

Digital Entrepreneurship and Institutional Voids: Bridging the Formal-Informal Divide

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Abstract

Emerging economies often experience regulatory uncertainty, weak market-supporting institutions, limited access to finance, and inadequate infrastructure, creating institutional voids that constrain entrepreneurial participation and sustain the formal-informal divide. This conceptual paper examines how digital entrepreneurship can bridge this divide and identifies the conditions under which digital platforms contribute to institutional integration. The paper adopts a conceptual approach, integrating institutional theory, institutional-voids theory, and digital entrepreneurship perspectives to examine how digital platforms function as institutional mechanisms through which entrepreneurs navigate formal and informal economic environments. Digital platforms can reduce information asymmetries and transaction costs, facilitate trust, expand market access, improve payment systems, generate transaction records, and support incremental formalisation. However, digitalisation does not automatically produce formalisation; rather, it may create hybrid forms of institutional participation in which entrepreneurs combine formal, informal, and digitally mediated practices. Digital entrepreneurship can contribute to bridging institutional divides, but it should not be regarded as a substitute for effective institutional development. Policymakers should strengthen digital infrastructure, develop digital and entrepreneurial capabilities, promote inclusive regulatory frameworks, and establish transparent platform-governance mechanisms to support sustainable formalisation, inclusion, resilience, and market expansion. The framework positions institutional voids as structural conditions, digital platforms as mediating mechanisms, entrepreneurial agency as a navigational force, and ecosystem conditions as moderators of developmental and exclusionary outcomes.

Keywords: *Digital entrepreneurship; digital platforms; formal-informal divide; informal economy; institutional voids*

Introduction

Entrepreneurship in emerging economies occurs within institutional environments that often differ substantially from the relatively stable and predictable conditions assumed in conventional entrepreneurship research. Institutions responsible for enforcing contracts, regulating markets, providing reliable information, facilitating access to finance, protecting property rights, and supporting market exchange may be incomplete, fragmented, inaccessible, or inconsistently implemented. Such conditions are commonly described as institutional voids (Bruton et al., 2010; Khanna & Palepu, 2010). More recent scholarship has refined this conceptualisation by demonstrating that institutional voids should not be treated as

homogeneous conditions; rather, their severity depends upon the institutional context in which they are experienced and interpreted (Andrews & Luiz, 2024).

Institutional voids have significant implications for entrepreneurial activity because they can increase uncertainty, information asymmetry, transaction costs, and exposure to opportunistic behaviour. In response, entrepreneurs frequently develop alternative mechanisms for coordinating exchange and managing risk, including family networks, community relationships, informal credit arrangements, personal trust, reputation, and other socially embedded institutions. Mair and Martí (2009), for example, demonstrate how entrepreneurial activity can emerge around institutional voids through alternative forms of social and economic coordination, while Webb et al. (2009) show that informal entrepreneurship can constitute a legitimate response to institutional conditions rather than merely an aberration from formal economic activity. Research on entrepreneurship in Africa demonstrates that institutional voids interact with entrepreneurial networks and contextual conditions to influence entrepreneurs' internationalisation outcomes (Pindado et al., 2023).

Informality should therefore not be understood solely as a failure to comply with formal rules. In many contexts, it represents an adaptive response to the costs, limitations, or inaccessibility of formal institutions. This perspective is particularly important in emerging economies, where entrepreneurs frequently operate across overlapping formal and informal institutional arrangements.

The interaction between institutional weakness and informality contributes to a persistent formal-informal divide. Formal enterprises operate within recognised legal, regulatory, financial, and administrative structures, whereas informal enterprises operate partly or wholly outside these structures. Yet the distinction is rarely absolute. Entrepreneurs frequently combine formal and informal arrangements in response to the opportunities and constraints they encounter. The resulting reality is therefore better understood as a continuum of institutional participation than as a strict formal-informal dichotomy.

The emergence of digital entrepreneurship introduces an important dimension to this debate. Digital technologies have transformed the ways in which entrepreneurs access markets, establish trust, exchange information, receive payments, coordinate transactions, and develop reputational capital. Digital platforms can connect entrepreneurs to customers and suppliers beyond geographically bounded markets, while digital financial technologies can facilitate transactions and financial inclusion in contexts where conventional financial systems remain inaccessible (Mathibe & Oppong, 2025).

The theoretical significance of this development extends beyond technological adoption. Digital platforms increasingly perform functions that resemble those traditionally associated with institutions. Rating systems can generate reputational information; digital payment systems can facilitate transactions; platform rules can establish standards of participation; and transaction histories can generate forms of verifiable economic identity. Recent scholarship explicitly conceptualises digital entrepreneurship through an institutional perspective, arguing that digital entrepreneurship emerges at the intersection of economic, social, and technological institutional fields (Hua et al., 2025).

This raises a fundamental theoretical question: Do digital platforms merely provide entrepreneurs with additional tools, or do they constitute alternative institutional mechanisms through which entrepreneurs navigate institutional voids? The distinction is consequential. If digital technologies merely provide additional business tools, their implications for institutional development may remain limited. If, however, platforms perform functions related to governance, coordination, trust formation, and information provision, digital entrepreneurship becomes relevant to the broader question of how institutions evolve in digitally mediated economies.

