

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Hamza El Guili

Doctor in Management Sciences
University of Abdelmalek Essaâdi, Morocco
hamza.elguili@etu.uae.ac.ma

ABSTRACT

Drawing on effectuation theory, this study examines how resource-constrained entrepreneurs in emerging markets reconcile the analytical capabilities of Generative Artificial Intelligence (GenAI) with relationship-based effectual decision-making under high uncertainty. It aims to resolve the tension between algorithmic efficiency and human-centric logic in non-Western contexts. Adopting an abductive multiple case study design, we conducted in-depth semi-structured interviews with twelve Moroccan entrepreneurs (N=12) engaged in international expansion across three distinct sectors: agri-business, traditional crafts, and sports technology. Data analysis followed a hierarchical coding process to identify cross-case patterns of integration and resistance. Findings reveal a Decision-Type Integration Hierarchy (DTIH) where entrepreneurs delegate analytical tasks to AI to operationalize affordable loss while strictly retaining human control over trust-intensive decisions. We document Crisis Reversion (CR), a novel phenomenon where entrepreneurs abandon algorithmic tools during supply chain shocks, reverting to human effectual networks. Furthermore, cultural authenticity acts as a strict boundary condition limiting AI adoption in high-touch sectors. This research extends effectuation theory by demonstrating how GenAI functions as a mechanism for Cognitive Expansion rather than substitution. It contributes a preliminary framework for AI-Enabled Effectuation challenging linear adoption models by highlighting the temporal fragility of AI reliance during crises.

Keywords: *Generative Artificial Intelligence, Effectuation Theory, Emerging Markets, Crisis Reversion, Cognitive Expansion, SME Internationalization.*

1. INTRODUCTION

The emergence of GenAI (GenAI) has fundamentally transformed entrepreneurial decision-making in emerging markets, creating a complex dualism between technological efficiency and traditional relationship-based logic. Consider the operational reality of a modern Moroccan entrepreneur who might simultaneously utilize ChatGPT for analyzing European market trends while relying exclusively on high-context, face-to-face interactions to secure the final partnership. This dichotomy represents a critical theoretical tension: while digital tools offer capabilities such as creative content generation, conversational interfaces, and dynamic scenario planning that extend beyond traditional analytical tools (Rajaram & Tinguely, 2024), the cultural fabric of emerging markets often demands a preservation of human-centric trust that algorithms cannot replicate. Entrepreneurs in Casablanca and Tangier are managing this reality with remarkable ingenuity, developing sophisticated approaches that integrate AI capabilities with relationship-based business practices. However, a significant theoretical disconnect exists in the current literature. Existing research on AI adoption in entrepreneurial contexts has mainly focused on resource-abundant environments and large-scale implementations. But this leaves important gaps in understanding how entrepreneurs in emerging markets might integrate GenAI capabilities with their decision-making processes.

Objective of Study

In light of the above, this exploratory study proposes a preliminary theoretical framework for understanding how GenAI capabilities might integrate with effectual decision-making processes in emerging market contexts. Thus, instead of testing established relationships, we seek to develop initial theoretical propositions that can guide future empirical research in this nascent field. Consequently, the specific problem this study addresses is the lack of empirical understanding regarding how resource-constrained entrepreneurs reconcile the analytical power of GenAI with the human-centric logic of effectuation. To achieve this objective, this research employs an abductive qualitative case study design. Unlike conventional AI systems that primarily analyze existing data, GenAI technologies such as ChatGPT, Claude, and Gemini, inter alia, allow entrepreneurs to engage in collaborative ideation, generate strategic alternatives, and create personalized stakeholder communications at unprecedented scale and speed (Le Dinh et al., 2025). Moreover, GenAI became widely accessible following ChatGPT's November 2022 release, becoming the fastest-growing consumer application with 100 million active users within 2 months (Rajaram & Tinguely, 2024).

Context and Rationale

Prevailing research on AI adoption frequently assumes environments characterized by abundant resources and high technical expertise. However, this assumption fails to capture the reality of emerging market entrepreneurs, who operate under significant scarcity and institutional voids.

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

This divergence becomes particularly intriguing when examining effectuation theory, which emphasizes means-driven approaches, affordable loss principles and stakeholder partnerships in uncertain environments (Sarasvathy, 2001). It should be recalled that the theory was developed before the arrival of modern AI technologies, leaving fundamental questions about how digital tools might interact with effectual logic. In fact, these questions become relevant in emerging market contexts where entrepreneurs face unique combinations of resource constraints, institutional uncertainties and cultural complexities that shape technology adoption patterns. Morocco exemplifies these dynamics, representing a nation with ambitious AI development aspirations yet maintaining a dynamic developing economy dominated by small and medium enterprises (SMEs). What actually emerges from this context isn't the either-or narrative often heard about human versus artificial intelligence, but instead, entrepreneurs who are learning to dance with AI rather than being replaced by it. Hence, it is important to emphasize that this technological evolution arrives at a particularly critical stage for emerging market entrepreneurs who must manage international expansion under significant resource constraints while maintaining the flexibility and relationship-based approaches essential for success in uncertain environments. This study therefore contributes to the literature by extending effectuation theory into the digital domain.

To achieve these research objectives, we have organized the remainder of this paper as follows. First, we synthesize the existing literature on effectuation theory and artificial intelligence to construct the theoretical foundation for the study. Second, we detail our methodological approach, justifying the use of an abductive multiple case study design with twelve Moroccan entrepreneurs. Third, we present the empirical findings, specifically highlighting the *Decision-Type Integration Hierarchy* (DTIH) and the phenomenon of *Crisis Reversion* (CR). Finally, we discuss the theoretical and practical implications of these results before concluding with limitations and specific avenues for future research.

2. LITERATURE REVIEW

Effectuation Theory: The Logic of Entrepreneurial Action

Effectuation theory can be seen as a fundamental departure from traditional causative reasoning in entrepreneurship. It proposes the concept of effectuation as a means-driven non-predictive logic of entrepreneurial reasoning as an alternative to goal-driven logic based on causation (Sarasvathy, 2001). On the other hand, causation processes take a given effect and focus on selecting between means to create that effect, while effectuation processes take a given set of means and focus on selecting between possible effects that can be created with that set of means (Sarasvathy, 2001). Causation thus goes from effect to means.

Furthermore, effectuation is grounded in bounded rationality (Simon, 1957; 1991), which means that any individual's decision-making capabilities are bounded by cognitive limitations, information asymmetries in the environment, and access to resources. Recent scholarship suggests that AI tools may help entrepreneurs overcome these bounded rationality constraints by enabling cognitive expansion (CE) in strategic reasoning. For instance, recent studies indicate that Large Language Models (LLMs) can simulate future scenarios and forecast strategic outcomes with accuracy comparable to human experts, effectively expanding the cognitive boundaries of the entrepreneur (Joshi, 2025; Giuggioli & Pellegrini, 2023). Accordingly, the concept of *intelligent altruism* is relevant to the affordable loss principle of effectuation that comes out of the bounded rationality logic rather than opportunism of unbounded rationality (Simon, 1993).

