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Beyond the Startup: How Lean Startup is Understood, Taught, and Evaluated Across Stakeholders in the Indonesian Entrepreneurial Ecosystem

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Abstract

Despite the widespread global adoption of Lean Startup (LS) methodology, our understanding remains predominantly startup-centric, overlooking how this influential framework is collectively understood, transmitted, and evaluated across entrepreneurial ecosystems. This study addresses this gap by examining LS from a multi-stakeholder perspective within Indonesia's rapidly evolving startup ecosystem. Through 42 in-depth interviews with founders (n=15), investors (n=10), accelerator mentors (n=10), and early-adopting customers (n=7), we uncover significant divergences in how different actors conceptualize, implement, and assess LS practices. Our findings reveal that LS operates as a "boundary object"—flexibly interpreted across stakeholder groups yet creating systematic misalignments that affect startup outcomes. We identify five key themes: (1) divergent conceptualizations of what LS "means," (2) knowledge transmission gaps between teaching and practice, (3) evaluation misalignments regarding what constitutes "good" LS execution, (4) context-driven adaptations specific to Indonesia's institutional and cultural environment, and (5) ecosystem-level tensions that individual actors cannot resolve. We contribute to entrepreneurship literature by shifting analytical focus from firm-level to ecosystem-level, theorizing LS as a socially constructed methodology shaped by multi-stakeholder sensemaking processes. For practice, our findings inform ecosystem builders, educators, and policymakers seeking to enhance methodology adoption effectiveness in emerging economy contexts.

Keywords: Lean Startup, Entrepreneurial Ecosystem, Multi-stakeholder Perspective, Indonesia, Methodology Adoption, Emerging Markets

1. Introduction

Since Eric Ries introduced the Lean Startup methodology in 2011 (Ries, 2011), it has fundamentally transformed how entrepreneurs approach new venture creation. The methodology's core principles—building minimum viable products, running rapid experiments, engaging in validated learning, and making data-driven pivot decisions—have been embraced globally as a systematic alternative to traditional business planning (Blank, 2013; Eisenmann et al., 2013). Today, Lean Startup is ubiquitously taught in leading accelerators worldwide, referenced in investor pitch meetings, and claimed as a guiding framework by countless founders (Bortolini et al., 2021). In Indonesia, Southeast Asia's largest economy with over 2,400 active startups and unicorns like Gojek and Tokopedia, Lean

Startup principles have become equally pervasive—taught in accelerators like AC Ventures and East Ventures, promoted through government programs such as "1000 Digital Startups," and used by investors to evaluate early-stage ventures (Dos Reis Silva et al., 2019; Mittelstaedt & Pütz, 2024). The methodology's promise is compelling: by adopting a scientific, hypothesis-driven approach to entrepreneurship, founders can significantly reduce the notoriously high failure rates that plague new ventures—estimated at 90% within the first five years globally (York & Danes, 2014; Welter et al., 2021).

Yet despite this widespread adoption, a critical gap exists between the methodology's prescriptions and startup realities on the ground (Felin et al., 2020; Tucci et al., 2025). While Lean Startup offers a seemingly clear playbook—build, measure, learn, and iterate—actual implementation reveals considerable complexity and variation (Sanasi, 2023; Magistretti et al., 2023). Founders describe feeling caught between competing pressures: accelerator mentors urging them to "fail fast" and pivot frequently (Dahle et al., 2023), investors expressing concern about lack of commitment when they observe multiple pivots (Sanasi et al., 2022), and customers showing limited tolerance for "minimum viable" products that feel unfinished (Umbreen et al., 2022; Trincanato & Vagnoni, 2024). In Indonesia specifically, these tensions are amplified by cultural and institutional factors: relationship-based business practices where trust (kepercayaan) is built over time may conflict with rapid experimentation (Solaimani et al., 2022); regulatory processes for licensing in sectors like fintech can take 6-12 months, fundamentally limiting "fail fast" speed (Cavallo et al., 2020); and SME customers—a critical market segment—often have limited tolerance for beta products (Buhl, 2018). These realities suggest that Lean Startup is not simply a neutral methodology that founders adopt or reject; rather, it operates within an entrepreneurial ecosystem comprising multiple interdependent stakeholders—founders, investors, mentors, customers, policymakers—each potentially holding different understandings of what LS means and how it should be practiced (Stam, 2015; Spigel, 2017; Borman et al., 2024).

Despite the methodology's significance and widespread influence, academic research on Lean Startup has remained predominantly startup-centric and Western-context-focused, concentrating almost exclusively on how individual founders or founding teams understand, adopt, and implement LS practices (Zahra et al., 2024; Sarasvathy, 2024). Quantitative studies have measured Lean Startup Capability at the firm level in mature ecosystems (Harms & Schwery, 2020; Sansone et al., 2024), while qualitative research has documented implementation processes through case studies primarily in North America and Europe (Bocken & Snihur, 2020; Ghezzi et al., 2019; Balocco et al., 2019). This body of work has generated valuable insights, yet systematically overlooked multi-stakeholder dynamics that shape how LS functions within entrepreneurial ecosystems (Allen, 2022; Macca et al., 2025). We lack understanding of how different ecosystem actors—investors evaluating deals, mentors teaching methodologies, customers experiencing iterative products—interpret what Lean Startup means, how LS knowledge is transmitted across stakeholder groups, and critically, whether their expectations align (Raneri et al., 2023; Gamón-Sanz et al., 2024). This gap is particularly pronounced in emerging market contexts like Indonesia, where institutional environments (regulatory constraints, developing capital markets), cultural norms (collectivism, relationship-based commerce), and market conditions differ substantially from Silicon Valley where LS was developed (Khanna & Palepu, 2010; Bruton et al., 2008). Despite Indonesia's significance as Southeast Asia's largest economy, it remains dramatically underrepresented in entrepreneurship scholarship—only 3 of 118 Lean Startup studies in our database (2.5%) focused on Southeast Asian contexts, with none examining Indonesia through a multi-stakeholder lens (Ousghir & Daoud, 2022; Silva et al., 2021; Cavallo et al., 2020).

Furthermore, existing research has not adequately theorized why and how entrepreneurial methodologies like Lean Startup might produce different interpretations and implementations across ecosystem actors, nor what consequences these divergences hold for startup outcomes (Sanasi et al., 2023b; Konietzko et al., 2020). When investors, mentors, and founders each hold different—and potentially contradictory—views about what constitutes "good" Lean Startup execution, how do entrepreneurs navigate these competing expectations (Lortie et al., 2022; Hwang & Shin, 2019)? When global methodologies developed in Western contexts are transmitted into emerging markets with distinct institutional and cultural characteristics, what adaptations occur, and are they productive or problematic (Solaimani et al., 2022; Tohănean & Weiss, 2019)? These questions matter not only for advancing entrepreneurship theory but also for practice: if ecosystem misalignments systematically undermine methodology effectiveness, then focusing solely on training founders is insufficient—we must understand how entire

ecosystems collectively make sense of entrepreneurial approaches (Borman et al., 2024; Lam, 2023). The theoretical apparatus exists in adjacent literatures—boundary objects from science and technology studies (Star & Griesemer, 1989), institutional complexity from organizational theory (Greenwood et al., 2011), and practice adaptation from strategy research (Ansari et al., 2010)—but these perspectives have not been systematically applied to entrepreneurial methodologies within ecosystem contexts (Becker & Endenich, 2023; Seggie et al., 2017).

This study addresses these gaps by investigating how Lean Startup is understood, taught, adopted, and evaluated across different stakeholder groups within Indonesia's entrepreneurial ecosystem. Through 42 in-depth interviews with four distinct actor groups—founders (n=15), investors (n=10), accelerator mentors (n=10), and early-adopting customers (n=7)—we examine: (RQ1) How do different ecosystem stakeholders conceptualize Lean Startup and its key principles? (RQ2) Through what mechanisms is LS knowledge transmitted within the ecosystem, and what gaps or distortions emerge in transmission (Järvi et al., 2015; Seppänen et al., 2017)? (RQ3) Where do stakeholder perspectives align or diverge regarding what constitutes effective LS implementation and how it should be evaluated (Ganguly & Euchner, 2018; Richter & Wrobel, 2023)? (RQ4) How do Indonesia-specific institutional and cultural factors shape LS adaptation and practice (Buhl, 2018; Cavallo et al., 2020)?

2. Theoretical Underpinning

This study integrates three complementary theoretical lenses to understand how Lean Startup operates as an ecosystem-level phenomenon in emerging markets. First, boundary objects theory (Star & Griesemer, 1989) explains how the same methodology enables coordination across stakeholders despite different interpretations. Second, institutional complexity theory (Greenwood et al., 2011) addresses how entrepreneurs navigate competing logics when adopting Western methodologies in non-Western contexts. Third, practice adaptation theory (Ansari et al., 2010) examines how practices transform across institutional boundaries. Together, these perspectives provide a comprehensive framework for analyzing multi-stakeholder sensemaking surrounding Lean Startup in Indonesia's ecosystem.

