



From Start-Up to Scale-Up: Embedding Innovation in Entrepreneurial Strategies for Sustainable Expansion

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Abstract

The journey from being a start-up to becoming a scaled-up business is not just a matter of higher sales, more employees, or expanding into new areas; it involves an organisational transformation during which a company has to replicate the creation of value while at the same time redesigning its structures, routines, capabilities, and relationships. However, current research in entrepreneurship and innovation usually regards innovation as something that takes place in the early stages and scaling as a later issue relating to growth, with the mechanisms that link the two being only poorly integrated. This conceptual paper looks at how innovation can be incorporated into entrepreneurial strategy in order to promote sustainable expansion. It does this by carrying out an integrative conceptual synthesis of the foundational and more recent peer-reviewed literature on entrepreneurial innovation, business model innovation, dynamic capabilities, organisational scaling, entrepreneurial ecosystems, and sustainable business models, with particular reference to evidence from Nigeria and Africa. Drawing on Schumpeter's theory of innovation and also using the dynamic capabilities perspective, the analysis presents an innovation-embedded scale-up framework. This framework maintains that product, process, digital, and business model innovation enhance scale-up readiness when they are institutionalised via sensing, seizing, learning, resource reconfiguration, and organisational professionalisation. These capabilities allow for replicable value propositions, operational systems, market expansion, and resource mobilisation, while the quality of the ecosystem and scaling risks influence the process. Five propositions set out the relationships between the various elements. The paper makes a contribution by distinguishing between the mere existence of innovation and its strategic embeddedness and by conceptualising sustainable expansion as disciplined scaling which maintains economic resilience, operational coherence, market durability, and wider stakeholder value.

Keywords: Entrepreneurship, Start-Up, Scale-Up, Innovation, Sustainable Expansion

Introduction

Entrepreneurial ventures are praised for bringing new products, services, technologies, and business models, but the fact that one can start a business is not the same as having the ability to grow it. Current research into scaling tends to treat scaling as an organisational process, scalability as a capability, and the scale-up as a stage in the organisation's development (Coviello et al., 2024). This distinction is important since rapid expansion puts a venture in contact with a completely different set of problems from those faced during the stage of opportunity identification and early market testing. As transaction volumes, the number of customers, employees, partners, and the geographical area covered rise, informal arrangements which were acceptable at the beginning can turn into causes of delays, inconsistencies in quality, coordination failures, and a loss of strategic direction. DeSantola and Gulati (2017) therefore see scaling problems as arising both within the organisation and in the market, while Jansen et al. (2023) view scaling as a dynamic capability that involves expansion, replication, and synchronisation. Innovation plays a key role in this shift, although its function changes as the venture progresses. At the start-up stage, innovation may be focused on the product, the technology, or the value proposition. At the scale-up stage, the key issue becomes whether innovation is deeply

embedded so as to allow the business model, operating procedures, organisational structure, and the way resources are configured to be redesigned in response to the new demands created by growth. Research into business models stresses that value creation, delivery, and capture are interdependent and not separate decisions (Amit & Zott, 2001; Zott et al., 2011). Foss and Saebi (2017, 2018) also demonstrate that in order for business model innovation to take place there must be a greater level of clarity regarding what changes, why the changes are made, and under what conditions the changes lead to improved performance. Consequently, simply having an innovative product is not enough for a venture to scale sustainably; it needs a strategic system that continually turns innovation into scalable organisational arrangements.

This is especially true in African and Nigerian entrepreneurial settings, where companies often expand throughout fragmented markets, with uneven infrastructure, limited resources, uncertain institutions, and rapidly evolving digital ecosystems. Weiss et al. (2022) claim that African scaling provides a valuable opportunity for developing venture-scaling theory since factors such as location, the early stage of ecosystems, institutional conditions, financing markets, and social effects can influence the way growth is attained. The evidence from Nigeria highlights the importance of innovation in such circumstances. Iheanachor et al. (2021) find that weaknesses in a business model can compromise the viability and sustainability of financial-service agents, while Otache (2024) states that there are positive relationships between innovation capability, strategic flexibility, competitive advantage, and SME performance. Alake et al. (2024) also show that technology competence can enhance the link between business model innovation and SME resilience. Although these studies indicate that innovation is important, they also raise a question that has not yet been answered: how does innovation become an organisational logic that can take a venture from early experimentation towards durable scale?

The paper deals with the question in a conceptual way; it views innovation not as a separate event but as a strategic ability which has to be incorporated throughout the areas of value proposition, value creation, value delivery, and value capture. Schumpeter's theory of innovation is the main theoretical basis since it accounts for entrepreneurial development in terms of new combinations which disrupt the existing economic arrangements (Schumpeter, 1934). The dynamic capabilities approach supports this line of reasoning by showing how firms continuously perceive opportunities and threats, take advantage of opportunities, and reconfigure their resources as the environment changes (Teece, 2007, 2018). By combining these two perspectives it is possible to provide a process explanation of scale-up: entrepreneurial innovation generates new possibilities, while dynamic capabilities decide whether or not those possibilities can be organised, replicated, adapted, and sustained.

The issue that this paper looks at is not the well-known fact that many start-ups fail to grow. The real problem is that in the field of entrepreneurship research innovation and scaling are still too frequently regarded as separate issues that are not adequately connected. Early-stage research tends to focus on opportunity recognition, experimentation, product novelty and business-model discovery, while research into scale-up deals with replication, professionalisation, coordination, organisational design and resource mobilisation. Although scholarship on business model innovation connects these areas, there is still a lack of clarity regarding what exactly is being innovated, the organisational mechanisms by which innovation becomes scalable, and the conditions under which innovation leads to better long-term outcomes (Foss & Saebi, 2017, 2018). It therefore follows that the fact that a venture has an innovative product or service might be taken as proof that it has a scalable organisational system.

