

Conceptually investigate the relationship between Entrepreneurial Bricolage, Ecological Innovation, and Entrepreneurial Mindset on Digital Entrepreneurial Intentions among SMEs in Saudi Arabia

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Abstract: Recognizing Saudi Arabia's SMEs, this study examines how entrepreneurial bricolage, ecological innovation, and entrepreneurial mindset influence digital entrepreneurial intentions. The research investigates how those constructs contribute to fostering entrepreneurial self-efficacy and, in turn, drive digital entrepreneurship. The study famously found that entrepreneurial bricolage permits aid-restricted people to creatively leverage available equipment and materials, ecological innovation promotes sustainability-oriented ventures, and an entrepreneurial mindset fosters resilience a. Entrepreneurial self-efficacy emerges as a critical mediator, amplifying the impact of these factors on digital entrepreneurial intentions. This paper emphasized the importance of policy interventions and effective resource allocation in fostering entrepreneurial self-efficacy and guiding digital innovation. This paper highly recommends navigating the knowledge gaps on the mediating role of self-efficacy and establishing the groundwork for future research into various industries, geographical locations, and other factors impacting digital entrepreneurship. Recommendations also consist of investigating longitudinal trends and qualitative insights to deepen comprehension of the way entrepreneurial constructs evolve.

Keywords: *Entrepreneurial Bricolage; Ecological Innovation; Entrepreneurial Mindset; Entrepreneurial Self-Efficacy; Digital Entrepreneurial Intentions; Saudi Arabia; SMEs; Sustainability*

INTRODUCTION

The SMEs play a pivotal role in the economy of Saudi Arabia, imparting employment to a massive part of the population and contributing to the country's food security. However, the sector faces numerous challenges, including improved productivity, sustainability, and the mixing of digital technologies. The traditional SMEs strategies are increasingly being challenged by worldwide traits, including climate change, environmental degradation, and the rapid growth of digital technology (Bowen & Morris,

2024). In reaction to these challenges, entrepreneurial efforts in the Saudi SMEs region have taken on a brand-new size, in which innovation, resourcefulness, and sustainability are at the leading edge of entrepreneurs' efforts. The upward thrust of digital entrepreneurship has emerged as a critical element in reworking the sector, permitting entrepreneurs to overcome traditional challenges and capitalize on new opportunities in a globalized digital financial system (Mir, Hassan, & Khan, 2023). Hence, this paper aims to explore the effect of entrepreneurial bricolage, ecological innovation, and entrepreneurial mindset on digital entrepreneurial intentions, focusing on the mediating role of entrepreneurial self-efficacy in Saudi Arabia's SME context (Rahman, Ismail, et al., 2025).

Entrepreneurial bricolage is an idea that emphasizes the capacity of marketers to utilize available assets in novel approaches to resolve issues and create new possibilities. The term "bricolage" originated from the French word for "tinkering," which refers to creating solutions from reputedly insufficient or imperfect resources. This technique contrasts with traditional entrepreneurship, which frequently requires entry to considerable economic capital and outside resources. In the context of Saudi Arabia's SMEs, entrepreneurial bricolage is increasingly more applicable ((Hashim, et al., 2024). Farmers and entrepreneurs often face restricted capital, land, and generation entry. As a result, they depend on creativity, resourcefulness, and ingenuity to overcome those barriers. Entrepreneurs utilize bricolage to innovate and address the growing demand for sustainable SME practices by repurposing existing chemicals and adapting technologies to the situation, according to Lemaire et al. (2021). Furthermore, prior research (Sivathanu & Pillai, 2020) has demonstrated that entrepreneurial bricolage allows entities to react effectively towards altering circumstances, which is vital in businesses such as SMEs that are sensitive to changes in socio-politics, rules-and-regulations, and other market conditions In Saudi Arabia, this potential for innovative editions is essential for small-scale farmers and entrepreneurs who searching to create sustainable answers despite restricted resources (Rahman, Hossain, et al., 2025).

Ecological innovation, however, refers to innovations that deal with environmental challenges while reducing business costs. This form of innovation is particularly applicable in sectors like SMEs, wherein sustainability has emerged as a critical issue (Yuan, 2022). Saudi Arabia's SME quarter has seen a developing awareness of the need for environmentally friendly practices, because the results of climate change, soil degradation, and water shortage have become increasingly evident. Ecological innovation in SMEs involves developing and applying green technology, precision farming, organic farming, renewable energy solutions, and water-efficient irrigation systems (Scazziota et al., 2023). Entrepreneurs who embody ecological innovation in the SME sector would reduce environmental damage and gain a competitive advantage by reacting to the growing customer demand for sustainable products and activities. In addition, previous studies (Borsano, 2022; Scazziota et al., 2023) have highlighted the importance of ecological innovation in creating new market possibilities and enhancing the environmental footprint of SMEs (Borsano, 2022). In Saudi Arabia, where SMEs remain an essential industry, adopting ecological innovation can power long-term growth and ensure that SME practices remain sustainable for future generations.