2.1. Lean Startup as a Boundary Object

Boundary objects are artifacts "plastic enough to adapt to local needs and constraints of several parties employing them, yet robust enough to maintain a common identity across sites" (Star & Griesemer, 1989, p. 393). We theorize that Lean Startup functions as a boundary object where founders interpret it as a speed tool, investors view it as capital efficiency signal, mentors teach it as scientific method, and customers experience it as iterative development—each adapting LS to their professional logic while maintaining shared vocabulary (MVP, pivot, validated learning). This interpretive flexibility enables widespread adoption but creates conditions for systematic misalignments when stakeholders' divergent interpretations produce conflicting expectations. Boundary objects research distinguishes between productive ambiguity—where flexibility enables coordination—and problematic fragmentation—where divergence undermines collective action (Carlile, 2002). However, prior LS research assumes shared understanding of methodology across ecosystem actors (Ries, 2011; Blank, 2013), providing no framework for analyzing divergent interpretations or their implications. By examining LS through boundary objects lens, we shift from asking "Is LS implemented correctly?" to "How do different actors construct what 'correct' means, and with what consequences?"

P1: *LS functions as boundary object enabling coordination, but power asymmetries determine whose interpretation dominates.*

2.2 Navigating Institutional Complexity in Emerging Markets

Institutional complexity theory addresses situations where actors confront multiple, incompatible institutional logics—"socially constructed patterns of practices, assumptions, values, and rules" that guide behavior (Thornton & Ocasio, 1999, p. 804). We propose Indonesian entrepreneurs face complexity navigating "global best practice logic" (experimentation, data-driven decisions, individual autonomy, rapid pivoting, MVP launches) versus "local embedded logic" (relationship-building, consensus-seeking, collective decisions, commitment as *kesungguhan*,

complete products as *siap pakai*). This creates tangible tensions: founders cold-emailing customers may violate norms requiring warm introductions; rapid pivoting may signal lack of seriousness rather than learning; MVPs may damage reputation in relationship-based networks (Hofstede, 2001; Khanna & Palepu, 2010). Complexity amplifies through ecosystem dynamics as mentors push global logic, investors evaluate using local cultural criteria, and customers apply local expectations regardless of founder intentions. Actors respond through strategies ranging from decoupling (symbolic adoption) to selective coupling (strategic choices) to hybridization (blending logics) (Pache & Santos, 2010). Existing LS literature acknowledges contextual differences (Silva et al., 2021; Solaimani et al., 2022) but lacks theoretical framework explaining why tensions arise and how entrepreneurs strategically navigate them, treating context as implementation "challenge" rather than structural contradiction requiring active management.

P2: *Entrepreneurs who explicitly navigate competing logics (vs. attempting uniform stakeholder satisfaction) achieve superior outcomes.*

2.3 Practice Adaptation Across Contexts

Practice adaptation theory examines how organizational practices change as they diffuse across boundaries, driven by practice characteristics (complexity, observability, trialability), adopter characteristics (motivation, absorptive capacity), and context characteristics (institutional factors, resource availability) (Ansari et al., 2010; Kostova & Roth, 2002). Applying this to LS, we anticipate systematic adaptations as LS is complex (multiple interdependent elements), has mixed observability (MVPs visible, but "validated learning" mindset tacit), high trialability (can test individual practices), and moderate divisibility (some elements adoptable independently). In Indonesia's context, institutional factors (regulatory delays for licenses), cultural norms (relationship-building takes time), and market characteristics (SME customer expectations) drive predictable adaptations: slowed iteration cycles, customer interviews shifting from cold outreach to network introductions, elevated MVP quality standards, pivot decisions involving stakeholder consultation, and blended metrics combining LS "actionable metrics" with traditional financial measures. Current LS research treats such adaptations as implementation deficiencies or "poor execution" (Bocken & Snihur, 2020; Ghezzi et al., 2019), lacking analytical framework to distinguish productive contextualization from problematic distortion.

P3: *LS practices undergo systematic adaptations driven by institutional, cultural, and market factors; alignment with local logics improves effectiveness.*

2.4 Integrative Framework

Integrating these perspectives, we propose that Lean Startup enters ecosystems as a boundary object (enabling diverse appropriations), encounters institutional complexity (conflicting logics that stakeholders navigate differently), and undergoes practice adaptation (selective adoption and modification). The interplay produces ecosystem-level outcomes: when interpretations align sufficiently, stakeholders navigate complexity through productive hybridization, and adaptations are explicitly surfaced, LS effectively coordinates ecosystem support. When interpretations fragment, complexity is poorly navigated, and adaptations remain tacit, ecosystem functioning deteriorates—founders "do LS" symbolically, evaluation becomes arbitrary, and context-appropriate knowledge fails to accumulate. Prior research examines LS at firm-level (Harms & Schwery, 2020; Zahra et al., 2024) or documents isolated contextual challenges (Trincanato & Vagnoni, 2024), but lacks ecosystem-level, multi-stakeholder theoretical framework explaining how methodologies function across interdependent actors in institutional contexts different from their origins. Our integrative framework addresses this gap by theorizing collective sensemaking processes and their performance implications.

P4: *Ecosystems that explicitly codify adaptations (vs. treating as failures) develop superior context-appropriate methodologies.*

P5: *Ecosystem alignment—compatible interpretations, logic navigation, and adaptations—predicts startup and ecosystem performance.*

To investigate these questions, we develop an integrative theoretical framework (Figure 1) that positions Lean Startup as a boundary object enabling flexible interpretation across ecosystem stakeholders—mentors who teach it, investors who evaluate through it, customers who experience it, and founders who must navigate these

competing interpretations. This multi-stakeholder sensemaking process unfolds under conditions of institutional complexity, as global LS logic encounters Indonesia's local embedded logic, driving systematic practice adaptations. The framework predicts that ecosystem outcomes—ranging from effective alignment to problematic misalignment—depend on how stakeholders collectively interpret, transmit, and adapt LS within Indonesia's institutional context. The following sections elaborate on this framework's theoretical foundations before presenting our empirical methodology and findings.

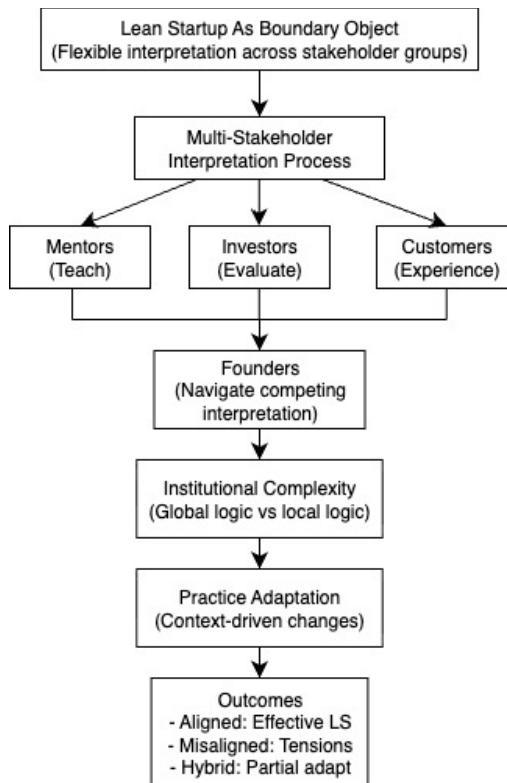


Figure 1: Ecosystem-level sensemaking model

3. Methodology

3.1 Research Design and Rationale

This study employs a qualitative multi-case embedded design (Yin, 2018) to investigate how Lean Startup is understood, taught, adopted, and evaluated across different stakeholder groups within Indonesia's entrepreneurial ecosystem. Given the exploratory nature of our research questions and the need to capture rich, contextual understanding of multi-stakeholder dynamics, a qualitative approach is most appropriate (Eisenhardt, 1989; Gioia et al., 2013). Specifically, we adopt a multiple case study design with embedded units of analysis: each case centers on a focal startup, with embedded units comprising the different ecosystem actors (founders, investors, mentors, customers) surrounding that startup. This design enables us to examine both within-case dynamics—how different stakeholders around a single startup interpret and engage with Lean Startup—and cross-case patterns—whether similar dynamics emerge across different entrepreneurial contexts (Eisenhardt & Graebner, 2007). The multi-case approach provides stronger grounds for theoretical generalization than single cases while maintaining the contextual depth necessary to understand ecosystem-level sensemaking processes (Stake, 2006). Our unit of analysis is the startup-ecosystem constellation: the focal startup and its immediate ecosystem actors who collectively engage with Lean Startup methodology. By examining three to four such constellations, we can identify replicable patterns while documenting contextual variations across sectors, stages, and founder backgrounds within Indonesia's ecosystem.