Existing evidence supports the latter possibility. Research on digital platforms in developing-country markets shows that platforms can fill institutional gaps by organising markets and formalising previously fragmented activities. Importantly, however, the same platforms may also maintain, expand, or create new institutional voids by concentrating market functions and power within the platform itself (Heeks et al., 2021). This qualification challenges technologically deterministic interpretations of digital entrepreneurship. Platforms may reduce entrepreneurs' dependence on some formal institutions while increasing their dependence on private technological intermediaries. Entrepreneurs may gain access to wider markets while relinquishing some control over customer relationships, data, pricing, or visibility. Algorithmic systems and platform policies may themselves become sources of uncertainty.

Recent research on digital platform entrepreneurship in Nigeria shows that platform boundary resources can shape the opportunities available to third-party developers and influence participation in digital entrepreneurship (Ajah, 2025). This suggests that entrepreneurial opportunity in digital ecosystems is partly conditioned by the architecture and governance of platforms themselves. Digital inclusion may also remain highly unequal because access to devices, connectivity, finance, skills, and reliable electricity varies across social groups and geographical locations. Recent evidence from Ghana indicates that digital technologies are increasingly incorporated into informal entrepreneurial practices, although their adoption remains shaped by contextual constraints (Aryeh-Adjei et al., 2025).

The central argument of this paper is that digital entrepreneurship should be understood as a process of institutional navigation rather than merely as technology-enabled business activity. Digital platforms can partially substitute for weak institutions, complement existing institutions, and generate hybrid governance arrangements. Within these arrangements, entrepreneurs exercise agency by selectively adopting formal mechanisms, retaining informal practices, and deploying digital technologies to manage uncertainty and pursue opportunities. Accordingly, this paper examines the relationship among digital entrepreneurship, institutional voids, and the formal-informal divide. Specifically, it considers how institutional voids shape entrepreneurial activity and informality; the mechanisms through which digital entrepreneurship can compensate for or complement weak formal institutions; how entrepreneurs use digital platforms to navigate the formal-informal divide; and the ecosystem and governance conditions under which digital entrepreneurship can generate inclusive and sustainable outcomes.

The paper makes three principal contributions. First, it integrates institutional-voids theory with digital entrepreneurship rather than treating technology as institutionally neutral. Second, it conceptualises digital platforms as hybrid institutional mechanisms that may substitute for, complement, or transform conventional institutional arrangements. Third, it develops an integrative conceptual framework connecting institutional conditions, digital platform mechanisms, entrepreneurial agency, ecosystem moderators, and developmental outcomes.

Literature Review

This section reviews and synthesises scholarship on institutional voids, entrepreneurship, informality, digital entrepreneurship, digital platforms, entrepreneurial agency, and ecosystem conditions. The review establishes how these strands intersect, identifies points of convergence and tension, and clarifies the conceptual gap addressed by the paper. Rather than treating digitalisation as an automatic route to formalisation, the literature is examined through the broader question of how entrepreneurs navigate overlapping formal, informal, and digitally mediated institutional arrangements.

Institutional voids constitute an important context for entrepreneurial action. They arise when institutions required to support effective economic exchange are absent, weak, fragmented, or

unreliable. These institutions include financial intermediaries, legal systems, regulatory agencies, information systems, contract-enforcement mechanisms, and other market-supporting organisations (Bruton et al., 2010; Khanna & Palepu, 2010). The concept remains particularly relevant to emerging economies because markets may develop more rapidly than the institutions required to regulate and support them. However, institutional voids should not be interpreted simply as an absence of government. They may also emerge where formal institutions exist but lack capacity, legitimacy, accessibility, consistency, or enforcement effectiveness. Andrews and Luiz (2024) emphasise that institutional voids are layered and dynamic and that their severity is experienced differently across contexts. This distinction is important because a country may possess commercial laws, regulatory agencies, banks, courts, and business-registration systems, yet entrepreneurs may continue to experience institutional voids if these mechanisms are costly, inaccessible, slow, corrupt, geographically concentrated, or unpredictable. Institutional voids are therefore best understood in functional rather than merely structural terms. They affect entrepreneurship by increasing uncertainty and transaction costs. Where entrepreneurs cannot rely on formal mechanisms for contract enforcement, market information, finance, or dispute resolution, they are compelled to develop or rely upon alternative mechanisms.

These alternatives may include interpersonal trust, kinship networks, community associations, repeated transactions, informal credit, social reputation, and relational contracting (Bruton et al., 2010; Mair & Martí, 2009; Webb et al., 2009). Evidence from African entrepreneurship research likewise shows that entrepreneurial networks can mediate the effects of institutional conditions on entrepreneurial activity and internationalisation (Pindado et al., 2023). Such mechanisms should not automatically be regarded as inferior substitutes. In some contexts, they can be highly effective because they are socially embedded and locally accessible. Their principal limitation is that they may not scale easily beyond the networks within which trust has been established. This creates an important paradox: the same informal mechanisms that facilitate entrepreneurial survival under conditions of institutional weakness may also constrain entrepreneurial growth beyond local markets. Institutional voids therefore influence not only entrepreneurial entry but also the scale, productivity, resilience, and trajectory of entrepreneurial activity. This provides the institutional context within which the potential role of digital entrepreneurship must be understood.

