How AI Tools Reshape Work and Stimulate Intrapreneurial Behavior: Insights from Tunisian and North African Startups

Mahmoud Menyaoui[1], Pr. Lassaad Lakhal[2]

[1] Higher Institute of Management of Sousse, Lamided Laboratory

[2] Faculty of Economics and Management of Sousse, Lamided Laboratory

DOI: https://dx.doi.org/10.47772/IJRISS.2025.91100469

Received: 04 December 2025; Accepted: 10 December 2025; Published: 18 December 2025

ABSTRACT

This study examines how artificial intelligence (AI) tools reshape work practices and foster intrapreneurial behavior within startups in Tunisia and North Africa. Using a qualitative multiple-case research design, data were collected from 24 semi-structured interviews across eight AI-adopting startups. The findings show that AI stimulates intrapreneurship through three key mechanisms: (1) work reconfiguration and cognitive relief generated by task automation; (2) enhanced opportunity recognition resulting from AI-driven insights; and (3) increased confidence and speed in problem-solving through predictive and simulation capabilities. The study also highlights that organizational culture—particularly autonomy, openness, and psychological safety—moderates the extent to which employees turn AI-enabled insights into innovative actions. This research contributes to digital transformation and intrapreneurship literature by identifying AI as a catalyst for cognitive, structural, and behavioral change. It offers practical guidance for leaders seeking to leverage AI to strengthen internal innovation in emerging-market contexts.

Keywords : Artificial intelligence (AI) ; Intrapreneurial behavior ; Digital transformation ; Opportunity recognition ; Emerging-market startups

INTRODUCTION

The rapid diffusion of artificial intelligence (AI) across industries has reshaped how contemporary organizations create value, coordinate work, and develop innovation capabilities. AI technologies—from machine-learning systems to generative models—are now embedded in everyday workflows, influencing decision processes, task allocation, and the cognitive demands placed on employees (Brynjolfsson & McAfee, 2023; Von Krogh, 2021). While a significant body of research has examined how AI adoption enhances operational efficiency, productivity, or strategic decision-making (Dwivedi et al., 2021; Nambisan et al., 2023), far less attention has been given to how AI transforms the human and behavioral dynamics within organizations. In particular, the potential role of AI as a catalyst for intrapreneurial behavior remains an underexplored yet increasingly relevant question.

Intrapreneurship—defined as employees' proactive engagement in opportunity recognition, experimentation, and internal innovation—has become essential for organizational renewal in technologically turbulent environments (Kuratko et al., 2021; Moriano et al., 2020). Firms operating in emerging economies, especially startups, face intense pressure to innovate despite structural constraints such as resource scarcity, institutional volatility, and limited technological infrastructure. As a result, the ability to stimulate intrapreneurial behaviors internally is often a decisive factor for survival and performance (Azis et al., 2022). Although recent scholarship highlights the role of digital technologies in shaping entrepreneurial work practices (Nambisan et al., 2019; Kraus et al., 2021), the specific mechanisms through which AI tools influence intrapreneurial mindsets and actions remain insufficiently theorized.

Emerging evidence suggests that AI has the potential to reconfigure work in ways that encourage creative problem-solving and initiative-taking. AI systems can automate routine tasks, enabling employees to redirect

cognitive resources toward exploratory and innovative activities (Huang & Rust, 2021). They can also augment human capabilities by providing real-time insights, predictive analytics, and decision support, thereby fostering greater confidence in experimenting with novel solutions (Colbert et al., 2022). Yet, despite these theoretical possibilities, empirical understanding of how AI adoption interacts with intrapreneurial behaviors—particularly in non-Western, resource-constrained contexts—remains limited. Most existing contributions draw on cases from technologically advanced economies, leaving substantial gaps regarding emerging regions such as Tunisia and North Africa, where AI adoption is accelerating but organizational conditions differ markedly (El Chaarani et al., 2023).

This gap motivates the present study, which seeks to investigate how AI tools reshape work practices and stimulate intrapreneurial behavior within startups in Tunisia and North Africa. More specifically,this research aims to:

(1) identify the transformations in work and decision processes induced by AI adoption;

(2) examine how these transformations influence employees' intrapreneurial actions, such as opportunity recognition, initiative-taking, and internal innovation; and

(3) uncover the organizational and cultural conditions that enable or inhibit AI-driven intrapreneurship in emerging-market startups.

