

# Strategic Entrepreneurship in the Digital Era: Integrating Innovation, Technology Adoption, and Sustainable Business Practices for Competitive Advantage



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## Abstract

This study develops a unified conceptual framework for strategic entrepreneurship in the digital era by integrating three mutually reinforcing pillars: digital innovation, technology adoption, and sustainable business practices. Positioned within the realities of emerging Asian markets, the framework explains how digital innovation enlarges the opportunity set, technology adoption enables reliable operationalization, and sustainability embeds resilience, legitimacy, and long-term value creation. Methodologically, the article is conceptual and theory-driven, synthesizing contemporary scholarship to specify constructs, clarify mechanisms, and articulate their interdependencies. The integrated model advances the literature by moving beyond siloed treatments of innovation, adoption, and sustainability, and by detailing a sequencing logic entrepreneurs can use to translate ideas into durable competitive advantage. The core novelty lies in advancing a sequencing perspective, showing how innovation creates opportunities, adoption enables their execution, and sustainability institutionalizes long-term advantage, thereby offering sharper theoretical clarity than prior fragmented models. Managerially, the framework guides small and medium-sized enterprises to invest in organizational readiness, digital capabilities, and sustainability routines that reinforce one another. Policy implications include the importance of targeted support for digital readiness, collaborative infrastructures, and incentives that align private returns with societal goals. The article concludes with an agenda for empirical testing across sectors and countries to assess boundary conditions and the persistence of advantage over time.

**Keywords:** strategic entrepreneurship, digital innovation, technology adoption, sustainable business practices, competitive advantage, small and medium-sized enterprise

## 1. Introduction

The modern business environment has been revolutionised by the digitalization, technological discontinuity and the introduction of the sustainability pressures. The new environment has created a paradigm shift in the old concept of entrepreneurship that focuses on opportunities in an uncertain environment. Digital technologies not only altered the way in which firms work and compete, but also introduced totally new types of entrepreneurial activity, the most prominent one being the advent of digital platforms, ecosystems, digitally enabled models of innovation (Hsieh and Wu, 2019). Meanwhile, the concept of sustainability has turned out to be an important component and companies are more likely to be requested to establish a balance between economic ambitions and environmental and social responsibility. The convergence of the two dynamics forms a fruitful area to reflect on the topic of strategic entrepreneurship in the digital era particularly when we

focus on small and medium-sized enterprises (SMEs) or start-ups that exist within the growing economies. Online entrepreneurship has become an icon of the modern era whereby technology has significantly taken its place in the organisational operations, contact with clients, and value-generation. Rathee and Rajain (2017) opine that the digital era has revolutionised the face of entrepreneurship by providing companies with new avenues to access markets, expand faster and become innovative. Compared to the traditional business model, digital entrepreneurship is built on the utilisation of technologies like mobile applications, e-commerce, artificial intelligence, blockchain, to provide new value propositions. The same view is as well put forward by Jawad et al. (2021) which states that due to the digital revolution the conditions of entrepreneurship in the emerging economies have radically changed which resulted in the capabilities of firms to avoid the classical barriers of entry and compete in the global market.

Nevertheless, there are also issues with the rate of the digital change and its power, and this makes the entrepreneurs more adaptable and prospect-netter.

The primary nature of this change is innovation. According to Nambisan et al. (2019), digitalization of innovation and entrepreneurship has jumped to an enormous level, which, however, is rife with issues and dynamic subjects. Digital technologies have broadened the area of innovation not only to the product and service but also to the processes, platforms and business model. The transformation is especially relevant in the field of the innovation ecosystems where companies co-create value with their partners, users, and other stakeholders. Oksanen and Hautamaki (2015) further propose that sufficient competition can include sustainable innovation as one of the ecosystem competitive advantages due to its ability to enable firms to stand out, besides solving the urgent societal and environmental issues. That is why the innovation of the digital age could not be discussed except the wider context of sustainability and long-term competitiveness.