In addition to those two critical elements, entrepreneurial bricolage and ecological innovation, an entrepreneurial mindset plays a crucial role in shaping the intentions and behaviors of entrepreneurs. Entrepreneurial mindset refers to the mindsets, cognitive frameworks, and decision-making procedures that guide entrepreneurs in identifying and seizing opportunities. The characteristics of an entrepreneurial mindset encompass risk-taking, proactivity, resilience, and opportunity (Tehseen et

al., 2024). In the context of Saudi Arabia's SMEs, an entrepreneurial mindset enables marketers to become aware of rising trends, adapt to challenges, and proactively explore new avenues for growth. The SMEs in Saudi Arabia are currently in digital transformation, with an increasing number of entrepreneurs looking to combine digital technologies into their industry models. Entrepreneurs with a strong entrepreneurial mindset are more likely to interact with digital tools, adopt new technology, and innovate in ways that could improve the productivity and sustainability of their corporations. With the traditional SMEs' knowledge of current digital tools, entrepreneurs can expand new industry fashions that address each of the monetary and environmental needs of the world (Hossen & Pauzi, 2025).

Entrepreneurial self-efficacy refers to a person's perception of their ability to successfully carry out entrepreneurial responsibilities, which include identifying possibilities, managing risks, and executing industry plans (Sawangchai et al., 2025). Self-efficacy has been proven to increase the likelihood of entrepreneurial intentions and behaviors, as individuals with high self-efficacy are much more likely to initiate new ventures, persist in the face of challenges, and discover modern solutions (Urban & Kanguwe, 2024). In the context of SMEs, entrepreneurial self-efficacy can play a crucial role in determining whether entrepreneurs can effectively engage with digital entrepreneurship. When entrepreneurs have a strong feeling of self-efficacy, they are much more likely to embody the challenges of integrating digital technologies into their SME practices and to test new industry fashions that could enhance their competitiveness inside the marketplace (Aly, 2021).

The digital transformation of Saudi Arabia's SME quarter has created new opportunities and challenges for entrepreneurs. Digital technology, such as precision SMEs, data analytics, and online structures, provides a powerful ability for improving SMEs' performance, sustainability, and market reach. However, adopting and implementing this technology requires entrepreneurial self-efficacy and capability (Owaisa et al., 2022). Initially, entrepreneurs with high levels of entrepreneurial self-efficacy would substantially absorb necessary risks connected with implementing digital innovations, which include significant funding, learning new skills, and changing current habits. Thus, entrepreneurial self-efficacy is thought to be able to mediate the effect of entrepreneurial bricolage, ecological innovation, and entrepreneurial mindset on digital entrepreneurial intent. Marketers are better equipped to leverage their resourcefulness, modern questioning, and proactive attitude in pursuing digital transformation in SMEs (Kurniawan & Selamat, 2023).

The role of entrepreneurial self-efficacy in digital entrepreneurship is mainly widespread in Saudi Arabia, where the digital divide between rural and urban areas is still a problem. While urban regions in Saudi Arabia have shown a rapid adoption of digital technology, rural SME communities frequently lack access to the essential infrastructure, training, and resources to fully participate in the digital financial system (Pigola et al., 2024). However, entrepreneurs with a sturdy experience of self-efficacy are much more likely to overcome those boundaries and discover revolutionary answers that allow them to engage with digital technologies in a way that benefits their companies. Entrepreneurs are empowered to take advantage of digital structures, e-trade opportunities, and digital advertising and marketing tools that help them attain broader markets and improve the performance of their operations (Sunguh & Yi, 2024).

The next sections address scholarly contentions on ecological innovation, the entrepreneurial mindset, and the mediating role of entrepreneurial self-efficacy. Knowledge of these topics is

especially useful in understanding how Saudi sustainable SMEs marketers can use digital entrepreneurship to address current issues and capitalize on emerging opportunities.

LITERATURE REVIEW

Entrepreneurial Bricolage

Entrepreneurial bricolage generally signifies how entrepreneurs creatively employ limited resources to expand new products, offerings, or solutions. Several studies have examined the function of bricolage in SMEs, mainly in growing economies. For example, in resource-scarce settings, farmers have been proven to leverage existing materials and low-cost technologies to improve productivity and sustainability (Iddris, 2024).

In Saudi Arabia, marketers carrying out SMEs' bricolage frequently depend upon their expertise in local environments and traditional practices to innovate and adapt to rising challenges, including climate change, fluctuating market prices, and regulatory shifts (Anser et al., 2024). These entrepreneurs can integrate modern and traditional strategies, growing hybrid solutions that maximize efficiency and sustainability. Bricolage additionally aligns with the increasing need for digital transformation in SMEs. As digital tools become more integrated into SMEs' practices, marketers should find ways to adapt them to their specific local contexts. Research using Rutihinda, (2020), indicates that bricolage allows the adoption of digital tools by encouraging entrepreneurs to combine new technology into their current business fashions in revolutionary methods (Hossen & Salleh, 2024).

