

The Impact of Entrepreneurial Bricolage and Green Entrepreneurial Orientation on the Digital Entrepreneurial Intentions of SMEs in Saudi Arabia

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Abstract: This paper conceptually identifies connections between digital entrepreneurial ambitions, entrepreneurial self-efficacy (ESE), green entrepreneurial orientation (GEO), and entrepreneurial bricolage for sustaining the SMEs in Saudi Arabia. In environments with limited resources, entrepreneurial bricolage is identified as a key factor that fosters innovation and resourcefulness and allows business owners to repurpose existing property in novel ways. Similarly, GEO emerges as a crucial role, aligning entrepreneurial activities with sustainability goals and fostering eco-friendly digital innovation. Entrepreneurial self-efficacy mediates these relationships, empowering people with self-efficacy and resilience to navigate uncertainties within the entrepreneurial process. The findings emphasised the transformative role of digital tools in improving sustainability, marketplace engagement, and operational efficiency within SMEs. This paper contributes to the theoretical information of entrepreneurial constructs while imparting practical insights for policymakers, entrepreneurs, and industry stakeholders. It highlighted the need for a multi-dimensional approach to fostering digital entrepreneurship in sustainability-focused sectors. To increase the generalisability and applicability of the results, further research is highly recommended to further investigate cross-cultural contexts, locate other mediating factors, and experimentally validate the findings addressed in this paper.

Keywords: *Entrepreneurial Bricolage; Green Entrepreneurial Orientation; Entrepreneurial Self-Efficacy; Digital Entrepreneurial Intentions; Sustainable SME; Innovation; Resource-Constrained Environments; Saudi Arabia.*

INTRODUCTION

Entrepreneurship in sustainable SMEs has garnered increasing interest, particularly as environmental challenges and customer choices evolve toward green companies. Digital entrepreneurial intentions, green entrepreneurial orientation (GEO), and entrepreneurial bricolage are becoming essential

concepts for comprehending how forward-thinking businesses might address sustainability demands. Creatively using existing resources to overcome limitations and seize opportunities is part of entrepreneurial bricolage, a technique based on the helpful resource-primarily based view of entrepreneurship (Sunguh and Yi, 2024). This capability is huge for sustainable SME marketers in resource-constrained environments like Saudi Arabia, where financial, technological, and infrastructural barriers are often significant. Entrepreneurs counting on bricolage can leverage local knowledge, cultural and historical past, and networks to create value and regularly use digital systems to increase their acquisition (Potluri, 2024). For instance, using social media to promote eco-excursion activities exemplifies how marketers can creatively overcome functional support boundaries.

Green entrepreneurial orientation (GEO) enriches the entrepreneurial panorama by emphasizing a strategic dedication to environmental sustainability. GEO encompasses proactiveness, hazard-taking, and innovativeness, all directed within the path of venture ecological dreams (Tekala et al., 2024). In Saudi Arabia's SME sector, GEO is plain in tasks that prioritize decreasing environmental outcomes, along with promoting renewable energy use, waste management, and biodiversity conservation. Entrepreneurs with strong GEOs are well placed to become privy to and make the most of possibilities for sustainable innovation. It has been revolutionary in integrating GEO with the digital generation, enabling scalable and environmentally friendly solutions and apps that direct eco-systems and permit enterprises to share support (Satar et al., 2024). These initiatives illustrate how GEO can inspire digital innovation tailored to sustainable SME goals.

Digital entrepreneurial intentions, representing the self-discipline to create ventures and use digital tools, apply to advancing sustainable SMEs. Personal characteristics, environmental factors, and perceived possibilities were found as practical elements to promote such intents and crucial indicators of entrepreneurial mobility (Aguirre, 2024). In Saudi Arabia, a country with a thriving digital environment and government initiatives such as "Amazing Saudi Arabia Go Local," fostering one's intentions becomes increasingly essential. However, expertise in the motivations and enablers behind those intentions requires more in-depth exploration of entrepreneurial bricolage and GEO elements (Chen et al., 2022).

In another perspective, entrepreneurial self-efficacy (ESE) is the perception of a single capability to carry out entrepreneurial initiatives efficiently, and it serves as a bridge between entrepreneurial orientations and actionable intentions. Wang et al. (2024) emphasized that ESE influences opportunity perception, risk evaluation, and beneficial support mobilization, making it a crucial issue in navigating the complexities of sustainable SME entrepreneurship. High levels of ESE enhance resilience and innovation, enabling entrepreneurs to address challenges such as support constraints and sustainability goals (Abukari et al., 2024).

