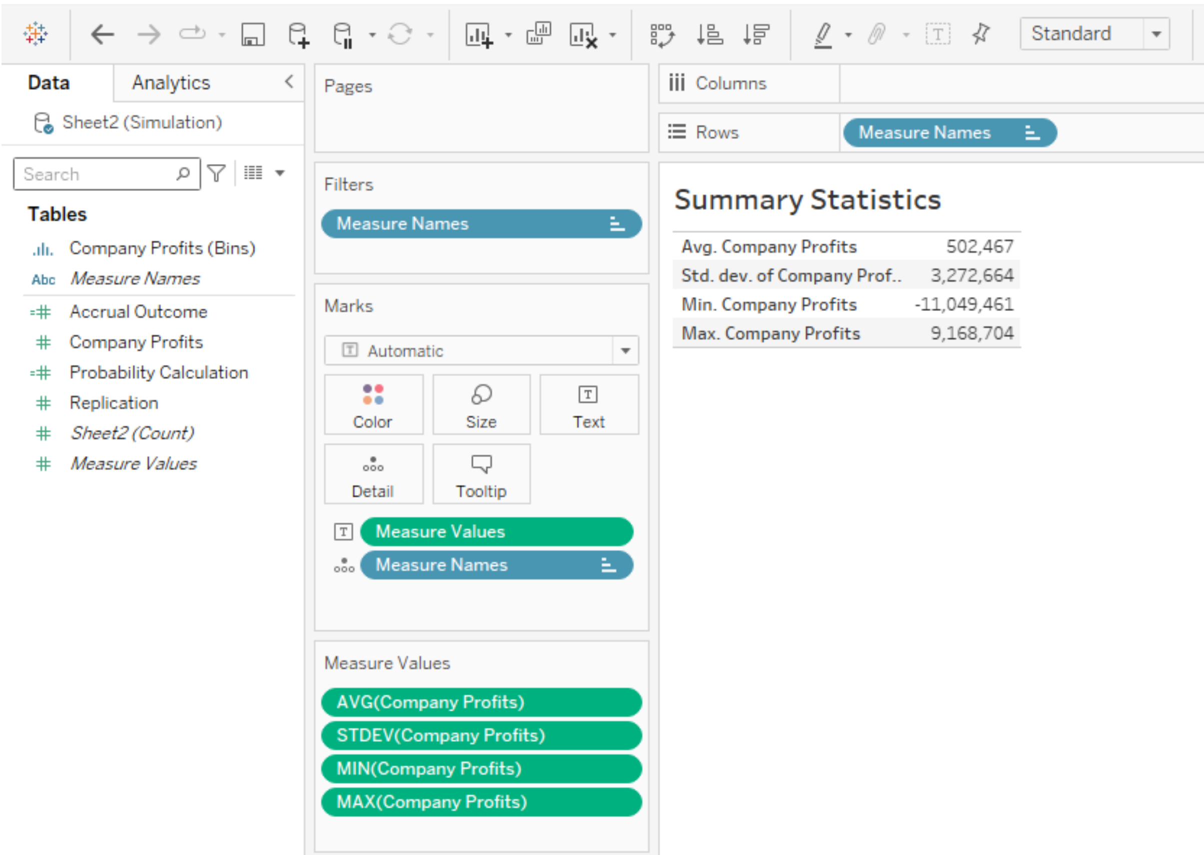
	A	B
1	**Replication**	**Company Profits**
2		-920,278
3	1	246,399
4	2	-46,293
5	3	-169,417
6	4	4,249,788
7	5	-481,950
8	6	-5,941,108
9	7	-4,091,733
10	8	-654,773
11	9	3,421,631
12	10	5,957,735
13	11	2,286,401

Table of Summary Statistics

[1] Background details relating to the simulation example are provided in Appendix A. Refer to Goh's (2018) article for a more detailed discussion of the simulation technique and the steps involved in developing the simulation model.
[2] Do so by first navigating to 'Data" → "New Data Source" → "Excel File" to upload the saved Excel workbook in Tableau. Next, in the "Data Source" tab in Tableau, double-click on the relevant Excel worksheet to upload the data to Tableau.