This assumption leads to both a theoretical and a practical shortcoming. Picken (2017) maintains that businesses must have a deliberate transition foundation if aggressive growth is to be maintained, and DeSantola and Gulati (2017) demonstrate that as young firms grow, organisational design, leadership, team composition and culture become increasingly important. Coviello et al. (2024) also make the distinction between scaling as a process and scalability as a capability, treating the scale-up as a developmental stage. Grimstad et al. (2025) do the same by showing that scalable business model innovation is linked to growth and internationalisation yet depends on factors such as product-market fit, capital, entrepreneurial experience, proactivity and global orientation. The research proves that growth does not occur automatically; nevertheless, the way in which entrepreneurial innovation is turned into repeatable, coordinated and economically sustainable scale is not adequately integrated.

The gap is particularly important in African and Nigerian entrepreneurial environments. Ventures may expand under infrastructure limitations, financing constraints, institutional uncertainty, fragmented markets, and uneven ecosystem support, conditions that can make resource reconfiguration and organisational learning more difficult (Weiss et al., 2022). Nigerian evidence shows that innovation capability and strategic flexibility are associated with SME performance (Otache, 2024), that technology competence can strengthen the business model innovation-resilience relationship (Alake et al., 2024), and that weaknesses in business model design can undermine the sustainability of otherwise promising ventures (Iheanachor et al., 2021). Yet these relationships are commonly examined separately. What remains underdeveloped is an integrated explanation of how innovation must be embedded in strategy, translated through organisational capabilities, supported or constrained by the ecosystem, and disciplined against premature scaling if expansion is to remain sustainable. Accordingly, the specific knowledge problem is the absence of a sufficiently integrated start-up-to-scale-up mechanism that distinguishes innovation presence from innovation embeddedness and connects embedded innovation to dynamic capabilities, scalable business-model architecture, scale-up execution, ecosystem conditions, and sustainable expansion. Without such a framework, prescriptions to innovate, digitise, attract capital, or enter new markets remain too general to guide entrepreneurs through the organisational transformation that scaling requires. This paper therefore develops and analyses a conceptual framework explaining how innovation becomes a repeatable strategic and organisational capability, why that capability should improve scale-up readiness and execution, and the conditions under which the resulting growth is more likely to remain economically resilient, operationally coherent, and socially sustainable.

The purpose of this paper is to carry out a critical examination and to provide a conceptual explanation of how strategically incorporating innovation allows entrepreneurial ventures to move from start-up experimentation to scalable organisational execution and, in the end, to sustainable expansion. The particular objectives of the paper are to:

1. distinguish innovation presence from innovation embeddedness and explain how innovation changes as a venture moves from start-up to scale-up;
2. analyse how business model innovation and dynamic organisational capabilities create scale-up readiness and support repeatable execution;
3. examine how entrepreneurial ecosystem conditions, particularly in Nigeria and other African contexts, enable or constrain innovation-driven scaling;
4. develop an integrated conceptual framework and testable propositions linking embedded innovation, dynamic capabilities, scale-up execution, ecosystem conditions, scaling risk, and sustainable expansion; and
5. Explain the theoretical, entrepreneurial, managerial, and policy implications of innovation-embedded scaling for companies that wish to achieve sustained growth.

The analysis is guided by the following questions:

1. How does innovation change from an early-stage entrepreneurial activity into an embedded strategic capability during the start-up-to-scale-up transition?
2. Through what business model and dynamic-capability mechanisms does embedded innovation create scale-up readiness and repeatable execution?
3. How do entrepreneurial ecosystem conditions in Nigeria and other African contexts enable or constrain innovation-driven scaling?
4. How can embedded innovation, dynamic capabilities, scale-up execution, ecosystem conditions, scaling risk, and sustainable expansion be integrated into a coherent conceptual framework?
5. What theoretical, entrepreneurial, managerial, and policy implications follow from an innovation-embedded view of sustainable scaling?

Conceptual Review

Start-Up, Scaling, Scalability, and Scale-Up

A startup can best be understood as an entrepreneurial organisation that is operating in the face of considerable uncertainty and is looking for a way to create and capture value that is both viable and capable of being repeated. During the startup phase, therefore, the emphasis is on validating opportunities, gaining knowledge, carrying out experiments, and developing an initial business model. The scale-up phase is different however. According to Coviello et al. (2024), scaling is defined as an organisational process, scalability as an organisational capability, and scale-up

as a developmental phase. This kind of conceptual distinction is helpful since it stops 'growth' being reduced to a single result such as revenue. It is possible for a venture to boost its sales without having scalable systems, and it is also possible for a venture to have scalable architecture before growth has been fully achieved.

Scaling involves replication and synchronisation. By replication is meant the ability to reproduce a value proposition, operating routine, market interface, or delivery system on a larger scale or in new locations without having to increase complexity or costs in proportion. Synchronisation refers to the need for people, structures, resources, culture, technology, and decision-making processes to be aligned as the organisation grows (Jansen et al., 2023). DeSantola and Gulati (2017) explain why this is difficult: ventures have to decide which of their original characteristics should be kept and which should be altered. Picken (2017) also points out a transitional phase during which leadership, organisational infrastructure, market positioning, and economic discipline must be put in place before aggressive scaling can be justified. The result is that scale-up should not be regarded as simply being about speed. Sustainable scale-up is instead a disciplined form of expansion that is based on the ability to reproduce value while at the same time adapting the organisation. Growth that is rapid but without the corresponding capability base can lead to coordination failures, a deterioration in customer service, cash-flow problems, founder bottlenecks, and strategic inconsistency. Thus the idea of scalability is at the heart of the start-up-to-scale-up issue since it represents the organisational readiness that enables growth to be repeatable rather than accidental.