SMEs are centred on Asia-Pacific in particular. These are growth engines of the economy, creators and innovators of employment but are often resource and capability limited. The use of technology is to this end an opportunity and a challenge. It can be mentioned that the managerial readiness, infrastructure, and access to finance are among the success factors and drivers that are critical to the adoption of digital technologies among SMEs in Asia-Pacific (De Vera et al., 2018). Likewise, Nguyen and Ngo (2021) observe that digital finance within Southeast Asia is changing the entrepreneurial landscape of SMEs, including providing them with more access to capital and financial inclusion, and risk management tools. The emergence of the digital technologies, however, does not only demand the financial and technical abilities but also the strategic vision and the organisational flexibility. In this regard, SMEs can be a strategic background of the strategic entrepreneurship in practise.

The entrepreneurial strategy should also include the sustainability. Baporikar (2017) reiterates the importance of the knowledge integration strategies in aligning the entrepreneurship and sustainability objectives, saying that sustainable business activities are no longer a choice, but a requirement of long-term survival. Hsu and Pivec (2021) also add that the need to focus on sustainability awareness within the entrepreneurship education has gained a greater significance, thus providing the future entrepreneurs with the values and competencies that they must possess so as to be responsible in their operation. Kuncoro and Surani (2018) prove this connexion between sustainability and competitive advantage by showing that product innovation and market-driven strategies can enable firms in obtaining sustainable competitive advantage. A confusion of these perceptions means that sustainability pursuit is not a limiting element but rather a strategic pathway, which will help companies to gain resilience, promote legitimacy, and even increase the trustworthiness of stakeholders.

A special intersection exists with a special relevance to emerging economies in the areas of digital entrepreneurship, innovation, adoption of technology, and sustainability. Foo et al. (2020) highlight the fact that institutional environments, resource limitations and market pressures in emerging economies which are highly different affect entrepreneurship in emerging economies. These circumstances introduce the problems and the opportunities of digital and sustainable entrepreneurship. On the one hand, the resource constraints can turn into the barrier to the chances of SMEs to utilise digital technologies or to use sustainable practises. It is the boiling economic growth, however, and the growing consumer consciousness and state domination which offer some special opportunities of the innovative and technology based and sustainability oriented, entrepreneurship.

Although the related spheres, including the digital entrepreneurial ecosystems (Sussan and Acs, 2017), sustainable innovation in ecosystems (Oksanen and Hautamaki, 2015), and model of technology adoption (Shachak et al., 2019; Salimon et al., 2023) are already covered in the literature of the field, these research directions are still rather fragmented. The majority of studies available analyse the issues of innovation, adoption or sustainability separately and without much focus on illustrating their connexions. This article fills this gap by further developing the integrative approach that explicitly conceptualises this interaction of these dimensions as not parallel tracks but as pillars that support each other in strategic entrepreneurship. It is value-added especially in the sense that there is logic of sequencing that is created where in which innovation provides opportunity, operationalization in the form of technology application and institutionalisation of long-term advantage in the form of sustainability. This is based on which strategic entrepreneurship in digital age should be interpreted as a deliberate integration of innovation, technology adoption and sustainable business practises in order to bring a competitive edge. The available literature is overflowed with facts concerning each of these dimensions individually, but there is a void in terms of how the dimensions are integrated in a coherent system that would capture the interdependence between these dimensions. Digital technologies facilitate innovation; innovation facilitates business models to be sustainability-driven and sustainability facilitates business competitiveness over the long term. This integrative character is needed in the firms, particularly the SME in emerging economies that are likely to survive in the unpredictable and fluctuating business environment.

The objective of the proposed research is thus to add to the conceptual framework that will capture the innovation, technology and sustainable business practises adoption in strategic entrepreneurship. In order to guide this research, the following research question will be used:

What can small and medium sized businesses in the new emerging Asian economies do to align themselves to attain sustainable competitive advantage in the digital

age with digital innovation, embracing technology and sustainability practises? By taking into account the reflections made in the course of the literature review and adapting them to the environment of the digital era, the research will have the capacity to add to the academic knowledge and practise. Its bias to the new economies and, specifically, in the Asian region, means that it is bound to follow the immediate global and regional issues that are associated with digital transformation and sustainable development.