The formal-informal divide is similarly better understood as a dynamic institutional continuum. It is frequently presented as a distinction between legally recognised and unrecognised economic activities. Such a binary interpretation, however, inadequately captures the behaviour of entrepreneurs operating in institutionally uncertain environments. Informal entrepreneurship may encompass enterprises that are completely unregistered, partially registered, formally registered but operationally informal, or digitally integrated while remaining outside particular regulatory arrangements. Consequently, formalisation should not be treated as a single event but as a multidimensional process. An entrepreneur may formalise business registration, taxation, payment systems, employment arrangements, accounting practices, digital transactions, contractual relationships, or access to financial services without formalising all dimensions simultaneously. Digital technologies are particularly relevant because they can facilitate selective and incremental forms of institutional integration. Recent evidence demonstrates that digital technologies are increasingly embedded in informal entrepreneurship in Africa, challenging the assumption that digitalisation automatically produces conventional formalisation (Aryeh-Adjei et al., 2025).

For example, an entrepreneur who accepts digital payments generates transaction records without necessarily registering the business formally. An entrepreneur who sells through a digital platform may become subject to platform rules while remaining outside certain

government regulatory arrangements. A freelancer may establish an international digital reputation without possessing the institutional credentials traditionally associated with a formal business. The formal-informal divide should therefore be conceptualised as a continuum of institutional engagement rather than as a rigid boundary. This perspective strengthens the connection between institutional theory and digital entrepreneurship. Institutional theory emphasises how regulative, normative, and cognitive institutions shape behaviour (Scott, 2014). Digital platforms introduce additional layers of rules, expectations, and governance mechanisms that interact with these conventional institutions. Entrepreneurs may therefore operate simultaneously within state-based formal institutions, community-based informal institutions, platform-based digital institutions, and self-developed organisational arrangements. Digital entrepreneurship consequently creates an increasingly complex institutional environment rather than simply moving entrepreneurs from informality towards formality.

Digital entrepreneurship can consequently be understood as a process of institutional navigation. Digital entrepreneurship differs from conventional entrepreneurship because digital technologies may become integral to opportunity recognition, resource mobilisation, value creation, transaction coordination, and customer relationships (Nambisan, 2017). Recent research reinforces the importance of institutional conditions in shaping digital entrepreneurship, particularly in developing contexts where institutional structures and ecosystem conditions influence the ability of digital ventures to access resources and achieve legitimacy (Klein & Braido, 2024). The critical issue is therefore not simply what entrepreneurs do with digital technologies but how digitalisation changes the institutional mechanisms through which entrepreneurial activity is organised. Digital platforms can reduce the cost of searching for customers, suppliers, workers, and information. They can also reduce geographical constraints and provide access to markets that would otherwise remain inaccessible to micro and informal enterprises.

This function becomes particularly significant where conventional market intermediaries are weak. A platform can connect buyers and sellers, establish transaction procedures, provide information, process payments, and generate reputational indicators. It consequently performs a coordination function that resembles institutional intermediation. Trust is particularly important where formal contract enforcement is weak. Traditional informal markets often depend on repeated interaction and personal reputation. Digital platforms extend this principle by transforming individual transactions into measurable reputational signals. Ratings, reviews, verified profiles, and transaction histories can generate forms of impersonal trust. Digital transactions also generate records that can provide evidence of business activity, income, customer relationships, and financial performance. Such information may support access to formal credit, insurance, investment, government programmes, commercial partnerships, and larger supply chains. Research on digital technologies and financial inclusion in Africa identifies a relationship between digital technologies, financial inclusion, and entrepreneurial activity, although the effects remain dependent on regulatory and socioeconomic conditions (Mathibe & Oppong, 2025).

Digitalisation can therefore create pathways from informal economic activity towards greater economic visibility without requiring immediate and comprehensive legal formalisation. Within this discussion, digital platforms can be understood as both institutional substitutes and complements. Their institutional significance derives partly from their capacity to perform functions traditionally associated with formal institutions. Platforms can substitute for selected functions where conventional institutions are weak. Where formal institutions fail to provide reliable market information, platforms may provide ratings and reviews. Where conventional intermediaries fail to connect buyers and sellers efficiently, platforms may provide digital

marketplaces. Where banking systems exclude small entrepreneurs, digital payment systems may facilitate transactions.

Heeks et al. (2021) show that digital platforms can fill institutional gaps and improve market coordination, but they can also maintain, expand, or create institutional voids when market functions and power become concentrated within platform infrastructures. Digital platforms can therefore provide functional institutional substitutes, but such substitution is necessarily partial. A digital platform cannot automatically replace the broader functions of the state, legal system, financial system, or regulatory environment. Platforms also operate as institutional complements. They depend on formal institutions for telecommunications infrastructure, legal recognition, payment systems, identity systems, consumer protection, cybersecurity, taxation frameworks, and dispute-resolution mechanisms. Recent research on digital entrepreneurial ecosystems reinforces this complementary relationship. Stein et al. (2025) demonstrate the importance of institutional entrepreneurship and ecosystem conditions in supporting digital and FinTech entrepreneurship.