Innovation and Business Model Innovation

Innovation means putting into practice new or greatly improved products or business processes which are considerably different from those previously available or used (OECD, 2018). For entrepreneurial enterprises, though, novelty is only of value to the extent that it can be turned into a viable value system. Schumpeter (1934) based his view of entrepreneurial development on the idea of new combinations, such as new goods, new methods of production, new markets, new sources of supply and new forms of organisation. This wider interpretation is particularly important in the context of scaling since the type of innovation needed during scale-up is generally concerned with changes to the organisation and business model rather than with introducing a completely new product.

A firm's business model describes the way in which it creates, brings to market, and captures value. Amit and Zott (2001) demonstrated that value creation may result from transaction-design elements that reinforce one another, and Zott et al. (2011) brought business model research together by focusing on a system-level perspective of firm activities. Foss and Saebi (2018) then stressed the importance of the architecture involved in value creation, value delivery, and value capture and regarded business model innovation as consisting of new developments in the complementary relationships between those activities. In other words, scale-up innovation can include redesigning aspects such as pricing, channels, partnerships, customer engagement, distribution, digital interfaces, production routines, or resource combinations even if the basic product remains identifiable.

The difference between innovation presence and innovation embeddedness is at the heart of this paper. Innovation presence refers to a venture having brought something new onto the market. Innovation embeddedness means that the venture has built continuous renewal into its decision rules, the way it allocates resources, its learning routines, the design of its processes, its handling of customer feedback, and the structure of its business model. The latter is more pertinent to sustainable scaling since growth leads to a series of recurring adaptation problems. Although a single innovation might achieve initial momentum, an embedded innovation system allows the venture to keep making adjustments as its scale changes the problem it is attempting to solve.

Entrepreneurial Strategy and Dynamic Capabilities

Entrepreneurial strategy combines opportunity-seeking with advantage-seeking behaviour. Ireland et al. (2003) argue that strategic entrepreneurship integrates entrepreneurial mindset, culture and leadership, strategic resource management, and innovation in ways that create wealth. This perspective is useful for scale-up because early ventures typically possess strong opportunity orientation but weaker formal structures for protecting and extending advantage. Scaling requires both: the firm must continue to discover opportunities while building the systems that allow it to appropriate value from them.

Dynamic capabilities provide a mechanism for this integration. Teece (2007) identifies sensing, seizing, and reconfiguring as higher-order capacities through which firms identify change, commit resources, and transform their asset base. Teece (2018) further connects dynamic capabilities to business model design, arguing that business models and capabilities co-evolve. Randhawa et al. (2021) demonstrate this interaction in an SME's evolution from start-up to scale-up: fitting dynamic capability processes helped the firm adjust its business model and move towards a more ambidextrous market orientation. Thus, dynamic capabilities are not abstract managerial virtues. They are organisational processes that enable repeated redesign without losing strategic coherence.

For this paper, dynamic capabilities mediate the relationship between innovation and scaling. Embedded innovation creates a continuing flow of opportunities for renewal, but sensing, seizing, learning, and reconfiguration determine whether those opportunities become reproducible operating systems. Professionalisation is part of this process: roles become clearer, decision rights are distributed, data and routines become more formal, and founder knowledge is translated into organisational knowledge. Without this conversion, growth remains dependent on individual improvisation and is difficult to replicate.

Sustainable Expansion

Sustainable expansion refers here to growth that enlarges the venture's reach and capacity without undermining its long-term economic viability, organisational coherence, stakeholder relationships, or social and environmental responsibilities. It is therefore broader than short-term growth rate. Shepherd and Patzelt (2011) conceptualise sustainable entrepreneurship as the pursuit of opportunities that connect what is to be developed with what is to be sustained. Sustainable business model scholarship similarly argues that value creation must be assessed across a wider stakeholder and systems perspective (Bocken et al., 2014; Geissdoerfer et al., 2018).

This perspective changes the scaling question. A venture has not scaled sustainably if higher revenue is achieved by creating fragile operations, unsupportable financing needs, persistent employee overload, regulatory exposure, customer distrust, or environmental and social costs that threaten future legitimacy. Bocken and Geradts (2020) show that organisation design can either enable or obstruct the dynamic capabilities required for sustainable business model innovation. Sustainable expansion therefore depends on both the direction of innovation and the organisational capacity to embed it within governance, incentives, resource allocation, and performance systems. In this paper, sustainable expansion is represented by four interrelated outcomes: economic resilience, operational efficiency, market durability, and social/environmental value. These outcomes provide a more demanding criterion than size alone. They recognise that the quality of growth determines whether a scale-up can continue to create value after the initial acceleration phase.