Ecological Innovation

Ecological innovation, or eco-innovation, refers to improving the latest products, tactics, or practices with a pleasing environmental effect. In Saudi Arabia's SME region, ecological innovation is increasingly vital due to the growing worries over environmental degradation, climate change, and resource scarcity. As the global call for sustainable SME merchandise rises, Saudi marketers are adopting eco-friendly practices that effectively identify productivity and contribute to environmental conservation (Yan, Huang, & Xiao, 2023).

Eco-innovation has been diagnosed as a key driving force for SMEs' competitiveness and long-term sustainability. Specifically, precision SMEs enabled through digital technology such as sensors, drones, and data analytics have emerged as an outstanding form of ecological innovation (Ghouse et al., 2024). These improvements permit farmers to optimize water, fertilizer, and pesticides, reducing waste and minimizing environmental damage. In Saudi Arabia, where SMEs are based heavily on water assets, adopting water-efficient irrigation structures and soil moisture sensors is an instance of ecological innovation that aligns with sustainable SME practices (Saleh & Athari, 2023).

Nielsen (2015) highlighted the importance of ecological innovation in meeting customer demand for green products. In Saudi Arabia, buyers are becoming more environmentally concerned, and there is an expanding choice of natural and sustainably grown food goods. Entrepreneurs in the SMEs region who include ecological innovation can cater to this demand, gaining an aggressive edge in domestic and international markets. According to Sun (2023), eco-innovation supports environmental dreams and generates new market prospects by recruiting environmentally conscious customers and organizations.

Entrepreneurial Mindset

The entrepreneurial mindset is another essential component influencing entrepreneurial intentions and behaviors. According to Alford & Jones (2024), an entrepreneurial mindset entails apprehending and acting on opportunities, taking risks, and persisting in facing challenges. Entrepreneurs with a sturdy entrepreneurial mindset tend to be proactive, modern, and resilient, which can be crucial for achievement in the digital age. In SMEs, an entrepreneurial mindset lets individuals navigate complex challenges, which include technological exchange, market opposition, and environmental risks.

In SMEs, marketers with a strong mindset are likelier to embrace digital transformation and undertake new technologies to enhance their productivity and competitiveness (Raza et al., 2024). SME entrepreneurs with a robust entrepreneurial mindset in Saudi Arabia is better positioned to integrate sustainable practices with digital technology, thereby creating new solutions for current SME challenges (Yu et al., 2021).

Entrepreneurial Self-Efficacy

Entrepreneurial self-efficacy, the belief in one's capacity to carry out entrepreneurial duties correctly, mediates in shaping entrepreneurial intentions and behaviors. Bandura (1997) described self-efficacy as the notion of an individual's capacity to execute moves required to attain unique dreams. In entrepreneurship, self-efficacy affects key behaviors, including possibility recognition, functional resource mobilization, and risk management (Chen, Greene, and Crick, 1998). Entrepreneurs with excessive self-efficacy are likelier to initiate ventures, triumph over barriers, and pursue innovative solutions (Fernandes et al., 2022).

Research has continuously proven that self-efficacy positively correlates with entrepreneurial intentions and behaviors (Yu et al., 2021). In digital entrepreneurship, entrepreneurial self-efficacy enhances entrepreneurs' confidence in adopting and using digital technology. For Saudi SME entrepreneurs, who also face challenges in adopting complex digital equipment and practices, high self-efficacy can empower them to conquer these challenges and discover new avenues for growth. Studies by McGee et al. (2009) advocate that entrepreneur with excessive self-efficacy are much more likely to include digital entrepreneurship and experiment with new technologies, even in resource-limited environments (Yan, Huang, & Xiao, 2023). In Saudi Arabia, where there is a digital divide between rural and urban areas, entrepreneurial self-efficacy can serve as a key enabler of digital adoption in SMEs. Entrepreneurs who consider their capability to master new digital tools are more likely to put money into generation, acquire new abilities, and integrate digital solutions into their business models.

METHODOLOGY

This study adopts a systematic literature analysis method to explore the relationships among entrepreneurial bricolage, ecological innovation, entrepreneurial mindset, digital entrepreneurial intentions, and the mediating position of entrepreneurial self-efficacy, mainly inside the SME region in Saudi Arabia. The systematic search and critical analysis of prior research, drawing on an extensive variety of scholarly resources, which includes academic articles, books, industry reports, and conference papers. This study employed a survey-based analysis to investigate the relationships

among entrepreneurial bricolage, ecological innovation, entrepreneurial mindset, entrepreneurial self-efficacy, and digital entrepreneurial intention. A structured questionnaire was developed, incorporating validated measurement scales adapted from prior studies to ensure reliability and validity.