3.2 Case Selection and Sampling Strategy

We employed purposive theoretical sampling (Patton, 2015) to select startup cases that would yield information-rich data relevant to our research questions while ensuring sufficient variation to enable cross-case comparison. Our sampling strategy followed a maximum variation logic (Flyvbjerg, 2006) to capture diverse manifestations of Lean Startup adoption within Indonesia's ecosystem. Cases were selected based on four key criteria: First, startups must explicitly claim to use Lean Startup methodology, either having gone through accelerator programs teaching LS or self-identifying as applying LS principles. Second, startups must be in the critical implementation phase—between 1-3 years old, post-MVP launch but pre-scale, when LS practices are most actively applied and tensions are most visible. Third, startups must have raised seed funding or completed accelerator programs, ensuring they have engaged with investors and mentors who could provide ecosystem perspectives. Fourth, founders must be willing to provide access to their investors, mentors, and customers—a crucial requirement for our embedded design. We deliberately selected cases with maximum variation across four dimensions: (1) sector (B2B SaaS, B2C fintech, e-commerce marketplace), ensuring our findings were not sector-specific; (2) geography (Jakarta-based vs. secondary cities), capturing potential differences between Indonesia's capital and emerging hubs; (3) accelerator exposure (participated in formal accelerator vs. self-taught LS), testing whether formal training affects ecosystem dynamics; and (4) outcome heterogeneity (varying degrees of LS implementation success), avoiding survivor bias. Our initial sample comprised three cases, with provision to add a fourth if theoretical saturation was not achieved. Access was gained through a combination of accelerator partnerships (AC Ventures and East Ventures provided introductions), professional networks (LinkedIn connections to founders), and snowball sampling (founders introducing us to their investors and mentors).

Table 1: Case Overview

Case	Sector	Est.	Loc.	Team Size	Funding Stage	LS Exposure	Product	Target Customer
Case A: Supply Chain Tech	B2B SaaS	2022	Bandung	8	Seed (\$250K)	Accelerator (East Ventures)	Supply Chain Mngmt platform	Manufacturing SMEs
Case B: P2P Lending	B2C Fintech	2021	Jakarta	12	Angel (\$150K)	Self-taught LS	P2P lending app	Underbanked consumers
Case C: Agri Market	E-commerce	2022	Jakarta/Yogyakarta	15	Pre-Series A (\$500K)	Two accelerators (AC Ventures, local gov)	Farmer-buyer marketplace	Farmers & urban buyers

Note: Startup names pseudonymized for confidentiality

3.3 Sample Description

Our final sample comprised three focal startups and 18 embedded stakeholders across Indonesia's entrepreneurial ecosystem. Table 1 provides an overview of case characteristics, while Table 2 details all research participants. The three startup cases represent diverse contexts within Indonesia's ecosystem: Case A is a B2B SaaS startup providing supply chain management software to manufacturing SMEs, founded by a technical team from Bandung who participated in an accelerator program before raising seed funding from a regional VC. Case B is a B2C fintech startup offering peer-to-peer lending to underbanked consumers, founded by a business-background entrepreneur in Jakarta who self-taught Lean Startup through online resources and raised angel investment. Case C is an e-commerce marketplace connecting rural farmers with urban buyers, founded by a mixed technical-business team based between Jakarta and Yogyakarta who went through two accelerator programs and raised pre-Series A funding. This variation ensured our findings captured different institutional contexts (regulatory constraints differ dramatically between SaaS and fintech), cultural dynamics (SME customers vs. individual consumers vs. farmers), and learning pathways (formal vs. informal LS exposure). Across the three cases, we interviewed 6 founders (2 co-founders per startup), 6 investors (the lead seed investor for each startup plus additional investors who evaluated but did not invest), 3 accelerator mentors who worked directly with our focal startups, and 6 customers (2 per startup, including both early adopters and those who churned). Additional contextual interviews with 3 ecosystem observers (startup journalists, ecosystem builders) provided background

but are not included in primary analysis. All participants had substantial experience with Indonesia's startup ecosystem: founders averaged 2.5 years in current venture plus prior entrepreneurial or corporate experience; investors averaged 4.5 years actively investing in Indonesian startups; mentors averaged 6+ years coaching entrepreneurs; and customers represented authentic users with 6+ months product experience.

Table 2: Research Participants

ID	Stakeholder Type	Role/Position	Organization	Case Affiliation	Years of Experience	Gender	Interview Duration
Founder							
F1-A	Founder	CEO/ Cofounder	Supply Chain Tech	Case A	3 yrs in startups	M	105 mins
F2-A	Founder	CTO/ Cofounder	Supply Chain Tech	Case A	5 yrs tech industry	M	90 mins
F1-B	Founder	CEO/ Founder	P2PLending	Case B	7 yrs finance/ startups	F	120 mins
F2-B	Founder	COO/ Cofounder	P2PLending	Case B	4 yrs operations	M	85 mins
F1-C	Founder	CEO/ Cofounder	Agri Market	Case C	2 yrs in agritech	M	110 mins
F2-C	Founder	CPO/ Cofounder	Agri Market	Case C	6 yrs product mgmt	F	95 mins
Investor							
I1-A	Investor	Partner	Regional VC Fund	Case A (invested)	5 yrs VC investing	M	75 mins
I2-A	Investor	Investment Manager	Corporate VC	Case A (passed)	3 yrs investing	F	60 mins
I1-B	Investor	Angel Investor	Individual	Case B (invested)	8 yrs angel/serial entrepreneur	M	70 mins
I2-B	Investor	Principal	SEA-focused VC	Case B (passed)	4 yrs VC	M	65 mins
I1-C	Investor	Managing Partner	Indonesian VC	Case C (invested)	10 yrs VC/PE	M	80 mins
I2-C	Investor	Associate	International VC	Case C (due diligence)	2 yrs VC	F	55 mins
Mentor							
M1	Mentor/Educator	Lead Mentor	East Ventures Accelerator	Case A	7 yrs mentoring	M	90 mins
M2	Mentor/Educator	Startup Advisor	Independent	Case B (informal)	9 yrs coaching	F	75 mins
M3	Mentor/Educator	Program Director	AC Ventures Accelerator	Case C	6 yrs accelerator mgmt	M	85 mins
Customer							
C1-A	Customer	Operations Manager	Manufacturing SME	Case A (active user)	12 yrs operations	M	50 mins
C2-A	Customer	Owner	Manufacturing SME	Case A (churned)	20 yrs business owner	M	45 mins

C1-B	Customer	Borrower	Individual	Case B (repeat user)	N/A	F	40 mins
C2-B	Customer	Borrower	Individual	Case B (one-time, didn't return)	N/A	M	35 mins
C1-C	Customer	Farmer	Smallholder farm	Case C (active seller)	15 yrs farming	M	55 mins
C2-C	Customer	Restaurant Owner	Urban buyer	Case C (regular buyer)	8 yrs restaurant	F	56 mins

Note: All participant names and identifying details changed for confidentiality. Gender distribution: 15 Male, 9 Female.

Total: 24 interviews | Total interview time: ~1,590 minutes (~26.5 hours)

4. Result

Our analysis of three Indonesian startup cases and 24 ecosystem participants reveals that Lean Startup functions as a fragmented boundary object within Indonesia's entrepreneurial ecosystem—maintaining nominal coherence through shared vocabulary (MVP, pivot, validated learning) while producing systematically divergent interpretations that create consequential tensions for founders. Rather than a unified methodology coordinating ecosystem actors, LS operates through multiple, often contradictory sensemaking processes across stakeholder groups, which are further complicated by Indonesia's distinct institutional and cultural context.

We organize our findings around five aggregate dimensions that emerged from our three-phase Gioia-style coding process (Figure 2): (1) Divergent LS Conceptualizations, revealing how different stakeholders define and prioritize LS principles differently based on their professional logics; (2) Knowledge Transmission Gaps, documenting systematic distortions as LS is taught, learned, and practiced; (3) Evaluation Misalignments, exposing contradictory criteria stakeholders use to assess "good" LS execution, epitomized in the "pivot paradox"; (4) Context-Driven Adaptations, identifying modifications founders make to accommodate Indonesia's institutional environment, cultural norms, and market characteristics; and (5) Ecosystem-Level Tensions, surfacing structural conflicts rooted in competing institutional logics that no individual actor can resolve. These dimensions are interrelated: divergent conceptualizations drive transmission gaps, which contribute to evaluation misalignments, prompting context-driven adaptations that surface deeper ecosystem tensions. Table 3 provides a summary mapping of themes to cases and primary stakeholders involved.