Theoretical Framework

Schumpeter's Theory of Innovation

Schumpeter's theory of innovation is the primary theoretical foundation of the paper. Schumpeter (1934) presents economic development as a discontinuous process driven by entrepreneurs who introduce new combinations. These combinations include new products, new methods of production, new markets, new sources of supply, and new forms of organisation. The entrepreneur is therefore not merely an owner of a small firm; the entrepreneur is an agent who reorganises economic resources in ways that disturb established routines and create new value possibilities. The theory explains why innovation can generate entrepreneurial growth. A new combination can create temporary differentiation, open new demand, reduce costs, or reorganise production. For a start-up, this logic explains the source of initial novelty and market entry. For a scale-up, however, the same logic has to be extended from innovation events to innovation systems. Once competitors respond and the venture itself becomes more complex, advantage depends on the capacity to generate and organise further combinations. Schumpeter's framework therefore supports the argument that innovation is central to growth, but it is less explicit about the organisational microprocesses through which repeated innovation is coordinated during rapid expansion. That limitation is important in African and Nigerian settings where scaling may require continuous recombination of resources in response to infrastructure gaps, institutional variation, financing constraints, and fragmented customer markets. Schumpeterian new combinations can explain entrepreneurial response to these conditions, but a complementary mechanism is needed to explain how the venture repeatedly senses, selects, and institutionalises such responses.

Dynamic Capabilities as a Complementary Mechanism

The dynamic capabilities perspective complements Schumpeter by shifting attention from the existence of entrepreneurial innovation to the organisational processes that sustain renewal. Teece (2007) conceptualises dynamic capabilities through sensing, seizing, and reconfiguring. Sensing identifies technological, market, and institutional change; seizing commits resources to selected opportunities; reconfiguring transforms assets, structures, routines, and business models so that the opportunity can be exploited repeatedly. Teece (2018) makes the connection explicit by showing how business model design and dynamic capabilities interact. The two perspectives are integrated in this paper rather than treated as competing theories. Schumpeter explains the growth-generating logic of new combinations; dynamic capabilities explain how a venture develops a repeatable organisational capacity to generate, select, implement, and renew those combinations as scale increases. This integration also clarifies the difference between an innovative start-up and an innovation-embedded scale-up. The former may possess a novel offer, while the latter must possess routines and governance that allow novelty to be adapted and reproduced without returning every decision to the founder. The theoretical integration therefore predicts that innovation will contribute more consistently to sustainable expansion when it is mediated by dynamic capabilities and translated into scalable systems. It also implies boundary conditions. Weak product-market fit, insufficient capital, organisational overload, or hostile ecosystem conditions can prevent innovation from being converted into scale even when the venture is creative.

Conceptual Framework

Figure 1 presents the proposed innovation-embedded scale-up framework. The model treats embedded innovation as the initiating strategic condition, dynamic organisational capabilities as the translation mechanism, scale-up execution as the organisational process, and sustainable expansion as the outcome. Entrepreneurial ecosystem support operates as an enabling condition across the pathway, while premature scaling, resource strain, governance complexity, weak product-market fit, and institutional volatility represent boundary or risk conditions.

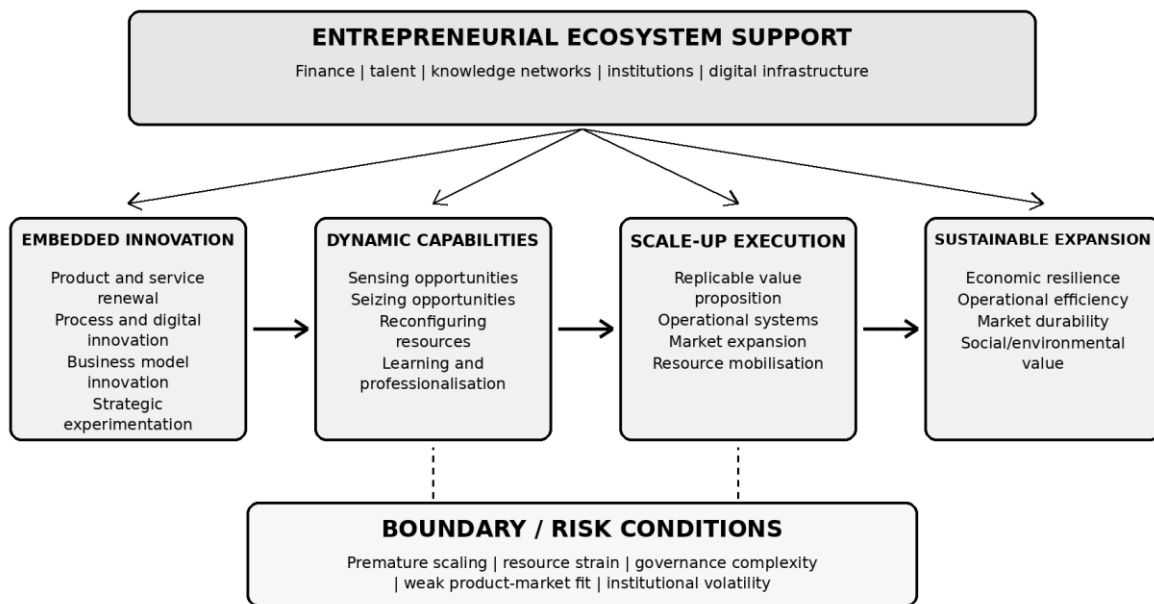


Figure 1. Innovation-Embedded Scale-Up Framework

Source: Authors' conceptualisation based on Schumpeter (1934), Teece (2007, 2018), DeSantola and Gulati (2017), Randhawa et al. (2021), Jansen et al. (2023), Coviello et al. (2024), and Grimstad et al. (2025).