The survey was distributed to a stratified sample of aspiring and active digital entrepreneurs across various sectors to capture diverse perspectives. Data were collected electronically, ensuring broad geographical coverage while maintaining the confidentiality and anonymity of respondents. Advanced statistical techniques, including Structural Equation Modeling (SEM), were applied to test hypotheses, validate the measurement model, and assess the structural relationships between constructs. This methodology facilitated the exploration of direct, indirect, and mediating effects within the proposed framework, offering robust insights into the interplay of entrepreneurial factors influencing digital entrepreneurial intentions.

The data was processed through distinguished academic databases, including Web of Science, Scopus, Google Scholar, and ScienceDirect. These search terms have been decided on to ensure an extensive knowledge of the core constructs and their application to entrepreneurship inside the digital and SME contexts. The search standards were restricted to guides from 2020 to 2024 to ensure the relevance and timeliness of the studies reviewed. This time frame was selected to capture the latest theoretical advancements and empirical findings on digital entrepreneurship, particularly considering the rapid evolution of digital technology and entrepreneurship in developing economies.

Only peer-reviewed academic resources, along with magazine articles, books, and official industry reports, have been covered to maintain the educational rigour and credibility of the study. The exclusion criteria have been applied to research from non-applicable fields, including healthcare or non-business era, as well as grey literature and non-peer-reviewed publications. The scope of the analysis was narrowed to the SMEs in Saudi Arabia, and cross-local perspectives were considered to contain worldwide expertise on the phenomena being studied, ensuring that findings from different nations and regions can be generalized to the Saudi context. The objective of this technique is to provide a complete synthesis of the existing literature, from which a conceptual framework and hypotheses are developed to explore the mediating position of entrepreneurial self-efficacy within the relationship among entrepreneurial bricolage, ecological innovation, entrepreneurial mindset, and digital entrepreneurial intentions. The effects of this literature-based analysis will inform future empirical studies in the Saudi SMEs area and contribute to the broader subject of digital entrepreneurship.

Conceptual framework

Drawing from the scholarly discussion above, this paper aims to offer a deeper understanding of the factors driving digital entrepreneurial intentions in Saudi Arabia's SMEs. The ecological innovation and entrepreneurial mindset, and by thinking about the mediating effect of entrepreneurial self-efficacy, this paper offers insights into how Saudi SME marketers can leverage digital entrepreneurship to deal with contemporary challenges and capitalize on rising opportunities. Furthermore, as shown in Figure 1, this paper attempts to contribute to a broader literature understanding of entrepreneurship, innovation, and digital transformation in emerging economies, with a particular emphasis on SMEs.