### Objectives of the Study:

1. To examine how innovation, technology adoption, and sustainable business practices interact within the framework of strategic entrepreneurship in the digital era
2. To propose an integrative conceptual framework that demonstrates how these dimensions collectively contribute to achieving sustainable competitive advantage, with particular relevance to SMEs in emerging Asian economies

### 2. Methodology

The work takes a conceptual and theoretically-informed approach, in which it explores the interaction of innovation, technology adoption and sustainability in strategic entrepreneurship in the digital age. It is focused on the building of the framework, which is founded on the existing theories and the recent scholarly discoveries rather than grounded on primary empirical evidence. It is a technique particularly appropriate to the advancement of theoretical clarity in an interdisciplinary and novel area of research.

#### 2.1 Conceptual Framework Development

Conceptual research helps to formalize ideas and theories to come up with models to explain complex phenomena. Farooq (2019) considers conceptual frameworks as a scaffold in terms of the construction of a theory since it enables researchers to show how different constructs can be related to each other and introduce refutable ideas. It is on this basis that the present study utilizes theory and previous experience in the fields of the entrepreneurship, innovation and sustainability literature to arrive at a framework that explains how digital entrepreneurship can be applied to attain sustainable competitive advantage. Unlike descriptive reviews, this research paper assumes a theory-building approach where the three components, innovation, adoption and sustainability are explained as dynamically interacting rather than being static. The framework is not merely a synthesis of existing perspectives but rather a generative model, specifying the mechanisms by which entrepreneurial advantage can be created, sustained and institutionalized. This theoretical orientation is such that the framework can be used as a starting point in coming up with empirically testable propositions in future studies.

The conceptual framework therefore incorporates three important aspects:

- a) Innovation as a driver of new business opportunities,
- b) technology adoption as a facilitator of digital transformation, and
- c) Sustainability as a foundation for long-term strategic advantage.

#### 2.2 Strategic Entrepreneurship as a Unifying Domain

The theoretical framework of the framework is strategic entrepreneurship. Ireland et al. (2023) assert that strategic entrepreneurship remains fragmented and requires the integration of the opportunity seeking and advantage seeking behaviours. This paper has put digital innovation, the adoption of technology, and sustainability practices as mutually-reinforcing components of strategic entrepreneurship. When these are combined, the framework moves towards a holistic approach of how companies, particularly the SMEs can be successful in the dynamic environments.

#### 2.3 Theoretical Anchors

The framework builds on three complementary theoretical perspectives:

- **Resource-Based View and Dynamic Capabilities:** The resource-based view (RBV) emphasizes the role of unique resources in achieving competitive advantage. Extending this, Civelek et al. (2023) demonstrate that dynamic capabilities enable SMEs to reconfigure resources and adapt to digital transformation. This perspective highlights how firms can align internal strengths with external digital opportunities.
- **Technology Adoption Models:** Adoption of digital technologies is examined through models such as TAM 3, UTAUT 2, and the Technology–Organization–Environment (TOE) framework. Salimon et al. (2023) show that these models are particularly relevant for SMEs, where adoption decisions are shaped by organizational readiness, technological benefits, and external pressures. These models inform the technology adoption dimension of the framework.
- **Sustainable Entrepreneurship Competencies:** To integrate sustainability, the framework draws on competence-based perspectives. Diepolder et al. (2021) identify systems thinking, normative orientation, and collaboration as critical competencies for embedding sustainability in entrepreneurship. These insights highlight the human and organizational capabilities required for sustainability-driven advantage.
- Building on these anchors, the study advances the following conceptual propositions:
- **Proposition 1:** Digital innovation expands the entrepreneurial opportunity set by lowering barriers to entry, enabling firms to explore novel products, services, and business models.
- **Proposition 2:** Technology adoption mediates the relationship between innovation and firm performance by providing the organizational and

infrastructural capacity to operationalize innovative opportunities.

- **Proposition 3:** Sustainability practices moderate the effect of innovation and adoption on competitive advantage by embedding resilience, legitimacy, and long-term value creation. These propositions translate the theoretical anchors into an integrated set of expectations that can guide empirical validation. Together, these perspectives create a multi-dimensional foundation for the proposed framework.