Understanding these dynamics is critical for both theory and practice. Theoretically, this study contributes to the emerging intersection between AI adoption, digital transformation, and intrapreneurship by proposing new insights into how technological augmentation shapes individual behavior within organizations. It also addresses calls for more context-sensitive research on digital innovation in under-studied regions (Kraus et al., 2022). From a managerial standpoint, the findings can guide startup leaders and policymakers in designing AI-enabled work environments that foster creativity, agility, and internal venture creation—key drivers of competitiveness in emerging economies.

By exploring how AI tools influence intrapreneurial behavior in North African startups, this research offers a novel perspective on the behavioral consequences of AI adoption and contributes to a more nuanced understanding of innovation processes in digitally transforming organizations.

LITERATURE REVIEW

Artificial Intelligence Adoption and the Transformation of Work

Artificial intelligence has moved from being a specialized technological capability to a central driver of organizational transformation. AI systems increasingly perform tasks that require pattern recognition, prediction, or analytical reasoning, reshaping how individuals interact with information and make decisions (Keding, 2021; Brynjolfsson & McAfee, 2023). As AI tools become more accessible and embedded in daily work routines, they influence not only productivity but also the distribution of cognitive effort across tasks. Routine activities are increasingly automated, allowing employees to redirect their attention toward tasks that demand creativity, interpretation, and judgment (Colbert et al., 2022; Huang & Rust, 2021).

This shift in work dynamics opens the door to new behavioral responses. Employees who previously lacked time or resources to explore ideas may find opportunities to develop innovative solutions when supported by AI-enabled insights and automated processes. The literature suggests that AI can augment human cognition by providing decision support, scenario simulations, and real-time feedback, which can, in turn, encourage initiative-taking and experimentation (Raisch & Krakowski, 2021). Yet these changes are not automatic: the degree to which AI reshapes work depends on organizational readiness, digital maturity, and the extent to which employees feel empowered to use these technologies autonomously (Tarafdar et al., 2023).

Despite growing scholarly interest, studies addressing how AI shapes behavioral orientations—particularly entrepreneurial and innovative actions—remain limited. Much of the research emphasizes technical or strategic

outcomes, leaving the human experience, agency, and creativity under-studied, especially in emerging economies where AI adoption is more uneven and organizational structures differ (El Chaarani et al., 2023).

Intrapreneurial Behavior and Its Antecedents

Intrapreneurship is widely recognized as a central mechanism through which organizations renew themselves and develop innovation from within. It encompasses behaviors such as opportunity identification, proactive problem-solving, experimentation, and the pursuit of novel solutions that challenge existing routines (Kuratko et al., 2021; Moriano et al., 2020). These behaviors are particularly important in startups and dynamic environments where external competition and technological turbulence push firms to innovate continuously.

The literature identifies several antecedents of intrapreneurial behavior, including organizational culture, autonomy, leadership, and access to resources (Hornsby et al., 2020; Rigtering & Weitzel, 2013). However, in digitally transforming organizations, new antecedents emerge—namely digital literacy, technological readiness, and employees' comfort with advanced technologies. Recent studies show that digital tools can lower the cost of experimentation and expand individuals' capacity to test ideas, thereby fostering internal entrepreneurial activity (Nambisan et al., 2019; Kraus et al., 2021).

Yet, surprisingly, AI—which represents the most advanced form of digital augmentation—has received minimal attention in intrapreneurship research. The question of how AI influences opportunity recognition, risk-taking, or creative problem-solving remains theoretically promising but empirically unexplored. This gap suggests the need for a closer examination of the interplay between AI-enabled work processes and intrapreneurial behavior.

AI as a Catalyst for Intrapreneurial Behavior

Bringing together insights from digital transformation, organizational behavior, and innovation management, scholars have begun to argue that AI may trigger intrapreneurial capabilities by augmenting employees' cognitive bandwidth and strategic awareness (Von Krogh, 2021). AI systems can provide employees with rich information flows—patterns, anomalies, predictions—that might spark novel ideas or reveal new opportunities for improvement (George et al., 2020). Moreover, automation of repetitive tasks frees time for exploration, while AI-enabled collaboration tools facilitate cross-functional innovation.