It should be noted that effectuation has a number of core principles that distinguishes it rather decisively from causal approaches. First of all, rather than the entrepreneurial actor making causal decisions according to pre-defined goals, effectuation entrepreneurs act upon the means they have available and continuously adjust their goals to those means (Sarasvathy, 2001). With three types of intangible resources: «*What I am*» (identity and abilities of the entrepreneurial actor), «*What I know*» (knowledge), and «*Who I know*» (networks), the effectuator makes new ends which can be new firms, products/services, or markets (Sarasvathy, 2001, 2008). Second, rather than causally and expensively doing research on pre-chosen markets, effectual entrepreneurs involve any/all interested stakeholders (Sarasvathy, 2001). As Sarasvathy and Dew (2008, p.729) explained, «*in effectuation, clear goals do not drive the stakeholder selection process. Instead, who comes on board drives what the goals of the enterprise will be*». This is almost the reverse of traditional strategic planning, and usually a lot more effective in uncertain environments. Third, effectual entrepreneurs risk as much as they can afford to lose while not counting how long a return is expected and on what risks. In conditions of high uncertainty, they cannot mentally predict the return of the investment or the success of the venture (Sarasvathy, 2001). Crucially, the emergence of GenAI significantly influences this affordable loss principle for resource-constrained entrepreneurs. By automating material generation and reducing marketing costs, AI tools effectively level the playing field versus bigger rivals (Aggarwal et al., 2025). This technological shift transforms affordable loss from a mere constraint-management strategy into an innovation accelerator, as the lowered cost of failure allows for more frequent experimentation within limited budgets. Fourth, effectual entrepreneurs do not create plans based on existing knowledge, but exploit contingencies to control the situation as it emerges, taking advantages of the unexpected and the surprising aspects of uncertainty, not as a downside, but as an opportunity and resource (Sarasvathy, 2001). Hence, effectuation is operationalized as a construct with four dimensions: experimentation, affordable loss, flexibility, and pre-commitments/strategic alliances (Chandler et al., 2011; Fisher, 2012).

To conclude, it is important to mention that effectuation theory has advanced to being at an intermediate stage of development (Matalamäki, 2017), with four main streams: innovation and

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

product development, internationalization, simultaneous effectuation and causation, and entrepreneurial expertise.

SME Internationalization and Effectuation Theory Integration

The literature on internationalization has matured considerably from its initial stage models to more sophisticated understanding of how SMEs internationalize (Ruzzier et al., 2006; Paul & Rosado-Serrano, 2019). The early starting point Johanson and Vahlne (1977) established their model in which the study of individual firm's internationalization addressed internationalizing ventures followed sequentially patterns of internationalizing through acquiring, integrating, and utilizing knowledge of foreign markets. However, this view has evolved substantially, where the business context is viewed as a complex web of relationships (Johanson & Vahlne, 2009) rather than a neoclassical market with independent buyers and sellers. The revision of 2009 added important patterns of trust-development and new knowledge creation, which fundamentally changes how we understand uncertainty.

Additionally, international entrepreneurship scholars have drawn on effectuation theory to account for international opportunity discovery and creation by internationalizing SMEs (Galkina & Chetty, 2015; Kalinic et al., 2014). Internationalization pathways are unpredictable (Vahlne & Johanson, 2017), and the uncertainty of SME internationalization means that, through their entrepreneurial process, they cannot depend solely on market research, competitive analysis, and market development/ planning. Subsequently, Kalinic et al. (2014) explored the internationalization process of five manufacturing SMEs using a qualitative methodology. The findings suggest that even when unplanned internationalization occurs, it can still be based on rational decisions but instead of causal logic, the entrepreneurs follow effectual logic. In other words, their decisions are orientated by affordable loss rather than maximizing expected return. This is perfectly understandable when you consider operating on limited resources, you simply cannot afford to risk it all on uncertain outcomes.

Crucially, recent empirical evidence suggests that GenAI acts as a mechanism to operationalize this effectual logic in international markets. Benmamoun (2025) demonstrates that GenAI language tools facilitate collaboration among diverse global teams, providing the technical means to bridge linguistic gaps. Similarly, Aggarwal et al. (2025) report that GenAI enables the instant translation of mass marketing campaigns for specific foreign audiences. We argue that these capabilities allow resource-constrained SMEs to mitigate the liability of outsidership and adhere to the affordable loss principle. By utilizing AI to generate localized content and predict market risks, with factors shown to account for over 98% of the variance in CRM capabilities for instance (Al Mamary, 2025), entrepreneurs can substitute high-cost market commitment with rapid, low-cost experimentation.

Artificial Intelligence in Business Applications and SME Contexts

Artificial intelligence enables integration of cognition with machine learning, combining computer science, logic and other disciplines for critical processes such as natural language processing, human-computer interaction, and decision-making (Lv et al., 2022; Blanco-González-Tejero et al., 2023). However, most of the literature still talks about AI as if it's something that happens to businesses rather than something businesses do with intention. In fact, the literature oriented to practitioners fails to address specific SME challenges and focuses on integrating AI in large organizations (Bughin, 2023). However, recent systematic reviews confirm a shift in this narrative, identifying AI as a critical enabler of the entrepreneurial process itself. Giuggioli and Pellegrini (2023) explicitly introduce the concept of the AI-enabled entrepreneurial process, demonstrating that AI impacts four key operational areas: opportunity recognition, decision-making, performance improvement, and education. Their framework reveals that in the opportunity phase, entrepreneurs engage in digital transformation to generate new business avenues, while in the decision-making phase, AI transforms raw data into accurate predictions, thereby reducing uncertainty.

Also, SMEs happen to frequently lack the complementary resources that will allow AI deployment such as data science skills and the requisite technical architecture. However, SMEs may access AI, as it provides creative opportunities that have previously only been available to firms with abundant resources (Rajaram & Tinguely, 2024). It is important to mention that AI techniques are truly capable of advancing the decision systems entrepreneurs use in decision-making, in addition to increasing the efficiency and effectiveness of their decisions, which correlates with higher operational performance (Kraus et al., 2020). This alignment supports the emergence of *Hybrid Intelligence*, where AI augments human intuition rather than replacing it. Huang and Rust (2021) propose a collaborative intelligence framework, arguing that AI's greatest potential lies in complementing human strengths, such as creativity and social judgment, with machine strengths like predictive accuracy and scalability. The main AI technologies that SMEs have adopted are Machine Learning, Deep Learning, NLP, GenAI, and Computer Vision, which will automate their processes, optimize their decisions, and improve customer engagement (Le Dinh et al., 2025).

GenAI, as its name implies, facilitates the creation of new content and is a notable advance for entrepreneurs in the context of GenAI and the broader AI landscape. While traditional AI systems are designed to identify patterns from existing data, GenAI tools utilize advanced language models trained on exaggerated datasets to build new content. Common examples of GenAI tools include ChatGPT (OpenAI), Claude (Anthropic), and Gemini (Google), as well as other large language models with conversational interfaces and content generation capabilities (Rajaram & Tinguely, 2024). These GenAI tools emerge as different than prior business software in terms of the ease of access and use to entrepreneurs as their intended users. Also, GenAI can be used without significant technical expertise, can replicate many different languages and responds immediately to queries about strategic planning, market analysis, and business communications (Le Dinh et al., 2025). This democratization is crucial for overcoming *algorithmic aversion* in SMEs, as recent

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

findings suggest that perceived simplicity and direct performance benefits are key drivers for adoption in resource-constrained environments (Giuggioli & Pellegrini, 2023; El Arabi & Yahyaoui, 2025).