While entrepreneurial bricolage, GEO, and ESE were studied in my view, their interaction in shaping digital entrepreneurial intentions inside sustainable SMEs remains underexplored. Most research in this quarter had been done in Western contexts, leaving a gap in information on their applicability and relevance in Southeast Asia (Anser et al., 2024). Saudi Arabia, SMEs dealing with extraordinary environmental challenges, provide a compelling context for studying those dynamics. For example, the synergistic outcomes of bricolage and GEO on fostering sustainable innovation have not been systematically studied, nor has the mediating function of ESE in linking those constructs to entrepreneurial intentions.

This paper emphasizes entrepreneurial bricolage, GEO, and ESE's collective ability to improve SMEs' ability to sustain and address pressing environmental issues by placing them within the virtual monetary device. Hence, this conceptual integration offers a nuanced mindset on the drivers of virtual entrepreneurial intentions, emphasizing the interaction of resourcefulness, environmental responsibility, and self-efficacy as vital components of entrepreneurial pride in sustainable SMEs.

LITERATURE REVIEW

Entrepreneurial bricolage has been studied in beneficial support-constrained environments, wherein creativity and improvisation are crucial for overcoming challenges (Shoukat et al., 2024). Studies highlighted that entrepreneurial bricolage allows the capability to repurpose existing property innovatively, mainly for solutions that don't require significant capital investment (Kleine-Stegemann et al., 2024). This characteristic aligns with the goals of sustainable SME entrepreneurs in Saudi Arabia, who frequently face monetary and infrastructural constraints. For example, bricolage allows entrepreneurs to use nearby materials for SME tasks or digital systems for advertising, marketing, and advertising campaigns.

Green entrepreneurial orientation (GEO) emphasizes a proactive, revolutionary, and hazard-taking approach to reaching ecological and economic goals (Raza et al., 2024; Lumpkin and Dess, 1996; Muñoz and Dimov, 2015). Prior studies (e.g., Zhang et al., 2024) have shown that GEO encourages businesses to mix sustainability into their core strategies, mainly for developing green products and services (Zhang et al., 2024). GEO can be demonstrated in the SME region by selling green journeys or conservation efforts. Adopting digital equipment frequently amplifies efforts, making them available to a broader target marketplace. For instance, cellular packages that sell SME locations align with the dreams of GEO.

Entrepreneurial self-efficacy (ESE) is a crucial mental construct influencing entrepreneurial behavior (Paust et al., 2024). Studies indicate that ESE affects the possibility of popularity, decision-making, and resilience in facing challenges (Mahmood, 2024). High levels of ESE are associated with increased self-efficacy in navigating complex entrepreneurial approaches, including ones involving digital technologies. ESE is relevant in the sustainable SME context as marketers need to balance environmental and commercial industry goals.

The mediating role of ESE is likewise apparent in the literature. ESE impacts entrepreneurial intentions and strengthens the relationship between entrepreneurial tendencies or orientations and these intentions (Andersén, 2022). For instance, an entrepreneur with a strong GEO also wants to expand eco-friendly digital solutions. However, translating this imaginative and prescient into actionable intentions regularly depends on their stage of self-efficacy. Similarly, bricolage calls for confidence and the ability to efficiently make do with what is available.

The literature analysis has underscored the contextual relevance of these constructs in Saudi Arabia's sustainable SMEs. Saudi Arabia offers a unique setting where applicable resource constraints, environmental challenges, and digital transformation intersect. However, the present research has centered on Western contexts, developing an opening in how these constructs interact in Southeast Asia (Yadegaridehkordi et al., 2023).

The mediating role of ESE bridging between entrepreneurial bricolage and digital entrepreneurial intentions is supported by the valuable research that underscores bricolage's innovative and improvisational nature. Cai et al. (2023) emphasized that bricolage is not a method but builds confidence in an entrepreneur's innovation ability under constraints. While internalized as ESE, this self-belief equips individuals to take calculated risks and extend entrepreneurial intentions in the digital realm. For instance, entrepreneurs engaging in bricolage frequently repurpose the generation or adapt local knowledge to create digital solutions and online systems for SMEs or digital cultural excursions. According to studies (Khalid et al., 2024), the ability to "make do" with assets fosters a sense of competence, which feeds into entrepreneurial self-efficacy, reinforcing intentions to act digitally.