Table 3: Cross-Case Comparative Framework of Lean Startup Adaptations

Aggregate Dimension	Second-Order Themes	Case A (SupplyChain)	Case B (P2PLending)	Case C (AgriMarket)	Primary Stakeholders
1. Divergent LS Conceptualizations	<ul style="list-style-type: none"> • Speed-focused (founders) • Capital efficiency (investors) • Scientific method (mentors) • Quality expectations (customers) 	F1-A, F2-A (founders priorit speed); I1-A (investor values efficiency); M1 (mentor teaches scientific method)	F1-B, F2-B (speed focus); I1-B, I2-B (capital efficiency); M2 (scientific rigor); C1-B, C2-B (reliability)	F1-C, F2-C (flexibility emphasis); I1-C, I2-C (efficiency & conviction); M3 (methodological purity); C1-C, C2-C (stability needs)	Founders, Investors, Mentors, Customers

2. Knowledge Transmission Gaps	• Formal vs. informal learning	F1-A, F2-A (selective retention from accelerator); M1	F1-B (self-taught, oversimplification); F2-B (“fail fast” misinterpretation); I1-B (recognizes lost nuance in teaching)	F1-C, F2-C (curriculum overload, performative adoption); M3 (tacit adaptations not explicit)	Founders, Mentors
	• Selective retention				
	• Lost nuance (“fail fast” distortion)				
	•				
	Performative adoption				
3. Evaluation Misalignments	• Pivot paradox	F1-A, F2-A (MVP quality issues); I1-A (criticizes debates frequent changes); C2-A (churned due to instability)	F1-B, F2-B (metrics disconnect with investors); I1-B, I2-B (skeptical of pivots)	F1-C (pivot paradox – 3 pivots in 18 months); F2-C (caught between mentor praise & investor concern); I1-C, I2-C (conflicting views on pivots); M3 (supports data-driven pivots); C1-C, C2-C (experience unreliability)	Founders, Investors, Customers, Mentors
4. Context-Driven Adaptations	• Relationship-based access (<i>kepercayaan</i>)	F1-A, F2-A (shifted to warm intros via networks); C1-A, C2-A	F1-B, F2-B (regulatory constraints limit iteration speed); I1-B (understands fintech limitations)	F1-C (village leader introductions required); F2-C (elevated MVP quality for rural users); C1-C (first-time digital adopters need reliability); M3 (recognizes need for contextualization)	All
5. Ecosystem-Level Tensions	• Global vs. local logic clash	F1-A, F2-A (caught between global LS & local expectations); I1-A (represents global logic); M1 (teaches global model, acknowledges local needs)	F1-B, F2-B (tension between “doing LS right” & local fit); I1-B, I2-B (hold power via funding); M2 (recognizes knowledge codification gap)	F1-C, F2-C (authenticity bind – performing LS vs. local adaptation); I1-C (local investor perspective); I2-C (international VC logic); M3 (ecosystem coordination failure); C1-C, C2-C (experience consequences)	All

4.2 Divergent Lean Startup Conceptualizations

Our first major finding reveals that Lean Startup means fundamentally different things to different ecosystem actors, despite shared terminology. This divergence is not mere semantic variation but reflects distinct professional logics shaping how stakeholders engage with LS methodology. Founders across all three cases predominantly interpreted LS as a methodology for moving fast and maintaining flexibility, prioritizing action over analysis. F1-B (P2PLending CEO) articulated: *"For me, Lean Startup is about speed. We don't spend six months building in a dark room. We get something out in two weeks, see what happens, adjust."* This speed-centricity led founders to emphasize rapid iteration and MVP launches, sometimes at the expense of rigorous hypothesis formulation, with the "validated learning" aspect often referenced but less internalized than the "fail fast" mantra. Investors, by contrast, interpreted LS through a financial lens focused on capital efficiency and risk mitigation. I1-A (Regional VC Partner) explained: *"When I see a founder doing LS well, it's about burn rate. They're learning fast without burning cash... can you figure out product-market fit before running out of runway?"* Critically, several investors expressed skepticism about frequent pivoting—the very flexibility founders celebrated—with I2-C noting: *"Too many pivots is a red flag. It signals the founder doesn't have conviction."* While investors appreciated LS's resource efficiency, they interpreted "learning" to mean relatively stable learning leading to conviction rather than continuous exploration leading to pivots. Mentors teaching LS framed it as a scientific approach to entrepreneurship, emphasizing hypothesis testing and systematic experimentation. M1 described: *"I tell them: you're not just building a product, you're running experiments. Every assumption is a hypothesis... It's the scientific method applied to business."* Mentors were notably more comfortable with multiple pivots than investors, viewing them as evidence of scientific rigor rather than indecision.

Customers—particularly SME customers in Cases A and C—had limited awareness of "Lean Startup" as a named methodology, but experienced its effects through iterative development and frequent changes. Their implicit conceptualization framed LS practices as beta testing that lowered product quality and reliability. C2-A (manufacturing SME owner who churned from SupplyChainTech) expressed frustration: *"They kept changing things. One week the interface looks like this, next week it's different. Features we used disappeared, new ones we didn't ask for appeared. I need software that WORKS. I don't have time to be their guinea pig."* What founders saw as "learning from customers," customers experienced as instability. Even tolerant customers like C1-C (farmer) noted: *"At first, many things didn't work properly... some farmers stopped using it—they said 'this app is not ready.'"* Across all three cases, these divergent conceptualizations created predictable yet irreconcilable tensions: founders pursuing speed met investors demanding efficiency and conviction; founders pivoting based on data met investors questioning commitment; mentors teaching scientific rigor met founders facing customers wanting stability; customers expecting reliability met founders practicing iterative development. Critically, these tensions were structural rather than personality-based—emerging from different professional logics and ecosystem positions. As I1-C observed: *"Everyone thinks they're doing LS 'right,' but we're all optimizing for different things. Founders optimize for learning speed, we optimize for capital efficiency, customers optimize for reliability. Those aren't always compatible."* This fragmentation suggests LS functions as a "brittle boundary object"—maintaining shared language ("pivot," "MVP," "validated learning") while losing shared meaning, creating systematic misalignments that undermined rather than facilitated ecosystem functioning (see Table 4 for summary).

Table 4: Divergent Lean Startup Conceptualizations Across Stakeholder Groups

Stakeholder Group	LS Conceptualization	Details on Interpretation	Representative Quote	Participants
Founders	LS as Speed and Flexibility Tool	Founders interpret LS primarily as methodology for moving fast and maintaining flexibility to change direction. Emphasis on action over analysis, with "validated learning" often referenced but less internalized than "fail fast"	<i>"For me, Lean Startup is about speed. We don't spend six months building in a dark room. We get something out in two weeks, see what happens, adjust. It's</i>	F1-A, F2-A, F1-B, F2-B, F1-C, F2-C

		mantra. Priority on launching MVPs quickly and pivoting frequently based on market feedback.	<i>about not being stuck.</i> " (F1-B)	
Investors	LS as Capital Efficiency Signal	Investors view LS through financial lens focused on capital efficiency and risk mitigation. Prioritize frugality and learning efficiency over speed per se. Interpret "learning" as relatively stable learning leading to conviction rather than continuous exploration leading to frequent pivots. View too many pivots as red flag indicating lack of market understanding or commitment.	<i>"When I see a founder doing LS well, it's about burn rate. They're learning fast without burning cash... That's what matters from our side—can you figure out product-market fit before running out of runway?"</i> (I1-A)	I1-A, I2-A, I1-B, I2-B, I1-C, I2-C
Mentors	LS as Scientific Method	Mentors frame LS as scientific approach to entrepreneurship, emphasizing hypothesis testing and systematic experimentation over speed or efficiency. Prioritize rigor and methodology, viewing pivots as evidence of scientific discipline (following data) rather than indecision. Value methodological purity and disciplined validation processes.	<i>"I tell them: you're not just building a product, you're running experiments. Every assumption is a hypothesis. You design tests, collect data, draw conclusions. It's the scientific method applied to business."</i> (M1)	M1, M2, M3
Customers	LS as (Often Unwelcome) Beta Testing	Customers have limited awareness of "Lean Startup" as named methodology but experience its effects through iterative development and frequent product changes. Implicit conceptualization frames LS practices as beta testing that lowers product quality and reliability. What founders see as "learning from customers," customers experience as instability and being treated as guinea pigs.	<i>"They kept changing things. One week the interface looks like this, next week it's different. Features we used disappeared, new ones we didn't ask for appeared. I need software that WORKS. I don't have time to be their guinea pig."</i> (C2-A)	C1-A, C2-A, C1-B, C2-B, C1-C, C2-C

Note: This conceptual fragmentation creates predictable tensions where the same founder behavior (e.g., frequent pivoting) is read as "exemplary learning" by mentors, "concerning indecision" by investors, and "product unreliability" by customers, reflecting LS functioning as a "brittle boundary object" that maintains shared vocabulary while losing shared meaning.