Digital platforms therefore occupy a hybrid institutional position. They may compensate for institutional weaknesses in some areas while depending on formal institutions in others. They are consequently neither purely technological tools nor complete alternatives to formal institutions. Rather, they constitute hybrid institutional infrastructures operating across public, private, and informal domains. This dual role introduces a platform-governance paradox that requires critical consideration. The institutional benefits of digital platforms must be considered alongside their governance implications. A platform may provide entrepreneurs with access to customers while simultaneously controlling the conditions under which that access is maintained. Entrepreneurs may therefore exchange dependence on weak public institutions for dependence on powerful private platforms.

This constitutes a platform-governance paradox: as a platform becomes more important to entrepreneurial participation, the consequences of platform-controlled rules become more significant. Algorithmic ranking, account suspension, changing commission structures, data ownership, advertising requirements, and modifications to platform policies can materially affect entrepreneurial income and market visibility. The implication is that institutional substitution does not necessarily equate to institutional liberation. Instead, it may represent a redistribution of institutional power. This concern is supported by research showing that platform companies can simultaneously fill institutional voids and generate new forms of institutional dependence and inequality (Heeks et al., 2021). Recent research on digital platform boundary resources similarly demonstrates that platform architecture can shape entrepreneurial opportunities and participation, particularly in emerging digital ecosystems such as Nigeria (Ajah, 2025).

Entrepreneurial agency provides a further lens for understanding hybrid institutional practices. Digital entrepreneurship is not determined exclusively by technological affordances or institutional conditions. Entrepreneurs exercise agency in deciding how technologies are incorporated into their business practices. This introduces the concept of institutional navigation. Entrepreneurs may comply with some regulations while avoiding others; use digital payments while remaining informally registered; use platforms for market access while maintaining independent customer relationships; retain informal labour arrangements while adopting formal accounting practices; or build digital reputations without establishing formal corporate identities. Such practices should not automatically be interpreted as inconsistent or irrational behaviour. They may represent deliberate strategies for balancing institutional opportunities and constraints. Recent scholarship emphasises the agency dimension of institutional voids. Rather than treating institutional voids as fixed deficiencies, researchers have examined how actors experience, interpret, navigate, and sometimes actively reshape

institutional environments (Andrews & Luiz, 2024; Tantawy et al., 2025). This agentic perspective is particularly relevant to digital entrepreneurship because digital technologies can provide entrepreneurs with mechanisms for circumventing, adapting to, or influencing existing institutional arrangements.

Entrepreneurs can therefore act as institutional bricoleurs, combining formal, informal, and platform-based mechanisms according to particular circumstances and strategic objectives. This perspective strengthens the relationship between institutional theory and entrepreneurship because it recognises entrepreneurs not merely as recipients of institutional pressures but also as agents capable of recombining institutional resources and creating new forms of economic coordination. Taken together, these perspectives indicate that digital entrepreneurship may transform, rather than simply eliminate, the formal-informal divide. Digital entrepreneurship does not eliminate informality; rather, it transforms the interface between formal and informal economic activity. Digital platforms enable informal entrepreneurs to reach customers beyond their traditional networks, thereby expanding markets and reducing dependence on geographically bounded relationships. Digital records, digital identities, and platform-based reputational systems can also create interfaces between informal enterprises and formal institutions, giving entrepreneurs forms of economic visibility that may previously have been unavailable.

Evidence from developing economies indicates that digital technologies can strengthen relationships among entrepreneurs, families, communities, and other stakeholders in ways that help overcome institutional constraints (Soluk et al., 2021). In sub-Saharan Africa, digital financial services and technologies are similarly becoming important mechanisms through which entrepreneurs and informal businesses participate in economic and financial systems (Mathibe & Oppong, 2025). At the same time, digitalisation does not inevitably produce formalisation. Evidence from Ghana indicates that digital technologies can become embedded within informal entrepreneurial activity without automatically moving entrepreneurs into conventional formal structures (Aryeh-Adjei et al., 2025). The formal-informal divide consequently becomes more institutionally layered. Entrepreneurs may be simultaneously subject to government regulation, community expectations, platform rules, and self-imposed organisational practices. Digital entrepreneurship thus does not necessarily move economic activity from one side of the formal-informal divide to the other. Instead, it can generate new combinations of institutional arrangements across the continuum.

The literature also identifies important constraints and contradictions that condition the developmental effects of digital entrepreneurship. The capacity of digital entrepreneurship to bridge institutional gaps is constrained by several structural and institutional conditions. Digital entrepreneurship requires access to devices, connectivity, electricity, affordable data, and relevant skills. Consequently, digitalisation can reproduce existing socioeconomic inequalities when access to these resources is uneven. The developmental effects of digital entrepreneurship therefore depend partly on the distribution of digital capabilities and infrastructure. Regulatory uncertainty may encourage entrepreneurial experimentation, but excessive uncertainty can discourage investment and long-term planning. Stein et al. (2025) demonstrate that institutional support and regulatory adaptation are important to digital entrepreneurship and ecosystem development. Platform dependence can create additional vulnerabilities. An entrepreneur who relies heavily on a single platform for customer acquisition may experience substantial losses if platform fees increase, algorithms change, an account is suspended, visibility declines, or platform policies are altered. The concentration of market functions within platforms can therefore generate new dependencies even where platforms initially address institutional gaps (Heeks et al., 2021).