Entrepreneurs who interact in bricolage will likely build confidence in their skills to overcome challenges, strengthening their intentions to pursue digital entrepreneurship. Aloulou et al. (2024) identified GEO as an ahead-searching strategic orientation characterized by innovation, proactiveness, and hazard-taking in addressing environmental challenges. However, merely owning a GEO does not guarantee entrepreneurial motion unless entrepreneurs experience confidence in their capacity to achieve their goals. (Guo, 2022) argued that GEO encourages marketers to identify eco-modern possibilities, including lowering carbon footprints or developing sustainable SME merchandise. ESE amplifies this system by enabling entrepreneurs to agree with their capacity to implement those improvements using digital tools. Research shows that entrepreneurs with excessive ESE are much more likely to embody digital technology, mobile applications, or online marketplaces to operationalize their GEO-driven projects (D'Angelo et al., 2024).

Entrepreneurs with a strong GEO recognize opportunities for digital solutions to sustainability issues, and their self-efficacy increases the likelihood of converting those opportunities into actionable entrepreneurial intentions. Table 1 summarizes the seminal works on the conceptual elements addressed in this paper:

Table 1

Summary of seminal works related to the entrepreneurial bricolage, GEO, ESE, and digital entrepreneurial intentions

No.	Research Title	Authors	Variables	Methodology and Findings	Limitations
1	An attention-based view on environmental management: The influence of entrepreneurial orientation, environmental sustainability orientation, and competitive intensity on green product innovation in	Andersén, J.	Entrepreneurial Orientation, Environmental Sustainability Orientation, Competitive Intensity, Green Product Innovation.	Qualitative study using survey data from Swedish small manufacturing firms. Found that entrepreneurial and sustainability orientations positively influence green product innovation under	The study is limited to small manufacturing firms in Sweden; findings may not generalize to other sectors or countries.

No.	Research Title	Authors	Variables	Methodology and Findings	Limitations
	Swedish small manufacturing firms.			competitive intensity.	
2	Determinants of environmental, financial, and social sustainable performance of manufacturing SMEs in Malaysia.	Yadegaridehkordi, E., Foroughi, B., Iranmanesh, M., Nilashi, M., and Ghobakhloo, M.	Environmental Performance, Financial Performance, Social Sustainability, Various Determinants.	Mixed-methods approach; structural equation modelling (SEM) showed significant predictors of sustainability performance in Malaysian SMEs.	Limited focus on manufacturing SMEs; causal inferences are limited due to cross-sectional design.
3	Examining the impact of entrepreneurial orientation on new venture performance in the emerging economy of Lebanon: A moderated mediation analysis.	Saleh, A. M., and Athari, S. A.	Entrepreneurial Orientation, New Venture Performance, Moderators, Mediators.	Moderated mediation analysis: entrepreneurial orientation positively impacts performance, with specific variables mediating or moderating the relationship in the Lebanese context.	Results specific to Lebanon; cultural and economic conditions may limit applicability to other sectors.
4	Sustainable leadership and sustainable entrepreneurship: A systematic literature review.	Ribeiro, G. K. A., and Leitão, J.	Sustainable Leadership, Sustainable Entrepreneurship.	Systematic literature review; analyzed existing research to identify themes linking leadership and entrepreneurship for sustainability.	The review focuses on existing studies, limiting the ability to provide novel empirical insights.
5	"Quiet the Mind, and the Soul Will Speak"! Exploring the Boundary Effects of Green Mindfulness and Spiritual Intelligence on University Students' Green Entrepreneurial	Cai, B., Chen, Y., and Ayub, A.	Green Mindfulness, Spiritual Intelligence, Green Entrepreneurial Intention, Behaviour.	A qualitative study of university students; found significant moderating effects of green mindfulness and spiritual intelligence on	The study population is limited to university students; results may not generalize to professional or other demographics.