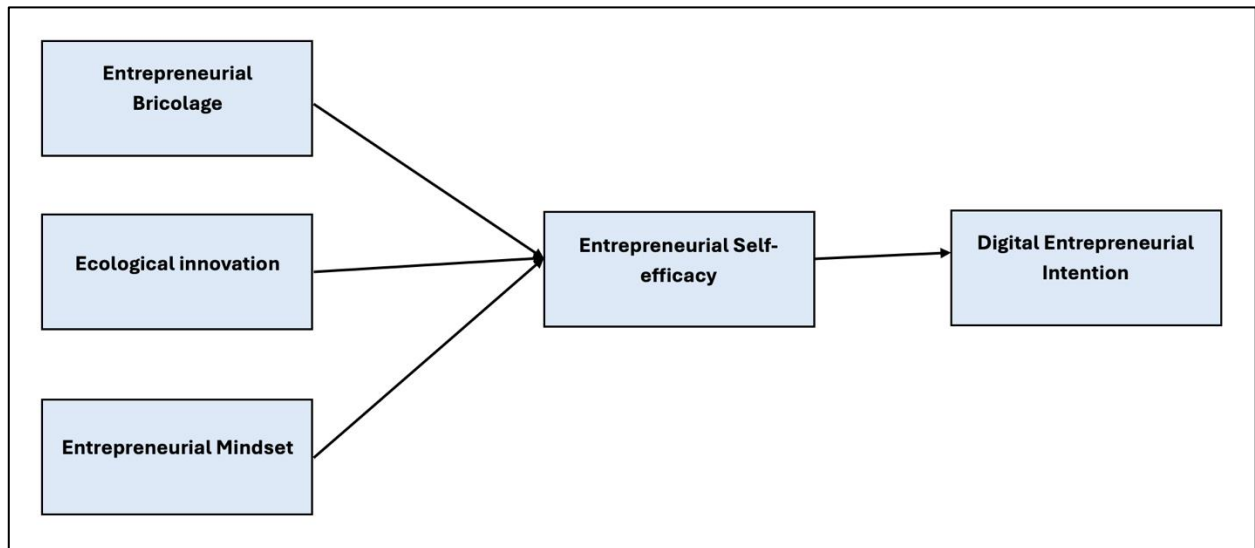


Figure 1: *The conceptual framework of the study*

Entrepreneurial Bricolage and Digital Entrepreneurial Intentions

Entrepreneurial bricolage refers to the technique by which entrepreneurs employ present resources in creative and unconventional ways to address challenges and seize possibilities, in environments with restricted resources (Khalid et al., 2023). According to Alford & Jones, (2024), bricolage entails "making do with what's handy," allowing marketers to innovate without needing vast external resources. In the world of digital entrepreneurship, bricolage performs a pivotal function in supporting entrepreneurs to undertake digital tools and technologies to triumph over constraints and enhance their ventures (Rutihinda, 2020).

Studies have proven that entrepreneurial bricolage fosters digital entrepreneurial intentions by promoting adaptive thinking and imaginative choice-making, which is crucial for digital entrepreneurship. Olan et al. (2024) highlighted that entrepreneurs engaged in bricolage often reveal a high degree of creativity in utilizing digital tools, encouraging their pursuit of digital commercial industry possibilities. This imaginative technique is especially obtrusive in sectors like SMEs, where technological adoption is high-priced, and entrepreneurs need to depend on low-value, efficient digital solutions to pressure business innovation. Thus, the first hypothesis that emerges from the literature is:

Hypothesis 1: Entrepreneurial bricolage positively influences digital entrepreneurial intentions.

Ecological Innovation and Digital Entrepreneurial Intentions

Ecological innovation, or eco-innovation, is developing new products, services, or techniques that contribute to environmental sustainability by lowering negative environmental impacts. In the context of digital entrepreneurship, ecological innovation frequently entails mixing digital equipment that improves the sustainability of commercial industry practices. Ghouse et al. (2024) suggest that eco-progressive practices now address environmental issues and present opportunities for entrepreneurship, specifically through the adoption of digital technology like precision farming tools, which are increasingly common in SMEs.

The hyperlink between ecological innovation and digital entrepreneurial intentions has been examined in numerous studies. According to Ripollés & Blesa (2024), adopting eco-friendly technologies, supported by digital solutions, encourages entrepreneurs to pursue new commercial industry opportunities that integrate environmental sustainability and technological innovation. In Saudi Arabia, SME marketers additionally use digital tools to reduce resource intake, optimize crop yields, and enforce eco-friendly farming practices. The growing demand for sustainable solutions makes ecological innovation a key driving force of digital entrepreneurial intentions. From the literature, we derive the following hypothesis:

Hypothesis 2: Ecological innovation positively influences digital entrepreneurial intentions.

Entrepreneurial Mindset and Digital Entrepreneurial Intentions

The entrepreneurial mindset, which encompasses risk-taking, opportunity recognition, and innovation, is a crucial determinant of entrepreneurial aim. Qi et al. (2023) argued that an entrepreneurial mindset fosters perseverance, creativity, and a willingness to embrace challenges, all of which are crucial for identifying and pursuing entrepreneurial possibilities. In digital entrepreneurship, people with a sturdy entrepreneurial mindset are much more likely to explore new digital tools, technology, and business models, which increases their probability of undertaking digital ventures.

Liñán and Chen (2009) also emphasize that individuals with an entrepreneurial mindset are more inclined to take initiative, persist through adversity, and exploit digital opportunities. In Saudi Arabia's SMEs, for example, entrepreneurs with a strong mindset more comfortably include digital innovations like online marketplaces or farm control structures, spotting the capacity of these tools to increase efficiency and productivity. From the literature, we derive the following hypothesis:

Hypothesis 3: Entrepreneurial mindset positively influences digital entrepreneurial intentions.

Entrepreneurial Bricolage and Entrepreneurial Self-Efficacy

Entrepreneurial self-efficacy refers to an entrepreneur's capacity to perform entrepreneurial duties and face challenges effectively. (Ahsan et al., 2024), Highlighted the critical position of self-efficacy in influencing entrepreneurial behavior, as people with high self-efficacy are more likely to take on entrepreneurial challenges and persist in the face of adversity. Entrepreneurial bricolage can boost entrepreneurial self-efficacy by encouraging ingenious trouble-fixing and progressive wondering, even when assets are limited. Entrepreneurs who engage in bricolage learn how to leverage present resources creatively, which boosts their self-belief in their potential to achieve entrepreneurial endeavours (Yadav et al., 2023).

Do Vale et al. (2021) argued that bricolage complements self-efficacy by fostering a sense of competence by using constrained sources to remedy issues and incur costs. This self-confidence is essential in entrepreneurial environments where marketers must regularly rely on their capabilities and ingenuity. Through bricolage, marketers in sectors like SMEs can construct their perception of their ability to innovate and grow their organizations. The derived hypothesis from the literature is:

Hypothesis 4: Entrepreneurial bricolage positively influences entrepreneurial self-efficacy.