Human capital presents another important constraint. Technology alone does not create digital entrepreneurship. Entrepreneurs require digital literacy, financial literacy, strategic capabilities, and the ability to understand and respond to platform systems. Research on institutional factors affecting digital entrepreneurship confirms the importance of the wider institutional environment in shaping digital entrepreneurial activity (Klein & Braido, 2024). These constraints demonstrate that digital entrepreneurship should not be regarded as inherently inclusive or developmental. Its effects depend on the distribution of technological resources, entrepreneurial capabilities, institutional quality, and platform power.

Theoretical Foundation and Integration

The conceptual framework integrates four complementary perspectives: institutional theory, institutional-voids theory, digital entrepreneurship theory, and entrepreneurial agency. Together, these perspectives explain how entrepreneurs respond to institutional deficiencies, exploit digital opportunities, and navigate formal, informal, and digitally mediated economic arrangements.

Institutional theory provides the broad foundation for understanding how institutional environments shape entrepreneurial behaviour. Its intellectual roots can be traced to Meyer and Rowan (1977) and DiMaggio and Powell (1983), whose work explains how organisational behaviour is influenced by institutionalised rules, norms, expectations, and pressures. Building on these foundations, Scott (2014) conceptualises institutions through regulative, normative, and cultural-cognitive elements. Accordingly, entrepreneurship is embedded within institutional structures that influence what is permissible, legitimate, expected, and cognitively acceptable. This perspective is particularly relevant to the formal-informal divide because entrepreneurs may simultaneously respond to government regulations, social norms, community expectations, and platform rules.

Institutional-voids theory, associated particularly with Khanna and Palepu (1997, 2010), explains how the absence, weakness, or inefficiency of market-supporting institutions creates uncertainty, transaction costs, and barriers to accessing information, finance, labour, and other resources. Mair and Martí (2009) and Bruton et al. (2010) subsequently demonstrated how entrepreneurs can develop alternative mechanisms in response to such deficiencies. More recent research indicates that institutional voids are neither uniform nor static; their severity varies across contexts and according to how institutional deficiencies are experienced and interpreted (Andrews & Luiz, 2024). This perspective provides the basis for examining digital platforms as mechanisms through which entrepreneurs may address selected institutional deficiencies.

Digital entrepreneurship theory, particularly Nambisan's (2017) digital technology perspective, explains how digital technologies reshape opportunity recognition, resource mobilisation, value creation, and entrepreneurial processes. Digital technologies can facilitate experimentation, recombination, market expansion, and new forms of entrepreneurial agency. Recent scholarship further connects digital entrepreneurship with institutional conditions, showing that institutional factors influence digital entrepreneurial activity among start-ups and SMEs (Hua et al., 2025; Klein & Braido, 2024).

Entrepreneurial agency complements these perspectives by explaining why entrepreneurs exposed to similar institutional conditions may adopt different strategies. Emirbayer and Mische (1998) conceptualise agency as a temporally embedded capacity through which actors interpret past experiences, envision future possibilities, and make practical judgements in the present. In institutionally uncertain environments, entrepreneurs may selectively comply with regulations, maintain informal networks, adopt digital payments, participate in platforms, and

combine formal and informal practices. Battilana et al. (2009) further connect agency with institutional entrepreneurship, demonstrating how actors can contribute to institutional change. The four perspectives are therefore complementary. Institutional theory explains the broader environment; institutional-voids theory identifies deficiencies within that environment; digital entrepreneurship theory explains how technology reshapes entrepreneurial opportunities; and agency theory explains how entrepreneurs interpret, adapt to, and potentially transform these conditions. The integrated framework conceptualises institutional voids as the structural context, digital platforms as compensatory or complementary mechanisms, entrepreneurial agency as the process through which these mechanisms are appropriated, and ecosystem conditions as factors influencing outcomes.

The framework consequently proposes that digital entrepreneurship is most likely to bridge institutional voids and the formal-informal divide when platforms provide reliable and accessible institutional mechanisms, entrepreneurs possess the capabilities to use them effectively, and the surrounding ecosystem offers supportive infrastructure, finance, regulation, and governance. Conversely, weak platform governance, unequal digital capabilities, or restrictive formal institutions may cause digital entrepreneurship to reproduce, relocate, or create institutional voids rather than resolve them (Heeks et al., 2021).

Thus, the framework avoids technological determinism. Digital platforms are neither inherently developmental nor inherently exclusionary; their effects depend on interactions among institutional conditions, platform structures, entrepreneurial agency, and ecosystem capabilities. This integration provides a basis for examining when, how, and under what institutional conditions digital entrepreneurship can bridge the formal-informal divide.