AI also influences employees' psychological states. Access to powerful insights can increase confidence and risk tolerance, both of which are central to intrapreneurship (Huang & Rust, 2021). Furthermore, the ability to quickly prototype or simulate scenarios with AI tools can encourage iterative experimentation, reducing uncertainty and lowering the perceived cost of failure.

Nonetheless, AI can also create challenges, such as skill gaps, perceived threats to autonomy, or role ambiguity (Tarafdar et al., 2023). These tensions suggest that AI's influence on intrapreneurial behavior depends heavily on organizational conditions, leadership support, and the broader cultural environment. Emerging economies, in particular, display unique configurations of constraints and opportunities, which may shape how employees engage with AI and whether they translate technological augmentation into entrepreneurial action.

The reviewed literature highlights a clear gap: while AI's potential to enhance operational efficiency has been extensively explored, its behavioral and intrapreneurial implications remain almost untouched—especially in North African startups. This gap forms the foundation for the conceptual model developed in the next section.

Conceptual Framework and Propositions

Drawing on the literature, this study conceptualizes AI adoption as a transformative force capable of reshaping work practices and stimulating intrapreneurial behavior. The framework rests on three core mechanisms: task reconfiguration, cognitive augmentation, and enhanced opportunity recognition.

AI Adoption and the Reconfiguration of Work

AI adoption alters the structure of work by automating mundane tasks and reallocating cognitive resources toward strategic, creative, or exploratory activities. When employees gain more time and mental bandwidth, they are better positioned to identify inefficiencies, conceive new ideas, or challenge established routines.

Proposition 1: *AI adoption that significantly reconfigures work processes encourages employees to engage in opportunity recognition and the early stages of intrapreneurial behavior.*

AI-Driven Cognitive Augmentation and Proactive Problem-Solving

AI tools can amplify human cognition by providing predictive analytics, pattern detection, and scenario modeling. These capabilities enhance employees' ability to diagnose problems, anticipate trends, and devise innovative solutions—behaviors that sit at the heart of intrapreneurship.

Proposition 2: *AI-enabled cognitive augmentation strengthens employees' proactive problem-solving behaviors, thereby enhancing their likelihood of engaging in intrapreneurial initiatives.*

AI and Opportunity Recognition

Opportunity recognition is central to intrapreneurship, and AI systems can enhance this process by revealing hidden insights, anomalies, or emerging patterns that would be difficult to detect manually. This informational richness widens employees' ability to envision new products, services, or process improvements.

Proposition 3: *The use of AI tools improves employees' opportunity recognition by expanding the range and depth of insights available to them.*

Organizational Conditions as Enablers or Constraints

AI alone cannot produce intrapreneurship; context matters. A supportive culture, autonomy, and leadership encouragement determine whether employees feel empowered to act on AI-enabled insights. In emerging economies, these contextual factors may amplify or weaken AI's behavioral effects.

Proposition 4: *The relationship between AI adoption and intrapreneurial behavior is strengthened when organizational culture promotes autonomy, risk-taking, and experimentation.*

Intrapreneurial Behavior and Organizational Performance

When employees act intrapreneurially—experimenting, developing new solutions, or optimizing processes—the organization stands to benefit in terms of innovation performance, adaptability, and competitiveness (Kuratko et al., 2021). AI may indirectly improve performance by fostering these behaviors.

Proposition 5: *Intrapreneurial behavior mediates the effect of AI adoption on organizational performance, such that AI's impact becomes stronger when employees actively engage in internal innovation.*

To summarize the relationships developed in this section, Figure 1 presents the conceptual model highlighting how AI adoption influences work design, opportunity recognition, proactive problem-solving, and ultimately organizational performance.