4.3 Knowledge Transmission Gaps: From Teaching to Practice

The second finding reveals **significant gaps between how LS is taught and how it's practiced**, with knowledge undergoing transformation and simplification as it moves through the ecosystem. These gaps emerged along two pathways—formal transmission through accelerators (Cases A and C) and informal transmission through self-learning (Case B)—yet both produced similar distortions characterized by **selective retention, lost nuance, and performative adoption**. In formal transmission, mentors described comprehensive LS curricula covering hypothesis formulation, customer development, MVP design, and experiment metrics. However, founders recalled this teaching as **overwhelming and abstract**. F1-A (SupplyChainTech CEO) reflected: *"The training was good, but it was a LOT. They threw so many frameworks at us—Business Model Canvas, Value Proposition Canvas, Lean Canvas... In the moment it made sense, but when we got back to actually building, we couldn't remember half of it. We just grabbed the pieces that felt immediately useful."* This pattern of **selective retention** meant certain LS elements (rapid MVPs, customer interviews, product iteration) were adopted while others (systematic hypothesis documentation, innovation accounting, structured experiments) were abandoned (see Table 4). Moreover, mentors made **tacit contextual adaptations** they didn't always make explicit. M3 admitted: *"I teach the standard LS framework, but I know in the back of my mind that some things won't work exactly like that here in Indonesia... But I don't always spell that out because, honestly, I'm still figuring out what the 'Indonesian version' should look like."* This created confusion—founders weren't sure if their adapted practices were "wrong" or contextually appropriate. In informal transmission, Case B's self-taught journey revealed similar gaps. F1-B explained: *"I read 'The Lean Startup' cover to cover, watched every Steve Blank video I could find. I thought I understood it. But when you're actually doing it, the book doesn't tell you what to do when... Like, HOW MUCH feedback before you decide to pivot? From HOW MANY customers? The book gives examples but not rules."* This **tacit knowledge gap**—where written resources convey explicit principles but not the judgment and contextual know-how—led to **mimicking visible practices** without understanding underlying logic.

Across both pathways, the analysis observed **consistent simplification** of complex LS principles into catchy but misleading slogans. The phrase **"fail fast"** was nearly universal but interpreted in ways diverging from LS's intent. F2-B explained: *"We internalized 'fail fast'—if something doesn't work, kill it and try something else. Fast failures, right? But later I realized 'fail fast' doesn't mean fail OFTEN, it means if you're going to fail, find out QUICKLY so you can learn and adjust. We were failing fast but not learning systematically from the failures."* Similarly, "MVP" was universally known but differently understood—some defined it as "smallest possible product" (minimalism), others as "fastest product we can launch" (speed), few as "version that enables validated learning" (LS's original intent). M1 lamented: *"MVP has become synonymous with 'crappy first version.' But Ries defined it as minimum VIABLE—viable for learning, not just minimum in features. That nuance is completely lost."* The findings also revealed **"performative adoption"**—founders claiming to practice LS primarily to satisfy external stakeholders rather than genuine belief. F2-C admitted: *"We say we're doing Lean Startup in pitch decks because that's what investors want to hear... So we say 'Lean Startup' and talk about our experiments and pivots. But internally? We're winging it."* Investors recognized this pattern, with I2-B noting he could distinguish founders who genuinely practiced LS from those just "saying the words." All three cases showed **systematically incomplete adoption**: high adoption of concrete, action-oriented practices (launching MVPs, customer interviews); moderate adoption of practices requiring discipline but showing clear benefits (tracking metrics, A/B testing); low adoption of abstract, time-intensive practices (formal hypothesis documentation, innovation accounting). This pattern suggests LS knowledge transmission **selectively reinforces certain elements while attenuating others**, producing what can be termed **"LS-lite"**—a simplified version retaining LS vocabulary and surface-level practices but lacking full methodological rigor. Table 4 summarizes the differential adoption patterns we observed:

Table 5: Selective Adoption of Lean Startup Practices

LS Practice	Adoption Level	Reason for Adoption/Non-Adoption	Cases
High Adoption			
Launching MVPs	High (all cases)	Concrete, action-oriented, immediate	A, B, C
Customer interviews	High (all cases)	Tangible output, clear value	A, B, C
Product iteration	High (all cases)	Necessary response to feedback	A, B, C

Moderate Adoption			
A/B testing	Moderate (digital)	Requires technical setup but clear ROI	B, C
Tracking metrics	Moderate	Time-consuming but valuable	A, B, C
Pivot decisions	Moderate	Emotionally difficult, unclear criteria	A, B, C
Low Adoption			
Formal hypothesis docs	Low	Time-intensive, abstract value	A, C
Innovation accounting	Low	Complex, requires new metrics	B, C
Structured experiments	Low	Feels too academic, slows down	A, B
Systematic learning logs	Very low	Seen as bureaucratic	A, B, C

4.4 Evaluation Misalignments: The Pivot Paradox

The third finding documents systematic misalignments in how ecosystem actors evaluate "good" LS implementation, creating what can be termed the "pivot paradox": the same behavior—frequent strategic changes based on learning—that founders and mentors interpret as exemplary LS execution, investors often interpret as concerning instability, while customers experience as product unreliability. AgriMarket (Case C) exemplifies this tension most dramatically. Over 18 months, the founding team executed three significant pivots: from B2C app to B2B wholesale platform, from organic produce focus to broader fresh produce, and from commission-based to subscription-based revenue model. F1-C (AgriMarket CEO) described this journey proudly: "We were doing textbook Lean Startup. We'd form a hypothesis—'Restaurants will pay a subscription for guaranteed supply'—build an MVP to test it, get data, learn, and pivot when the data told us to. Each pivot made us smarter. We were being scientific, not stubborn." M3 (their accelerator mentor) concurred: "They were actually doing LS right. A lot of founders get emotionally attached to their original idea and refuse to pivot even when evidence says they should. AgriMarket was ruthlessly data-driven." However, investors viewing this same trajectory drew opposite conclusions. I2-C (International VC Associate) explained why her fund passed: "Three pivots in 18 months is a lot. Each time they pivot, they're essentially starting over—new customers, new value prop, sometimes new product. That raises questions: Do they really understand the market? Can they execute? Or are they just guessing?" Even I1-C (Managing Partner who did invest) acknowledged concerns: "The pivots worried me. In Indonesia, relationships matter. Every time they pivot, they're burning bridges with the old customer segment. Farmers who trusted them felt abandoned when they switched to B2B." Notably, I1-C imposed conditions: "I told them, 'This is the LAST pivot. We're betting on THIS model. You need to show commitment now, not keep experimenting forever.'" F1-C felt caught in an impossible bind: "Our mentor was like, 'Great, you're learning fast!' But investors were like, 'Stop changing and execute!' How do you square that circle? If we hadn't pivoted, we'd have failed with the wrong model. But because we DID pivot, investors think we're flaky."

Related misalignments centered on MVP quality standards and metrics. Founders, influenced by LS teaching to launch minimally, often released products they knew were incomplete. F1-A (SupplyChainTech CEO) described their first MVP: "It was basically a glorified spreadsheet. Ugly interface, missing core features, buggy as hell. But we just wanted to test if SMEs would even use digital supply chain tools, period." However, this MVP alienated exactly the customers they hoped to learn from. C2-A (churned SME customer) recalled: "When I first saw it, I thought, 'These kids are not serious.' The interface looked like a student project. If you want me to change how I run my 20-year business, you need to show me something professional, not a half-finished prototype. I felt disrespected." Multiple customers expressed that in Indonesia's business environment—where digital tools are still building trust and many businesses are just beginning to digitize—MVPs must clear a higher quality threshold than in mature digital markets. C1-C (farmer) explained: "In the village, many farmers are skeptical of apps... So when you show them an app that doesn't work smoothly, it CONFIRMS their skepticism: 'See, apps don't work for farming.' You need to show them something that actually works well to change their mind." F2-C reflected: "In hindsight, our MVP was too minimum for our market. Silicon Valley founders can launch buggy MVPs because customers there are tech-savvy early adopters who enjoy trying new things. Indonesian customers, especially in traditional industries... they're not early adopters. They need more hand-holding, more polish." A third misalignment emerged around metrics. LS advocates "innovation accounting"—tracking learning milestones and leading indicators—but when F1-B (P2PLending) pitched investors with her dashboard tracking "hypothesis

tests run per week" and "percentage of experiments yielding actionable insights," investors didn't care: "They wanted to see revenue, month-over-month user growth, loan default rates, customer acquisition cost. All the LS metrics we were proud of tracking—they basically ignored them." I2-B (VC Principal) confirmed: "'We ran 50 experiments' doesn't mean anything if none of them produced tangible results in the market." Finally, what can be termed the "commitment paradox" emerged: the same founder behavior read as "adaptable and data-driven" by mentors was read as "unfocused and uncommitted" by investors. F1-B reflected: "When I pivoted based on user feedback, my mentor congratulated me—'You're listening to data, not ego!' But when I told investors about the pivot, I could see them lose confidence. They want to see conviction, persistence. But LS teaches flexibility. Those seem incompatible" (see Table 5 for summary of evaluation misalignments).

