



Law and Humanities Quarterly Reviews

Elfakharani, A. M. A. (2022). Evaluation and Comparison of the Electronic Contract in the Context of Legislations in Egypt and Saudi Arabia: An Explanatory Study. *Law and Humanities Quarterly Reviews*, 1(2), 30-38.

ISSN 2827-9735

DOI: 10.31014/aior.1996.01.02.7

The online version of this article can be found at:
<https://www.asianinstituteofresearch.org/>

Published by:
The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.



ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide



Evaluation and Comparison of the Electronic Contract in the Context of Legislations in Egypt and Saudi Arabia: An Explanatory Study

Ashraf M. A. Elfakharani¹

¹ Taif University, College of Sharia and Law, KSA. Email: fakharani@tu.edu.sa

Abstract

The pace of technological development today is such that the law simply cannot keep up. The reason not only being that legislating new technology requires an understanding of it to legislate it, but because the full potential and implications of new technology cannot be fully surmised without first observing its full applications. Legislation of technology is necessary to protect the public from various scams, frauds, and illegal activities, so that they may be financially and personally safeguarded. There is little evidence on how Arab countries address the challenges and risks inherent in e-commerce. The purpose of this paper is to examine the laws and regulations currently in place in Egypt and Saudi Arabia regarding electronics and associated properties. More specifically, the study examines the e-contract laws in Egypt and Saudi Arabia to construct an explanatory theory regarding the legislative process relating to online transactions. The study presents original ideas that are sequential within the suggested framework that will assist in and contribute to knowledge and policy development.

Keywords: Electronic Contract, E-Contract, Egypt E-Contract Laws, Saudi Arabia E-Contract Laws

1. Introduction

Technological development and its wide application in various fields have likely become part of daily life, to which this progress, its use among people in general and commerce. Furthermore, these developments have led to the need to legislate on such uses and to develop conditions and guidelines to prevent customers from becoming victims of electronic fraud and scams, to condemn such activities, and to set out clear terms and conditions to make them legal. The electronic contract does not differ in its structure, summary, nature, and content from an ordinary contract, so its guiding principles are intended to establish the general contractual scenario's principles.

The Internet creates Click-wrap contracts (some of which are called “click-through”; “click and acknowledge”; and “web-wrap”). Sometimes an end-user can download a product or an electronic substance simply by “clicking and acknowledging” the perpetual license. In many cases, it is necessary to know this term to ask for online help or buy a distinctive product. Online customers are familiar with screens that show reasonable terms and conditions and require the click of the “Confirm” button before they can organize those goods, make administrative purchases, or obtain data. The online customer must accept the offer's details by directly mentioning it - regularly clicking

the “Accept” or “Confirm” button. It is generally impossible to register in paper form, and an online customer ID (electronic or paper) is not usually required (Ali, 2015).

The research provides original knowledge regarding the state of e-contract laws in Egypt and Saudi Arabia. The study aims to explore the current legal framework regarding electronic contracts to identify the weaknesses and offer suggestions for improvement. The findings of the paper will prove useful for government policymakers in Arab countries to improve the e-contract laws to promote electronic transactions in the respective countries.

2. Research Problem

According to Grove, Gray, and Burns (2014), a research problem refers to an area of concern regarding which there is a gap in the literature.(Burns, Grove, 2010) After reviewing the literature, it was found that there is no current literature that comprehensively examines and critiques the nature of e-contract laws in Arab countries.

3. Research Purpose

Grove et al. (2014) state that the research purpose often follows the problem statement that is developed based on the research problem. The purpose of the research studies is to critically examine the nature of e-contract laws in Egypt and Saudi Arabia. The paper explores the epistemological basis of an electronic contract in Arab countries with traditional ruling regimes. It aims to not just describe the current e-contract laws but also make recommendations on how the legislative framework regarding electronic contracts can be improved in Arab countries.

According to Hesse-Biber (2012), our values and beliefs affect the interpretation and understanding of the research. (Hesse,2012) In this respect, the main aim of the research study is to objectively reflect reality without any biases in interpreting the laws.