For emerging market entrepreneurs with limited resources, these characteristics make GenAI particularly attractive compared to traditional business intelligence solutions that require significant investment in infrastructure and expertise. Interestingly, AI doesn't just improve the performance of organizations that are already AI-driven, it also encourages more traditional firms to rethink and develop their business models using AI-based solutions (Giuggioli & Pellegrini, 2023). In this light, it is worth mentioning that Africa hasn't been left behind as the world adopts artificial intelligence in various capacities- quite the contrary, actually. AI has made significant inroads across multiple sectors of the African continent, with numerous organizations integrating AI into their daily operations (Kwanya et al., 2023). However, Africa lags behind other regions in AI readiness, with AI startups emerging nearly a decade after the beginning of the 4th Industrial Revolution (Arakpogun et al., 2021). Notably, recent bibliometric reviews highlight that while interest in AI entrepreneurship is growing, there remains a substantial research gap regarding its application in developing African regions, where entrepreneurs must navigate unique institutional voids (Boateng et al., 2025).

Moroccan Business and AI Context

Morocco has implemented an ambitious modernization agenda over the past quarter century, leveraging world-class infrastructure to insert itself into global value chains and attract foreign direct investments. Indeed, the development of the Tangier Med Port in 2007 marked a milestone, transforming it into Africa's leading industrial free zone. As a matter of fact, Morocco is uniquely positioned to be open, as it is the only country in Africa with a Free Trade Agreement with the United States. Notably, Morocco's emphasis on AI development was articulated through a series of strategic initiatives which outline a role for AI that is central to public policy across the domains of education, economic inclusion, and energy transition. Additionally, the government aims to host the Global AI Summit in 2027, with relative technological infrastructure in place, and innovation centers anticipated to be launched.

What is salient about Morocco's approach that is relevant in considering entrepreneurial cognition related to AI adoption is the focus on practical, accessible implementation adhering to ideas of effectuation. Government officials identified human-centered deployment as a key strategy for AI, admitting that there needed to be a way for users to adopt effective technology strategy under existing constraints, rather than seeking a total transformation on the part of users. This is consistent with recent empirical findings in the Rabat-Salé-Kénitra region, which suggest that while regulatory challenges and skill scarcity remain barriers, the regulatory environment can also positively structure AI adoption opportunities for SMEs (El Arabi & Yahyaoui, 2025).

In this vein, Morocco is going to create Al-Jazari Institutes (MFM, 2025) which provide an institutional infrastructure to facilitate stakeholder cooperation as embodied in theoretical effectuation. These regional centers aim to «*bring together all these actors in one region. Universities, public sector, private sector*» to develop Moroccan products that will come to existence and go to market (MFM, 2025). This ecosystem approach recognizes that successful AI adoption requires the kind of network-driven partnership formation that effectuation theory emphasizes.

It should be recalled that within the Moroccan context, El Guili et al. (2023) found that both causation and effectuation logics have positive influence on SME export performance. Contrary to other researchers, the superiority of effectuation over causation in internationalization contexts was not confirmed in this setting. This finding suggests that Moroccan entrepreneurs may be particularly well-positioned to develop sophisticated hybrid approaches combining analytical AI capabilities with relationship-based effectual strategies.

Despite the growing body of literature, a critical gap remains. While recent studies have begun to map the AI entrepreneurship landscape (Boateng et al., 2025) and identify AI as an enabler of entrepreneurial processes (Giuggioli & Pellegrini, 2023), there is a distinct lack of empirical research examining how GenAI interacts with effectual logic in North African contexts. Specifically, the literature lacks theoretical frameworks that explain how resource-constrained entrepreneurs utilize AI not just for efficiency, but as a partner in means-driven opportunity creation. This study addresses this precise gap.

To synthesize the theoretical progression from foundational effectuation logic to contemporary AI-enabled processes, Table 1 summarizes the key literature informing this study's framework.

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Table 1

Summary of Key Theoretical Contributions Linking AI, Effectuation, and SME Contexts (Author)

<u>Author(s) & Year</u>	<u>Thematic Focus</u>	<u>Key Findings / Conceptual Contribution</u>	<u>Relevance to Current Study</u>
<i>Sarasvathy (2001)</i>	Effectuation Theory	Established the distinction between causation (goal-driven) and effectuation (means-driven) logics. Defined core principles: Affordable Loss, Strategic Alliances, Flexibility.	Provides the foundational theoretical lens for understanding non-predictive entrepreneurial action.
<i>Huang & Rust (2021)</i>	Human-AI Interaction	Proposed the Hybrid Intelligence framework. Argues that AI's value lies in complementing human strengths (creativity/intuition) with machine strengths (scale/prediction).	Supports the study's central metaphor of "dancing with AI"(collaborative rather than replacive).
<i>Giuggioli & Pellegrini (2023)</i>	AI & Entrepreneurship	Introduced the AI-enabled entrepreneurial process. Identified 4 phases where AI acts as an enabler: Opportunity Recognition, Decision-making, Performance, Education.	Validates AI as an active partner in the entrepreneurial process, not just a passive tool.
<i>Joshi (2025)</i>	Cognitive Expansion (CE)	Demonstrated that LLMs can simulate future scenarios and forecast outcomes with expert-level accuracy, effectively expanding the	Explains the mechanism by which AI tools enhance strategic planning in resource-constrained settings.

<u>Author(s) & Year</u>	<u>Thematic Focus</u>	<u>Key Findings / Conceptual Contribution</u>	<u>Relevance to Current Study</u>
		entrepreneur's bounded rationality.	
<i>Aggarwal et al. (2025)</i>	SME Resource Constraints	Found that GenAI significantly reduces costs in content generation and marketing, effectively democratizing access to high-quality resources.	Operationalizes the Affordable Loss principle: AI lowers the cost of failure, enabling more experimentation.
<i>Benmamoun (2024)</i>	Internationalization	Showed that GenAI tools bridge linguistic and cultural gaps in global virtual teams.	Explains how SMEs use AI to overcome the liability of outsidership during international expansion.
<i>Al Mamary (2025)</i>	Decision Making & CRM	Empirical study finding that AI capabilities account for 98% of the variance in CRM effectiveness and decision-making quality.	Provides empirical evidence for the performance benefits of AI adoption in emerging markets.
<i>Boateng et al. (2025)</i>	Bibliometric Review	Mapped the field of AI entrepreneurship, identifying a critical lack of empirical research in African and developing contexts.	Justifies the specific geographical scope (North Africa/Morocco) and the need for this study.

3. METHODOLOGY

Research Design

This research employs an exploratory multiple case study design aimed at theory building rather than theory testing (Eisenhardt, 1989). Given the nascent nature of GenAI adoption in emerging market entrepreneurship, our goal is to identify preliminary patterns and develop propositions for future empirical validation rather than to provide definitive causal explanations.

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Following Lee et al. (1999) suggestion to use an exploratory case study approach, we employed a qualitative research method that allows in-depth investigation of contemporary AI adoption phenomena within real-life entrepreneurial contexts.

To address the methodological ambiguity often found in qualitative studies, we explicitly define our approach as a multiple case study design where semi-structured interviews serve as the primary data collection instrument. Case studies attempt to understand the dynamics present within single settings by using a variety of lenses to reveal multiple facets of the phenomenon (Stake, 1995; Yin, 2003).