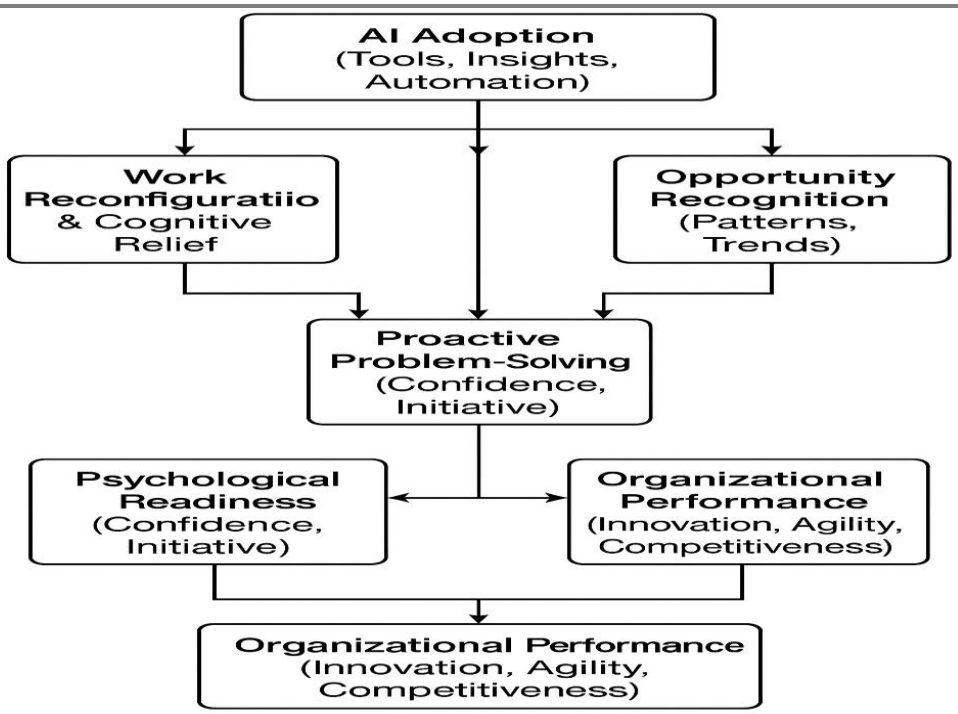

Figure 1. AI-Driven Intrapreneurship Conceptual Framework

Source: Authors' elaboration based on study findings.

METHODOLOGY

Research Design

Given the exploratory nature of the research question—how AI tools reshape work practices and stimulate intrapreneurial behavior—a **qualitative multiple-case study design** was adopted. This design is appropriate for investigating complex social and technological phenomena that unfold in real organizational contexts (Eisenhardt & Graebner, 2007; Yin, 2018). Multiple cases allow for analytical rather than statistical generalization and provide a richer understanding of variation in AI adoption across startups.

Startups were selected as the focal unit of analysis because they operate under resource constraints, rely heavily on digital technologies, and often display flexible structures through which intrapreneurial behavior can emerge. Studying AI-driven work transformations in such environments provides insights that remain largely absent from existing research, particularly in emerging economies.

Sampling Strategy and Case Selection

A purposive sampling strategy was employed to identify startups in Tunisia and North Africa that had already integrated AI tools into their daily operations. To ensure variation and robustness, the sampling sought to include firms from different sectors (e.g., fintech, digital marketing, health tech, logistics, e-commerce) and with differing degrees of AI maturity.

The selection followed three criteria:

1. **Active adoption of AI tools** Firms had to use AI-driven systems for tasks such as data analytics, customer interaction, automation, decision support, or product development.

2. **Organizational conditions conducive to intrapreneurial behavior** Startups or scale-ups with flat hierarchies, collaborative cultures, or innovation-oriented strategies.

3. **Accessibility for in-depth inquiry** Willingness of employees and managers to engage in interviews and provide detailed accounts of their work experiences.

Ultimately, **8 startups** (case organizations) were selected, representing a diverse yet comparable set of technological contexts. Within each case, participants included founders, managers, AI specialists, and employees who routinely interacted with AI tools.

In total, **24 semi-structured interviews** were conducted (2–5 per case), ensuring both breadth and depth of perspectives.