4. Methods and Analysis

Selecting the right research design is important to create the necessary foundation for scientifically based research (Henson, Williams, 2010). The qualitative research method has been used that looks at the big picture in an attempt to explain the context of the study (Dobrovolny, Fuentes, 2010). The explanatory theory has been used as a framework for qualitative analysis to understand the legislation regarding e-contracts in Arab countries. This methodology is selected for the study since there is little information about the topic and thereby the aim is to uncover the inherent process related to the substantive area of inquiry.

5. Discussion

5.1. Section I: Definitions of E-contract

As stated in the second article of the “*UNCITRAL Model Law on Electronic Commerce, Electronic Data Interchange (EDI)*” (Richter, 2010), electronic contract (or e-contract) is the electronic exchange of data from one computer to another using an appropriate data structuring standard. The “*UNCITRAL Model Law on Electronic Commerce*” provides that the above-mentioned separation tests may be used for all electronic data, including data on orders and various business transactions, where the identifier of the electronic contract for this law is an agreement assigning joint recognition among the parties using the predefined strategies set out in Articles 2 and 2b (Richter, 2010). Many legal advisers have condemned the Single Law on Electronic Commerce adopted by the United Nations Commission on International Trade Law because it does not distinguish between contracts concluded by electronic means but recognizes the methods used in them.

The Electronic Transactions Protection Law of 2007 (1428H) in Saudi Arabia defines an e-contract in the first article as, “Any exchange, communication, contracting or other procedure, performed or executed, wholly or

partially, by electronic means.” Electronic technology is defined as one based on electromagnetic, electrical, optical, or similar capabilities.

The purpose of the Electronic Transactions Protection Law of 2007 as stated in Article 2 is to create a unified legislative framework for e-transactions and the related e-signatures. The legislation was passed to assist the public and private sectors in the verification and authentication of e-contracts to ensure the integrity and credibility of digital signatures, records, and transactions. Another aim of the Saudi e-contract law is to promote electronic transactions and the use of signatures both locally and internationally in different sectors of the economy including medicine, commerce, government, education, and e-payments. The introduction of the law also aims to remove challenges related to the implementation of electronic transactions by preventing abuse and fraud.

In comparison, there is no definition of an e-contract in Egyptian law, but an electronic signature could prevent this lack of definition. Article 147 of the Civil Code has been stating: “*A contract is a right of the parties to the contract, the so-called sunt servanda*” (Metwally, 2013) As the electronic contract is considered to be a kind of contract; it will be governed by the article mentioned above. However, as we can see, this article has been defined to ensure legal certainty and follows a global approach, since the electronic contract has won one of the most important agreements, both at the level of neighbouring countries and worldwide.

Some lawyers in Egypt have defined the electronic contract as “a contract in which a joint offer and acceptance is reflected in an international network of open correspondence at a distance and by visual and hearing means as a result of the interaction between the offeror and the offeree of the offer”, but this definition is incomplete, as it does not reveal the effects of the offer and acceptance, the legal consequences, the creation of contractual obligations and the concrete form in which the contract should be audible and visible. This definition defines the identity of an electronic contract when the form in which the contract is concluded by agreement is similar to that of an ordinary contract and produces legal effects but differs from the form in which an electronic contract is essentially concluded by computer or other means of communication, unlike an ordinary contract which is essentially based on an agreement.

5.2. Section II: Contracts Excluded from E-Contracts Laws

The Saudi Arabian Electronic Transactions Protection Law of 2007 identifies contracts that cannot be concluded electronically. Article 3 of the e-contract specifically states that transactions related to real estate property deeds and personal status law such as wills are excluded from the e-contract law. But it is also stated that such transactions will be allowed if the authorities that oversee these transactions approve of the electronic form of these contracts subject to the fulfilment of conditions laid by the said authority in coordination with the Ministry of Communications and Information Technology in Saudi Arabia.

The Egyptian legislator, in “Law No 15 of 2004” (Blythe, 2014) on electronic signatures unlike the Electronic Transactions Protection Law of 2007, does not specify which contracts may be concluded by electronic means. The legislator states that electronic documents have the same evidential value as ordinary documents, in accordance with Article 15 of that law: “*Both electronic works and electronic documents shall have the same authenticity and the same degree of authenticity,*” provided that the technical and professional standards are met.” (Gebba, Roshday, Mohamed, 2012)

In any case, with the functional application of the above-mentioned articles, we will, unfortunately, find that some agreements cannot be agreed upon electronically, as they have enormous legal consequences. Contracts that cannot be negotiated electronically include marriage contracts, acts of donation, wills and adoptions, maritime mortgages, rights of registration and seizure of property, judgments, and court orders, and trial documents.