#### 2.4 Integration Process

The combination of the theories above included the congruence of the core findings of the theories in defining the relationships between innovation, digital adoption and sustainability. Innovation is developmental processes that involve new product, service and business model development. The facilitating infrastructure is opened to innovations by technology adoption, and this enables entrepreneurs to leverage effectively digital tools. The concept of sustainability presents the wider facet of ensuring that the entrepreneurial strategies create long term value to the firms and the society. The interplay of the three factors can result in a system, in which dynamic capabilities enable the production of innovative, technology adoption contributes to the digital transformation, and sustainability practises preserves competitive power over time in the research. This integrative style targets the loophole that was identified in the earlier studies of the entrepreneurship where such considerations have been explored separately.

#### 2.5 Rationale for Methodological Choice

This is an excellent step to take one conceptual approach, on two grounds. On the one hand, to promote the scholarly discussion, the further theoretical integration of strategic entrepreneurship should be done, as Ireland et al. (2023) observe. Second, the fast-changing characteristic of digital technologies and the need to be sustainable raise conceptual modelling as a beneficial starting point in regards to guiding ongoing empirical research. The theoretical rigor and practical applicability are ensured by the fact that the current research is founded on the already existing theories (RBV), technology adoption models and sustainability competence models (Civelek et al., 2023; Diepolder et al., 2021). Finally, through the conceptual approach the framework has the ability to interconnect the different levels of analysis, personal entrepreneur competencies, organizational adoption capabilities and institutional sustainability needs. It is a multilevel theorizing as a

response to the calls in the entrepreneurship research to integrative models that can be used to explain the interdependencies across domains. The paper is composed of a conceptual map and a systematic plan of additional empirical testing through contexts not just in proposing propositions, but also in expounding how.

#### 3. Results and Discussion

In this section, the synthesised findings of the conceptual analysis are provided and their implications to strategic entrepreneurship in the digital age are discussed. The discussion is divided into three dimensions: digital innovation and entrepreneurship, technology adoption and digital readiness and sustainable business practices and competitive advantage. These strands are subsequently created into a whole conceptual framework.

##### 3.1 Digital Innovation and Entrepreneurship

Digital innovation has become one of the major entrepreneurial competitiveness drivers in the twenty-first century. According to Kreiterling (2023), digital tools are not only providing new possibilities to create value, but also increasing competition, reducing the barriers to entry and making imitation faster. Social and cultural capital is also a decisive factor in Southeast Asia, as Pillai and Ahamat (2018) indicate, where the ecosystems of youth entrepreneurship can flourish when they are part of the community support networks.

This trend can be highlighted by the development of platform-based business models. Maspul and Ardhin (2025) believe that the platform economy in Malaysia requires network effects and trust because consumer loyalty and reputation are a strategic asset in Malaysia. Equally, Mele et al. (2024) highlight how knowledge-based dynamic capabilities can assist the firms to align the innovation strategies with the digital transformation initiatives.

The other frontier that is defining entrepreneurial opportunities is artificial intelligence (AI). Fossen et al. (2024) demonstrate that AI has an impact on the decision-making process of entrepreneurs, market analysis, and scalability, allowing companies to achieve predictive benefits and efficiency benefits. Collaboration, transparency, and trust are another benefit of blockchain to business model innovation (Pucheanu et al., 2020).

Table 1 gives a summary of the major drivers and barriers of digital innovation found in the reviewed articles. As the table shows, AI, blockchain, and digital platforms allow developing scalability and new opportunities, but the competitive intensity and trust-building are still challenges to be considered.