Integrative Conceptual Framework

The preceding analysis supports an integrative framework comprising institutional voids, digital platform mechanisms, entrepreneurial agency, ecosystem conditions, and developmental outcomes. Institutional voids constitute the structural conditions within which entrepreneurial activity occurs, generating uncertainty, transaction costs, information asymmetry, and restricted access to formal resources. Contemporary research suggests that these voids should be understood as context-dependent and dynamically experienced rather than as uniform institutional deficiencies (Andrews & Luiz, 2024).

Digital platforms constitute the principal mediating mechanisms within this framework. They provide market information, buyer-seller matching, digital payments, reputation systems, transaction records, coordination mechanisms, and platform-based governance. Entrepreneurial agency determines how these mechanisms are interpreted, appropriated, and deployed. Entrepreneurs may selectively combine formal institutions, informal arrangements, platform rules, and self-developed organisational practices in response to the opportunities and constraints they encounter. This agentic dimension is consistent with research emphasising institutional adaptation and entrepreneurial responses to institutional weaknesses (Tantawy et al., 2025).

Ecosystem conditions, including digital infrastructure, finance, regulation, digital literacy, human capital, social networks, and institutional quality, further moderate the relationship between digital entrepreneurship and its outcomes. Recent research on digital entrepreneurial ecosystems underscores the importance of institutional adaptation and ecosystem-level support in enabling digital entrepreneurship (Stein et al., 2025). Under favourable conditions, digital entrepreneurship may contribute to market inclusion, reduced transaction costs, increased trust, improved access to finance, incremental formalisation, entrepreneurial resilience, business growth, and value creation. Conversely, inadequate infrastructure, unequal digital capabilities, weak regulation, or concentrated platform power may produce platform dependency, digital

exclusion, regulatory vulnerability, surveillance, income volatility, algorithmic discrimination, and new forms of institutional inequality. The relationships among these elements and their potential developmental and adverse outcomes are synthesised in the integrative conceptual framework presented in Figure 1 below.

Figure 1. Integrative Framework of Digital Entrepreneurship and Institutional Voids