Our research approach follows an abductive reasoning logic, which combines deductive and inductive elements to develop theoretical explanations for observed phenomena (Dubois & Gadde, 2002). Abduction is particularly suited for exploratory research where existing theories provide partial explanations but require extension or modification to address new empirical contexts (Timmermans & Tavory, 2012). In our case, effectuation theory provides a foundational framework, but its application to GenAI in emerging markets requires theoretical extension.

The abductive approach enabled us to develop preliminary theoretical propositions based on initial literature synthesis, then systematically test and refine these propositions through empirical data collection and analysis (Kovács & Spens, 2005).

Sampling and Data Collection

For reasons of theoretical coherence and practical accessibility, this study focused specifically on widely accessible GenAI platforms including ChatGPT (OpenAI), Claude (Anthropic), and Gemini (Google).

We employed purposeful theoretical sampling to identify entrepreneurs meeting specific criteria relevant to our theoretical development: (1) Moroccan SME founders/owners, (2) active in international expansion efforts, (3) regular usage of GenAI tools in business operations, and (4) willingness to discuss technology adoption processes openly.

Between January 15th and May 1st, 2025, we conducted in-depth semi-structured interviews with twelve entrepreneurs (N=12) across three distinct sectors selected to represent different levels of task subjectivity (Gieselman et al., 2025):

- **Agri-business (4 cases):** Selected to represent high operational constraints and physical resource dependence (Cavazza et al., 2023).
- **Traditional Crafts/Handicrafts (4 cases):** Selected to represent high cultural embedding and tacit knowledge.

- **Sports Technology (4 cases):** Selected as a polar type to represent high digital native capabilities.

While a sample size of 12 may appear small for statistical generalization, it aligns with established norms for qualitative saturation in homogeneous groups (Guest et al., 2006). As Eisenhardt and Graebner (2007) note, adding cases beyond this range often diminishes the depth of individual case analysis without significantly adding to theoretical insight.

Interviews were conducted in Moroccan dialect (Darija), then translated into French and validated with participants to ensure accuracy of meaning and context (Member Checking). Final translations into English maintained the authentic verbatims while ensuring academic precision.

Each interview lasted 45-60 minutes and followed a comprehensive semi-structured protocol designed to capture both effectuation patterns and GenAI integration mechanisms.

The interview guide was organized into five main sections:

1. **Current GenAI usage patterns:** Examining daily AI tool deployment across ChatGPT, Claude, and Gemini.
2. **Internationalization processes:** Mapping entrepreneurs' market entry journeys and decision-making evolution.
3. **AI integration in decision-making:** Exploring the systematic approaches entrepreneurs develop.
4. **Integration boundaries and cultural context:** Investigating where entrepreneurs draw limits on AI usage.
5. **Integration limits and future perspectives:** Examining natural equilibrium effects.

Crucially, questions were specifically designed to test our three core propositions through targeted probes:

- **For P1 (DTIH):** We asked entrepreneurs to distinguish between trust-intensive decisions (*partnership formation, cultural negotiations, stakeholder relationship building*) and analytical decisions (*market research, risk assessment, competitive analysis*).
- **For P2 (Cultural Contingency as Innovation Opportunity):** We explored situations where AI-generated content felt culturally inappropriate and how entrepreneurs transformed these constraints into competitive advantages.
- **For P3 (Systematic Integration Architecture):** We probed for evidence of three-stage processes involving AI-generated analytical input, human contextual interpretation, and collaborative decision synthesis.

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Our questions specifically asked about how entrepreneurs were making sense of these AI tools as opposed to more complex AI systems, allowing for a better understanding of integration patterns in resource-constrained circumstances.

Analytical Strategy: Two-Stage Process

This study employed a two-stage analytical strategy common in theory-building case research (Eisenhardt & Graebner, 2007; Miles & Huberman, 1994).

Stage 1 - Comprehensive Pattern Analysis

All twelve interview transcripts were systematically coded and analyzed to identify recurring patterns of GenAI integration. This stage focused on achieving theoretical saturation across the full sample, ensuring that the emergent framework was grounded in the complete dataset rather than a subset. Template analysis (King, 2012) was applied to all twelve cases, with initial codes derived from effectuation theory dimensions and emerging themes related to GenAI integration patterns.

Stage 2 - Selective Deep Presentation

Following complete analysis, five cases were purposefully selected for detailed narrative presentation in the Results section. This selection prioritized theoretical exemplarity over statistical representation, by choosing cases that most clearly demonstrated the identified patterns with rich, contextual evidence suitable for academic publication (Eisenhardt, 1989; Yin, 2014).

This approach balances analytical rigor (comprehensive analysis of all data) with narrative clarity (focused presentation of exemplary cases).

Rather than presenting all twelve cases superficially, we provide deep contextualized accounts of five strategically selected cases that best illuminate the theoretical mechanisms identified across the full sample.

Case Selection Strategy

From the analyzed corpus of twelve cases, we selected five for detailed narrative presentation based on their theoretical contribution:

- **Three primary cases (A, B, C)** were chosen because they best illustrated each of the three core propositions with rich, quotable evidence. Each serves as an exemplar for one of the three theoretical mechanisms identified across the full sample.

- **Two supporting cases (D, E)** were selected to demonstrate integration boundaries and failure modes, showing both successful and unsuccessful attempts to integrate GenAI. These cases provide critical evidence regarding the boundary conditions of the framework.

The remaining seven interviews from the broader sample provided important background understanding and pattern confirmation but did not offer unique theoretical insights beyond those captured in the five presented cases. Importantly, these seven cases confirmed rather than contradicted the patterns identified, strengthening confidence in the theoretical framework's validity across the full sample.

This selective presentation strategy is consistent with recommended procedures for theory-building qualitative research, where depth of insight is prioritized over breadth of coverage (Eisenhardt, 1989; Yin, 2014).

Data Analysis

Interview transcripts were analyzed using template analysis (King, 2012), with initial codes derived from effectuation theory dimensions and emerging themes related to GenAI integration patterns.

To ensure rigor and address the need for detailed coding procedures, we employed a hierarchical coding process (Glebova et al., 2025):

- **Open Coding (Line-by-Line Analysis):** We first conducted a line-by-line analysis of all twelve transcripts to identify initial concepts, extracting key points and generating detailed codes.
- **Axial Coding (Pattern Matching):** We then organized these open codes into higher-order categories based on their relationships, looking for patterns of effectual logic (e.g., affordable loss, flexibility) versus causal logic. This analysis was conducted across the full sample of twelve interviews
- **Theoretical Integration:** Finally, we compared these patterns across the three sectors to identify variations (e.g., how task subjectivity in handicrafts influenced AI adoption differently than precision tasks in agri-business). This cross-case analysis encompassed all twelve cases.

We focused on identifying patterns consistent with effectuation principles and GenAI integration mechanisms rather than seeking definitive proof of theoretical relationships. The goal was pattern recognition for theoretical development, not statistical validation.

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Theoretical Saturation

Theoretical saturation was assessed across the full sample of twelve interviews, including those not presented as detailed case narratives in the Results section. Data collection and analysis continued until theoretical saturation was achieved, defined as the point when “*no additional data was found that would allow the researcher to further develop the properties of the phenomenon*” (Rahimi & Khatooni, 2024).

By the 10th interview, the three core integration mechanisms (DTIH, CR, CB) had fully emerged, with no new patterns appearing. Interviews 11 and 12 served as confirmatory cases, reinforcing rather than expanding the theoretical framework.