**Table 1. Drivers and Barriers of Digital Innovation in Entrepreneurship**

Drivers	Barriers	Sources
AI-driven efficiency and decision-making	Intensified market competition	Fossen et al. (2024); Kreiterling (2023)
Platform-based scalability and networks	Need for trust in digital ecosystems	Maspul & Ardhin (2025)

Blockchain-enabled collaborative models	High technological and resource demands	Pucheanu et al. (2020)
Dynamic capabilities for innovation	Rapid imitation of innovations	Mele et al. (2024)

The entrepreneurial environment is characterized by a two-sidedness, i.e. by technological enablers and structural barriers (see Table 1). This pressure has necessitated the need of entrepreneurs to build the ability to adapt in order to achieve a balance between innovation and resilience. One of the key observations that come out of these findings is the fact that digital innovation democratizes and destabilizes entrepreneurship. Although AI and blockchain minimize barriers to entry, they also shorten the cycle of imitation and competitive advantage is becoming shorter by the day. This paradox highlights the fact that digital innovation is not necessarily good, the value of the innovation lies in the ability of the firm to incorporate innovation in the dynamic capabilities to counteract erosion. Therefore, innovation should be theorized not as an opportunity-expanding mechanism only but also as a source of fragility unless it is accompanied by some complementary strategic assets.

### 3.2 Technology Adoption and Digital Readiness

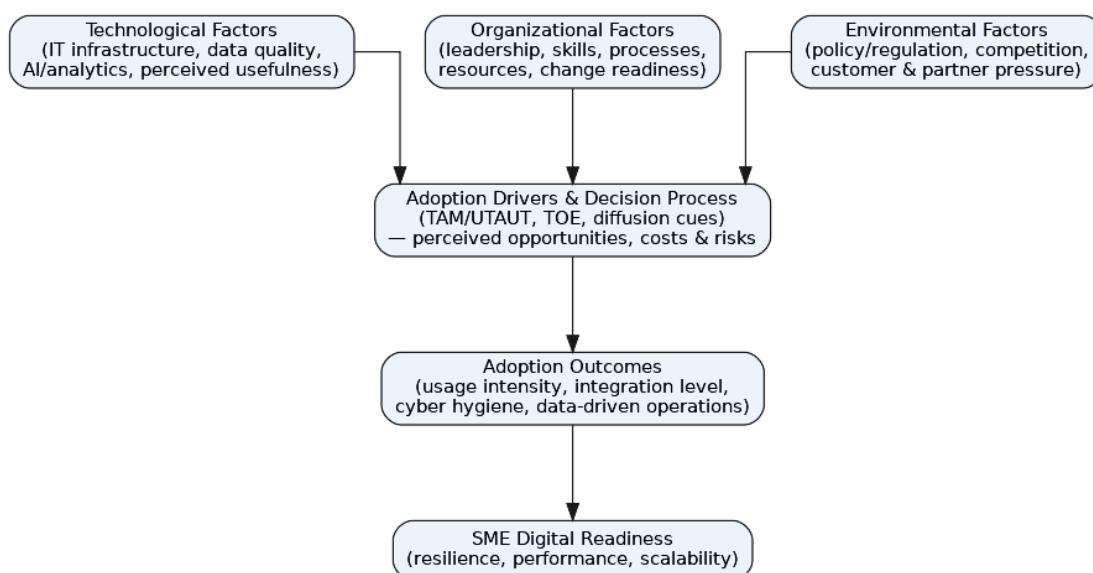
Digital technologies adoption is both a facilitator and a constraint to the SMEs in emerging economies. Shahadat et al. (2023) point out that the behavior of adoption is influenced by all three factors: technological, environmental, and organizational. These results build upon previous conceptualisations like TAM and

UTAUT, but also demonstrate the necessity of contextual adaptations (Shachak et al., 2019).

In spite of the opportunities, SMEs usually struggle to embrace e-commerce and digital solutions. According to Nazir and Roomi (2021), infrastructural shortages, scarcity of resources, and distrust are the major barriers in emerging markets. The intersection of gender, technology, and entrepreneurship is demonstrated in the case of women entrepreneurs in Malaysia and Indonesia where Ong et al. (2020) reveal that women adopting ICT can improve their performance.

There are also some regional differences in digital readiness. According to Rafiah et al. (2022), the readiness of Indonesian SMEs is very heterogeneous, which indicates the need to focus on specific capacity-building programs. In a similar manner, Burgess et al. (2017) use an innovation diffusion lens to illustrate the impacts of peer effects and perceived benefits on social media adoption by small firms.