The first component of our dashboard consists of a table to display summary statistics relating to the replications obtained. Exhibit 2 presents this summary statistics table, which is created by applying the following steps in Tableau:

1. Create a new worksheet and rename it "Summary Statistics."
2. From the "Data" tab of the new worksheet, drag and drop the "Measure Values" data field into "Text" in the "Marks" area.
3. Edit the measure values in the "Measure Values" area to compute the average, standard deviation, minimum, and maximum of Company Profits.
4. Finally, from the "Data" tab of the worksheet, drag and drop the "Measure Names" data field into the "Rows" shelf.



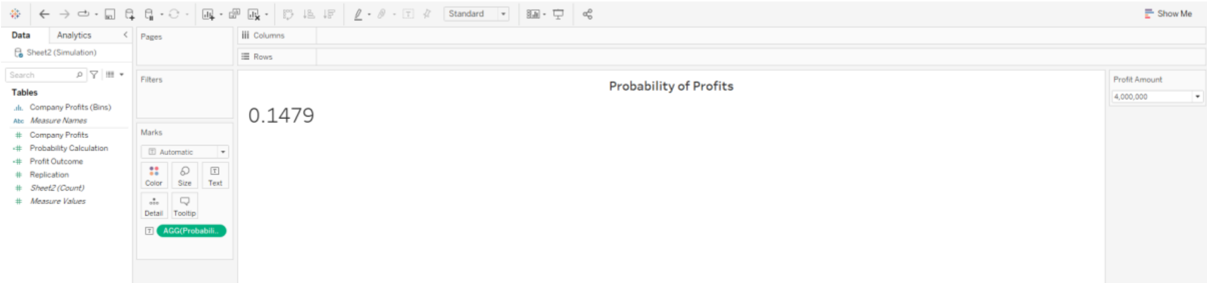
Probability Display

The second component of our dashboard consists of a display to indicate the probability that the minimum profits from the health insurance plan would be equivalent to certain test values. Exhibit 3 presents this display, which is created by applying the following steps in Tableau:

1. Create a new worksheet and rename it "Probability of Profits."
2. Create a parameter named "Profit Amount" with the following list of values: 2,000,000, 4,000,000, and 6,000,000.[3]
3. Create a calculated field named "Profit Outcome" using the following formula: IF [Company Profits]> [Profit Amount] THEN 1 END.[4]
4. Create a calculated field named "Probability Calculation" using the following formula: SUM([Profit Outcome])/1001.

[3] In Tableau, a parameter is a workbook variable such as a number, date, or string that can replace a constant value in a calculation, filter, or reference line. The list of values that I create in this parameter allows me to examine the probability that the health insurance plan will generate profits of at least $2,000,000, $4,000,000, and $6,000,000.
[4] In Tableau, a calculated field allows the creation of new data from data that already exists in the data source. The values of this data is determined by a calculation.