No.	Research Title	Authors	Variables	Methodology and Findings	Limitations
	Intention–Behaviour Link.			entrepreneurial behaviour.	
6	Examining the role of intellectual capital in maturing sustainable competitive advantage through enkindling innovations in SMEs: the moderating role of entrepreneurship-orientation.	Alshahrani, M. A., Yaqub, M. Z., and Alabdali, M. A.	Intellectual Capital, Sustainable Competitive Advantage, Innovation, Entrepreneurship Orientation.	Structural equation modelling of SME data; intellectual capital and innovation significantly improve competitive advantage, moderated by entrepreneurial orientation.	Study limited to SMEs; broader organizations and industries not included.
7	Exploring the Effects of Entrepreneurial and Digital Orientations on the Competitive Advantage of Saudi Firms: Is Strategic Agility the Missing Link?	Aloulou, W. J., Alsadi, A. K., Ayadi, F. M., and Alaskar, T. H.	Entrepreneurial Orientation, Digital Orientation, Competitive Advantage, Strategic Agility.	Survey-based analysis; found entrepreneurial and digital orientations positively impact competitive advantage through strategic agility.	Focused only on Saudi firms; findings may not apply in non-Saudi contexts.
8	The significance of green entrepreneurial self-efficacy: Mediating and moderating role of green innovation and green knowledge sharing culture.	Guo, J.	Green Entrepreneurial Self-Efficacy, Green Innovation, Green Knowledge Sharing Culture.	Qualitative analysis: green innovation and knowledge sharing mediate and moderate the relationship between self-efficacy and outcomes.	Cross-sectional data limits causal inferences; focus on green entrepreneurship only.
9	Understanding corporate entrepreneurship in the digital age: a review and research agenda.	D'Angelo, S., Cavallo, A., Ghezzi, A., and Di Lorenzo, F.	Corporate Entrepreneurship, Digital Transformation.	Literature review; identified trends and gaps in corporate entrepreneurship in the context of digital transformation.	Limited to secondary data; empirical testing of identified gaps not conducted.
10	Determinants and impacts of digital entrepreneurship: A pre-and post-	Yáñez-Valdés, C., and Guerrero, M.	Digital Entrepreneurship, Determinants, Impacts.	A mixed-method study comparing digital entrepreneurship	Focuses on temporal comparisons; lacks broader

No.	Research Title	Authors	Variables	Methodology and Findings	Limitations
	COVID-19 perspective.			before and after COVID-19. Found shifts in determinants and performance metrics.	sectoral analyses.
11	How does the green entrepreneurship process of students undergoing SME education proceed? Implementation of the policy acceptance model.	Kement, Ü., Zeybek, B., Eter, E., Bayram, G. E., Raza, A., and Valeri, M.	Green Entrepreneurship, SME Education, Policy Acceptance.	Survey of SME students; policy acceptance model explains green entrepreneurship processes among students.	Limited to SME education students; applicability to other industries uncertain.
12	Entrepreneurial orientation and open innovation promote the performance of services SMEs: The mediating role of cost leadership.	Chelliah, M. K., Aravindan, K. L., and Muthaiyah, S.	Entrepreneurial Orientation, Open Innovation, Cost Leadership, SME Performance.	Structural equation modelling: and cost leadership mediate the relationship between entrepreneurial orientation, open innovation, and performance.	Limited focus on services SMEs; no cross-industry comparisons.
13	Global entrepreneurial orientation (GEO): An updated, multidimensional view of EO.	Lumpkin, G. T., and Pidduck, R. J.	Global Entrepreneurial Orientation.	The conceptual paper; proposed a multidimensional framework for analysing entrepreneurial orientation on a global scale.	Framework not empirically validated; conceptual focus only.
14	Entrepreneurial Orientation Impact on the Innovation Ambidexterity: Evidence from the Industrial-Based Sector.	Horchani, S. C., and Zouaoui, M.	Entrepreneurial Orientation, Innovation Ambidexterity.	Empirical study on industrial sector firms; entrepreneurial orientation significantly enhances innovation ambidexterity.	Limited to the industrial sector; findings may not apply to other sectors.
15	Disentangling the individual	Bilal, A. R., and Fatima, T.	Individual Entrepreneurial	Qualitative study:	Cross-sectional design limits

No.	Research Title	Authors	Variables	Methodology and Findings	Limitations
	entrepreneurial orientation and SMEs success nexus: An action-based interplay of exploration activities and entrepreneurial alertness.		Orientation, SME Success, Exploration Activities, Entrepreneurial Alertness.	exploration activities and alertness mediate the relationship between entrepreneurial orientation and SME success.	causal conclusions; focused on SMEs only.

METHODOLOGY

This conceptual article aimed to strengthen theory by establishing a robust structure that connects entrepreneurial bricolage, green entrepreneurial orientation (GEO), entrepreneurial self-efficacy (ESE), and digital entrepreneurial ambitions for the sustainability of Saudi SMEs. From entrepreneurship, sustainability, and digital transformation literature perspectives, the study seeks to deal with gaps in expertise in those interconnected domains.