The conceptual model of digital readiness among the SMEs as presented in Figure 1 incorporates the technological, organizational, and environmental aspects. The figure shows that external pressures, internal capabilities and perceived opportunities all have a concurrent effect on adoption outcomes.



**Figure 1. Conceptual Model of SME Digital Readiness**

Having synthesized this, it is now evident that although the SMEs are becoming aware of the advantages of

digital tools, structural barriers are restricting their ability to maximize their potential. According to Rupeika-Apoga et al. (2022), the support of the public policy is important to overcome these limitations and

allow fair access to digital ecosystems. Notably, adoption is not a straight line process. Research is divided on whether it is the organizational preparedness or outside institutional pressure that has more impact. As an example, although Shahadat et al. (2023) highlight the importance of environmental and organizational conditions, Nazir and Roomi (2021) indicate that the intent of managers can be disregarded by structural

deficits. This indicates that technological adoption among SMEs depends on institutional infrastructures that are unique to a particular region and therefore requires comparative studies across regions. The framework, by making adoption both a facilitator and a limiting factor, leaves behind deterministic approaches such as TAM, and instead highlights conditional paths of digital readiness.

### 3.3 Sustainable Business Practices and Competitive Advantage

Sustainability has become more of a core aspect than peripheral issue of entrepreneurship in Asia. According to Lathabhavan (2022), some of the most common barriers to implementing sustainable practices are financial barriers, regulatory

loopholes, and lower levels of awareness. However, it has been shown that sustainability has the potential to improve performance of firms. As demonstrated by Rustiarini et al. (2022), green innovation enhances the competitiveness of SMEs, whereas the authors of the studies by Marques and Dhiman (2020) suggest that

corporate social responsibility (CSR) builds the image of legitimacy and trust of stakeholders.

The triple bottom line model also highlights the fact that economic development, social justice, and environmental care are interconnected (Gu et al., 2021). Mehrotra and Jaladi (2022) note that start-ups in emerging economies adopt circular business models in order to minimize their wastage and create new sources of value. Dhahri et al. (2021) define behavioral entrepreneurship as the connection between personal values and intentions and the realization of sustainable development goal (SDGs).

Sustainable entrepreneurship is also affected by institutional factors. Fichter and Tiemann (2018) show that universities can support the development of entrepreneurial skills, and Wei et al. (2023) show that environmental entrepreneurship can have a positive impact on green development in the Asian economies. Table 2 gives an overview of sustainable practices, their advantages, and the challenges related to it. The table points to the various means in which sustainability can be used to provide competitive advantage, but it also recognizes the structural and institutional impediments.

**Table 2. Sustainable Entrepreneurship Practices and Their Impacts**

Practices	Benefits	Challenges	Sources
Green innovation	Enhanced SME performance	High initial costs	Rustiarini et al. (2022)
Circular business models	Waste reduction, new value streams	Institutional resistance	Mehrotra & Jaladi (2022)
Corporate social responsibility	Legitimacy, stakeholder trust	Lack of long-term orientation	Marques & Dhiman (2020)
Environmental entrepreneurship	Green development in emerging economies	Regulatory inconsistencies	Wei et al. (2023)

Table 2 suggests that sustainability oriented entrepreneurship is an opportunity and a challenge. The companies that are capable of aligning such practices to strategic entrepreneurship will be in a better position to achieve long term competitive advantage. However, a normative contradiction, like this, can also be seen in sustainability: as circular models and CSR become more legitimate, they tend to demand resource outlays that are challenging to maintain by SMEs in the short-term. Critics fear greenwashing in which the concept of sustainability is adopted as a slogan rather than a practise in reality, and this undermines the strategic importance of sustainability. The proposed model would eliminate these criticisms because sustainability would be viewed as an entrepreneurial competency, as opposed to an extrinsic compliance cost, to help sustainability become a tool of resiliency to help competitive advantage be made sustainable.