Ecological Innovation and Entrepreneurial Self-Efficacy

Ecological innovation, as a technique of adopting sustainable practices, can also have a fantastic impact on entrepreneurial self-efficacy. When entrepreneurs interact in eco-innovation, they frequently increase an experience of feat and competence, especially when these innovations result in environmental benefits and business fulfillment. According to Shoukat et al. (2024), entrepreneurs who enforce eco-friendly technologies often feel extra assured in their skills to create value through sustainable practices, which enhances their entrepreneurial self-efficacy.

In the case of Saudi Arabia's SME region, entrepreneurs who adopt eco-revolutionary practices like precision farming or sustainable irrigation techniques additionally experience improved self-efficacy as they see the high-quality impact of this technology (Chowdhury, 2024). The process of enforcing such innovations not only builds entrepreneurial confidence but also encourages further experimentation with digital solutions to enhance sustainability. From this perspective, the hypothesis we derive is:

Hypothesis 5: Ecological innovation positively influences entrepreneurial self-efficacy.

Entrepreneurial Mindset and Entrepreneurial Self-Efficacy

An entrepreneurial mindset has a robust relationship with entrepreneurial self-efficacy. Entrepreneurs who showed off tendencies such as optimism, resilience, and a focus on opportunities are much more likely to accept as true their capability to triumph over challenges and innovate. Aloulou et al. (2024) highlighted that a growth-oriented mindset is closely connected to higher tiers of self-efficacy, as individuals with this mindset are much more likely to embody challenges, test with new thoughts, and persist in the face of failure.

In the context of digital entrepreneurship, entrepreneurs with an innovation-oriented mindset are much more likely to adopt new technologies and digital solutions, which increases their perception of their ability to innovate and prevail. This confidence, in turn, boosts their entrepreneurial self-efficacy, reinforcing their purpose to pursue digital entrepreneurial possibilities. The literature suggests the following hypothesis:

Hypothesis 6: Entrepreneurial mindset positively influences entrepreneurial self-efficacy.

Mediation Role of Entrepreneurial Self-Efficacy

The mediation of entrepreneurial self-efficacy between entrepreneurial bricolage and digital entrepreneurial intentions showed that entrepreneurial bricolage enhances self-efficacy, which in turn drives digital entrepreneurial intentions. Research by Krohn et al. (2021) and Baker and Nelson (2005) indicates that bricolage not only increases self-efficacy by encouraging resourcefulness but additionally increases the likelihood of pursuing digital ventures by boosting entrepreneurial self-belief. In resource-restrained environments like SMEs, the capability to creatively use existing assets and digital tools increases the entrepreneur's notion of their ability to prevail, making them much more likely to pursue digital entrepreneurial possibilities. The hypothesis derived from this perspective is:

Hypothesis 7: Entrepreneurial bricolage positively influences digital entrepreneurial intentions mediated by entrepreneurial self-efficacy.

The mediation speculation showed that ecological innovation increases digital entrepreneurial intentions through its effect on entrepreneurial self-efficacy. Entrepreneurs who put into effect eco-modern practices, supported by digital equipment, identify their belief in their competencies to resolve environmental and business challenges (Scuotto, et al., 2024). This confidence motivates them to pursue digital entrepreneurial possibilities. In Saudi Arabia, for instance, adopting sustainable farming practices and the usage of digital tools additionally enhances entrepreneurial self-efficacy, thereby driving entrepreneurs to embody digital commercial industry models. The derived hypothesis from this literature is:

Hypothesis 8: Ecological innovation positively influences digital entrepreneurial intentions mediated by entrepreneurial self-efficacy.

The entrepreneurial mindset impacts digital entrepreneurial intentions through entrepreneurial self-efficacy, as people with a strong entrepreneurial mindset are more likely to undertake digital equipment and technologies once they consider their ability to be successful. Krohn, et al., (2024), highlighted that an entrepreneurial mindset fosters self-efficacy, which in turn increases entrepreneurial intentions. Entrepreneurs with a growth-oriented mindset are extra willing to explore and adopt new digital technologies, as their confidence in their talents supports their entrepreneurial aspirations. The hypothesis drawn from the literature is:

Hypothesis 9: Entrepreneurial mindset positively influences digital entrepreneurial intentions mediated by entrepreneurial self-efficacy.

The hypotheses support that entrepreneurial bricolage, ecological innovation, and an entrepreneurial mindset no longer directly affect digital entrepreneurial intentions but additionally do so through the mediation of entrepreneurial self-efficacy. (Nugroho & Soewarno, 2024). These relationships highlighted the importance of fostering creativity, sustainability, and self-efficacy in improving digital entrepreneurship, specifically in aid-restricted environments like SMEs.