For example, while Entrepreneur 11 (leather goods export) and Entrepreneur 12 (argan oil production) provided sectorally distinct contexts, both described the same analytical-versus-trust task delegation pattern already identified in prior interviews. Similarly, both recounted experiences of reverting to human networks during supply chain disruptions, consistent with the CR pattern documented in earlier cases.

This recurrence of key themes without the emergence of new patterns confirmed that the sample size of twelve was sufficient to capture the core dynamics of the phenomenon. The decision to continue to twelve interviews (rather than stopping at ten) provided additional confidence in the robustness of the identified patterns and ensured that saturation was genuine rather than premature.

4. RESULTS AND DISCUSSION

Theoretical Framework Development

The convergence of GenAI capabilities with effectuation theory creates opportunities for understanding how entrepreneurs might manage digital transformation while preserving the adaptive, relationship-focused approaches essential for success in uncertain environments.

Drawing from Sarasvathy’s (2001) foundational work and recent research demonstrating effectuation’s relevance in digital contexts (Giuggioli & Pellegrini, 2023), our theoretical framework suggests that GenAI might enhance rather than replace effectual decision-making through systematic integration mechanisms.

Notably, GenAI technologies offer unique characteristics that distinguish them from traditional AI systems. Contrasting conventional analytical tools that optimize predetermined objectives, GenAI provides conversational interfaces and dynamic scenario planning that align with effectuation’s emphasis on stakeholder partnerships and contingency leveraging.

Table 2 : Core Theoretical Framework Components (Author)

<u>Framework Element</u>	<u>Traditional Effectuation</u>	<u>GenAI-Enhanced Effectuation</u>	<u>Key Innovation</u>
Means Assessment	«What I am, What I know, Whom I know»	AI-augmented scenario generation and Human contextual insight	Rapid hypothesis testing at near-zero cost (Aggarwal et al., 2025)
Affordable Loss	Stake what you can afford to lose	Enhanced risk assessment and Cultural sensitivity simulation	Intelligent risk boundaries
Contingency Leveraging	Embrace the unexpected	Real-time pattern recognition and Relationship preservation	Adaptive opportunity creation
Stakeholder Partnerships	Co-create with willing partners	AI-enhanced communication and Human trust-building	Hybrid collaboration models

Core Theoretical Propositions

Drawing from effectuation theory foundations (Sarasvathy, 2001), emerging research on digital entrepreneurship (Joshi, 2025), and observed patterns in our cases, we propose three specific mechanisms through which GenAI capabilities interact with effectual decision-making.

Proposition 1: Decision-Type Integration Hierarchy (DTIH)

P1: *Emerging market entrepreneurs demonstrate systematically different GenAI integration patterns for trust-intensive decisions (partnership formation, cultural negotiations) compared to analytical decisions (market research, risk assessment), preserving human agency for relationship-based processes.*

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

This proposition emerges from effectuation's emphasis on stakeholder partnerships (Sarasvathy & Dew, 2008). The hierarchy suggests how entrepreneurs systematically preserve human control where cultural sensitivity matters most. It suggests a *Hybrid Intelligence* model (Huang & Rust, 2021) where AI handles the analytical load, freeing human cognition for trust-building.

Proposition 2: Cultural Contingency as Innovation Opportunity

P2: *In emerging market contexts, cultural resistance to GenAI adoption acts as a constraint that drives innovation, leading entrepreneurs to develop hybrid approaches that preserve authentic storytelling while leveraging backend technological efficiency.*

This proposition reflects effectuation's emphasis on contingency leveraging (Dew et al., 2009). Rather than viewing cultural friction as an obstacle, entrepreneurs transform it into a feature of competitive advantage, using AI for the backend logic while intensifying the human touch in the frontend customer experience.

Proposition 3: Systematic Integration Architecture

P3: *GenAI-effectuation integration operates through a systematic three-stage process: (1) AI-generated analytical input, (2) Human contextual interpretation, and (3) Collaborative decision synthesis.*

This proposition suggests that successful integration preserves the experimental nature of effectual reasoning while accelerating the means assessment phase through technological enhancement.

Case Analysis and Findings

Case A: Decision Hierarchy in Sports Technology

Entrepreneur A, founder of a Casablanca-based sports technology startup, illustrates the decision hierarchy patterns suggested in **P1**. When analyzing potential expansion into African and MENA markets, this entrepreneur demonstrates clear boundaries between AI-supported analytical work and relationship-intensive activities.

For data processing, the entrepreneur relies heavily on ChatGPT to analyze market reports and competitor pricing, estimating approximately "70% AI reliance" for these analytical tasks. However, for trust-intensive decisions, such as negotiating with academy directors, AI usage drops to "around 30%" used strictly for background preparation.

Representative Evidence: *"The AI can give me the numbers on youth participation in some countries in seconds. But if I use AI to write the email to the Academy Director, I lose him. He needs to feel the handshake in the text. I use AI for the math, never for the trust."*-**Entrepreneur A**

Case B: Cultural Adaptation in Traditional Textiles

Entrepreneur B, owner of a traditional textile business in Fès, demonstrates how cultural resistance became an innovation opportunity (**P2**). Initially, European buyers rejected AI-generated product descriptions as inauthentic. Instead of abandoning AI, the entrepreneur developed a hybrid approach.

The current system uses AI to analyze European fashion trends and generate technical specifications (thread counts, color fastness). However, the cultural narrative, the story of the weaver and the pattern's meaning, is personally crafted. This aligns with Benmamoun's (2024) findings on using AI to bridge cultural gaps without losing authenticity.

Representative Evidence: *“At first, the AI wrote perfect French, but it had no soul. The clients knew. Now, I let the AI handle the technical specs, the boring stuff. But the story of the wool? That comes from me. This mix... it’s actually selling better than before.” -Entrepreneur B*

Case C: Systematic Integration Architecture in Agri-Tech

Entrepreneur C, managing a Casablanca-based olive oil export startup, illustrates the systematic three-stage decision-making process (**P3**).

1. **Stage 1 (AI Input):** Using AI to generate comprehensive reports on EU regulations and pricing.
2. **Stage 2 (Human Context):** Consulting mentors to interpret “what this means” for relationships.
3. **Stage 3 (Synthesis):** Making the final decision by combining AI facts with network context.

Representative Evidence: *“The AI gives me the map. My mentor tells me where the potholes are. I drive the car. You cannot skip the mentor, and you cannot drive without the map anymore.” -Entrepreneur C*

Supporting Cases: Integration Boundaries and Failures

Case D: The Limits of Authenticity (Traditional Pottery)

Entrepreneur D, a traditional pottery artisan, provides critical evidence regarding the “boundary conditions” of my framework. Unlike the Sports Tech founder (**Case A**) who successfully integrated AI into 70% of analytical workflows, Entrepreneur D experienced a deployment failure when attempting to use GenAI for stakeholder communication.

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Early attempts to use ChatGPT for drafting emails to European buyers resulted in negative feedback; clients perceived the polished, algorithmic language as incompatible with the rustic brand identity of the pottery workshop. This failure forced the entrepreneur to establish a strict integration boundary.

Currently, this business operates with a maximum “5% AI Reliance” rule, strictly limiting the technology to backend technical inquiries (e.g., verifying firing temperatures or glazing compositions). This case theoretically validates Proposition 2, demonstrating that in sectors relying on high cultural tacitness, the authenticity premium acts as a hard limit on AI adoption.