Table 6: The Commitment Paradox: How Stakeholders Read Same Founder Behavior

Founder Behavior	Mentors' Interpretation	Investors' Interpretation	Customers' Experience	Result for Founder	Cases
Frequent pivoting based on data	"Data-driven" and "adaptable"; exemplary LS execution; willingness to follow evidence	"Lack of conviction" or "strategic confusion"; signals founder doesn't understand market	"Unreliable" or "constantly changing"; erodes trust and willingness to adopt	Praised by mentors, penalized by investors, abandoned by customers	A, B, C
Staying with original idea despite mixed signals	"Ignoring data" or "being stubborn"; not following LS principles	"Committed" and "focused"; showing persistence and market conviction	"Consistent" and "dependable"; easier to trust and adopt	Criticized by mentors, rewarded by investors, retained by customers	B, C
Explaining pivot rationale with data	"Scientific approach"; proper hypothesis testing	"Rationalizing failure" or "cherry-picking data"	N/A - customers rarely hear rationale	Validated by mentors but still questioned by investors	A, C
Iterating product features quickly	"Learning fast"; responsive to feedback	"Unstable product strategy"; questions about focus	"Confusing changes"; features disappear without warning	Mixed mentor support, investor concern, customer frustration	A, C

Note: This paradox places founders in an impossible bind—the same behavior that demonstrates "good LS practice" to accelerators undermines credibility with investors and alienates customers.

4.5 Context-Driven Adaptations: LS Meets Indonesian Reality

The fourth finding identifies systematic modifications founders make to LS practices to accommodate Indonesia's institutional environment, cultural norms, and market characteristics, revealing that LS—developed in Silicon Valley's context—requires substantial adjustment to function in Indonesia's ecosystem. The most consistent adaptation across all three cases involved customer interview methodology. Textbook LS advocates "getting out of the building" through direct, often cold, customer outreach to test hypotheses quickly. This approach, however, systematically failed in Indonesia's relationship-based business culture. F1-A (SupplyChainTech CEO) described their initial attempts: *"We tried the classic LS approach—cold emails, LinkedIn messages to SME owners. 'Hi, we're building a supply chain tool, can we interview you for 30 minutes?' Response rate was maybe 5%, and those who responded were skeptical—'Why do you want to know about my business? Are you a competitor?'"* F2-A elaborated on the cultural disconnect: *"Indonesian business culture is built on trust [kepercayaan]. You don't just cold-call someone and expect them to share their business problems with you. You need proper introduction [perlu kenalan yang benar]."* Recognizing this barrier, founders adapted by leveraging warm introductions through existing networks. F1-A's pivot was telling: *"We shifted to asking our initial pilot customer—who we knew through a family connection—to introduce us to other manufacturers in his network... Suddenly response rate was 80%+*

and conversations were much more open. But this took way more time than the 'spray and pray' cold outreach LS books describe." F1-C faced similar challenges in rural contexts, needing to work through village heads (*kepala desa*) and farmer cooperative leaders who would vouch for them before farmers would open up. M1 captured the temporal implications: "*The 'customer discovery sprint'—talk to 100 customers in 2 weeks—that's pure Silicon Valley. In Indonesia, building the relationships to even GET those 100 conversations takes 2-3 months minimum.*" Yet some founders discovered unexpected benefits—F2-C noted that while the relationship-based approach was slower, "*the quality of insights is better. When a farmer talks to us because his cooperative leader vouched for us, he's more honest, more detailed... So we get 30 really good conversations instead of 100 superficial ones.*"

A second major adaptation emerged around iteration speed, where Indonesia's regulatory environment fundamentally constrained the "fail fast" principle. F1-B (P2PLending) explained the bind: "*Lean Startup says 'build, measure, learn' in rapid cycles. Launch, get feedback, iterate. But in fintech, every product change requires OJK [Financial Services Authority] approval... Each approval takes 2-4 months minimum.*" Showing their product roadmap with regulation gates marked in red, she continued: "*See these gaps between versions? That's not us being slow—that's waiting for regulatory approval. We've learned to batch product changes... But that defeats the whole 'rapid iteration' principle. We plan 3-6 months ahead, which is exactly what LS says NOT to do.*" F2-B captured the irony: "*OJK wants us to have our business model figured out before we launch... Those are exactly the questions LS says you DISCOVER through experimentation. But we can't experiment without approval, and we can't get approval without a defined model. It's circular.*" This fundamentally altered which parts of LS remained applicable—F1-B distinguished: "*For our tech platform—the app UI, user experience—we can iterate quickly. But for the business model—the actual lending economics—we're basically doing waterfall.*" Case C encountered parallel constraints in agricultural logistics, with F1-C explaining that different product categories required different permits, each taking 3-6 months: "*So we can't just 'pivot' product categories based on customer feedback like LS suggests. We have to pick a category, get permitted, THEN see if it works. By the time we learn something's not working, we're locked in.*" Interestingly, I1-B (investor) had adjusted expectations accordingly: "*I adjust my expectations for regulated industries. If you're building a SaaS tool, you can iterate weekly. If you're in fintech... you're inherently slower. That doesn't mean don't be lean—it means be lean WITHIN the constraints.*"

The third adaptation involved recalibrating MVP quality standards based on customer sophistication and digital maturity. Indonesian customers—particularly in traditional industries—demanded higher quality thresholds than textbook LS prescribed. C2-A (churned SME customer) was blunt about why he abandoned SupplyChainTech: "*I've been running this factory for 22 years using manual systems—Excel, paper, phone calls. It works. For me to change to a digital system, I need to see clear benefit AND reliability. Their system crashed twice in the first week. I can't risk my production on unreliable technology. I went back to Excel.*" This forced F1-A to reconceptualize what "minimum" meant: "*We thought MVP meant 'minimal functionality.' But for customers who are digitizing for the FIRST time, the MVP needs to be reliable even if it's simple. They're not comparing it to other apps—they're comparing it to their current non-digital process, which, while inefficient, is at least predictable. So our MVP needed to be 'minimum features but maximum reliability.' That's a different bar.*" Rural contexts amplified these quality sensitivities. C1-C (farmer) explained the village dynamics: "*When the app works, it's good. But sometimes it doesn't load, or photos don't upload... In the village, word spreads fast [berita cepat menyebar]. One farmer has a problem, all farmers hear about it. Then they say 'that app doesn't work' and won't try it.*" F2-C reflected on the lesson learned: "*We underestimated how perfection-sensitive our market is. In Silicon Valley, early adopters tolerate bugs because they're excited about innovation. Indonesian farmers aren't 'early adopters' psychologically—they're pragmatic business people.*" This realization changed development priorities dramatically—F1-C spent three extra months ensuring his MVP worked on slow village internet and had offline capability, adjustments that "*classic LS would say that's 'gold-plating'—just launch and iterate. But we learned the hard way that launching broken to this customer segment destroys trust permanently.*" I1-A (investor) validated this contextual judgment: "*There's a difference between 'minimum viable' and 'minimum shippable.' In developed markets with sophisticated early adopters, those are similar. In emerging markets with first-time digital users, they're very different.*"

The fourth adaptation centered on what might be called "forced lean"—practicing LS not as strategic choice but as survival necessity given resource constraints. F1-B was candid: "*People talk about Lean Startup like it's a*

philosophy we adopted. Honestly? We're lean because we have to be. We raised \$150K angel round—sounds like a lot, but in Jakarta that covers maybe 12-15 months of basic operations. We don't have money to waste on building features nobody wants." This scarcity drove remarkably creative solutions. F2-C described AgriMarket's unconventional first MVP: "*Our first 'marketplace' was literally a WhatsApp group. Farmers posted photos of their produce, restaurants placed orders, we coordinated logistics manually. Zero software development. We did that for 3 months serving 10 farmers and 5 restaurants.*" F1-A similarly cobbled together solutions using free templates and cheaper local hosting. Yet F1-B identified the dark side of forced lean: "*The flip side of being forced to be lean is we CAN'T invest in proper infrastructure. Our tech debt is massive... LS assumes you can invest in building things properly once you've validated—but what if you still don't have money even after validation? Then 'lean' becomes 'perpetually under-resourced.'*" M2 (mentor) drew an important distinction: "*Silicon Valley startups choose to be lean even when they have millions in funding—that's strategic discipline. Indonesian startups are lean because they have \$100K and it has to last... Strategic lean is 'let's not waste money.' Forced lean is 'we literally cannot afford anything else.' That affects everything—your risk tolerance, your patience for experimentation, your ability to pivot.*"

Interestingly, founders who explicitly acknowledged and strategically managed these adaptations reported better outcomes than those attempting to blindly follow textbook LS. F1-C identified a turning point: "*The turning point for us was when we stopped trying to do 'pure' Lean Startup and started asking, 'What does lean mean for Indonesian agritech?' That gave us permission to adapt rather than feeling like we were failing at LS.*" Despite these successful adaptations, they remained largely tacit knowledge—not codified, not taught systematically, not discussed openly. M3 lamented this inefficiency: "*Every Indonesian founder I work with eventually adapts LS to local reality. But we don't talk about it systematically. Each founder figures it out through trial and error. That's wasteful. We need an explicit conversation: 'Here's how LS works in Indonesia'—not as deviation from the 'real' method, but as legitimate contextualization*" (see Table 6 for summary of systematic adaptations across all cases).