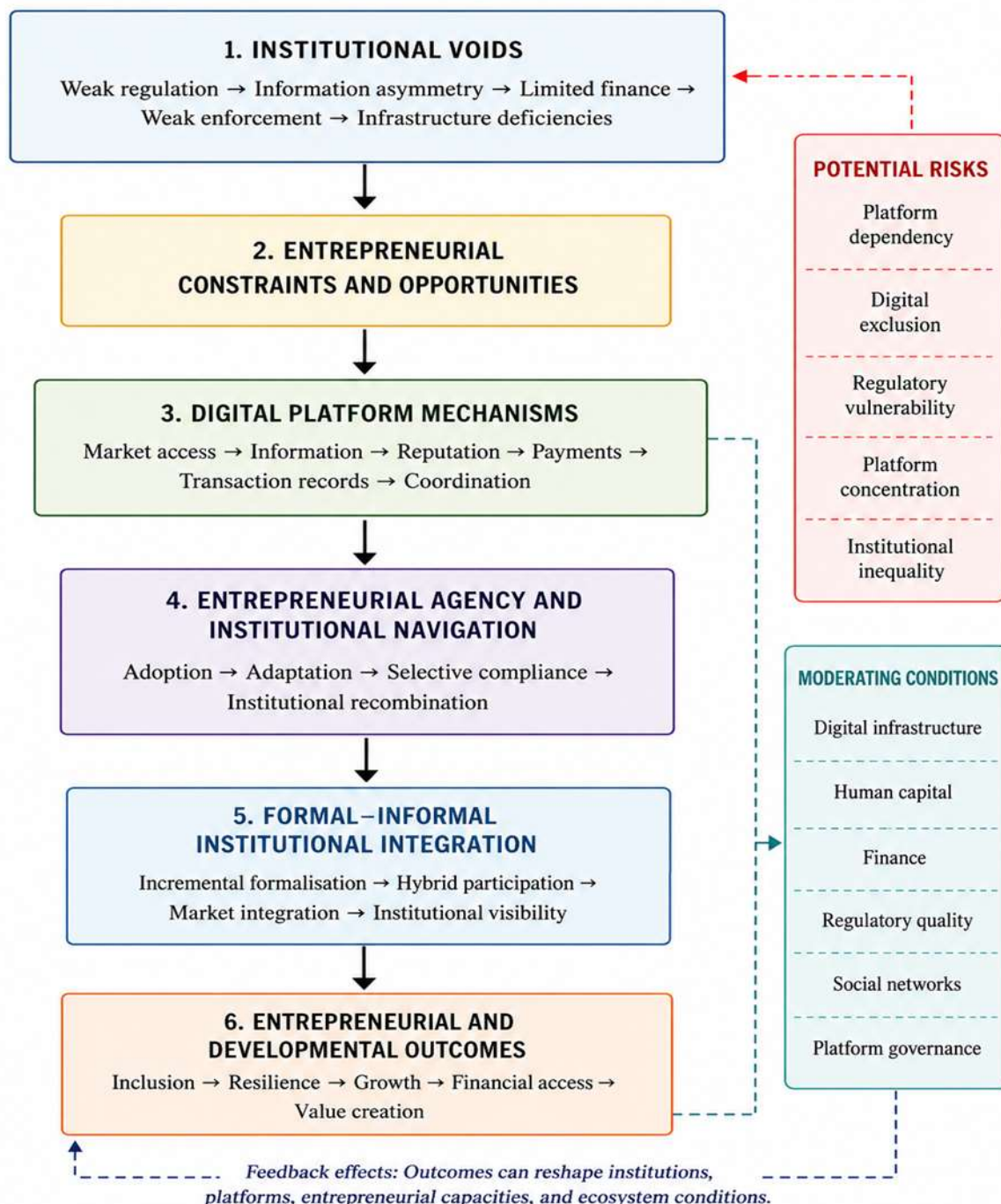


Figure 1 presents the proposed framework as a dynamic institutional process rather than a simple linear causal sequence. It illustrates how structural conditions, digital mechanisms, entrepreneurial agency, and ecosystem characteristics interact to shape how entrepreneurs respond to institutional challenges. Institutional voids constitute the underlying structural

conditions, generating uncertainty, information asymmetries, transaction costs, and restricted access to formal resources that shape both entrepreneurial constraints and opportunities (Bruton et al., 2010; Khanna & Palepu, 2010). These conditions may encourage entrepreneurs to seek alternative or complementary mechanisms for coordinating economic activity, accessing markets, building trust, and mobilising resources. Digital platforms provide such mechanisms by facilitating market access, information exchange, reputation building, digital payments, transaction recording, and coordination, thereby performing selected functions traditionally associated with formal institutions (Heeks et al., 2021; Soluk et al., 2021).

However, the effects of digital platforms are not predetermined. Entrepreneurs exercise agency in interpreting, adapting to, and appropriating these digital mechanisms according to their circumstances and strategic objectives. Through this process, they may combine formal institutional arrangements, informal practices, and platform-based mechanisms, producing diverse forms of institutional navigation and hybrid participation (Battilana et al., 2009). The extent to which such practices contribute to incremental formalisation, market integration, institutional visibility, and entrepreneurial development is further influenced by ecosystem conditions, including digital infrastructure, human capital, finance, regulatory quality, social networks, and platform governance (Klein & Braido, 2024; Stein et al., 2025). Thus, the framework recognises that digital entrepreneurship can both mitigate existing institutional voids and generate new forms of dependency or exclusion, depending on the interaction among these conditions (Andrews & Luiz, 2024; Heeks et al., 2021).

The framework therefore conceptualises digital entrepreneurship as a recursive institutional process rather than a one-directional movement from informality to formality. Feedback effects are also possible. Successful digital entrepreneurs may generate transaction records, reputational capital, employment, and tax visibility that subsequently strengthen their engagement with formal institutions. Conversely, platform exclusion, digital inequality, or restrictive regulation may reinforce vulnerability and informality.

Policy and Practical Implications

The analysis of digital entrepreneurship as a mechanism for navigating institutional voids has important implications for the design of entrepreneurship policy and the development of supportive entrepreneurial ecosystems. The central implication is that policy should move beyond viewing digital entrepreneurship primarily as a technological or enterprise-development issue and recognise its broader institutional significance. Where digital platforms perform functions traditionally associated with market intermediaries, financial institutions, and other support structures, their development becomes closely connected to the quality, accessibility, and responsiveness of the wider institutional environment.

A further implication concerns the relationship between digitalisation and formalisation. The evidence that digital technologies can become embedded within informal entrepreneurial activity without necessarily producing immediate formalisation (Aryeh-Adjei et al., 2025) suggests that the relationship between digital participation and institutional integration is more complex than a simple transition from informality to formality. Digital entrepreneurship may instead provide intermediate forms of market participation through digital payments, platform-based transactions, reputational systems, and digitally recorded business activities. Consequently, the effectiveness of entrepreneurship policy should be assessed not only in terms of formal business registration but also in terms of increased market access, economic visibility, financial participation, and the gradual strengthening of institutional linkages (Mathibe & Oppong, 2025).

The analysis also highlights the importance of the broader digital and entrepreneurial ecosystem. Digital entrepreneurship depends on the interaction of technological, financial,

institutional, and human-capital resources. Access to broadband connectivity, reliable electricity, affordable digital services, appropriate financial mechanisms, and relevant digital capabilities influences the extent to which entrepreneurs can participate effectively in digital markets. Thus, weaknesses in any of these complementary conditions can limit the capacity of digital platforms to compensate for institutional deficiencies. This supports the wider ecosystem perspective, which emphasises that digital entrepreneurial activity is shaped not by technology in isolation but by the institutional and resource environment within which technology is deployed (Klein & Braido, 2024; Stein et al., 2025).

Platform governance represents another significant policy and practical consideration. As digital platforms increasingly mediate market access, transactions, reputation, and entrepreneurial visibility, platform rules can become consequential institutional arrangements. Entrepreneurs may therefore experience a shift from dependence on weak conventional institutions to dependence on privately governed digital infrastructures. This creates practical concerns relating to transparency, predictability, data control, platform access, dispute resolution, and the distribution of power between platforms and participating entrepreneurs (Heeks et al., 2021). The implication is not that platforms should be treated as inherently problematic, but that their institutional role requires appropriate governance arrangements capable of balancing innovation, entrepreneurial opportunity, consumer interests, and platform accountability.