The first component, embedded innovation, combines product/service renewal, process and digital innovation, business model innovation, and strategic experimentation. These are not assumed to affect scale directly. Their effect is translated through dynamic capabilities: the venture must sense market and technological change, seize opportunities through resource commitment, reconfigure structures and assets, and convert individual learning into organisational routines. This mechanism is consistent with dynamic capability theory and with evidence that business model evolution from start-up to scale-up requires fitting capability processes (Randhawa et al., 2021). The second mechanism is scale-up execution. A venture is scale-ready when it can replicate a value proposition, support growth with coherent operations, mobilise resources, and expand across markets or customer segments without equivalent increases in friction. Grimstad et al. (2025) show that product-market fit, global mindset, proactivity, capital, and scalable business model innovation are linked to internationalisation and growth. The framework incorporates these insights by treating product-market fit and resource adequacy as conditions that influence whether embedded innovation becomes executable scale. The final outcome is sustainable expansion rather than undifferentiated growth. Sustainable expansion combines economic resilience, operational efficiency, market durability, and social/environmental value. This outcome reflects the insight that innovation for sustainability requires organisational design and dynamic capabilities, not merely an environmentally or socially desirable idea (Bocken & Geradts, 2020). Ecosystem support is represented above the core pathway because finance, talent, knowledge networks, institutions, and digital infrastructure can strengthen or weaken each transition. This is especially relevant in African contexts, where scaling may require ventures to compensate for market and institutional gaps through creative resource recombination and network-based solutions (Weiss et al., 2022).

Analytical Approach

This paper uses an integrative conceptual synthesis designed for theory development rather than empirical estimation or a systematic-review claim. The analytical task is to connect bodies of scholarship that are usually discussed separately - entrepreneurial innovation, business model innovation, strategic entrepreneurship, dynamic capabilities, organisational scaling, entrepreneurial ecosystems, and sustainable business models - and determine whether they can be organised into a coherent explanation of the start-up-to-scale-up transition. The approach therefore prioritises mechanism, construct boundaries, theoretical compatibility, contextual variation, and explanatory usefulness over exhaustive database coverage or statistical aggregation.

Sources were retained when they performed at least one identifiable analytical function: establishing a foundational theory; clarifying a core construct; explaining a causal or organisational mechanism; supplying contemporary evidence on scaling or scalable business models; challenging a simple innovation-growth assumption; or illuminating Nigerian and African contextual conditions. The synthesis deliberately combines foundational works with recent scaling scholarship and context-specific evidence. Rather than citing sources as isolated authorities, the analysis compares them for convergence, disagreement, missing links, contingencies, and the organisational processes they imply. The synthesis proceeded through four stages. First, innovation, innovation embeddedness, growth, scaling, scalability, scale-up, dynamic capabilities, and sustainable expansion were conceptually separated so that related terms were not treated as synonyms. Second, the literature was examined for mechanisms linking innovation to replication, coordination, professionalisation, resource mobilisation, and business-model redesign. Third, the emerging mechanism was stress-tested against rival explanations and boundary conditions, including product-market fit, capital availability, governance maturity, infrastructure, ecosystem quality, resource strain, and premature scaling. Fourth, the resulting relationships were organised into an innovation-embedded scale-up framework and five propositions that can be subjected to later empirical testing. The analytical sections that follow correspond directly to the study objectives and research questions.

Analysis

The analysis is organised around five interlocking issues: the institutionalisation of innovation, the role of business model innovation in creating replicability, the capability mechanisms that translate innovation into scale, the conditioning effect of entrepreneurial ecosystems, and the discipline required to convert growth into sustainable expansion. Each issue addresses one or more of the stated objectives and culminates in a proposition that makes the conceptual argument empirically testable.

Innovation Must Shift from Episodic Novelty to an Embedded Strategic Logic

The first analytical conclusion is that scale-up readiness depends less on whether a venture has ever innovated than on whether innovation has become a repeatable strategic logic. Start-ups frequently begin with a concentrated innovation: a technology, product feature, channel, customer experience, or delivery method. Such novelty can establish initial market traction, but growth changes the task. More customers produce more diverse feedback, more transactions expose process weaknesses, and new employees dilute the founder's direct control. If innovation remains episodic, the venture responds to these pressures through ad hoc fixes. If innovation is embedded, feedback, experimentation, process redesign, and resource allocation become routinised.

This distinction is consistent with Schumpeter's emphasis on new combinations but extends it organisationally. New combinations must be renewed as the firm itself becomes part of the established structure it once disrupted. It also resolves a weakness in generic innovation prescriptions. Advising a scale-up to 'innovate more' says little about how innovation decisions should be governed. Embedded innovation requires explicit responsibility, feedback loops, learning routines, digital information, cross-functional coordination, and a resource-allocation logic that protects experimentation while maintaining operational discipline.

Proposition 1 (P1). *The greater the strategic embeddedness of innovation across the venture's value proposition, value creation, value delivery, value capture, and operating processes, the greater its scale-up readiness, provided that a viable product-market fit has been established.*

Business Model Innovation Creates Replicability and Economic Logic for Scale

The second conclusion concerns business model innovation. A venture can have a desirable product but an unscalable delivery model, expensive acquisition process, fragile revenue structure, or dependence on scarce founder labour. Business model innovation addresses the architecture through which value is created, delivered, and captured. It therefore provides the bridge between product success and organisational replicability. Foss and Saebi (2018) emphasise complementary relations among business model activities, and Grimstad et al. (2025) show empirically that scalable business model innovation is associated with internationalisation and growth outcomes. The Nigerian evidence provides an important contextual test of this logic. Iheanachor et al. (2021), examining financial-service agents, show that weak business models can undermine viability even where market need exists. The implication is that demand alone does not create sustainable scale. The venture must align resources, customer conditions, channels, incentives, and value capture. Alake et al. (2024) add that technology competence can strengthen the relationship between business model innovation and resilience, suggesting that digital capability can improve the execution of redesigned business models.