Data Collection Procedures

Semi-structured interviews

Interviews were the primary data source. A semi-structured protocol was developed around four themes:

1. Nature of AI tools adopted and their integration in workflow
2. Changes observed in daily tasks, decision processes, or collaboration
3. Employee experiences with creativity, initiative-taking, and opportunity recognition
4. Organizational conditions influencing the use of AI for internal innovation

Interviews lasted between **45 and 90 minutes** and were conducted either in person or via video call. All conversations were audio-recorded with permission and transcribed verbatim.

Supplementary data

To strengthen triangulation, additional materials were collected:

- Internal documents (process guidelines, innovation reports)
- Publicly available information (company websites, product descriptions)
- Observational notes during site visits or virtual demonstrations of AI tools

These supplementary sources enriched contextual understanding and validated interview claims.

Data Analysis and NVivo Coding Protocol

Data analysis followed an iterative and abductive approach, combining thematic analysis with cross-case comparison. NVivo (version 12) was used to structure and code the data systematically.

Step 1: Open Coding

Transcripts were read line by line to identify meaningful segments. Codes were generated inductively, with initial labels reflecting participants' descriptions such as *task automation*, *idea experimentation*, *data-driven insights*, *collaboration changes*, or *AI-related frustrations*.

Two researchers independently coded a subset of interviews to establish preliminary agreement on code meaning.

Step 2: Axial Coding

Codes were then grouped into categories reflecting broader concepts, such as:

- **Work reconfiguration**
- **Cognitive augmentation**
- **Opportunity recognition mechanisms**
- **Proactive problem-solving**
- **Cultural enablers and constraints**

This phase involved linking categories to the theoretical constructs from the literature while remaining sensitive to emergent insights.

Step 3: Cross-case Comparison

Patterns were examined within and across the eight cases. NVivo matrices were used to compare how AI-enabled behaviors differed across sectors, maturity levels, and organizational cultures.

Cross-case synthesis helped identify recurring mechanisms of AI-driven intrapreneurship, as well as boundary conditions and exceptions.

Step 4: Theoretical Integration

Findings were iteratively connected with existing theories on intrapreneurship, digital transformation, and socio-technical work design. This iterative process strengthened the conceptual framework by grounding abstract constructs in empirical evidence.

Ensuring Trustworthiness

To ensure rigor and credibility, the study applied well-established criteria for qualitative research (Lincoln & Guba, 1985).

Credibility

- Triangulation of data sources (interviews, internal documents, observations).
- Member checking: participants confirmed the accuracy of key interpretations.
- Peer debriefing: preliminary coding categories were reviewed by two external researchers.

Transferability

- Thick descriptions of organizational contexts and AI use cases allow readers to assess relevance to other settings.
- Variability across cases (sector, size, AI maturity) enhances analytical generalization.

Dependability

- A detailed methodological protocol was maintained, including interview guides, coding schemes, and analytic memos.
- An audit trail documented the evolution of codes and themes throughout the analysis.

Confirmability

- Reflexive notes were recorded to acknowledge the researchers' positionality and assumptions.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue XI November 2025

- NVivo project files allow transparency regarding coding decisions and data structure.

Ethical Considerations

All participants provided informed consent. Organizations and individuals were anonymized to protect confidentiality. The study followed ethical guidelines for research involving human participants and ensured secure storage of data throughout the project.

RESULTS

The thematic analysis revealed four major mechanisms through which AI tools reshape work and stimulate intrapreneurial behavior in Tunisian and North African startups:

1. **Work Reconfiguration and Cognitive Relief**
2. **AI-Enabled Opportunity Recognition**
3. **Enhanced Proactive Problem-Solving**
4. **Cultural and Structural Enablers of AI-Driven Intrapreneurship**

These themes emerged consistently across the eight case organizations, although with varying intensity depending on AI maturity, leadership support, and internal culture.

Work Reconfiguration and Cognitive Relief

Across all cases, participants described AI tools as fundamentally altering the structure and rhythm of their work. Automation of repetitive tasks—such as data cleaning, report generation, or customer classification—freed employees to devote more time to higher-value activities. Many reported that this shift reduced cognitive load and created space for reflection, experimentation, and creativity.

A data analyst from a fintech startup explained:

“Before we integrated AI, most of my day was spent cleaning spreadsheets. Now, those processes run automatically. I finally have time to ask questions, explore anomalies, and think about what we can improve.” (Case 3, Analyst)

Another participant highlighted how AI reconfigured decision processes:

“AI takes care of the grunt work. It doesn’t replace us—it gives us room to think. I feel like I can step back, look at the bigger picture, and propose new ideas.” (Case 1, Product Manager)

This reallocation of mental energy was described by several employees as the **“spark”** that encouraged them to challenge existing routines and suggest internal improvements. For many, intrapreneurial actions were facilitated precisely because AI reduced operational burdens, allowing them to act beyond narrowly defined job roles.

AI-Enabled Opportunity Recognition

AI tools—particularly analytical dashboards, predictive models, and classification algorithms—enhanced employees’ ability to detect patterns and spot opportunities for innovation. Participants emphasized how AI-generated insights often uncovered issues or market gaps that would otherwise remain invisible.

A marketing specialist at a digital agency remarked:

"AI shows us trends we would never notice manually. Sometimes it highlights a customer segment we ignored or a service gap we didn't think about. That's usually where new ideas start." (Case 5, Marketing Specialist)

Similarly, a founder of an AI-driven logistics startup described AI as an "opportunity amplifier":

"When the system reveals a weird pattern—like an unexpected spike in delivery delays—it pushes us to question processes. Many of our internal innovations came directly from what AI exposed." (Case 2, Founder)

These insights strengthened employees' capacity to engage in early-stage intrapreneurship, especially opportunity identification and idea generation. In several cases, employees explained that AI "opened their eyes" to possibilities that felt too complex to uncover without computational support.

Enhanced Proactive Problem-Solving

AI tools not only surfaced opportunities but also supported rapid experimentation and problem-solving. When employees faced operational challenges, they relied on AI-based simulations, testing environments, or predictive models to evaluate potential solutions.

A software engineer explained:

"If I have a hypothesis, I can test it quickly with AI—run simulations, check predictions. It accelerates everything. Instead of waiting weeks, I can validate an idea in hours." (Case 4, Engineer)

Another employee described AI as a source of confidence that encouraged bolder experimentation:

"AI doesn't tell me what to do, but it gives me enough evidence to take a risk. I feel more comfortable proposing changes because I know the system backs me with data." (Case 6, Operations Lead)

This ability to evaluate ideas more rapidly reduced the perceived cost of failure—an important psychological barrier to intrapreneurial behavior in many emerging-market contexts. AI thus acted as a **safety net**, reinforcing proactive attitudes and experimentation.

Cultural and Structural Enablers of AI-Driven Intrapreneurship

The influence of AI on intrapreneurial behavior was not uniform across cases. Startups with supportive leadership, openness to experimentation, and flexible structures reported significantly stronger effects.

In organizations where autonomy was encouraged, AI insights translated directly into internal initiatives:

"Our CEO tells us: if you see something interesting in the AI dashboard, don't wait—create a prototype. That freedom is why many new ideas come from the team, not just management." (Case 7, Data Scientist)

Conversely, in more hierarchical environments, employees felt constrained:

"AI gives us good ideas, but if the structure is rigid, there's nowhere to take them. You end up keeping them to yourself." (Case 8, Customer Experience Associate)

This contrast highlights that AI alone does not produce intrapreneurship; instead, organizational context determines whether AI-enabled insights lead to real action.

Supportive conditions included:

- Flat structures
- Psychological safety

- Reward systems for experimentation
- Cross-functional collaboration opportunities
- Leaders who frame AI as an enabler, not a threat

When these conditions were present, AI acted as a **behavioral accelerator**, transforming insights into intrapreneurial initiatives such as service enhancements, process innovations, or new product concepts.

Summary of Findings

Overall, the analysis demonstrates that AI adoption reshapes work in ways that promote intrapreneurial behavior through three interconnected mechanisms:

1. **Cognitive relief and work reconfiguration**, allowing employees to focus on innovative tasks.
2. **Improved opportunity recognition**, driven by AI-generated insights.
3. **Faster and more confident experimentation**, facilitated by predictive and simulation capabilities.

These effects were amplified when organizational culture embraced autonomy and learning.

The next section discusses these findings and their implications for theory and practice.

DISCUSSION

The findings of this study show that AI adoption has important behavioral implications for startups in emerging markets. Beyond efficiency and automation, AI influences how employees understand their work, identify opportunities, and engage in innovative actions. The results demonstrate that AI reshapes work structures and employee cognition in ways that can support intrapreneurial behavior.

AI as a Catalyst for Work Reconfiguration

AI simplifies routine activities and reduces cognitive load, allowing employees to devote more time to analysis, creativity, and problem-solving. This shift provides the mental space needed to question existing processes and propose improvements. The study shows that AI itself—not only leadership practices—can create the conditions that support intrapreneurial behavior by modifying how daily work is organized.

AI-Enabled Opportunity Recognition

The results also highlight how AI broadens employees' ability to detect opportunities. By revealing patterns and anomalies, AI systems help employees identify unmet needs and new possibilities that might otherwise go unnoticed. This positions AI as a tool that enhances strategic awareness and supports idea generation.

AI and Proactive Problem-Solving

Participants reported that AI increased their confidence to experiment with new solutions. Predictive models and simulations reduced uncertainty and lowered the perceived risk of failure. As a result, employees felt more willing to test ideas, take initiative, and suggest changes—key elements of intrapreneurship.

The Role of Organizational Culture

The study also shows that the benefits of AI depend strongly on organizational culture. In startups where autonomy, openness, and experimentation are encouraged, employees were more likely to act on AI-generated insights. In more hierarchical environments, however, AI insights did not always translate into action. Culture therefore moderates AI's impact on intrapreneurial behavior.

Theoretical Contributions

This research contributes to three areas:

1. **Intrapreneurship** by identifying AI as a new antecedent of innovative behavior.
2. **Digital transformation** by showing that AI acts as a behavioral catalyst, not only an efficiency tool.
3. **Socio-technical systems** by illustrating how AI reorganizes work in ways that support innovation.

Relevance to Emerging Markets

The focus on North African startups shows that AI can stimulate innovation even under resource constraints, but its impact depends on cultural and structural factors. This highlights the importance of aligning AI adoption with supportive work environments.

In summary, AI reshapes work in ways that can stimulate intrapreneurial behavior, but its effects are fully realized only when organizations create conditions that allow employees to act on AI-driven insights.

CONCLUSION

This study examined how artificial intelligence (AI) tools reshape work practices and encourage intrapreneurial behavior within startups in Tunisia and North Africa. The findings show that AI adoption goes beyond efficiency gains: it influences how employees think, identify opportunities, and engage in proactive improvement. By automating routine tasks, AI frees cognitive capacity and enables employees to focus on creative and value-adding activities. AI-generated insights also improve opportunity recognition and support faster and more confident experimentation. However, these positive effects depend strongly on organizational culture. Environments that promote autonomy, psychological safety, and learning amplify AI's impact, whereas rigid or hierarchical structures limit its potential.

Theoretical Implications

This research extends intrapreneurship theory by identifying AI as a new antecedent that shapes employees' cognitive and behavioral capacities. It contributes to digital transformation literature by showing that AI acts not only as a technical tool but also as a behavioral catalyst within organizations. The study also enriches socio-technical perspectives by illustrating how AI reshapes task structures and interactions. Finally, it highlights the unique conditions of emerging markets, where resource constraints and cultural factors influence AI's contribution to internal innovation.

Managerial Implications

Several practical insights emerge. Managers should view AI as an enabler of innovation, supporting employee creativity rather than replacing human input. Startups should build cultures that encourage initiative-taking, experimentation, and responsible risk-taking. Developing both digital and intrapreneurial skills is essential to fully leverage AI tools. Leaders should actively use AI-driven insights to stimulate internal discussions and innovation. Policymakers can also strengthen the ecosystem by facilitating access to AI infrastructure, training, and support programs for startups.

Limitations

This study has several limitations. First, the qualitative multiple-case approach limits the generalizability of findings. Second, the analysis relies on self-reported perceptions, which may not fully capture actual behaviors. Third, many startups are still in early stages of AI adoption, making long-term effects difficult to assess. These limitations open avenues for further research.

Future Research Directions

Future studies could quantitatively test the mechanisms identified here using larger samples. Longitudinal research would help assess how AI-driven intrapreneurship evolves as technologies mature. Comparative studies could examine differences across cultural and institutional settings. Scholars should also explore the potential negative effects of AI, including overreliance on algorithms or employee anxiety. Finally, future work could investigate team-level dynamics and leadership styles that shape employees' willingness to act on AI-generated insights.

In conclusion, AI is transforming not only operational processes but also the cognitive and behavioral foundations of innovation within startups. By clarifying how AI stimulates intrapreneurial behavior, this study contributes to a better understanding of digital transformation in emerging markets and provides actionable guidance for organizations seeking to strengthen their internal innovation capacity.

REFERENCES

1. Azis, Y., Putri, A. N., & Aprilianti, D. (2022). Intrapreneurship as a driver of innovation performance in emerging economies. Journal of Entrepreneurship in Emerging Economies, 14(6), 1234–1254.
2. Brynjolfsson, E., & McAfee, A. (2023). The second wave of AI transformation. Management Science, 69(3), 1457–1474.
3. Colbert, A., Yee, N., & George, G. (2022). The digital workforce and the augmentation of human capabilities. Academy of Management Annals, 16(2), 435–468.
4. Dwivedi, Y. K., et al. (2021). Artificial intelligence for societal good: Opportunities, challenges, and research agenda. International Journal of Information Management, 60, 102383.
5. Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. Academy of Management Journal, 50(1), 25–32.
6. El Chaarani, H., Raimi, L., & El Abiad, Z. (2023). Digital transformation and innovation in North African startups. Technological Forecasting and Social Change, 191, 122497.
7. George, G., Haas, M. R., & McGahan, A. M. (2020). Big data and management. Academy of Management Journal, 63(3), 887–893.
8. Gielnik, M. M., Bledow, R., & Stark, M. S. (2020). A dynamic account of creativity and entrepreneurship. Journal of Applied Psychology, 105(2), 119–140.
9. Hornsby, J. S., Holt, D. T., Kuratko, D. F., & Wales, W. J. (2020). Assessing a measurement model of corporate entrepreneurship. Journal of Business Venturing, 35(5), 106041.
10. Huang, M.-H., & Rust, R. (2021). Artificial intelligence in service: A research agenda. Journal of Service Research, 24(1), 3–21.
11. Keding, C. (2021). What impact does artificial intelligence have on marketing? Journal of Business Research, 124, 311–316.
12. Kraus, S., Clauss, T., Breier, M., Gast, J., Zardini, A., & Tiberius, V. (2021). The digital transformation of entrepreneurship. Review of Managerial Science, 15(4), 1023–1045.
13. Kraus, S., Filser, M., & Niemand, T. (2022). Research on digital transformation in emerging economies: A systematic review. International Business Review, 31(6), 102064.
14. Kuratko, D. F., Hornsby, J. S., & Hayton, J. (2021). Corporate entrepreneurship and competitive advantage. Journal of Business Venturing Insights, 16, e00287.
15. Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Sage.
16. Moriano, J. A., Topa, G., Molero, F., & Mangin, J.-P. L. (2020). Transformational leadership and intrapreneurship. International Entrepreneurship and Management Journal, 16, 259–287.
17. Nambisan, S., Wright, M., & Feldman, M. (2019). The digital innovation era: Opportunities and challenges for entrepreneurship research. Research Policy, 48(8), 103788.
18. Nambisan, S., Lyytinen, K., & Yoo, Y. (2023). Digital technologies and organizational innovation: Reframing the field. MIS Quarterly, 47(1), 1–18.
19. Raisch, S., & Krakowski, S. (2021). Artificial intelligence and management: A review and framework for future research. Academy of Management Annals, 15(2), 630–676.

20. Rigtering, J. P. C., & Weitzel, T. (2013). Work environment and intrapreneurship. Entrepreneurship Theory and Practice, 37(1), 67–92.
21. Tarafdar, M., Beath, C. M., & Ross, J. W. (2023). Automation, augmentation, and the future of work: Emerging research opportunities. MIT Sloan Management Review, 64(3), 42–49.
22. Von Krogh, G. (2021). Artificial intelligence in organizations: New opportunities for value creation. Journal of Management Studies, 58(3), 547–552.
23. Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). Sage.