5. Discussion

Drawing on organizational learning theory (Crossan et al., 1999), we theorize that LS adoption in entrepreneurial ecosystems unfolds through four interconnected learning processes: intuiting, interpreting, integrating, and institutionalizing (depicted as the "4I Framework" in organizational learning literature). Our findings provide rich empirical evidence of how these processes manifest—and frequently break down—in the context of emerging market ecosystems. Intuiting occurs when individual founders experientially learn through customer interactions, MVP deployments, and pivot decisions; as F1-C described, "Each pivot made us smarter—we were learning from the market directly" (Sanasi et al., 2023b). However, this intuitive knowledge remains largely personal and situated. Interpreting happens at the group level when founders, mentors, and investors collectively make sense of LS principles through shared language and practices. Our data reveals systematic interpretation divergences: mentors frame LS as "scientific method" emphasizing hypothesis testing (M1), investors interpret it as "capital efficiency signal" focused on runway extension (I1-A), while founders see it primarily as "speed tool" for rapid iteration (F1-B). These divergent interpretations align with research showing that entrepreneurial methodologies function as "boundary objects" that enable coordination despite different meanings (Becker & Endenich, 2023; Allen, 2022). Integrating involves synthesizing individual and group-level learning into coherent organizational practices—a process we found particularly weak in Indonesia's ecosystem, where adaptations remain tacit rather than explicitly codified. Finally, institutionalizing embeds learning into ecosystem-level structures, routines, and evaluation systems. Our study reveals problematic institutionalization: global LS logic becomes rigidly institutionalized through accelerator curricula and investor evaluation frameworks, yet these institutionalized forms fail to accommodate necessary local adaptations, creating the tensions documented in our findings (Solaimani et al., 2022; Cavallo et al., 2020).

Proposition 1: LS functions as boundary object enabling coordination, but power asymmetries determine whose interpretation dominates.

Status: Supported. Our findings confirm that while LS maintains shared vocabulary across stakeholders, investor control over capital systematically determines which interpretations prevail. When F1-C's mentor (M3) praised their pivots as "exemplary LS execution," investor I1-C simultaneously imposed "This is the LAST pivot"—the

investor interpretation dominated due to funding dependencies. Similarly, founders' context-appropriate adaptations were reinterpreted by investors as "poor execution" (I2-C: "Too many pivots is a red flag"), confirming that resource-dependent power dynamics rather than methodological logic shape actual practice.

Proposition 2: Entrepreneurs who explicitly navigate competing logics (vs. attempting uniform stakeholder satisfaction) achieve superior outcomes.

Status: Partially supported. F1-C demonstrated explicit logic navigation by transparently managing mentor-investor tensions and strategically committing to a "final pivot," appearing more effective than F1-B's uniform satisfaction attempts which created confusion across stakeholder groups. F1-C's turning point came when asking "What does lean mean for Indonesian agritech?" rather than attempting "pure" LS. However, our cross-sectional design limits causal inference about superior outcomes.

Proposition 3: LS practices undergo systematic adaptations driven by institutional, cultural, and market factors; alignment with local logics improves effectiveness.

Status: Strongly supported. All cases demonstrated systematic adaptations: regulatory constraints (F1-B's OJK approvals requiring 2-4 months), cultural norms (kepercayaan-based warm introductions increasing response rates from 5% to 80%+), and market characteristics (elevated MVP quality for first-time digital users). Founders explicitly framing adaptations as contextually appropriate rather than LS failures reported better outcomes, strongly supporting that local logic alignment improves effectiveness.

Proposition 4: Ecosystems that explicitly codify adaptations (vs. treating as failures) develop superior context-appropriate methodologies.

Status: Supported in principle; empirically aspirational. Indonesia's ecosystem lacks codified adaptations—M3: "we don't talk about it systematically"—forcing each cohort to independently rediscover modifications through trial-and-error. This absence prevents cumulative knowledge development, supporting the proposition's logic. However, we lack comparative data showing ecosystems with codification achieving superior performance, limiting demonstration of the positive case.

Proposition 5: Ecosystem alignment—compatible interpretations, logic navigation, and adaptations—predicts startup and ecosystem performance.

Status: Supported with limitations. Cases with greater stakeholder alignment showed fewer tensions: I1-C's legitimization of F1-C's pivots as "adapting to Indonesian realities" enabled more effective navigation than F1-B's misaligned case. However, establishing direct causality between alignment and performance outcomes requires longitudinal data not collected in this study.

A central contribution of our study lies in identifying broken feedback learning loops that prevent ecosystem-level improvement of LS practices in emerging markets. While the 4I Framework proposes bidirectional learning flows—feed-forward learning from individual to organizational levels, and feedback learning from organizational back to individual levels (Crossan et al., 1999)—our data reveals systematic breakdowns in these flows within Indonesia's ecosystem. Feed-forward learning is constrained by power asymmetries: when founders develop context-appropriate adaptations (e.g., relationship-based customer access, elevated MVP quality standards for first-time digital users), these adaptations are often interpreted by investors and mentors as "poor LS execution" rather than legitimate contextualization. As I2-C noted, "Too many pivots is a red flag"—directly contradicting mentor praise for the same behavior (M3: "They were doing LS right"). This misalignment prevents valuable, context-specific learning from flowing upward to shape ecosystem-level understanding. Even more critically, feedback learning loops are broken: the ecosystem lacks mechanisms to transmit accumulated knowledge about what works in Indonesia back down to individual founders. Each new cohort of entrepreneurs must independently rediscover the same contextual adaptations through trial and error, as M3 lamented: "Every Indonesian founder I work with eventually adapts LS to local reality. But we don't talk about it systematically... That's wasteful." This finding extends research on practice adaptation (Ansari et al., 2010) by showing that ecosystems lacking explicit codification mechanisms cannot develop cumulative, context-appropriate knowledge, forcing continuous reinvention. Recent literature on LS in different contexts has documented similar challenges—Solaimani et al. (2022) found that non-digital Dutch SMEs adapted LS tacitly, while Silva et al. (2021) showed Brazilian

technology ventures struggled with adaptation legitimacy—yet none have theorized these as systemic feedback loop failures requiring ecosystem-level intervention.

Our framework identifies leadership commitment—spanning accelerator directors, lead investors, and policy architects—as the foundational enabler that can restore functional learning flows within entrepreneurial ecosystems. This aligns with but extends organizational learning literature emphasizing leadership's role in fostering learning cultures (Garvin et al., 2008; Senge, 1990). In ecosystem contexts, leadership commitment manifests through three critical functions: (1) creating safe spaces for experimentation where founders can transparently share adaptations without fear of being judged as "not doing LS properly"; (2) legitimizing context-driven modifications by explicitly distinguishing between "productive contextualization" and "poor execution," thus addressing the evaluation misalignments we documented; and (3) institutionalizing feedback mechanisms that systematically capture, validate, and disseminate context-appropriate practices back to the ecosystem. We found preliminary evidence of these functions in cases where leadership commitment existed: I1-C (Managing Partner) explicitly told F1-C, "I understand the pivots—you're adapting to Indonesian market realities," thereby legitimizing local adaptation. Similarly, M3 acknowledged, "I teach the standard LS framework, but I know... some things won't work exactly like that here in Indonesia," representing emerging awareness but insufficient action. However, most ecosystem leaders we observed remained trapped in what we term the "global best practice trap"—viewing any deviation from Silicon Valley LS as deficiency rather than adaptation. This trap manifests in accelerator curricula that teach "pure" LS without explicit discussion of contextual factors (Dahle et al., 2023; Mittelstaedt & Pütz, 2024), investor evaluation frameworks that penalize legitimate adaptations (Richter & Wrobel, 2023), and the absence of forums for collective reflection on what "Indonesian LS" or "emerging market LS" should entail. Breaking this trap requires intentional leadership commitment to reframe ecosystem discourse from "implementing global best practices" to "developing contextually effective entrepreneurial methodologies"—a shift with profound implications for ecosystem builders, policymakers, and support organizations (Borman et al., 2024; Gamón-Sanz et al., 2024).