### 3.4 Integrating Innovation, Adoption, and Sustainability

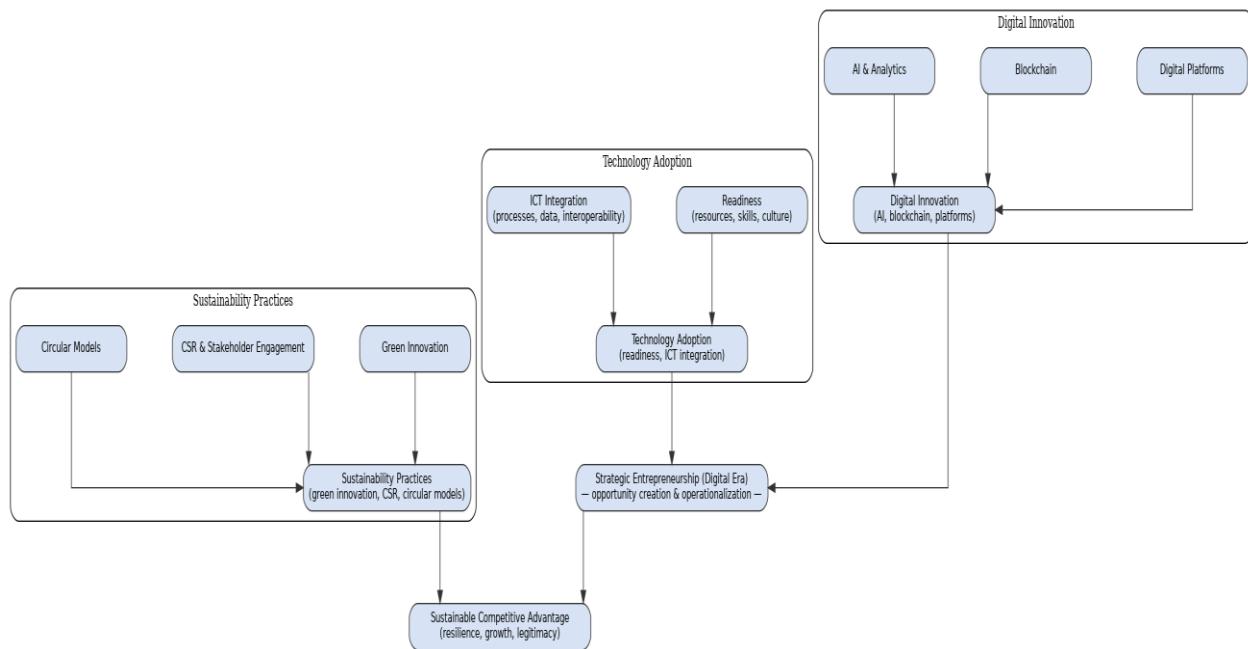
The combination of the three strands results in an integrative strategy of entrepreneurship in the digital age. Westgren and Wuebker (2019) mention that the

economic models of strategic entrepreneurship have to reflect the trade off between opportunity-seeking and advantage-seeking. This paper expands their understanding by proving that digital innovation, technology adoption and sustainability are interdependent, but not independent pillars.

Kafoe (2024) also argues in favor of a holistic approach and argues that competitive advantage has to be aligned on various strategic levels. Equally, Sussan and Acs (2017) suggest the concept of a digital entrepreneurial ecosystem, which focuses on how firms, institutions, and technologies interact. The logic behind the sequencing of the proposed framework is a novelty. Most integrative models in the past tend to regard innovation, adoption, and sustainability as co-existing aspects of entrepreneurship. In comparison, this framework hypothesizes their relationship with each other in chronological sequence: innovation creates the opportunity set, adoption facilitates operationalization on a large scale, and sustainability institutionalizes the benefit over time. The sequencing provides strategic entrepreneurship theory with a step further to elucidating what factors are important, but when and how they combine to generate sustainable value.

The proposed conceptual framework is shown in figure 2. The figure indicates that the digital innovation (AI, blockchain, platforms) drives the entrepreneurship, adoption of technology (readiness, ICT integration)

facilitates operationalization, and sustainability practices (green innovation, CSR, circular models) are what will guarantee the competitive advantage in the long term.