Case E: Crisis Reversion (CR) and Network Resilience (Agricultural Equipment)

Entrepreneur E, a distributor of agricultural equipment, illustrates the temporal dynamics of integration. This case serves as a natural experiment to test the robustness of AI adoption under stress.

During the supply chain disruptions of early 2024, the entrepreneur’s reliance on AI analytics collapsed. While AI tools could process global logistics data, they failed to account for the informal, hyper-local solutions required to move goods through blocked channels. The entrepreneur described a phenomenon of CR, where the firm abandoned algorithmic efficiency tools and reverted entirely to trusted human networks (e.g., calling personal contacts, relying on informal favors).

This behavior validates the effectuation principle of affordable loss over expected return. In a high-stakes crisis, the *efficiency* of AI (expected return) became irrelevant compared to the *reliability* of human partners (affordable loss).

It suggests that for emerging market entrepreneurs, GenAI acts as a fair-weather efficiency multiplier, while human effectual networks remain the storm-weather survival mechanism.

Table 3
Cross-Case Comparison of GenAI Integration Patterns (Author)

<u>Sector (Cases)</u>	<u>Primary Proposition Illustrated</u>	<u>Task Subjectivity (Gieselman et al., 2025)</u>	<u>Integration Pattern</u>	<u>Key Insight</u>
Sports Technology (Case A)	P1: Decision Hierarchy	Low (Data-driven metrics)	High Analytical Integration (~70% AI / 30% Human)	AI handles analytical load (market data); Human retains exclusivity over trust- intensive decisions.
Agri- Business (Case C, E)	P3: Systematic Architecture	Medium (Regulatory/Physical)	Process Integration (AI Input → Human Filter → Synthesis)	A systematic workflow works in stable times, but CR occurs during supply chain shocks (Case E).
Traditional Crafts (Case B, D)	P2: Cultural Contingency	High (Tacit/Cultural)	Selective Backend Integration (<5% Visible AI)	High authenticity premium limits AI to backend tasks. AI content generation fails if not culturally adapted (Case D).

As summarized in Table 3, cross-case analysis reveals that the depth of AI integration is inversely related to Task Subjectivity.

Sectors with low subjectivity (Sports Tech) allow for high integration, whereas high-subjectivity sectors (Crafts) enforce strict boundaries to preserve authenticity.

Conceptual synthesis

The cross-case analysis and theoretical pattern matching (Table 3) culminate in the proposed conceptual model. The integrated framework posits that GenAI adoption in emerging markets is not a linear technological upgrade, but a complex interaction between technological capabilities and effectual reasoning, moderated by specific contextual constraints.

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

As illustrated in the framework, the Effectual Process Engine functions as the central operating mechanism, where entrepreneurs continuously cycle through means-driven adaptation and affordable loss experimentation. However, this engine does not operate in a vacuum. It is heavily moderated by the drive for technological sovereignty; the entrepreneur's explicit desire to maintain agency and authenticity despite relying on foreign AI tools.

This interaction produces two distinct outcomes: (1) Culturally-Adapted Innovations (as seen in Case B's textiles) and (2) Enhanced Entrepreneurial Autonomy (as seen in Case A's ability to compete globally).

The framework visualizes how resource constraints, rather than inhibiting adoption, actually force a more disciplined, relationship-focused integration of AI.

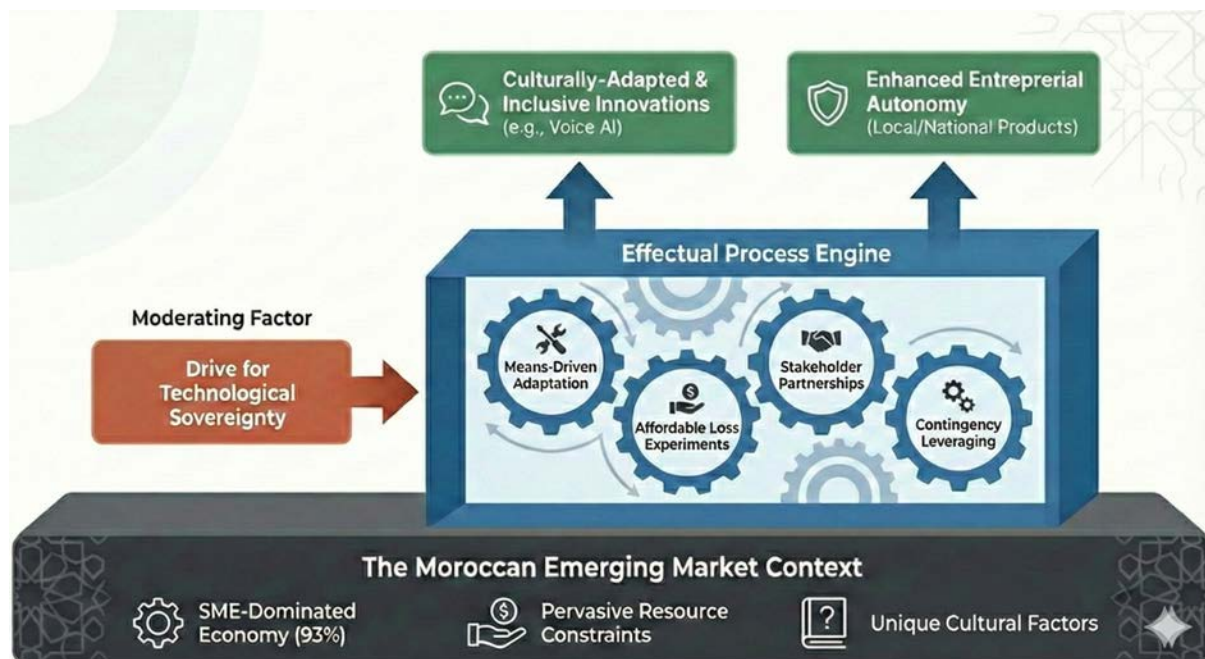


Figure 1: Framework for AI Integration in Emerging Market Contexts (Author)

5. THEORETICAL IMPLICATIONS

This study contributes to the literature by extending effectuation theory into the domain of GenAI, offering three distinct theoretical advancements.

We extend Simon's (1957) concept of bounded rationality by demonstrating how GenAI acts as a mechanism for CE (Joshi, 2025).

While traditional effectuation theory assumes cognitive limits as a constant constraint, our findings suggest that AI tools effectively stretch these boundaries. By enabling entrepreneurs to simulate future scenarios and forecast outcomes with expert-level accuracy, GenAI allows effectual entrepreneurs to process information at a scale previously impossible, transforming bounded rationality into augmented rationality. Thus, our research provides empirical support for Huang and Rust's (2021) hybrid Intelligence framework within an entrepreneurial context. We found that entrepreneurs naturally adopt a specific division of labor consistent with Huang and Rust's "*Feeling vs. Thinking*" economy. Specifically, our DTIH (Proposition 1) confirms that entrepreneurs delegate mechanical and analytical tasks to AI (to reduce the cost of experimentation), while strictly retaining feeling and trust tasks for human judgment. This operationalizes the affordable loss principle: by using AI to test market hypotheses at near-zero cost, entrepreneurs can run more experiments with less capital, effectively lowering the barrier to entry.