FINDINGS

This paper studies explicitly the relationships between entrepreneurial bricolage, ecological innovation, entrepreneurial mindset, and digital entrepreneurial intentions, with a particular cognizance of the mediating function of entrepreneurial self-efficacy in Saudi Arabia's SMEs area. The findings drawn from the literature indicate several key insights, supported by diverse theoretical and empirical studies (Khalid et al., 2025). The literature highlighted that entrepreneurial bricolage, making a price with to-be-had resources and improvisation, plays a substantial function in shaping digital entrepreneurial intentions. Researchers (Mir et al., 2023) have concluded that marketers often face resource constraints, and bricolage lets them leverage current assets creatively. This mainly applies to sectors like SMEs, where access to capital and infrastructure was restricted.

Studies focusing on digital entrepreneurship emphasize that entrepreneurial bricolage encourages entrepreneurs to innovate with available equipment, digital platforms, and technology, fostering the growth of digital commercial industry ventures in aid-restricted settings. (Yuan, 2022), argued that bricolage facilitates marketers within the digital sector in apprehending new opportunities for technology adoption, thereby using digital entrepreneurial intentions. This is crucial in developing economies like Saudi Arabia, where generation can enable business creation and growth.

Ecological innovation, which integrates environmental sustainability with entrepreneurial activities, has gained widespread attention recently. Studies (Sivathanu & Pillai, 2020) have observed that environmental innovation improves recent business models, especially in sectors like SMEs, wherein sustainability is a key challenge. Ecological innovation encourages marketers to use digital tools to create environmentally friendly industry solutions, such as precision farming or sustainable food production. In the context of digital entrepreneurship, ecological innovation can inspire SME entrepreneurs to interact with digital technologies that enhance environmental sustainability while pursuing growth.

Entrepreneurs with a robust entrepreneurial mindset are more likely to include digital transformation, spotting the technology's potential to power business innovation. Studies by Urban & Kanguwe (2024) indicate that people with a growth-oriented mindset are more inclined to pursue digital entrepreneurial possibilities. For instance, SME marketers with an entrepreneurial mindset can see the potential of digital equipment in improving farm productivity or getting access to new markets.

Entrepreneurial self-efficacy, or an entrepreneur's perception of their capacity to correctly execute entrepreneurial obligations, has been proven to be prompted by entrepreneurial bricolage. According to Kurniawan & Selamat (2023), self-efficacy is critical in shaping entrepreneurial behaviors and choices. Entrepreneurs who interact in bricolage regularly develop a feeling of capability by overcoming challenges with restrained assets, leading to accelerated self-belief in their abilities. For instance, inside the Saudi SMEs, where entrepreneurs also face resource barriers, bricolage enables enhanced self-efficacy by demonstrating that fulfilment is possible by innovation and resourcefulness.

Research by Saleh & Athari (2023) has shown that marketers in sustainable industries who integrate ecological innovation into their business practices have better self-efficacy. This feeling of efficacy stems from the ability to broaden novel solutions to environmental challenges, motivating further entrepreneurial interest.

A robust entrepreneurial mindset is critical for enhancing entrepreneurial self-efficacy, as it shapes the entrepreneur's perception of their abilities to navigate challenges and capitalize on possibilities. As referred to by Tajeddini et al. (2023), individuals with an entrepreneurial mindset tend to have better self-efficacy, which is more likely to engage in self-reflection, learning, and looking for answers to challenges. In the SMEs region, an entrepreneurial mindset allows marketers to remain adaptable and proactive, which complements their self-efficacy in digital ventures. This accelerated self-efficacy permits them to tackle entrepreneurial tasks with extra self-belief, leading to the likelihood of digital entrepreneurial intentions.

The study proposes that entrepreneurial self-efficacy mediates the relationships between entrepreneurial bricolage, ecological innovation, and entrepreneurial mindset with digital entrepreneurial intentions. The literature assists with this idea. According to Zhao et al. (2005), entrepreneurial self-efficacy mediates between entrepreneurial activities and intentions, because it enhances an entrepreneur's self-efficacy in executing digital ventures.

Studies by Olan et al. (2024) further highlighted that self-efficacy is a mediator influencing how entrepreneurs interpret possibilities and challenges. This effect is especially essential in Saudi Arabia's SMEs, where marketers can be skeptical about the capability of digital technology due to resource

constraints. Entrepreneurial self-efficacy boosts entrepreneurs' self-belief, thus increasing their chance of undertaking digital entrepreneurship (Raza et al., 2023).

The findings of this literature synthesis offer substantial aid for the proposed hypotheses. Entrepreneurial bricolage, ecological innovation, and the entrepreneurial mindset all undoubtedly influence digital entrepreneurial intentions, and entrepreneurial self-efficacy performs a crucial mediating position in these relationships. These insights highlighted the importance of fostering entrepreneurial behaviors and self-efficacy in driving digital entrepreneurship within the SME quarter in Saudi Arabia. The findings also contribute to the broader expertise of digital entrepreneurship in developing economies, suggesting that enhancing self-efficacy is key to fostering entrepreneurial intentions and inspiring the adoption of digital technologies.

CONCLUSION

Previous research has supported the relationship between entrepreneurial bricolage and digital entrepreneurial intentions, demonstrating how entrepreneurs who can creatively use restricted resources to generate new industry opportunities are more likely to engage in digital ventures. That is specifically relevant in Saudi SMEs, as economic and infrastructural boundaries frequently constrain marketers. The capability to make the most of current sources and conquer useful resource scarcity permits marketers to consider digital technologies as a feasible tool for industry expansion and innovation.

Similarly, ecological innovation was a massive factor in shaping entrepreneurial intentions. The developing emphasis on sustainability in industry practices underscores the importance of integrating environmental concerns into entrepreneurship. This is pertinent to SMEs, an area inherently tied to ecological problems. Green technologies and practices, as well as SME entrepreneurs, not only contribute to sustainability but also create new digital commercial industry opportunities. The findings highlighted the importance of fostering ecological innovation to foster sustainable increases and digital entrepreneurial intentions, which aligns with worldwide developments towards green technology.

The function of the entrepreneurial mindset in shaping digital entrepreneurial intentions was also strengthened using the examination. An entrepreneurial mindset, characterized by using possibility popularity, danger-taking, and proactivity, was discovered to immediately affect an entrepreneur's chance of pursuing digital business possibilities. This finding is essential within the Saudi SMEs region, wherein marketers with a growth-oriented mindset are more likely to leverage digital tools for business transformation. The entrepreneurial mindset complements confidence and resilience, each crucial for navigating the complexities of the digital age.

The mediating position of entrepreneurial self-efficacy changed into the most crucial perception of this study. Entrepreneurs with high levels of self-efficacy accept as accurate their capacity to be triumphant, even in the face of adversity. This belief is pivotal for overcoming challenges inherent in digital entrepreneurship, mainly in resource-confined environments like Saudi Arabia's SME region. Self-efficacy boosts marketers' ability to adopt and implement digital solutions, influencing their intentions to interact in digital entrepreneurship.

This study offers numerous crucial implications for stakeholders concerned with fostering digital entrepreneurship, mainly in rising sectors and SMEs. For policymakers, the findings emphasize the

importance of creating a permitting environment that supports entrepreneurial bricolage and ecological innovation. Policies that offer access to sources, investment, and schooling packages can help entrepreneurs overcome resource constraints and adopt sustainable digital practices. The study additionally highlighted the need for focused tasks that enhance entrepreneurial self-efficacy through mentorship packages and digital literacy education. With the entrepreneurs' self-confidence and sensible competencies, policymakers can inspire more individuals to interact in digital entrepreneurship, using financial growth and innovation in sectors like SMEs.

This paper indicates a need for academic institutions to integrate entrepreneurship training that emphasizes technical abilities and the development of a resilient entrepreneurial mindset. Encouraging college students to interact with actual-world problems and discover creative solutions using digital equipment can help foster both an entrepreneurial mindset and self-efficacy. This ensures that future entrepreneurs are better prepared to navigate the digital panorama and harness possibilities in sectors like SMEs.

Entrepreneurs can leverage the insights from this examination to adapt their methods to digital entrepreneurship. Understanding the significance of entrepreneurial bricolage and ecological innovation can guide them in correctly using available resources while adopting sustainable commercial industry practices. Furthermore, strengthening their entrepreneurial self-efficacy through continuous getting to know and engagement with digital tools is key to overcoming the challenges of digital adoption and reaching business fulfillment.

Future studies in this region could discover numerous avenues. One promising course is increasing the scope of the survey past Saudi Arabia's SME region to include different industries and areas. Comparative studies throughout sectors or nations with one-of-a-kind ranges of digital adoption aim to offer broader expertise on the dynamics among entrepreneurial bricolage, ecological innovation, and entrepreneurial mindset in shaping digital entrepreneurial intentions. Another research location could focus on extra mediating or moderating factors affecting these relationships, including entrepreneurial level, getting the right to enter investment, or networking opportunities. Longitudinal research monitoring the evolution of entrepreneurial self-efficacy over time could offer deeper insights into how digital entrepreneurial intentions develop and change.

Moreover, qualitative research exploring entrepreneurs' lived experiences through in-depth interviews or case studies could shed light on how these standards play out in practice. Finally, analyzing the function of governmental and institutional aid, especially in promoting digital literacy and entrepreneurship programs, could offer valuable policy insights. Understanding the position of external support in fostering entrepreneurial self-efficacy and driving digital entrepreneurship would be crucial for designing effective assist systems for entrepreneurs in resource-limited environments.

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