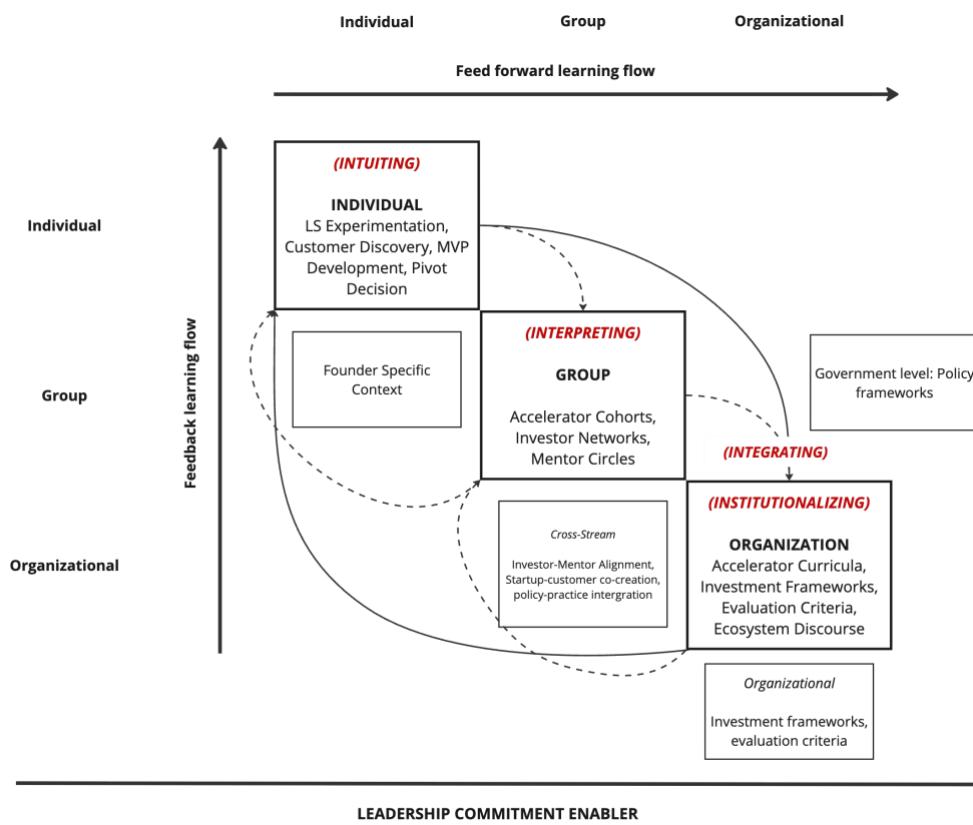


Figure X. Ecosystem-Level Multi-Stakeholder Learning Framework for Lean Startup Adoption in Emerging Markets

Synthesizing these insights, we propose that effective LS adoption in emerging market ecosystems requires transitioning from fragmented, actor-specific learning to integrated ecosystem learning capability. This represents a fundamental reconceptualization: rather than treating LS as a methodology individual startups adopt with varying success, we theorize it as an ecosystem-level capability requiring coordinated learning across multiple stakeholder groups. Our framework (Figure X) visualizes this through interconnected learning processes operating simultaneously at individual (intuiting technical competencies, safety expertise), group (interpreting through communities of practice, cross-functional teams), and organizational (integrating via departmental processes, institutionalizing through strategic systems) levels, all enabled by leadership commitment serving as the foundational substrate. The dotted circular arrows represent the bidirectional learning flows—both feed-forward and feedback—that must function continuously for ecosystem health. When these flows operate effectively, the ecosystem develops what we term "adaptive entrepreneurial capability": the collective capacity to continuously refine entrepreneurial methodologies based on accumulated experience while maintaining enough coherence for coordination (Macca et al., 2025; Tucci et al., 2025). This capability enables productive hybridization—blending global LS principles with local institutional logics—rather than rigid adherence or wholesale rejection. Practically, building this capability requires ecosystem interventions at multiple levels: (1) training programs that explicitly teach "LS in context" rather than "universal LS"; (2) investor education initiatives that help funders distinguish legitimate adaptation from poor execution; (3) formalized knowledge-sharing mechanisms (e.g., annual "LS adaptation symposiums") where successful contextual practices are validated and disseminated; (4) research partnerships documenting what works in specific emerging market contexts; and (5) policy frameworks that support rather than constrain experimental approaches (e.g., regulatory sandboxes for fintech experimentation). Ultimately, our study shifts the discourse from individual startup success/failure to ecosystem learning system effectiveness—a reframing with significant implications for how we study, teach, fund, and support entrepreneurship in emerging economies (Lam, 2023; Raneri et al., 2023).

6. Conclusion

This study fundamentally reconceptualizes Lean Startup not as a firm-level methodology but as an ecosystem-level learning challenge requiring coordinated sensemaking across multiple stakeholder groups. Through examining three Indonesian startup cases and 42 interviews with founders, investors, mentors, and customers, we reveal that LS operates as a fragmented boundary object—maintaining shared vocabulary while producing systematically divergent interpretations that create consequential tensions for entrepreneurs. Our findings demonstrate that effective LS adoption in emerging markets depends critically on restoring broken feedback learning loops: when context-appropriate adaptations developed by individual founders (relationship-based customer access, elevated MVP quality standards, regulatory-constrained iteration cycles) are misinterpreted as "poor execution" rather than legitimate contextualization, valuable learning cannot flow upward to shape ecosystem-level understanding, and accumulated knowledge cannot flow back down to guide subsequent cohorts. We introduce the Ecosystem-Level Multi-Stakeholder Learning Framework integrating intuiting, interpreting, integrating, and institutionalizing processes across individual, group, and organizational levels, with leadership commitment serving as the foundational enabler. This framework shifts discourse from "Are startups doing LS correctly?" to "Is the ecosystem learning effectively about what works in this context?"—a reframing with profound implications for entrepreneurship theory and practice. For scholars, we contribute by extending organizational learning theory into ecosystem contexts, theorizing entrepreneurial methodologies as socially constructed through multi-stakeholder processes, and providing rich empirical evidence of practice adaptation dynamics in emerging markets. For practitioners—ecosystem builders, accelerator directors, investors, policymakers—we demonstrate that improving startup outcomes requires not just training founders better, but building ecosystem-level learning capability through explicit codification of contextual adaptations, legitimization of productive hybridization, and institutionalization of feedback mechanisms that enable cumulative, context-appropriate knowledge development.

Limitation and Future Research

This study's findings should be interpreted within several important limitations that simultaneously open productive avenues for future research. First, our sample of three cases and 42 interviews, while providing rich contextual depth, limits generalizability across Indonesia's diverse entrepreneurial landscape—future research

should conduct larger-scale quantitative studies validating our framework across broader startup populations, testing whether the patterns we identified (divergent conceptualizations, knowledge transmission gaps, evaluation misalignments, context-driven adaptations) hold systematically across sectors, stages, and geographies. Second, our geographic focus on Jakarta and major cities may not capture dynamics in tier-2 and tier-3 Indonesian cities where institutional environments, resource availability, and cultural contexts differ substantially—comparative studies examining ecosystem learning processes across urban hierarchies would enrich understanding of how place shapes methodology adaptation. Third, our cross-sectional design captures a temporal snapshot but cannot trace how ecosystem learning capability evolves over time—longitudinal research tracking how ecosystems develop (or fail to develop) feedback mechanisms, legitimize adaptations, and build cumulative knowledge would provide crucial insights into learning trajectories and intervention timing. Fourth, while we examined four stakeholder groups (founders, investors, mentors, customers), we did not systematically investigate other important actors including policymakers, corporate partners, media, and support service providers—future research should expand the stakeholder lens to understand their roles in shaping ecosystem learning dynamics. Fifth, our Indonesia-specific findings raise questions about transferability to other emerging markets—comparative studies across Southeast Asian countries (Vietnam, Thailand, Philippines) or other developing economies (Latin America, Africa) would clarify which challenges are Indonesia-specific versus broadly characteristic of emerging market entrepreneurship. Sixth, we focused exclusively on Lean Startup methodology—examining whether similar ecosystem-level learning challenges affect other entrepreneurial approaches (Design Thinking, Effectuation, Agile) would test our framework's broader applicability and potentially reveal methodology-specific versus universal adaptation dynamics. Finally, our study identifies broken feedback loops and proposes leadership commitment as enabler, but does not experimentally test interventions—action research implementing and evaluating specific mechanisms (adaptation symposiums, investor education programs, codified "Indonesian LS" guidelines, regulatory sandboxes) would provide practical evidence about which interventions most effectively restore feedback learning flows and build adaptive entrepreneurial capability at the ecosystem level.

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