Secondary statistics from peer-reviewed magazine articles, books, and credible sources form the backbone of the studies. Databases consisting of Scopus, Web of Science, and Google Scholar were searched for the usage of key phrases like "entrepreneurial bricolage," "green entrepreneurial orientation," "entrepreneurial self-efficacy," "digital entrepreneurship," "sustainable SME," and "Saudi Arabia." The inclusion criteria prioritized high-impact magazine guides, particularly those focusing on entrepreneurship, sustainability, and SMEs. This systematic technique included applicable and incredible literature to underpin the theoretical framework.

The conceptual framework was developed utilizing a concept-driven approach, drawing on existing ideas such as the social cognitive idea (Bandura, 1997), the resource-based view (Barney, 1991), and the principle of deliberate conduct (Ajzen, 1991). These theories furnished a basis for expertise on how individual abilities, practical resource usage, and strategic orientations impact entrepreneurial intentions. The constructs have been analyzed for definitions, dimensions, and interrelationships, mainly for hypothesis formulation. Entrepreneurial bricolage and GEO were thought to positively influence digital entrepreneurial inclinations, with ESE acting as a mediating factor. The hypotheses proposed in this paper specifically address the knowledge gaps in prior studies on the intersection between sustainability, digital entrepreneurship, and the mental conceptions underlying the entrepreneurial actions.

Saudi Arabia's sustainable SMEs were selected because of the study context and its specific intersection of challenges and possibilities. This sector often requires modern solutions because of resource constraints, environmental issues, and a developing emphasis on digitalization. Entrepreneurial bricolage is relevant in any such setting, allowing marketers to innovate with restrained assets. Similarly, GEO aligns with the world's sustainability goals, whilst digital entrepreneurship shows scalable solutions for selling SMEs and improving customer engagement. Saudi Arabia is the focus of discussion in this paper, where the study contextualizes its theoretical contributions and provides valuable insights into both academic and practical applications.

The method emphasized theoretical contributions over empirical validation, aiming to enhance the literature by integrating entrepreneurial bricolage, GEO, and ESE into the domain of digital entrepreneurial intentions. The framework particularly highlighted ESE's mediating role, which has been underexplored in contexts of sustainability and digital transformation. The study achieves theoretical generalizability, while its cognizance of Saudi Arabia's sustainable SME place guarantees contextual relevance.

Additionally, qualitative techniques should include qualitative insights, deepening our knowledge of how the constructs engage in actual global situations (Raza et al., 2024). Through its rigorous and systematic approach, this study confirmed its significant contributions to the literature and sensible implications for fostering digital entrepreneurship in sustainable SMEs.

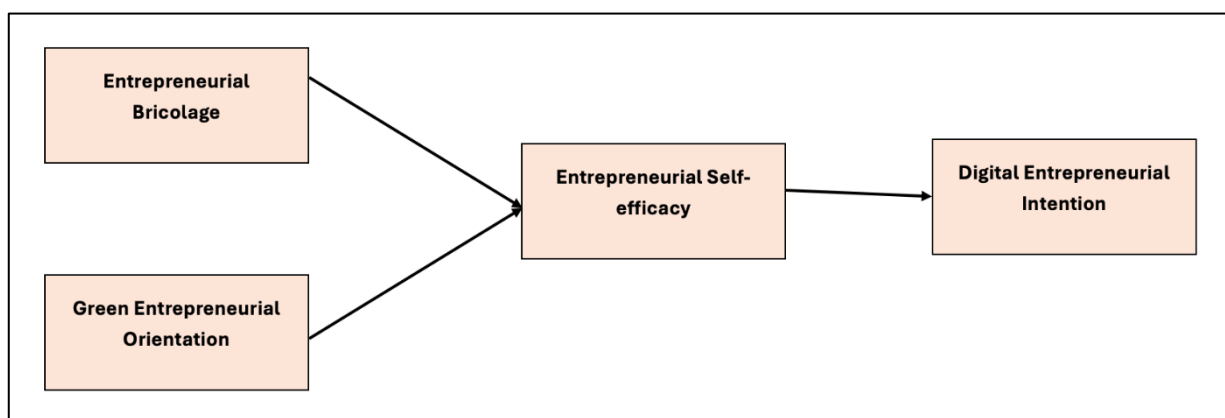


Figure 1 The conceptual framework of the study

Entrepreneurial Bricolage on Digital Entrepreneurial Intentions

Entrepreneurial bricolage has received a lot of attention in the entrepreneurship literature, which is defined as the ability to recombine and use existing resources creatively. In resource-confined environments, bricolage empowers entrepreneurs to acquire modern effects and improvise solutions (Yáñez-Valdés & Guerrero, 2024). Digital entrepreneurial intentions and the decision to engage in online entrepreneurial activities require resourcefulness and flexibility, attributes strongly aligned with bricolage. Studies by Sawangchai et al., (2024) suggest that entrepreneurial bricolage fosters creativity, enabling marketers to overcome technological and resource limitations related to digital ventures. Furthermore, Chelliah et al. (2022) proposed that entrepreneurs who engage in bricolage tend to create unique digital commercial industry fashions by leveraging existing digital tools and platforms. From these insights, it's evident that entrepreneurial bricolage positively impacts digital entrepreneurial intentions by improving innovative thinking and reducing the perceived risks of digital ventures. Therefore, the first hypothesis is proposed as follows:

H1: Entrepreneurial bricolage has a positive impact on digital entrepreneurial intentions.

Green Entrepreneurial Orientation on Digital Entrepreneurial Intentions

Green entrepreneurial orientation (GEO) emphasizes integrating environmental sustainability with entrepreneurial activities. GEO-driven marketers adopt techniques that stabilize profitability with

ecological duty (Horchani and Zouaoui, 2023). Within the digital landscape, GEO permits marketers to find green digital possibilities consisting of green e-trade structures or sustainability-targeted digital content (Lumpkin and Pidduck, 2021). Bilal and Fatima (2022) highlighted that GEO no longer most effectively fosters and revels in environmental stewardship but also cultivates an advanced-wondering method essential for navigating the dynamic digital environment.

Moreover, by aligning green tasks with digital entrepreneurship, businesses can create a competitive sector and attract environmentally conscious customers. This connection underscores the critical position of GEO in shaping digital entrepreneurial intentions. Supported by previous research, the second hypothesis is formulated as follows:

H2: Green entrepreneurial orientation has a positive impact on digital entrepreneurial intentions.

Entrepreneurial Bricolage on Entrepreneurial Self-Efficacy

Entrepreneurial self-efficacy (ESE) refers to a person's notion of their skills to execute entrepreneurial obligations correctly. Liew et al. (2024) emphasized that bricolage contributes significantly to ESE by instilling a mindset and promoting self-efficacy in dealing with constraints. Entrepreneurs who interact in bricolage showcase better resilience and adaptability, strengthening their self-efficacy (Nallalathan et al., 2024). For example, scholars like Magableh, (2023) showed that marketers who use bricolage frequently flip limited assets into possibilities, reinforcing their entrepreneurial skills. This relationship indicates that entrepreneurial bricolage acts as a catalyst for constructing ESE and serves as the basis for the third hypothesis as follows:

H3: Entrepreneurial bricolage has a positive impact on entrepreneurial self-efficacy.

Green Entrepreneurial Orientation on Entrepreneurial Self-Efficacy

Green entrepreneurial orientation complements entrepreneurial self-efficacy by equipping entrepreneurs with an experience of purpose and a strategic path. According to Lans et al. (2014), entrepreneurs with a GEO cognizance are more likely to adopt sustainable commercial industry practices, which inherently require a better stage of self-efficacy and modern thinking. Green projects encourage entrepreneurs to cope with challenges with creative solutions, bolstering their capabilities (Sharifi-Tehrani et al., 2024). Furthermore, GEO provides a dependent framework for marketers to pursue environmentally conscious targets, reinforcing their self-efficacy. The literature helps the proposition:

H4: Green entrepreneurial orientation has a positive impact on entrepreneurial self-efficacy.

Mediation of Entrepreneurial Self-Efficacy

ESE amplifies the effects of bricolage by improving self-efficacy in support-confined digital settings (Manigandan and Raghuram, 2024). Entrepreneurs who accomplished the bricolage might encounter ambiguity in decision-making; therefore, ESE will serve as a psychological buffer, allowing them to embrace digital entrepreneurship progressively (Pricopoaia et al., 2024). When self-efficacy is high, entrepreneurs are more likely to translate bricolage-driven innovation into actionable digital industry ventures. Therefore, the fifth hypothesis is proposed as follows:

H5: Entrepreneurial self-efficacy mediates the relationship between entrepreneurial bricolage and digital entrepreneurial intentions.

Additionally, green entrepreneurial orientation's influence on digital entrepreneurial intentions is strengthened by entrepreneurial self-efficacy. Yadav et al. (2023) found that self-efficacy mediates the link between entrepreneurial orientation and intentions by shaping how entrepreneurs perceive challenges and opportunities. In the context of GEO, it was found that entrepreneurs whose scores are high in ESE are more likely to convert their green goals into successful digital obligations (Steffens et al., 2023) and leverage their self-efficacy to carry out complex strategies (Demirel et al., 2019). Thus, entrepreneurial self-efficacy is a crucial high-level mechanism that lets GEO-driven entrepreneurs thrive in digital surroundings. The sixth proposed hypothesis is as follows:

H6: Entrepreneurial self-efficacy mediates the connection between green entrepreneurial orientation and digital entrepreneurial intentions.

The broader literature also highlighted the interplay between ESE and entrepreneurial orientations in using intentions. Hamzah and Othman (2023) found that ESE is a key mediator that links entrepreneurial characteristics and behaviors to intentions. This is mainly obtrusive in era-pushed contexts in which self-belief in one's ability to use digital gadgets is essential. For example, Altinay et al. (2022) highlighted that self-efficacy isn't the simplest factor motivating entrepreneurs to act, but also sustains their efforts in implementing contemporary answers.

ESE's mediating function in sustainable SMEs has become even greater because of the world's particular challenges. Entrepreneurs in this trouble often grapple with applicable resource constraints, environmental dangers, and the need for network engagement. Bricolage and GEO provide the foundational dispositions for addressing the challenges (Magalhaes and Abouzeid, 2018), but ESE lets entrepreneurs move from ideation to movement. This scenario is particularly relevant in Saudi Arabia, where the intersection of sustainability and digitalization gives substantial possibilities for innovation. Entrepreneurs who creatively use resources (bricolage) or commit to green innovation (GEO) are considerably more likely to succeed with high self-efficacy.

Foremost, McGee and Terry (2024) have found that self-efficacy significantly enhances the opportunity of entrepreneurial aspirations and supports the perceived feasibility and desirability of entrepreneurial action. In brief, the literature underscores the critical function of ESE as a mediator that bridges entrepreneurial developments, orientations, and intentions. ESE lets entrepreneurial bricolage and GEO translate into actionable digital entrepreneurial intentions in practical, sustainable-constrained, and sustainability-concentrated contexts like Saudi Arabia's sustainable SMEs.

FINDINGS

The findings of this study revealed the intricate relationship between entrepreneurial bricolage, green entrepreneurial orientation, entrepreneurial self-efficacy, and virtual entrepreneurial intent in Saudi Arabia's sustainable SME sector. The literature synthesis suggests that entrepreneurial bricolage, described as resourcefulness and revolutionary hassle-fixing under constraints, notably influences virtual entrepreneurial intentions and the usage of empowering people to utilize limited property innovatively. Jun et al. (2023) emphasized that bricolage benefits aid-constrained industries like SMEs, in which entrepreneurs regularly need to repurpose available materials and abilities to create value. This aligns with the dynamic and competitive nature of the sustainable SME quarter in Saudi Arabia, wherein entrepreneurs try to leverage confined resources to fulfil evolving customer needs.

Green entrepreneurial orientation (GEO) is an essential detail in fostering sustainable virtual entrepreneurship. According to usage studies (Olutuase et al., 2018), GEO significantly improves an enterprise's potential to innovate green solutions and strengthens its aggressive position in environmentally concerned marketplaces (Hossen & Pauzi, 2025). In Saudi Arabia, where the SME sector relies heavily on natural and cultural assets, GEO is critical in integrating entrepreneurial markets with sustainability goals. Entrepreneurs with a robust green orientation are more likely to mix virtual devices that promote SMEs and valuable belongings for normal universal performance, thereby driving digital entrepreneurial intentions.

The entrepreneurial self-efficacy (ESE) was determined to be an essential component in mediating the relationship between entrepreneurial bricolage, GEO, and digital entrepreneurial aspirations among sustainable SMEs. Sunguh and Yi's (2024) self-efficacy theory gives a theoretical foundation, suggesting that people with high self-efficacy are extra assured of their capability to triumph over challenges and achieve entrepreneurial dreams. This premise is reinforced by Zhao et al. (2005), who assert that ESE significantly impacts the risk of entrepreneurial fulfilment. The paper stated that ESE enables and encourages entrepreneurs to effectively cope with uncertainties in digital entrepreneurship by using their bricolage talents and green attitude (Potluri, 2024), particularly among SMEs.

The literature supports the hypothesis that mixing digital equipment and platforms is a key enabler of entrepreneurial intentions in sustainable SME places. Sussan and Acs (2017) highlighted the significance of digital ecosystems in fostering innovation and developing the marketplace, especially in emerging economies (Tekala et al., 2024). Similarly, Hjalager (2015) identifies digital improvements and innovative online systems as crucial for boosting sustainability in SMEs. These findings mainly apply to Saudi Arabia, where adopting digital technology can deal with challenges, including market fragmentation, beneficial support control, and customer engagement (Hossen & Salleh, 2024).

Cross-cultural perspectives further develop the findings, emphasizing the significance of tailoring entrepreneurial techniques to local contexts. Satar et al. (2024) underline the unique tendencies of Saudi Arabia's SME region, collectively with its reliance on the nearby historical and natural resources. The findings suggest that successful digital entrepreneurial aspirations in this setting need an array of international incredible practices and local ways of diversification, ensuring that entrepreneurial actions connect with the cultural and natural surroundings.

In conclusion, this paper's findings highlighted the interwoven roles of entrepreneurial bricolage, green entrepreneurial orientation, and self-efficacy in creating digital entrepreneurial intent within Saudi Arabia's sustainable SMEs. These outcomes are grounded in strong theoretical frameworks and empirical proof, demonstrating how entrepreneurial behaviors and orientations can strain innovation and sustainability in beneficial resource-restrained environments (Rofiaty et al., 2022). This study comprehensively explains the elements influencing digital entrepreneurship in sustainable SMEs, with significant implications for policymakers and marketers aiming to enhance sustainability and competitiveness.

CONCLUSION

The findings demonstrated in this paper show that entrepreneurial bricolage serves as an essential driving force of innovation and supports optimization, permitting entrepreneurs to conquer

constraints and pursue digital ventures. Similarly, green entrepreneurial orientation emphasizes the significance of matching business goals with sustainability ambitions, which is critical in SMEs that rely primarily on herbal and cultural property. Entrepreneurial self-efficacy is perceived as bridging the literacy gaps by promoting self-efficacy and resilience among marketers. It allows them to successfully leverage bricolage skills and green practices to explore beneficial digital possibilities (Rahman, Ismail, et al., 2025).

The elements contribute notably to fostering digital entrepreneurial intentions, which can be essential for addressing marketplace fragmentation, enhancing customer engagement, and ensuring the resource allocation for the general performance of Saudi Arabia's SME businesses. Theoretically, it advances the understanding of how entrepreneurial constructs interact to force digital entrepreneurship, especially in resource-constrained and sustainability-centred industries. The entrepreneurial bricolage, green orientation, and self-efficacy, the study enriches the prevailing frame of literature. It highlights the significance of a multi-dimensional technique to the knowledge of entrepreneurial intentions. The findings provide precious insights for entrepreneurs, policymakers, and industry stakeholders in Saudi Arabia's sustainable SMEs. Entrepreneurs are recommended to adopt a bricolage mindset and emphasize green practices to align with developing customer calls for sustainability. Policymakers could capitalize on these findings to create targeted programs identifying entrepreneurial self-efficacy, such as mentoring programs, education seminars, and digital resource accessibility efforts. Additionally, SMEs can use these findings to foster a subculture of innovation, wherein sustainability and digitalization move hand in hand, riding each other's competitiveness and long-term growth (Rahman, Hossain, et al., 2025).

Despite its contributions, this study paves the way for future study opportunities. Prior studies have typically relied on theoretical and secondary data, and while they provide substantial insight, future research should corroborate the conclusions through practical investigations. Furthermore, this paper focuses on Saudi Arabia's sustainable SMEs, and future research might explore applying these findings in other contexts or industries to improve generalizability. Cross-cultural studies might additionally examine how unique socioeconomic and cultural circumstances influence the interaction of bricolage, green orientation, and self-efficacy in creating digital entrepreneurial intents.

Further research might experiment with other mediating or moderating variables affecting those relationships. For example, the role of digital literacy, access to investment, or marketplace situations can be explored to offer a more nuanced understanding of the elements of digital entrepreneurship. Additionally, future research was needed to check out the long-term influences of green entrepreneurial practices on the commercial industry's overall performance, customer loyalty, and network improvement. By addressing these gaps, future research can offer a greater holistic view of how entrepreneurial techniques contribute to sustainability and innovation in numerous settings. In sum, the study provides a solid foundation for investigating the dynamic links between entrepreneurship, sustainability, and digitalization, therefore contributing to the creation of practical strategies and theoretical advances.

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Conflicts of Interest: The author has no conflicts of interest to disclose concerning this study.

Declarations: The manuscript has not been submitted/presented for consideration to any other journal or conference.

Data Availability: The author holds all the data employed in this study and is open to sharing it upon reasonable request.

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