5.3. Section III: E-Contract Authentication

As per Article (14) of Chapter Four: Electronic Signature of the Saudi Arabian Electronic Transactions Protection Law of 2007, the users of the contract must exercise due diligence in verifying the authenticity of the electronic

signature through electronic signature verification data. Article 1 of the Saudi law regarding e-contracts specifies that the electronic signature date verifies the identity and confirms the approval of the electronic transaction, and also detects any changes in the transaction after signing by the parties involved in the said transaction.

Article 1 of The Saudi Arabian Electronic Transactions Protection Law of 2007 also clarifies that a digital certificate provided by a certification service provider verifies the signature verification data that authenticates the identity of the person electronically signing the contract.

The Digital Certification is carried out by the Saudi National Center for Digital Certification. The organization carries out electronic certification services in conformance with the Model Law on Electronic Signatures 2001. The center goals include managing public key infrastructure (PKI) for electronic signatures and ensuring data integrity related to digital signatures (Gov.SA). The national center for digital certification is part of the Ministry of Communications and Information Technology.

In Article 10 of the Saudi Electronic Transactions Law, offer and acceptance of e-contracts are allowed through the electronic medium that makes the contract valid and the enforceability of the contract cannot be denied. Moreover, the law allows the contract to be carried out through automated electronic data systems. While the law has not specifically defined automated electronic data systems, an automated system refers to a system that can manage tasks automatically (IGI Global) i.e. without human interaction.

Article 6 of the Saudi Arabian Electronic Transaction Law specifically states that electronic records should be stored in a form that was generated so long as the identity of the person can be verified. Moreover, the law also states that the electronic transaction record should be stored in a manner that will allow future reference and use. The condition for the electronic record to be considered valid and original, the document should include the date and time of the document has been sent and received.

In contrast, there is no clear definition of electronic authentication of contracts in Egyptian law, but this definition is considered from a different perspective, which can be defined as the authentication of an electronic signature, meaning that the signature is electronic if the electronic method is used. An electronic signature, as defined in Law No. 15 of 2004, Electronic signature is a letter, number, character, or another form that is unique and easily identifiable by the applicant. In order for an electronic signature to be duly authenticated, it must meet all the conditions established in article 18 of the aforementioned law:

- Must be uniquely formed, which can be easily distinguished and determined from multiple signatures. The signer must be then identified easily to avoid more confusion;
- The signer must be dominant over the electronic mean of signature; the e-signature should be clear, easy to change, amend or modify the electric document

Egyptian law regulated electronic contracts and signatures in 2004 under the “*Electronic Signature Law No. 15 of 2004*” and its implementing “*regulation No. 109 of 2005*”. This law provides that the “*ITIDA (Information Technology Industry Development Agency)*” is in charge of all matters related to electronic agreements in Egypt, among others:

- Issuance and renewal of the necessary licenses to provide electronic signature services and other electronic exchange and information technology activities in accordance with the applicable laws.
- Establishment of electronic signature standards/criteria to verify the technical characteristics of electronic signatures.
- Receive complaints related to electronic signatures, electronic exchange, and information technology activities; take the necessary measures in this respect.

The Act applies essentially the same rules on material documents and signatures to electronic types of such documents and signatures, as Article 14 states that “in the context of commercial and administrative trade, electronic signatures are as decisive as signatures as “*Evidence Law in the civil and commercial articles*” (Hemdani, 2003), the same is stated in “*Article 15*” with respect to composition and written electronic

communications having the same conclusive effect as composition, formal and informal communications, the law and its implementing rules have the same conclusive effect on the burden of proof as to the following:

As set out in Article 18, it must be accepted that electronic signatures, typing and written, electronic communications are accompanied by electronic signatures (Marathe, 2012):

- The electronic signature belongs solely to the signatory
- The electronic medium is exclusive to the signatory.
- The possibility of detecting changes or exchanging data in an electronic message or an electronic signature

However, appropriate technical checks will be carried out in accordance with Article 8 of the implementing rules:

(a) The date and time of the electronic components or formal and informal electronic documents must be technically accessible. Such availability must be achieved by means of a separate electronic storage system that is not subject to the control of the compiler of these repositories or documents or collections (Alsahouly, Ibrahim, Rashid, 2012).