**Figure 2. Conceptual Framework of Strategic Entrepreneurship in the Digital Era**

This constitutive model emphasises the idea that competitive advantage is not created by discrete strategies but as a result of the synergistic interaction of innovation, adoption, and sustainability. Entrepreneurial competencies, institutional support, and public policy are mediating factors, which make sure that SMEs and start-ups in Asia are able to utilise these forces optimally.

### 3.5 Implications for Research and Practice

The implications of the integrative framework are a number of them. It gives a systematic outline that can be empirically tested by the empirical researchers on various Asian settings in the theory-construction of strategic entrepreneurship. The framework introduces the necessity to strike a balance between digital innovation and organisational preparedness and sustainability commitments specifically to the practitioners specifically the SMEs.

Policy implications are also important to be taken. According to Rupeika-Apoga et al. (2022) and Caloffi et al. (2015), the role of the policy of public support and regional innovation in enhancing the SME cooperation and transformation is considerable. Moreover, the beneficiation can be broadened to the application of inclusive business strategies (Likoko and Kini, 2017) and entrepreneurship education as a component of the public-private partnership (Abdimomynova et al., 2021) that

will introduce entrepreneurship to the setting of the overall development.

There is a suggestion in this debate that strategic entrepreneurship in the digital age cannot be narrowed down to either innovation or sustainability. Rather, it needs a combined strategy where innovation introduces the potential, technology adoption realises it and sustainability makes it sustainable. The synergy provides the SMEs and start ups in Asia with a path of attaining competitive advantage in addition to facilitating an inclusive and sustainable development.

Theoretically, the framework gives empirically testable propositions to be applied in subsequent empirical investigations. For example:

- Firms that sequence innovation → adoption → sustainability will outperform those that pursue these dimensions in parallel.
- Technology adoption will mediate the relationship between innovation and firm competitiveness.
- Sustainability practices will moderate the adoption–performance link by strengthening resilience and legitimacy.

These propositions shift the paradigm of a descriptive synthesis to a generational model of the further development of strategic entrepreneurship studies. The implication to practitioners and policymakers is straightforward: innovation, adoption, and sustainability as processes should not be viewed as independent initiatives, but rather as the stages in the process, which are mutually supportive and interdependent.

### 4. Conclusion

The paper also assists in offering a coherent perspective on strategic entrepreneurship in the digital epoch by the

three complementary pillars that are digital innovation, technology adoption as well as sustainability practises into one conceptual framework. The point is that their integration does not manifest itself in the form of the independent pillars which give the competitive advantage to SMEs and start-ups but in the form of coordination: innovation multiplies the opportunities provided, technology adoption enhances and speeds up the opportunities and sustainability practises instil the resilience, legitimacy and value creation over the time. It is novel in the sense that it creates a sequencing point of view, where innovation creates opportunities, application of technology creates opportunities and sustainability institutionalises sustainable advantage, a better way to go than earlier models, which divided these areas. Combined, these elements offer a logical route through which companies are able to operate in volatile markets and adapt to change in the dynamic Asian economies. Theoretically, the framework assists in the clear view of an inconsistent literature by identifying the way in which the entrepreneurial initiatives are mediated through capabilities, preparedness, and governance mechanisms between ideation and performance at the long-term performance. Hopefully, it will provide decision makers with a sequencing logic: develop dynamic capabilities in digital innovation, invest in organisational and ecosystem preparedness in ICT integration and institutionalise the green innovation, circularity and responsibility to earn competitive advantage over time. Policy actors can improve these trajectories through offering certain support to SMEs to go digital ready, collaborative infrastructures, and incentives which would align the returns of the private with the societal goals. The study conceptual design is limited, the study fails to test causal pathways. Further research should determine the measures of the constructs and determine the framework by sector and government using longitudinal and mixed-methods research design in order to determine the ability development and the sustainability of benefit. The model will also be further reduced by considering the boundary conditions as the institutional quality, access to finance and the ecosystem maturity. This piece of work lays the principles of evidence-based solutions that would integrate the digital scale with sustainable impact by providing a systematic basis to be used to base such inquiry.

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