Proposition 2 (P2). *Business model innovation positively strengthens scale-up execution when it increases the replicability of value creation, delivery, and capture while reducing dependence on non-scalable founder-centred or resource-intensive arrangements.*

Dynamic Capabilities and Organisational Professionalisation Translate Innovation into Scale

The third conclusion is that dynamic capabilities perform a translation function. Innovation produces possibilities; capabilities convert those possibilities into coordinated action. Sensing identifies changes in customer behaviour, technology, regulation, competitor moves, and operational performance. Seizing prioritises which opportunities deserve investment. Reconfiguring changes routines, roles, assets, partnerships, and business models. These activities are especially important as a venture transitions from informal founder control to a more professionalised organisation. Professionalisation should not be interpreted as bureaucracy for its own sake. The scaling challenge is to formalise what must become repeatable without destroying the speed and experimentation that created the venture's advantage. DeSantola and Gulati (2017) show that growth may require both continuity and change in organisational design, team composition, and culture. Jansen et al. (2023) similarly frame scaling as synchronised expansion and replication. Dynamic capabilities provide the mechanism for achieving that balance because they enable structured adaptation rather than rigid standardisation. Otache's (2024) Nigerian evidence is relevant here: innovation capability and strategic flexibility are associated with SME performance, with competitive advantage operating as an important explanatory mechanism. The finding supports the argument that innovation is more productive when it is accompanied

by the capacity to adapt strategically. The theoretical implication is that dynamic capabilities are not merely another predictor of growth; they help explain how innovation becomes scalable organisational performance.

Proposition 3 (P3). *Dynamic organisational capabilities - particularly sensing, seizing, learning, resource reconfiguration, and professionalisation - mediate the relationship between embedded innovation and effective scale-up execution.*

Entrepreneurial Ecosystems Condition the Conversion of Internal Capability into Growth

The fourth conclusion is that scaling is neither purely internal nor purely ecosystem-driven. Entrepreneurial ecosystems provide finance, specialised talent, knowledge, legitimacy, mentorship, market access, digital infrastructure, and institutional support. Autio et al. (2018) show that entrepreneurial ecosystems are shaped by digital and spatial affordances and by opportunity-oriented knowledge flows. Yet external support cannot substitute for a weak business model or absent organisational capability. Ecosystems are more accurately treated as conditions that strengthen or weaken the venture's ability to exploit internal capabilities. This conditional interpretation is particularly appropriate in Africa. Weiss et al. (2022) identify location, entrepreneurial strategies, nascent ecosystems, institutions, financing markets, and societal effects as key areas for understanding technology-venture scaling on the continent. In such contexts, ventures may need to build around institutional gaps, use partnerships to access resources, and design models that work across fragmented customer and infrastructure conditions. Ecosystem quality can therefore alter the cost, speed, and feasibility of reconfiguration. At the same time, ecosystem dependence introduces a strategic risk: ventures may confuse access to funding or accelerator visibility with scale-readiness. Capital can accelerate a weak system as easily as a strong one. The framework therefore positions ecosystem support as an enabling condition rather than the causal core of scaling. Internal innovation and capability must be sufficiently developed for external resources to produce durable expansion.

Proposition 4 (P4). *Entrepreneurial ecosystem quality strengthens the positive relationship between dynamic organisational capabilities and scale-up execution, with the effect likely to be more consequential in resource-constrained and institutionally fragmented environments.*

Sustainable Expansion Requires Ambidexterity, Discipline, and Attention to Scaling Risk

The fifth conclusion is that scale is sustainable only when exploration and exploitation are balanced. Ventures need exploration to discover new technologies, markets, and business model configurations, but they also need exploitation to standardise routines, improve efficiency, and deliver consistently. Randhawa et al. (2021) show how dynamic capabilities can support the evolution of an SME towards an ambidextrous business model. This balance is important because excessive exploration can create strategic diffusion, while excessive exploitation can lock the venture into routines that no longer fit the market. Sustainability adds another discipline. Bocken et al. (2014) and Geissdoerfer et al. (2018) demonstrate that sustainable business models require attention to the broader architecture of value, while Bocken and Geradts (2020) show that organisation design can enable or obstruct the capabilities needed for sustainable business model innovation. Consequently, expansion should be evaluated not only by the amount of growth achieved but also by whether the growth preserves financial resilience, operational integrity, stakeholder legitimacy, and the capacity for future adaptation. Premature scaling is the principal counter-argument to a simple 'more innovation equals more growth' model. A venture may scale before product-market fit is robust, before unit economics are defensible, before leadership roles are clear, or before operations can maintain quality. Grimstad et al. (2025) show the importance of product-market fit and other conditions in scalable business model innovation. These conditions justify placing scaling risk as a boundary factor in the framework: innovation and capability increase the potential for scale, but the timing and discipline of expansion determine whether that potential becomes sustainable.

Proposition 5 (P5). *Embedded innovation is more likely to produce sustainable expansion when the venture balances exploratory and exploitative innovation and when scaling intensity remains aligned with product-market fit, resource capacity, governance maturity, and operational readiness.*

Discussion

Innovation Embeddedness and the Start-Up-to-Scale-Up Mechanism

The first finding of the conceptual analysis is that the start-up-to-scale-up transition is best understood as a conversion problem rather than a simple growth problem. Schumpeter (1934) explains why entrepreneurial new combinations can disturb markets and create initial advantage, but the framework developed here argues that novelty must be converted into an embedded strategic logic if it is to survive organisational expansion. This interpretation is consistent with Picken's (2017) transition-stage argument and DeSantola and Gulati's (2017) account of the organisational dilemmas created by growth. It also sharpens the distinction made by Coviello et al. (2024): scaling is the process, scalability is the capability, and the scale-up is the developmental condition in which that capability is exercised. The contribution of the present analysis is to identify innovation embeddedness as one of the organisational foundations of scalability rather than treating innovation output itself as sufficient evidence of scale-readiness.