The analysis further underscores the importance of entrepreneurial capabilities. Digital participation requires more than access to technology; entrepreneurs need the knowledge and skills to use digital platforms strategically, manage digital transactions, interpret information, build online reputation, protect data, and respond to changing platform environments. Digital literacy, financial literacy, business management capabilities, and platform-specific competencies therefore form an important part of the institutional infrastructure supporting digital entrepreneurship. These capabilities can determine whether entrepreneurs are able to convert digital access into sustainable economic opportunities.

Finally, the findings point to the importance of institutional coordination. Digital entrepreneurship operates across multiple institutional domains involving government agencies, financial institutions, technology platforms, educational institutions, entrepreneurial networks, and other ecosystem actors. Fragmented interventions may therefore limit the benefits of digitalisation, whereas greater coordination can strengthen the connections among digital infrastructure, finance, skills development, market access, and institutional support. Research on digital entrepreneurial ecosystems similarly indicates that institutional adaptation and collaboration are important in creating conditions that enable digital entrepreneurship to develop and contribute to broader economic outcomes (Stein et al., 2025). In all, the policy and practical significance of the framework lies in recognising digital entrepreneurship as part of a wider process of institutional adaptation and economic integration rather than simply as the adoption of digital technologies by entrepreneurs.

Conclusion and Recommendations

This paper concludes that digital entrepreneurship offers an important but conditional mechanism for navigating institutional voids and bridging the formal-informal divide in emerging economies. Its significance extends beyond digital tools to alternative mechanisms for market coordination, trust, reputation, information exchange, payments, and economic organisation. Digital platforms can perform selected institutional functions and partially compensate for weak or inaccessible formal institutions while complementing existing institutions and depending on broader legal, infrastructural, financial, and regulatory systems.

They should therefore be understood as hybrid institutional infrastructures rather than merely technological intermediaries.

The paper further establishes that digital entrepreneurship does not necessarily produce comprehensive formalisation. Instead, digitalisation can generate hybrid forms of participation in which formal regulations, informal networks, and platform-based governance coexist. Entrepreneurs may progress incrementally across different forms of institutional participation, gaining market access, financial inclusion, transaction visibility, and economic integration while retaining selected informal practices. The formal-informal divide is consequently better understood as a dynamic continuum of institutional engagement rather than a rigid boundary. The central theoretical contribution is the proposition that digital entrepreneurship constitutes a process of institutional navigation. Institutional voids provide the structural conditions within which entrepreneurial constraints and opportunities emerge; digital platforms provide alternative or complementary mechanisms for addressing selected institutional deficiencies; entrepreneurial agency determines how these mechanisms are interpreted, adopted, adapted, and combined; and ecosystem conditions influence whether outcomes favour inclusion, resilience, growth, and institutional integration or dependency, exclusion, and vulnerability. The developmental potential of digital entrepreneurship nevertheless has important limits. Digital platforms cannot indefinitely substitute for effective public institutions. Weak or highly concentrated platform governance may create new dependencies and redistribute power rather than eliminate institutional constraints. Similarly, unequal access to infrastructure, finance, skills, and technology may reproduce existing inequalities. Digitalisation should therefore not be regarded as inherently inclusive or developmental; its outcomes depend on the interaction among institutional quality, platform governance, entrepreneurial capabilities, and ecosystem conditions.

This conclusion provides the basis for the following recommendations, which seek to strengthen the institutional conditions necessary for digital entrepreneurship to contribute to sustainable economic integration:

1. Strengthen digital and institutional infrastructure: Governments should improve broadband connectivity, reliable electricity, affordable digital services, digital payment systems, and supporting infrastructure to enable wider and more equitable participation in digital entrepreneurship.

2 Promote progressive formalisation: Policies should provide accessible pathways through which digitally active informal entrepreneurs can progressively engage with formal financial, regulatory, and market systems without imposing unnecessarily burdensome compliance requirements.

3. Develop entrepreneurial and digital capabilities: Educational institutions, government agencies, and ecosystem organisations should strengthen digital literacy, financial literacy, business management, data literacy, cybersecurity awareness, and platform-management capabilities among entrepreneurs.

4. Strengthen platform governance: Digital platforms should operate within transparent and predictable governance arrangements that provide fair dispute-resolution mechanisms, responsible data practices, clear rules, and safeguards against arbitrary exclusion or excessive dependence.

5. Improve institutional coordination: Government agencies, financial institutions, educational institutions, technology providers, entrepreneurial associations, and other ecosystem actors should strengthen collaboration to create an enabling environment for digital entrepreneurial development.

Ultimately, the relationship between digital entrepreneurship and institutional voids represents a process of institutional recombination in which formal institutions, informal norms, digital

platforms, and entrepreneurial agency increasingly interact. Digital entrepreneurship should therefore be integrated into broader institutional-development strategies rather than treated as a technological shortcut to development. Implementing the recommendations above can strengthen inclusion, resilience, market expansion, progressive formalisation, and sustainable value creation while reducing digital exclusion, platform dependency, and institutional inequality.

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