Finally, we contribute a new theoretical nuance regarding the stability of AI adoption. While Giuggioli and Pellegrini (2023) propose an AI-enabled entrepreneurial process, our findings (specifically Case E) suggest this process is temporally fragile. We observed a phenomenon of CR, where entrepreneurs abandon algorithmic tools and revert to human effectual networks during periods of high uncertainty. This challenges the assumption of linear digital transformation, suggesting instead that AI is often viewed as a fair-weather efficiency tool, while human networks remain the primary mechanism for survival.

6. PRACTICAL IMPLICATIONS

For Entrepreneurs and Managers

Entrepreneurs should not view AI as a replacement for intuition but as a "Devil's Advocate". We recommend a structured workflow where AI is assigned the role of data analyst (generating options, forecasting risks), while the entrepreneur retains the role of judge (assessing cultural fit and trust). This aligns with El Arabi's and Yahyaoui's (2025) recommendation for gradual, task-specific integration.

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Our findings warn against over-reliance on automated supply chain or market analysis tools. Managers should maintain warm human backup networks, as AI tools trained on historical data may fail to predict or navigate unprecedented market shocks (e.g., the *CR effect*).

For Policymakers in Emerging Markets (The Moroccan Context)

Consistent with El Arabi's and Yahyaoui's (2025) findings in the Rabat-Salé-Kénitra region, the primary barrier to AI adoption is not infrastructure but skill scarcity. We recommend that Moroccan policy initiatives focus on AI Literacy Bootcamps for SMEs, specifically teaching prompt engineering for business instead of generic coding skills.

Given that regulatory challenges were found to actually positively impact adoption by creating clear frameworks, we recommend the establishment of sector-specific AI Regulatory Sandboxes in agriculture and crafts to allow safe experimentation without punitive compliance costs.

7. CONCLUSION AND RECOMMENDATION

This study set out to explore how resource-constrained entrepreneurs in emerging markets integrate GenAI with effectual decision-making. Through a multiple case study of twelve Moroccan SMEs, we developed a framework of *AI-Enabled Effectuation* that relies on a distinct decision hierarchy: utilizing AI for analytical cost-reduction while preserving human agency for trust-based interactions. We conclude that GenAI does not replace the effectual entrepreneur. Instead, it amplifies them. It lowers the cost of affordable loss experimentation and provides a cognitive prosthesis for market analysis, allowing SMEs to compete with larger global players. However, this integration is bounded by cultural authenticity and improved only through a deliberate hybrid intelligence approach.

This study is subject to limitations typical of exploratory qualitative research, particularly the small sample size (N=12) and the focus on a single geographic region (Morocco). While data analysis covered the full sample of twelve entrepreneurs to ensure saturation, the decision to present five in-depth narrative cases, even though being consistent with Eisenhardt's (1989) recommendations for clarity, limits the ability to display the full heterogeneity of the broader sample.

To address these limitations and the gaps identified by Boateng et al. (2025), we propose three avenues for future research:

- 1. Geographic Diversity:** Future studies should test the decision hierarchy model in other emerging markets (e.g., Sub-Saharan Africa or Southeast Asia) to see if the cultural authenticity boundary remains consistent.

2. **Longitudinal Impact on Intuition:** While Al Mamary (2025) calls for longitudinal research, no study has yet examined the long-term cognitive effects of AI reliance. A critical question remains: *Does long-term reliance on AI for market analysis atrophy an entrepreneur's natural intuition?* Future research should track this de-skilling hypothesis over multi-year periods.
3. **Quantitative Validation:** Future research should employ survey-based methods to statistically validate the link between *AI Usage Intensity* and *Effectual Experimentation Speed*, moving beyond qualitative propositions to causal measurement.

REFERENCES

- Aggarwal, V., Kaur, M., Padmaja, P., & Ahmad, F. (2025). Exploring the GenAI for small business: A design thinking approach. *Academy of Marketing Studies Journal*, 29(1), 1–14.
- Ahmed, R., Aureejo, A. H., Khan, M. J., Syed, M. I., Mateen, A., & Hussain, A. (2025). Artificial intelligence and entrepreneurial success: Exploring innovation capability and digital literacy as dynamic enablers of performance. *Journal of Asian Development Studies*, 14(3), 1257–1271. <https://doi.org/10.62345/jads.2025.14.3.102>
- Arakpogun, E., Elsahn, Z., Olan, F., & Elsahn, F. (2021). Artificial intelligence in Africa: Challenges and opportunities. In *Responsible AI in Africa* (pp. 375–388). https://doi.org/10.1007/978-3-030-62796-6_22
- Benmamoun, M. (2024). GenAI in international business research: A guide to ethical and responsible application. *Thunderbird International Business Review*, 67. <https://doi.org/10.1002/tie.22415>
- Blanco-González-Tejero, C., Ribeiro-Navarrete, B., Cano-Marin, E., & McDowell, W. C. (2023). A systematic literature review on the role of artificial intelligence in entrepreneurial activity. *International Journal on Semantic Web and Information Systems*, 19(1), 1–16. <https://doi.org/10.4018/IJSWIS.318448>
- Boateng, S. L., Penu, O. K. A., Budu, J., Boateng, R., Marfo, J. S., Anning-Dorson, T., & Broni, F. E. Jr. (2024). Mapping the research on artificial intelligence and entrepreneurship. *International Journal of E-Entrepreneurship and Innovation*, 14, 1–24. <https://doi.org/10.4018/IJEEI.343790>
- Bughin, J. (2023). Are you resilient? Machine learning prediction of corporate rebound out of the Covid-19 pandemic. *Managerial and Decision Economics*, 44(3), 1547–1564. <https://doi.org/10.1002/mde.3764>

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Cavazza, A., Dal Mas, F., Paoloni, P., & Manzo, M. (2023). Artificial intelligence and new business models in agriculture: A structured literature review and future research agenda. *British Food Journal*, 125(13), 436–461. <https://doi.org/10.1108/BFJ-02-2023-0132>

Chandler, G. N., DeTienne, D. R., McKelvie, A., & Mumford, T. V. (2011). Causation and effectuation processes: A validation study. *Journal of Business Venturing*, 26(3), 375–390. <https://doi.org/10.1016/j.jbusvent.2009.10.006>

Dew, N., Read, S., Sarasvathy, S. D., & Wiltbank, R. (2009). Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices. *Journal of Business Venturing*, 24(4), 287–309. <https://doi.org/10.1016/j.jbusvent.2008.02.002>

Dubois, A., & Gadde, L.-E. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research*, 55(7), 553–560. [https://doi.org/10.1016/S0148-2963\(00\)00195-8](https://doi.org/10.1016/S0148-2963(00)00195-8)

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.2307/258557>

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32. <https://doi.org/10.5465/amj.2007.24160888>

El Arabi, H., & Yahyaoui, N. (2025). The challenges and opportunities of artificial intelligence for entrepreneurs: Case study of the Rabat-Salé-Kénitra region. *Theoretical and Practical Research in Economic Fields*, 16(1), 115. [https://doi.org/10.14505/tpref.v16.1\(33\).10](https://doi.org/10.14505/tpref.v16.1(33).10)

El Guili, H. E., Alami, Y., & Idrissi, I. E. (2023). Contribution des propriétaires-dirigeants à la performance à l'export des PME: Cas des PME exportatrices marocaines. *Moroccan Business Review Research*, 2(3). <https://doi.org/10.34874/PRSM.mb2r-vol2iss3.47375>