Business Model Innovation and Dynamic Capabilities

The second finding concerns the mechanism through which embedded innovation becomes scalable. Business model innovation reorganises how value is created, delivered, and captured, while dynamic capabilities explain how the venture repeatedly senses change, seizes opportunities, learns, and reconfigures resources as scale alters the operating environment (Teece, 2007, 2018). This interpretation agrees with Randhawa et al. (2021), who show dynamic capability deployment shaping business model evolution from start-up to scale-up, and with Grimstad et al. (2025), who link scalable business model innovation to growth and internationalisation. However, the present framework departs from any interpretation that treats business model redesign as a one-off strategic choice. At scale, redesign becomes recurrent: channels, pricing, partnerships, routines, governance, and resource combinations must continue to change as replication exposes new constraints. Dynamic capabilities therefore function as the translation mechanism between innovation embeddedness and scale-up execution.

Ecosystem Conditions in Nigeria and Africa

The third finding is that ecosystem conditions do not replace internal capability, but they materially influence whether capability can be converted into growth. Mature-market scaling research can understate this contingency because finance, infrastructure, specialised labour, digital systems, and institutional support are comparatively more available. Weiss et al. (2022) show why African scaling requires greater attention to location, financing, institutions, and ecosystem development. Nigerian evidence reinforces this point: innovation capability and strategic flexibility are associated with SME performance (Otache, 2024), technology competence strengthens business model innovation and resilience (Alake et al., 2024), and weak business-model architecture can undermine the sustainability of otherwise promising ventures (Iheanachor et al., 2021). The implication is not that African ventures follow a completely different scaling logic, but that the costs of weak orchestration, poor technology fit, or premature expansion may be greater where ecosystem buffers are thinner.

Sustainable Expansion, Ambidexterity, and Scaling Risk

A fourth finding is that sustainable expansion should be treated as a quality criterion for growth, not merely as a larger growth rate. Sustainable business model research argues that durable value creation depends on organisational design, stakeholder relationships, and the ability to renew the business model over time (Bocken et al., 2014; Bocken & Geradts, 2020; Geissdoerfer et al., 2018). This challenges a purely acceleration-oriented view of scale. A venture can record rapid customer, revenue, or geographic growth while simultaneously weakening service quality, cash discipline, employee capacity, governance, or stakeholder legitimacy. Sustainable expansion therefore exists only when the organisation becomes more capable as it becomes larger. In this sense, exploration and exploitation must be balanced: exploration preserves adaptability, while exploitation stabilises routines, economics, and service delivery.

Tensions, Rival Explanations, and Boundary Conditions

The analysis also clarifies areas of tension in the literature. One position emphasises speed, experimentation, and entrepreneurial flexibility; another emphasises professionalisation, standardisation, governance, and repeatability. Treated as opposites, these positions create a false choice. The framework instead proposes organisational ambidexterity: scale-ups must formalise what has become repeatable without formalising away the capacity to learn. A second tension concerns internal capability versus external ecosystem support. The conceptual evidence suggests complementarity rather than substitution. Capital, infrastructure, networks, and institutions can accelerate a capable venture, but they cannot permanently compensate for an unscalable operating model; equally, strong internal

capability cannot fully neutralise severe institutional or infrastructural constraints. The strength of the framework lies in specifying where these factors enter the scaling process rather than assigning all explanatory weight to one side.

Integrated Interpretation and Contribution

Taken together, the discussion answers the paper's central problem. Innovation contributes to sustainable expansion when it is embedded across the venture's value proposition, processes, organisational routines, and business model; translated through sensing, seizing, learning, reconfiguration, and professionalisation; converted into replicable scale-up execution; and supported by sufficiently enabling ecosystem conditions. The relationship remains contingent on product-market fit, resource capacity, governance maturity, and the timing of expansion. This integrated explanation moves the paper beyond the descriptive claim that innovation is important for growth. It specifies what must be institutionalised, the mechanism through which it should work, the conditions that can strengthen or weaken the process, and why larger size should not be equated automatically with sustainable scale.

Theoretical Contribution

The first theoretical contribution is the concept of innovation embeddedness. The paper distinguishes having an innovation from institutionalising innovation as an operating logic across the business model and organisation. This shifts attention from innovation output to the organisational depth of innovation. The distinction helps explain why ventures with similarly novel products can display very different scaling trajectories. The second contribution is a mediated process explanation. Rather than assuming a direct innovation-growth relationship, the framework positions dynamic capabilities as the translation mechanism and scale-up execution as the organisational process through which innovation becomes sustainable expansion. This links Schumpeterian entrepreneurial change to contemporary capability and scaling scholarship in a way that specifies how and why the relationship should occur. The third contribution is contextual and boundary-oriented. Ecosystem support is conceptualised as an enabling condition, while premature scaling, resource strain, governance complexity, weak product-market fit, and institutional volatility are treated as boundary risks. This makes the framework suitable for comparative testing across mature and emerging entrepreneurial ecosystems and particularly relevant to African settings where institutional and resource conditions may vary sharply.