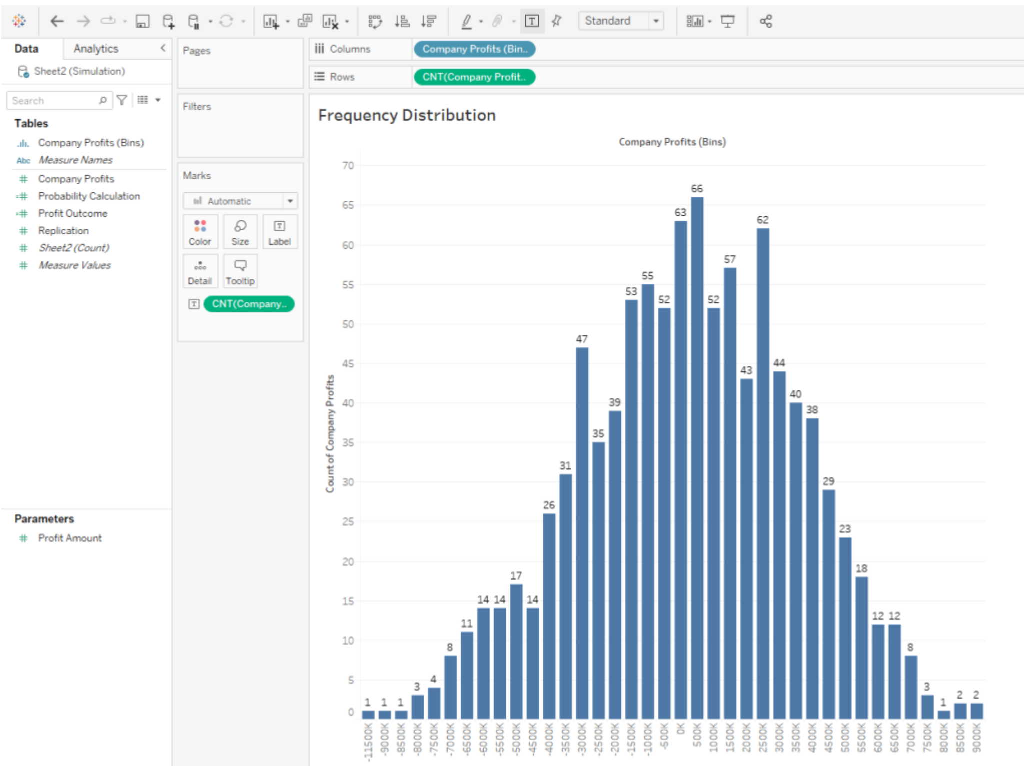
5. From the "Data" tab of the new worksheet, drag and drop the "Probability Calculation" data field into "Text" in the "Marks" area.
6. Finally "Show" the Profit Amount parameter. Making selections on the parameter allow you to examine the probability that the health insurance plan will generate profits of at least the selected amount. For example, Exhibit 3 indicates that there is a probability of 0.1479 that the health insurance plan will generate profits of at least $4,000,000.



Frequency Distribution Histogram

The third component of our dashboard consists of a histogram to display the frequency distribution of our replications. Exhibit 4 presents this frequency distribution histogram, which is created by applying the following steps in Tableau:

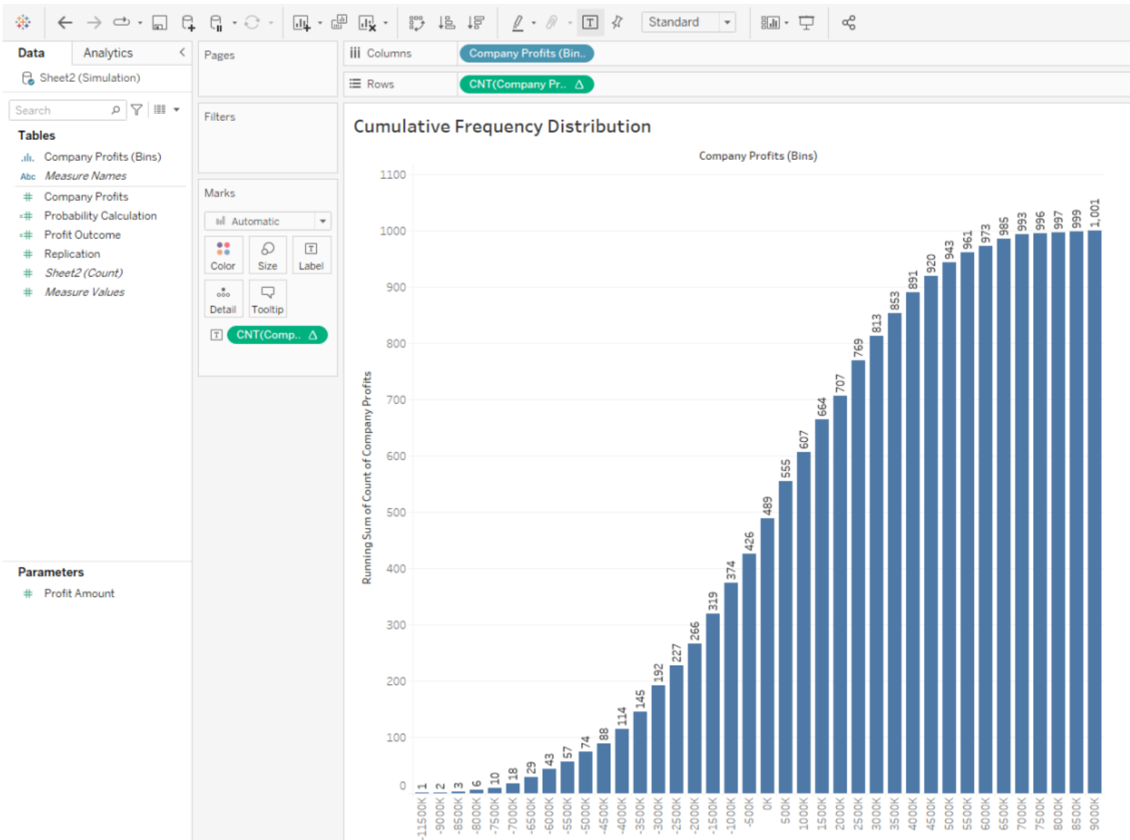
1. Create a new worksheet and rename it "Frequency Distribution."
2. Using the Company Profits field, create bins, with bin sizes of 500,000. Name this new field Company Profits (Bins).
3. From the "Data" tab of the new worksheet, drag and drop the "Company Profits (Bins)" field into the Columns shelf.
4. From the "Data" tab of the new worksheet, drag and drop the "Company Profits" field into the Rows shelf. Set the aggregation measure to "Count."
5. From the "Data" tab of the new worksheet, drag and drop the "Company Profits" field into the "Label" in the "Marks" area. Set the aggregation measure to "Count."