(b) The identification of the source of an official or unofficial deposit or document in electronic form and the extent to which its author has control over that source and the means used to produce it should be technically accessible

(c) If the official or unofficial electronic compilation or documents are created and supplied without human intervention, most, or all of the documents are completed after a period of time and date of their creation and if they have not been compromised

The Egyptian *Electronic Signature Act* states that a customary signature is not required for the conclusion of a legal contract, contracts are considered essential if persons have the legal capacity to conclude a contract (this can be done by oral, electronic, or de facto summons, Articles 89 and 90 of the Egyptian Civil Code and Article 69 of the Egyptian Commercial Code). In addition, article 14 of the Egyptian Electronic Signature Law states that contracts cannot be refused because they are essentially electronic. However, these contracts may require additional evidence to be confirmed in court and certified by local authorities. According to articles 14 and 15 of the Electronic Signature Law, electronic signature agreements can be used to transmit such documents in electronic form.

Despite the existence of the “*Electronic Signature Act*” (Ghoneim, 2011) and the rules governing its implementation, there are gaps in the Act with regard to specific aspects of the electronic exchange, decisions on the subject, the obligation to collect data, the burden and methods of proof, data protection and certain other specifications that need to be regulated. This required the adoption of a new law regulating the aspects discussed and examined from 2018, as announced by the “*Minister of Communications and Information Technology and the President of the Central Telecommunications Office* (Blythe, Stephen, 2014). The law requires the cooperation of many agencies, including the Ministry of Finance, Ministry of Trade and Industry, the Customs Office, the Consumer Protection Office, the National Association of Postal Organizations, commercial banks, the Central Bank, etc.

In addition, thanks to Russian-Egyptian cooperation, the Egyptian legislation is working on a new “*Cyber Security Law*” (Blythe, Stephen, 2014). This law describes the obligations of persons who control data and information and establishes rules to ensure the security of their information space and the data, systems, projects, and networks it contains. In 2020 March, the Egyptian Court of Cassation presented a new rule on the use of electronic evidence. In this context, the Court decided that electronic evidence must be challenged and rejected for forgery, as served for in “*Egyptian law 25/1968 (“Evidence Law”)*”.

There is no doubt that the use of technology in business has increased significantly in recent decades. The negotiation, implementation, and enforcement of contracts have been facilitated by the simple exchange of electronic messages, video conferences, electronic signatures, or the conclusion of electronic contracts.

However, a major problem for parties who conclude contracts in electronic form or who use electronic compositions or documents during the term of the contract is the extent to which these electronic means guarantee their rights in the same way as traditional written documents. In particular, parties may have doubts about the evidential value of electronic documents and designs in the courts of Egypt (Marathe, 2012).

Many legal systems have already fully controlled the use of electronic evidence and are constantly updating their rules to reflect the constant evolution of technology and the needs of users. Other countries, such as Egypt, are gradually trying to regulate this issue.

In 2004, “Law 15/2004” on Electronic Signature (“*Electronic Signature Law*”) was enacted, which, inter alia, introduces and regulates the use of electronic signatures. Most importantly, the Electronic Signature Act provides that electronic compositions and documents have the same evidentiary value as an official or private composition if they meet the conditions set out in article 18 of the Act. Thus, Article 16 of the Electronic Signature Act provides that a rewritten copy of a public administration electronic document is conclusive evidence, provided that the rewritten copy is the same as a public administration electronic document and that the public administration electronic document and the electronic signature are present in an electronic medium.

The wording of Article 16 is somewhat questionable and does not explain when “copies” of electronic documents would have evidential value (Ghoneim, 2011). This article seems to be more applicable to electronically signed documents than to electronic documents in general. To this uncertainty can also be added the amount of work done by agencies to facilitate the implementation of the Electronic Signature Act, in particular the Information and Communications Industry Development Agency (ITIDA).

Subsequently, in 2016, the Egyptian Court of Cassation issued a ruling interpreting “*articles 1 (b) and 15 of the Electronic Signature Law*” (Ghoneim, 2011). The Court concluded that all data created, recorded, stored, transmitted, or obtained by electronic or other comparable means must be treated as a relevant compilation having the same evidential value as any official or private compilation used in ordinary commercial or administrative transactions.

Based on this premise, the Court considered that the complaint submitted to the High Electoral Commission by electronic communication (pursuant to “*Article 45 of the Law on the Exercise of Political Rights No. 45/2014*”) is justified because the wording of this paragraph is so broad that it covers a wide range of compilations, whether they are traditional written documents, including the electronic correspondence.

6. Legislative Frameworks of E-Contract Laws in Egypt and Saudi Arabia

An important aspect that needs to be highlighted regarding the Saudi Arabian Electronic Transactions Rule does not mention any element related to sharia. Saudi Arabian government is one of the few Muslim countries to enact sharia (Islamic) law¹. But the Saudi Arabian Electronic Transactions Rule of 2007 does not mention anything about the permissibility of the transactions in terms of sharia law.

Saudi Arabian laws are derived from *Al-Quran* (Muslim holy book) and *Sunnah* (prophetic sayings)². But the electronic contracts were not in vogue during the advent of Islam. It is noteworthy to note that while the laws mentioned in *Al-Quran* and *Sunnah* are comprehensive covering various aspects of public and private life, they are not exhaustive in that they don’t cover every aspect of life, particularly that have evolved later. The concepts of *Ijmah* (consensus) and *qiyas* (logical analysis) apply in a situation where there is no clear law in the main sources of Islamic laws. Indeed, that may be the reason that the Saudi Arabian Electronic Transactions Rule does not mention sharia or Islamic law in any of the Articles. The concept of *maslah* (public interest) also applies to

¹ Article 1 of the Basic Regulation of the Kingdom of Saudi Arabia (1992).
https://www.constituteproject.org/constitution/Saudi_Arabia_2013.pdf?lang=en.

² Article 1 of the Basic Regulation of the Kingdom of Saudi Arabia (1992).
https://www.constituteproject.org/constitution/Saudi_Arabia_2013.pdf?lang=en.

electronic transaction law formulation in Saudi Arabia. According to Islamic scholar Al-Ghazali, the aim of *maslah* is fivefold that includes protecting the five critical values viz religion, life, lineage, intellect, and property (Kamali, 2005). The Saudi Arabian e-contract law considers the protection of public interest in formulating the rules. Still, the sharia law in the country that applies to traditional commercial contracts also applies to e-transaction laws.

Contract laws in Egypt can be surmised for recent court rulings. In 2011 the Cairo Court of Appeal ruled that the Electronic Signature Law expressly provides that electronic works and documents have the same evidentiary value as other private or authoritative works and documents (as defined in the Evidence Law) if those electronic works and documents meet the requirements of the Electronic Signature Law and its implementing regulations. (Hemdani, 2003)

In addition, in 2015 the Cairo Commercial Court made use of an e-mail that was sent by the defendant to the plaintiff to establish the existence of a contractual relationship between the two parties. The Court held that the e-mail was legal and admissible evidence in electronic form and rejected the defendant's claims that the e-mail could not constitute admissible evidence of the existence of a business relationship. (Alsahouly, Ibrahim, Rashid, 2012).

The Cairo Commercial Court based its judgment depending on the fact that (I) article 2(1) of the Egyptian Commercial Law No. 17/1999 ("the Egyptian Commercial Law") provides that commercial practices and customs must be applied in the absence of a legal text. Furthermore, article 69 of the Egyptian Commercial Law provides that commercial obligations may be proved by any means and not necessarily by a written [traditional] document; and (ii) the e-mail in question is a legitimate means of proof, as it meets all the requirements of article 8 of the old implementing rules (article 9 of the new implementing rules), since the defendant has never denied that the e-mail address used to send the e-mail belonged to the defendant's business operations.

Subsequently, in 2016, the Egyptian Court of Cassation issued a ruling interpreting articles 1(b) and 15 of the Electronic Signature Law. The Court ruled that any data created, recorded, stored, sent, or received by electronic or other similar means must be considered a legal document with the same evidential value as any official or private document used in a general, commercial or administrative communication. Based on this premise, the court considered that the scandalous submission in the form of electronic communication to the High Electoral Commission (under Article 45 of Law No. 45/2014 on Political Rights (law: Exercise of Rights)) is important because the wording of this paragraph is broad enough to cover a wide range of compositions, whether in the form of ordinary written documents or otherwise, including electronic communications (Ghoneim, 2011).

Recently, however, in 2019, Egyptian courts have taken several steps in the opposite direction. While the Evidence Act still does not mention the evidentiary value of correspondence between the parties, including the exchange of electronic correspondence, the Electronic Signature Act defines an electronic document and regulates its evidentiary value. The Court added that the Electronic Signature Act expressly provides that an electronic document cannot be admissible as material evidence if the requirements of the Electronic Signature Act and its implementing regulations are not met (Marathe, 2012).

7. Conclusion and Recommendations

The fact is technology is constantly evolving. The right time to initiate legislative reform is in the infancy of the technology. Trying to develop legislations when the technology has expanded can be a challenging task. The paper has shown that the current regulations regarding electronic contracts in Egypt and Saudi Arabia are not sufficient. The main shortcoming of the law is that they don't cover all aspects of the legality of electronic contracts. This creates uncertainty for the parties carrying out the electronic transactions. It seems that the e-contract laws in the respective countries are general statements regarding electronic contracts. They define the framework but don't go into sufficient detail regarding cryptography and other technologies that underlie digital transactions. The laws do not specifically describe what represents an offer in terms of electronic contracts. Moreover, they are unclear about the revocation of an offer. The location where the contract has been formed has also not been discussed in

detail. In addition, there is no mention of the security-related aspects such as using a secure medium, password protection, and other measures.

The laws regarding electronic contracts in Saudi Arabia are clearer and more specific as compared to Egyptian law. Egyptian law doesn't define an electronic contract at all. One way to rectify this lapse is to classify documents signed through a digital or electronic signature as electronic contracts. But there are no provisions According to Egyptian Law regarding authentication, verification, and storage of electronic contracts. Contrarily, the Saudi Arabian Electronic Transactions Protection Law of 2007 covers important aspects of the electronic contract including identity verification, authentication, and excluded contracts. The law requires a digital signature for authentication of the identity and approval of the electronic contract, and the signature can be verified by the digital certificate issued by a certification service provider. The law also clearly specifies that transactions related to personal status law and real property deeds are excluded unless the authority overseeing the legality of electronic contract in coordination with the Ministry. However, despite the Saudi e-contract law being more comprehensive as compared to the Egyptian law regarding electronic transactions, the Saudi Arabian laws don't cover many important security-related issues that arise due to the inherent risks of the internet.

The political and economic structure in some developing countries plays an influential role in the development of a comprehensive electronic contract law. The apparent difference between developing countries and modern industrial countries can be seen in dealing with electronic contract laws. The legal structure in Arab countries is conservative and slow in dealing with technological development, unlike modern industrial countries. Creating a law that encompasses every detail regarding electronic contracts requires coordination with the electronic trade bodies. It requires the government bodies to consult with international IT firms and security experts to develop a comprehensive framework for the legality and security of electronic contracts. Although the regulations regarding e-contract in Saudi Arabia was a big step, a lot more is needed to be done to remove uncertainties and risk regarding electronic contracts. There is a need for reforms to address the issues in both Egypt and Saudi Arabia regarding electronic contract legislation.

The legislative framework in the countries for electronic contracts needs to be strengthened as well. It is also important to consult with businesses to know about the uncertainties and risks in carrying your electronic transactions. The involvement of the government, IT sector, and businesses are critical for the development of a comprehensive framework for electronic contracts. The laws must be detailed that formulate rules for both Business to Business (B2B) and Business to Consumer (B2C) contracts.

The electronic contract laws in Arab countries particularly Saudi Arabia and Egypt are not reliable due to being insufficient. They are not consistent with the needs of the parties involved in electronic commerce. In exploring the Egyptian and Saudi Arabian laws, the thesis has shown that the lack of comprehensiveness of e-contract laws leads to uncertainty regarding transactions that are carried out through electronic means. The study has shown that there is inconsistency particularly in Saudi Arabian e-contract laws regarding the traditional contract laws that are based on Islamic principles and the electronic contract laws that seem to be secular in wording. Formulation of robust and consistent laws in Arab countries can bolster confidence regarding electronic transactions that will accelerate the rate of e-commerce in the respective regions.

References

- Ali, Y. H. (2015). The online electronic signature for the consumer. *홍익법학*, 16(1), 995-1016. <http://doi.org/10.16960/jh1r.16.1.201502.995>.
- Alsahouly, I., & Rashid, T. (2012). A closer look on the Egyptian e-commerce: A case study. *International Journal of Research in Management & Technology*, 2(6), 1-7. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.660.494&rep=rep1&type=pdf>.
- Article1 of the Basic Regulation of the Kingdom of Saudi Arabia (1992). https://www.constituteproject.org/constitution/Saudi_Arabia_2013.pdf?lang=en.

- Blythe, S. E. (2014). Fine-tuning Vietnam's electronic transactions law to promote growth in e-commerce. *J. Int'l Com. L. & Tech.*, 9, 214.
https://www.researchgate.net/profile/Stephen-Blythe-2/publication/290573525_Fine-Tuning_Vietnam's_electronic_transactions_law_to_promote_growth_in_E-Commerce/links/5f3570a792851cd302f211f8/Fine-Tuning-Vietnams-electronic-transactions-law-to-promote-growth-in-E-Commerce.pdf.
- Burns, N., & Grove, S. K. (2010). *Understanding nursing research-eBook: Building an evidence-based practice*. Elsevier Health Sciences.
- Dobrovolny, J. L., & Fuentes, S. C. G. (2008). Quantitative versus qualitative evaluation: A tool to decide which to use. *Performance Improvement*, 47(4), 7-14. <https://onlinelibrary.wiley.com/doi/abs/10.1002/pfi.197>.
- Electronic Transactions Protection Law. <https://wipo.int/en/text/197970>.
- Gebba, T. R., & Zakaria, M. R. (2012). E-government in Egypt: an analysis of practices and challenges. *International Journal of Business Research and Development*, 4(2). <https://pdfs.semanticscholar.org/b674/f822e500a4cfdc4a1b6ddc17bfdd495c2b84.pdf>.
- Ghoneim, A. F. (2011). Unexploited Potential: The Case of Egypt. *Exporting SERVICES*, 193.
- Gov.SA.National Center for Digital Certification. <https://www.my.gov.sa/wps/portal/snp/agencies/agencyDetails/AC299>.
- Hemdani, M. Data Protection in Egypt. https://www.researchgate.net/profile/Mohamed-Hemdani/publication/332962793_Data_Protection_in_Egypt_The_Present_and_the_Future/links/5cd3e8ff92851c4eab8c7915/Data-Protection-in-Egypt-The-Present-and-the-Future.pdf.
- Henson, R. K., Hull, D. M., & Williams, C. S. (2010). Methodology in our education research culture: Toward a stronger collective quantitative proficiency. *Educational Researcher*, 39(3), 229-240. <https://doi.org/10.3102%2F0013189X10365102>.
- Hesse-Biber, S. (2012). Feminist approaches to triangulation: Uncovering subjugated knowledge and fostering social change in mixed methods research. *Journal of Mixed Methods Research*, 6(2), 137-146. <https://doi.org/10.1177%2F1558689812437184>.
- IGI Global. What is Automation system. <https://www.igi-global.com/dictionary/robotic-system-design-and-development-for-medical-treatment-surgery-and-automated-production-applications/46660>.
- Metwally, E. K. (2013). An assessment of users' acceptance of Internet banking: An empirical case of Egypt. *American Academic & Scholarly Research Journal*, 5(5), 132. <https://search.proquest.com/openview/02badc19c55553ff0ad65b0225c7dc99/1.pdf?pq-origsite=gscholar&cbl=1416344>.
- Richter, C. (2010). Virtual mobilisation: The Internet and political activism in Egypt. *Orient I*, 51, 16-23. https://www.researchgate.net/profile/Carola-Richter/publication/292481040_Virtual_mobilisation_The_internet_and_political_activism_in_Egypt/links/57597ba808ae9a9c954efde8/Virtual-mobilisation-The-internet-and-political-activism-in-Egypt.pdf.