Entrepreneurial and Managerial Implications

Entrepreneurs should audit scalability before accelerating growth. The audit should ask whether customer value can be reproduced at higher volume, whether delivery processes can maintain quality, whether unit economics remain defensible, whether key decisions can be made without continuous founder intervention, and whether the organisation can learn from performance data. These questions convert scaling from an aspiration into a capability assessment. Innovation portfolios should also be managed deliberately. Product innovation should be connected to process, digital, organisational, and business model innovation so that growth in demand is matched by improvements in the way value is delivered and captured. Ventures should protect exploratory activity while standardising proven routines. This requires clear decision rights, regular customer and operating feedback, ring-fenced experimentation resources where feasible, and explicit criteria for moving an experiment into the core business. Leadership development is another priority. As ventures grow, founders must increasingly build systems that allow others to act consistently with the firm's strategic logic. Professionalisation should therefore focus on role clarity, management information, talent depth, governance, coordination, and learning rather than on importing bureaucracy. The objective is to make the organisation less dependent on heroic individual effort without eliminating entrepreneurial responsiveness.

Policy Implications for Nigeria and Emerging Economies

Policy support for entrepreneurship should distinguish start-up creation from scale-up capability. Programmes that concentrate only on business registration, ideation, or seed funding may increase venture formation without addressing the organisational requirements of growth. Scale-up policy should include support for business model redesign, managerial systems, digital capability, export and market access, governance, and specialist talent development. Public and private ecosystem actors should also treat finance as one component of a broader scaling architecture. Investors, incubators, universities, development agencies, and industry associations can strengthen ventures by connecting capital with diagnostic support, market intelligence, technology adoption, leadership development, and network access. Nigerian evidence on technology competence, strategic flexibility, and business model adaptation suggests that such capability-building can improve the resilience with which SMEs respond to competitive and environmental change (Alake et al., 2024; Otache, 2024). Finally, policy design should recognise contextual diversity.

Scaling across Nigerian states, sectors, infrastructure conditions, and customer segments may require different business model configurations. Rather than imposing a single scaling template, ecosystem institutions should support experimentation and provide data, regulatory clarity, digital infrastructure, and market-linkage mechanisms that lower the cost of adaptation.

Research Agenda and Limitations

The framework is conceptual and requires empirical testing. Future research can operationalise innovation embeddedness through measures capturing the extent to which innovation is integrated into strategic planning, resource allocation, business model redesign, customer-learning routines, process improvement, and organisational governance. Dynamic capabilities can be operationalised through sensing, seizing, reconfiguration, learning, and professionalisation routines, while scale-up execution can be examined through replicability, synchronisation, market expansion, and resource mobilisation. Sustainable expansion should be measured with both growth and resilience indicators rather than growth rate alone.

Longitudinal research would be particularly valuable because scaling is a process rather than a single event. Studies could follow ventures across start-up, transition, and scale-up phases to examine whether changes in innovation embeddedness precede capability development and whether capability development precedes repeatable expansion. Comparative research across Nigerian sectors and other African economies could test how infrastructure, regulatory institutions, finance, and ecosystem maturity alter the proposed relationships. Mixed-method studies could combine panel data with founder and employee narratives to capture both performance trajectories and organisational change. The paper has three limitations. First, it uses integrative conceptual synthesis rather than a systematic review, so it does not claim exhaustive coverage of the scaling literature. Second, the framework combines theories and evidence from multiple contexts; empirical work is needed to determine which relationships are strongest in specific sectors and institutional environments. Third, sustainable expansion is deliberately multidimensional, which improves conceptual realism but increases measurement complexity. These limitations define a research programme rather than weakening the central argument.

Conclusion

This paper explains how innovation must be embedded in entrepreneurial strategy for a venture to move from start-up experimentation to sustainable scale. The analysis shows that the transition is not secured by novelty alone. What matters is whether innovation becomes institutionalised across the business model and operating system and whether the venture develops the dynamic capabilities needed to sense change, seize opportunities, learn, reconfigure resources, and professionalise without losing entrepreneurial responsiveness. The resulting framework positions business model innovation and dynamic capabilities as the principal translation mechanisms between innovation and scale-up execution. Entrepreneurial ecosystems provide enabling resources and institutional support, while product-market fit, capital, governance maturity, operational readiness, and premature-scaling risk define important boundary conditions. Sustainable expansion is therefore reached when replication, coordination, and market growth strengthen rather than weaken economic resilience, operational coherence, stakeholder value, and future adaptability. The paper's central contribution is the distinction between innovation presence and innovation embeddedness. By connecting Schumpeterian innovation, dynamic capabilities, scalable business-model architecture, ecosystem conditions, and scaling discipline, the framework provides a clearer basis for explaining why some innovative ventures remain small, why some grow rapidly but become fragile, and why others convert innovation into durable scale. The five propositions provide an agenda for empirical testing in Nigeria, Africa, and comparative entrepreneurial ecosystems.

Suggestions

1. Entrepreneurs should institutionalise innovation through recurring customer-feedback, experimentation, process-redesign, and business-model review routines rather than treating innovation as a one-off product-development activity.
2. Ventures preparing to scale should conduct a scalability audit covering product-market fit, unit economics, process replicability, founder dependence, management depth, technology readiness, governance, and resource capacity before accelerating expansion.
3. Scale-ups should connect product innovation with process, digital, organisational, and business model innovation so that rising demand is matched by improvements in delivery, coordination, value capture, and service reliability.

4. Nigerian and African entrepreneurship-support institutions should complement finance with capability-building support in business model design, digital competence, governance, market intelligence, process architecture, and management professionalisation.
5. Future empirical studies should test the five propositions longitudinally and comparatively, examining whether dynamic capabilities mediate the effect of innovation embeddedness on scale-up execution and whether ecosystem quality and scaling risk moderate the path to sustainable expansion.

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