Cumulative Frequency Distribution Histogram

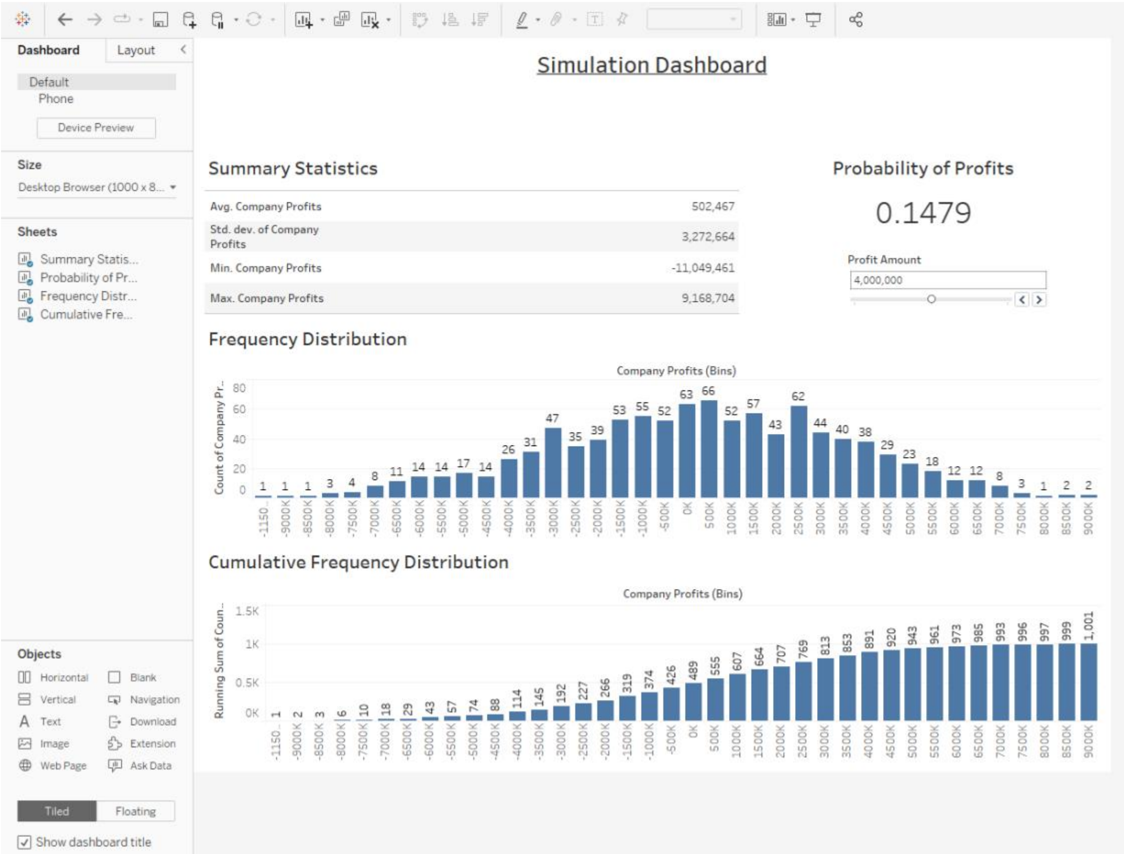
The fourth component of our dashboard consists of a histogram to display the cumulative frequency distribution of our replications. Exhibit 5 presents this cumulative frequency distribution histogram, which is created by applying the following steps in Tableau:

1. Replicate the "Frequency Distribution" worksheet. Rename this worksheet "Cumulative Frequency Distribution."
2. Add a "Running Total" table calculation to the "CNT Company Profits" fields in the Rows shelf and "Label" in the "Marks" area.



Consolidated Dashboard

Finally, I create the simulation dashboard by putting the four components together on a Tableau dashboard, which I name "Simulation Dashboard." This dashboard is presented in Exhibit 6. The dashboard provides several key insights related to the simulation replications to decision makers in a single view. First, the summary statistics table provides an overview of the key statistical characteristics of the potential profits from the health insurance plan. Second, the Profitability of Profits display allows the decision maker to make assessments of the likelihood of key outcomes relating to overall profits from the health insurance plan. Third, the frequency distribution and cumulative frequency distribution histograms provide the decision maker with a visual display of the replications. Overall, these components of the dashboards provide important information which the decision maker can rely on in making assessments about the potential profitability of the health insurance plan.



4. Conclusion

Data dashboarding, which involves organizing and visually displaying data in an easy to use interface to facilitate the processing of analyzing large, complex data sets, is an important skill which accountants can apply to provide insights to aid accounting decision making. In this article, I use a worked example to illustrate how accountants can use Tableau to develop a dashboard that provides insights from the output obtained from a simulation model to aid accounting decision making.

The discussions in this article are relevant to accounting practitioners. In particular, it illustrates how, against the backdrop of rapid technological advances, data dashboarding has emerged as one of the key skills that accountants should possess. Further, it also demonstrates and provides details about how a data dashboard can be created using Tableau, a popular data visualization tool, to provide insights to support accounting decision making.

Appendix A

It is now 31 December 2016. As of December 2016, Baker has 15,222 customers who each pay $200 per month in premiums. Average insurance claim per customer in the month was $185. Although Baker does not expect to raise premiums in 2017, it expects the number of customers signed on to the health insurance plan to increase by an average of 2% per month, and for average claims per customer to increase by an average of 1% per month. Figure 1 summarizes these expected trends related to the insurance plan in 2017:

	A	B	C	D
1		2016	2017	
2		December	Assumptions	Rate
3	No of customers	15,222	Increasing	2%
4	Average claim per customer	$185	Increasing	1%
5	Premiums per customer	$200	Constant	

Any claims made by customers of the health insurance plan are paid out by Baker from premiums collected from other customers on the plan. Should premiums collected from customers be insufficient to pay claims, Baker would then have to pay these outstanding claims from its own cash account.

Baker needs to determine how likely it is that premiums collected will be able to cover claims made on this health insurance plan (i.e. that this insurance plan will be profitable) in 2017. If the insurance plan is likely to be profitable, Baker would not need to accrue any money to pay for customer claims (because they can be paid from profits). However, if the plan is not likely to be profitable, Baker would then have to determine how much money to accrue in order to pay for outstanding customer claims (from its own cash account).

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