Fisher, G. (2012). Effectuation, causation, and bricolage: A behavioral comparison of emerging theories in entrepreneurship research. *Entrepreneurship Theory and Practice*, 36(5), 1019–1051. <https://doi.org/10.1111/j.1540-6520.2012.00537.x>

Galkina, T., & Chetty, S. (2015). Effectuation and networking of internationalizing SMEs. *Management International Review*, 55(5), 647–676. <https://doi.org/10.1007/s11575-015-0251-x>

Gieselmann, M., Erdsiek, D., Rost, V., & Sassenberg, K. (2025). Do managers accept artificial intelligence? Insights into the role of business area and AI functionality. *Journal of Economic Psychology*, 108, 102804. <https://doi.org/10.1016/j.joep.2025.102804>

Giuggioli, G., & Pellegrini, M. M. (2023). Artificial intelligence as an enabler for entrepreneurs: A systematic literature review and an agenda for future research. *International Journal of Entrepreneurial Behavior & Research*, 29(4), 816–837. <https://doi.org/10.1108/IJEBR-05-2021-0426>

Glebova, E., Madsen, D. Ø., Mihal'ová, P., Géczi, G., Mittelman, A., & Jorgič, B. (2024). Artificial intelligence development and dissemination impact on the sports industry labor market. *Frontiers in Sports and Active Living*, 6, 1363892. <https://doi.org/10.3389/fspor.2024.1363892>

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>

Huang, M.-H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49(1), 30–50. <https://doi.org/10.1007/s11747-020-00749-9>

Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm—A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23–32. <https://doi.org/10.1057/palgrave.jibs.8490676>

Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431. <https://doi.org/10.1057/jibs.2009.24>

Joshi, S. (2025). The role of artificial intelligence in strategic decision-making: A comprehensive review. *Preprints*. <https://doi.org/10.20944/preprints202505.0047.v1>

Kalinic, I., Sarasvathy, S. D., & Forza, C. (2014). ‘Expect the unexpected’: Implications of effectual logic on the internationalization process. *International Business Review*, 23(3), 635–647. <https://doi.org/10.1016/j.ibusrev.2013.11.004>

King, N. (2012). Doing template analysis. In G. Symon & C. Cassell (Eds.), *Qualitative organizational research: Core methods and current challenges* (pp. 426–450). Sage. <https://doi.org/10.4135/9781526435620.n24>

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Kovács, G., & Spens, K. M. (2005). Abductive reasoning in logistics research. *International Journal of Physical Distribution & Logistics Management*, 35(2), 132–144. <https://doi.org/10.1108/09600030510590318>

Kraus, M., Feuerriegel, S., & Oztekin, A. (2020). Deep learning in business analytics and operations research: Models, applications and managerial implications. *European Journal of Operational Research*, 281(3), 628–641. <https://doi.org/10.1016/j.ejor.2019.09.018>

Kwanya, T., Dignum, V., Borokini, F., Okolo, C., Obaido, G., Ruttkamp-Bloem, E., Ogoh, G., Stahl, B., Eke, D., Wakunuma, K., & Akintoye, S. (2023). *Responsible AI in Africa*. <https://doi.org/10.1007/978-3-031-08215-3>

Le Dinh, T., Vu, M.-C., & Tran, G. T. C. (2025). Artificial intelligence in SMEs: Enhancing business functions through technologies and applications. *Information*, 16(5). <https://doi.org/10.3390/info16050415>

Lee, T. W., Mitchell, T. R., & Sablinski, C. J. (1999). Qualitative research in organizational and vocational psychology, 1979–1999. *Journal of Vocational Behavior*, 55(2), 161–187. <https://doi.org/10.1006/jvbe.1999.1707>

Lv, Z., Wang, N., Ma, X., Sun, Y., Meng, Y., & Tian, Y. (2022). Evaluation standards of intelligent technology based on financial alternative data. *Journal of Innovation & Knowledge*, 7(4), 100229. <https://doi.org/10.1007/s40497-024-00385-5>

Matalamäki, M. J. (2017). Effectuation, an emerging theory of entrepreneurship–towards a mature stage of the development. *Journal of Small Business and Enterprise Development*, 24(4), 928–949. <https://doi.org/10.1108/JSBED-02-2017-0030>

MFM (Director). (2025, July 6). *Emission décryptage «MFM Radio» du 6 juillet 2025. Invité Spécial, Mme. La Ministre de la Transition Numérique et de la Réforme de l'Administration* [Broadcast]. YouTube. <https://www.youtube.com/watch?v=tcc8bmcQCCs>

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*, 2nd ed (pp. xiv, 338). Sage Publications, Inc.

Paul, J., & Rosado-Serrano, A. (2019). Gradual internationalization vs born-global/international new venture models: A review and research agenda. *International Marketing Review*, 36(6), 830–858. https://doi.org/10.1108/IMR-10-2018-0280*

Rajaram, K., & Tinguely, P. N. (2024). GenAI in small and medium enterprises: Navigating its promises and challenges (SSRN Scholarly Paper No. 4867904). Social Science Research Network. <https://doi.org/10.2139/ssrn.4867904>

Rahimi, S., & Khatooni, M. (2024). Saturation in qualitative research: An evolutionary concept analysis. *International Journal of Nursing Studies Advances*, 6, 100174. <https://doi.org/10.1016/j.ijnsa.2024.100174>

Ruzzier, M., Hisrich, R. D., & Antoncic, B. (2006). SME internationalization research: Past, present, and future. *Journal of Small Business and Enterprise Development*, 13(4), 476–497. <https://doi.org/10.1108/14626000610705705>

Al-Mamary, Y. H. (2025). The transformative power of artificial intelligence in entrepreneurship: Exploring AI's capabilities for the success of entrepreneurial ventures. *Future Business Journal*, 11(1), 1–25. <https://doi.org/10.1186/s43093-025-00533-7>

Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243–263. <https://doi.org/10.5465/AMR.2001.4378020>

Sarasvathy, S. D. (2008). *Effectuation: Elements of entrepreneurial expertise*. Edward Elgar Publishing. <https://doi.org/10.4337/9781848440197>

Sarasvathy, S., & Dew, N. (2008). Effectuation and over-trust: Debating Goel and Karri. *Entrepreneurship Theory and Practice*, 32(4), 727–737. <https://doi.org/10.1111/j.1540-6520.2008.00250.x>

Simon, H. A. (1957). *Models of man: Social and rational*. Wiley.

Simon, H. A. (1991). Bounded rationality and organizational learning. *Organization Science*, 2(1), 125–134. <https://doi.org/10.1287/orsc.2.1.125>

Simon, H. A. (1993). Strategy and organizational evolution. *Strategic Management Journal*, 14(S2), 131–142. <https://doi.org/10.1002/smj.4250141011>

Stake, R. E. (1995). *The art of case study research*. Sage.

Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, 30(3), 167–186. <https://doi.org/10.1177/0735275112457914>

DANCING WITH AI: TOWARD A FRAMEWORK FOR UNDERSTANDING HOW EMERGING MARKET ENTREPRENEURS INTEGRATE GENERATIVE ARTIFICIAL INTELLIGENCE WITH EFFECTUAL DECISION-MAKING

Vahlne, J.-E., & Johanson, J. (2017). From internationalization to evolution: The Uppsala model at 40 years. *Journal of International Business Studies*, 48(9), 1087–1102. <https://doi.org/10.1057/s41267-017-0107-7>

Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Sage.

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Sage.

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage.