

Agentic AI as a Co-Founder in Entrepreneurship: A Systematic Literature Review

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Abstract

This study examines research articles on agentic artificial intelligence and its role as a “virtual co-founder” in startups from 2015 to 2025. Moreover, agentic AI refers to advanced AI systems that act independently, take initiative, and handle business tasks, whereas traditional generative AI tools only respond to instructions. Based on 25 selected research articles, the authors conducted a systematic review of the literature to examine how AI performs roles typically handled by startup co-founders. The findings show that agentic AI helps startups test ideas faster, recognise business opportunities more effectively, encourage innovation, automate routine operations, and improve work efficiency. It also redefines the role of human founders, allowing them to focus more on strategy and leadership. Furthermore, AI as a team partner offers significant benefits, such as faster learning, scalability, and broader access to entrepreneurial opportunities; it also raises issues related to trust, skills, and ethical use. In the present study, the PRISMA 2020 and Emerald publishing guidelines are followed, and this review summarises the research articles and provides directions for future studies. Further, although agentic AI emerges as an influential partner in entrepreneurship, human judgment and leadership remain essential.

Keywords: *Agentic Artificial Intelligence, Startups, Virtual Co-founder, Digital Entrepreneurship and Business Automation*

1. Introduction

In recent years, artificial intelligence (AI) has significantly impacted entrepreneurship. Many researchers see this period as the start of an “AI era” (Iansiti & Lakhani, 2020). There is now an increasing focus on agentic AI that can act independently and take initiative. Many practitioners call it a “virtual co-founder” that works with human entrepreneurs to start and run

businesses successfully (Almansour, M. 2023). To clarify, “Generative AI is a tool, whereas Agentic AI is a teammate.” This shows that agentic AI does not wait for instructions; it can plan future steps and execute tasks to meet business goals. As a result, startups are increasingly incorporating agentic AI into their teams. Also, research shows that startups using agentic AI make better decisions, work more efficiently, cut costs, and produce higher-quality products.

Solo entrepreneurs also benefit greatly from agentic AI. For example, agentic AI handles bookkeeping, customer follow-ups, and other routine tasks. This allows solo entrepreneurs to boost their productivity and manage their businesses more easily. Moreover, when agentic AI acts like a “co-founder,” it can support nearly every stage of building a business, from finding new opportunities and creating products to managing operations and growing the company.

On the other hand, these new opportunities also bring challenges. Therefore, entrepreneurs need to learn how to work effectively with AI agents. Additionally, Organisations might need to change their structure and culture to include AI agents as part of the team. However, relying too much on AI agents can be risky if the system exhibits biased results.

In recent years, research on AI agents and entrepreneurship has grown. However, the studies remain scattered across various fields (Bahoo, S., Cucculelli, M., & Qamar, D., 2023). Additionally, there is no single comprehensive review that explores how agentic AI functions as a co-founder in startups and solo businesses.

To address this research gap, the present study undertakes a systematic literature review of the role of agentic AI as a co-founder in entrepreneurship. This review includes research articles published between 2015 and 2025. Furthermore, the authors identified peer-reviewed Scopus-indexed articles that examine how autonomous AI technologies are used in startups. To ensure that all relevant articles are included in the study, the authors used a wide range of search terms, including 'Agentic Artificial Intelligence,' 'Startups,' 'Virtual Co-founder,' 'Digital Entrepreneurship,' and 'Business Automation.'

In the present study, the authors explain the research method, including the search process and the criteria for selecting studies. Furthermore, a PRISMA flow diagram illustrates the selection of the studies. The review also provides a summary table of selected studies, a

thematic analysis of key findings, a discussion of important patterns, followed by theoretical insights, practical implications, suggestions for future research, and a conclusion.

2. Methodology

The authors used a systematic search process to find relevant articles published between 2015 and 2025. First, they searched academic databases such as Scopus and Web of Science to ensure they considered high-quality articles from peer-reviewed journals and conference papers.

Authors also searched IEEE Xplore (a digital library providing full-text access to over 7 million technical documents) for research articles on technology and AI applications. Additionally, Google Scholar was used to identify influential studies, preprints, and other relevant “grey literature.”

To make the search more thorough, the authors examined the reference lists of key articles (backward search) and reviewed newer research articles that cited the key papers (forward citation search). This helped authors identify additional relevant research papers.

The authors created a comprehensive list of keywords related to AI and entrepreneurship. These included terms such as “Agentic Artificial Intelligence, Startups, Virtual Co-founder, Digital Entrepreneurship, and Business Automation.” They tested various combinations of these keywords in titles, abstracts, and keyword sections across databases. They included only studies published in English between 2015 and 2025. Additionally, both conceptual and empirical research articles discussing AI in the context of entrepreneurship and startups were included.

2.1. Inclusion Criteria: *The authors included research articles that met the following criteria:*

The research articles must focus on startups and small business entrepreneurs. The authors did not include research articles about large companies. Additionally, the research article must involve AI technologies such as machine learning, intelligent agents, and generative AI. The authors selected articles in which AI actively participates in tasks such as decision-making, opportunity identification, and product development, rather than simply serving as a support tool.

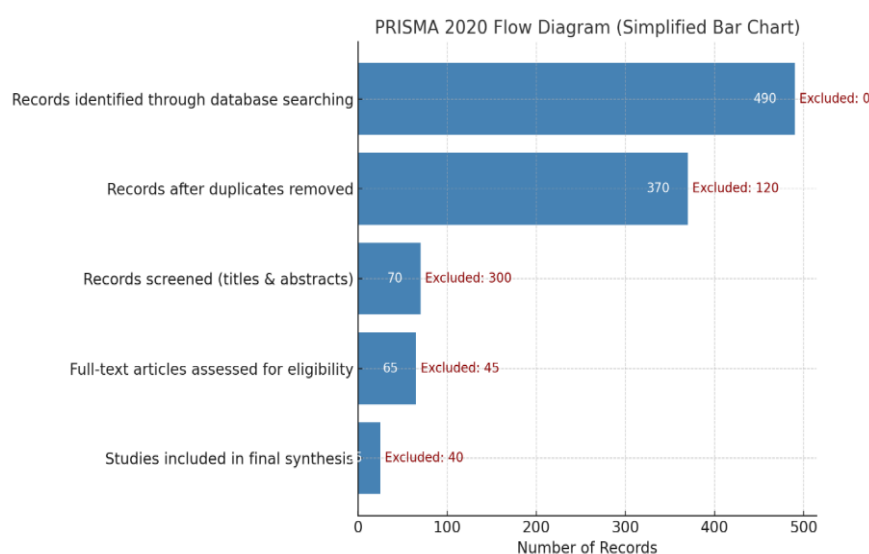
The research article must have been published between 2015 and 2025. Authors included peer-reviewed journal articles and high-quality conference papers. Some highly cited articles from recognised sources were also included. Priority was given to research papers published in Scopus-indexed journals.

2.2.Exclusion Criteria: The authors excluded research articles that met the following criteria:

The authors did not include papers that discussed only technical aspects of AI without linking them to startups. They also excluded research articles focused on large companies using AI. Additionally, media reports are not included in the systematic review analysis. However, practitioner-focused articles by recognised experts were considered only if they provided strong conceptual insights. After conducting the database searches, the authors removed duplicate records and research studies without full-text access.

Authors followed PRISMA 2020 guidelines to document the search and screening process. The initial searches yielded about 490 records. After removing duplicates, 370 unique studies remained. Authors then screened the titles and abstracts, excluding around 300 studies that did not meet the criteria. This left 70 articles for full-text review. Of these, 5 studies were excluded because the full text was unavailable or they were not in English. The authors reviewed the remaining 65 full-text articles. After a detailed assessment, approximately 40 more were excluded because they did not directly examine AI's role in entrepreneurship, focused solely on education, or lacked robust analysis. Ultimately, 25 high-quality studies were selected. These studies formed the basis for the review on agentic AI as a co-founder in entrepreneurship.

Figure 1: Figure showing PRISMA 2020 Flow Diagram



2.3. Summary of the articles included in the Study:

All twenty-five selected research articles are summarised in Table 1. This table provides key details for each study, including the author's name and year, title and source, research method, main findings, and how each study relates to agentic AI in entrepreneurship. Furthermore, the study includes systematic reviews, bibliometric studies, conceptual papers, and empirical research, including surveys, case studies, design-based studies, and qualitative analyses. These studies were published in journals related to entrepreneurship, management, and technology.

A review of the literature on the selected articles offers a comprehensive understanding of how research on AI agents and entrepreneurship has evolved. For example, (Giuggioli and Pellegrini 2023 and Truong et al. 2023) conducted systematic reviews on how AI agents support entrepreneurship. Similarly, (Blanco-González-Tejero et al. 2023) conducted a bibliometric study of AI in entrepreneurial activities. These studies identified key themes, research trends, and gaps in the field. They provided a solid foundation for the review and helped authors compare research findings with existing knowledge.

Few research articles focus on specific uses of AI in startups. For example, Dellermann et al. (2019) developed a decision-support system that combines human knowledge and AI to help founders evaluate business models. Other research studies examine how AI helps entrepreneurs identify and assess business opportunities, such as using machine learning to detect market gaps. Research studies, such as those by Upadhyay et al. 2022, examine the factors that influence entrepreneurs' adoption of AI. There are also studies on AI-driven product innovation, new business models, and entrepreneurship in the context of digital transformation (e.g., Chalmers et al., 2021; Elia et al., 2020).

In addition, a few practitioner-oriented articles were examined. For instance, Harvard Business Review (Stave et al., 2025) discusses how AI is transforming the workforce. Articles from Medium (Manuel, 2025), Forbes (Fred-Ojala, 2025), and Entrepreneur (Solovyev, 2025) describe how solo founders use AI tools to grow their businesses. Although these are not traditional academic research studies, they offer practical examples that support the research findings and demonstrate how the idea of AI as a co-founder is gaining popularity in real business practice. Altogether, the twenty-five selected research articles form the basis for the review, and they were organised into key themes, which are discussed in the following paragraph:

3. Thematic Synthesis

The selected literature provides valuable insights into how agentic AI is applied in entrepreneurship and its effects. The authors organise the findings into themes that address the research question of how AI functions as a co-founder in startups, solo ventures, and new businesses. Below, the authors describe each theme with examples from the selected research articles.

3.1. AI as a Catalyst for Lean Startup Methodology and Rapid Experimentation

A main theme in the literature is that AI, which supports startups, accelerates progress, especially when employing the lean startup method. Lean startups follow a Build–Measure–Learn cycle, meaning they create a simple version of a product, test it, learn from feedback, and refine it. Agentic AI speeds up and enhances this cycle. For instance, Raneri et al. 2023 proposed an extended framework called the Build–Measure–Predict–Learn framework. In their case study, an AI system forecasted how customers would respond to new product features before the company could fully develop them. By analysing real data, the AI predicted which features were likely to succeed. This approach helped entrepreneurs focus on key ideas, reducing time and resource waste. As a result, startups could validate ideas much more quickly.

AI can run experiments automatically. For example, an AI marketing tool can continuously test different advertisements, analyse the results, and select the best option with minimal human intervention. Tasks that require a marketing co-founder can be done at digital speed. Even solo owners use AI tools to run frequent tests and quickly improve the quality of their products.

Research studies show that the best outcomes occur when humans and AI collaborate. For example, Dellermann et al. 2019 found that combining AI decision support with human judgment increased founders' confidence in business model decisions. The AI suggested what to test next based on data, while the human founder used intuition and experience to make the final decision. This partnership ensured both speed and strategic clarity.

To be specific, agentic AI functions like a highly effective co-founder in lean startups. It conducts experiments, analyses data, and offers evidence-based advice. Startups that employ AI in this way can learn and adapt faster, gaining a significant competitive edge in rapidly changing markets.

However, most existing studies rely on conceptual models and case-based evidence, with limited large-scale empirical validation of AI-driven lean startup acceleration. Additionally, the long-term sustainability of AI-supported experimentation remains underexplored.

3.2.Opportunity Recognition and Innovation Powered by AI

Another key theme is how AI helps entrepreneurs discover new business opportunities and generate innovative ideas. In the early stages of a startup, AI can serve as a creative partner, helping new ventures achieve sustainable growth.

AI systems excel at analysing large amounts of data. They identify patterns, trends, and unmet customer needs that humans might overlook. Research (Giuggioli & Pellegrini, 2023; Gupta et al., 2023) shows that AI aids in opportunity recognition. For instance, AI analyses social media posts to detect emerging customer issues. This enables owners to discover new business ideas early. In this way, AI functions as a tireless market research partner.

Few research studies demonstrate that AI can evaluate whether an idea is technically feasible and will succeed in the market. It can scan large volumes of industry data to assess feasibility and demand. This gives entrepreneurs more informed insights.

Beyond data analysis, generative AI tools are now enhancing creativity. Advanced language and image models can suggest product names and slogans, design logos and marketing materials, create website layouts, generate initial software code, and brainstorm new product ideas. This allows even a solo owner to perform tasks that previously required a technical co-founder. For example, an entrepreneur can ask AI to propose innovative practices for a new technology and receive multiple ideas to progress.

Current research (Kaplan & Haenlein, 2020; Bahoo et al., 2023) shows that AI goes beyond routine tasks and also involves creative work. One practitioner describes an agentic AI as a human-friendly founder that helps plan and launch a podcast by generating ideas, organising content, and managing tasks in an innovative and creative manner.

To be specific, AI can assist with idea generation and product development. It helps entrepreneurs think broadly and improve processes more effectively. In this way, AI acts as a creative co-founder in the early stages of a venture, thereby promoting sustainability.

While AI enhances opportunity identification, current research largely focuses on data-rich environments, paying limited attention to contexts with constrained data availability. Furthermore, the role of human intuition in AI-assisted opportunity recognition requires deeper investigation.

3.3. AI-Enabled Automation and Efficiency in Startup Operations

One of the most significant effects of agentic AI in startups is automation. Several authors describe AI agents as “digital employees” that perform tasks previously done by humans. In practice, this allows owners to delegate key operations to AI tools (Almansour, M. 2023). For example, an online store might use AI to forecast inventory needs and automatically reorder stock, provide 24/7 customer support through chatbots, and handle bookkeeping with accounting software. Additionally, solopreneurs are encouraged to automate tasks such as scheduling, client follow-ups, and financial tracking, which founders often spend a lot of time on. In small ventures, AI acts as an accountant, assistant, salesperson, and analyst, helping these ventures complete the right tasks at the right times.

A review of the literature shows that AI agents offer many advantages. For example, Chatterjee et al. 2022 found that small business owners using AI-based customer relationship management systems improved sales and customer satisfaction. Additionally, AI tracked customer data, segmented customers into groups, and automatically sent marketing messages, which was similar to what a sales-focused co-founder was doing.

An AI tool enables startups to grow without increasing staff size. For example, if AI manages customer onboarding through computerised tutorials and chatback, a startup can expand its user base without hiring more employees. A Forbes column suggests that small teams using AI can grow much faster than traditional ventures. The main benefits are saving time and reducing costs. Additionally, by automating repetitive tasks, owners can focus on strategic management, leadership, partnerships, and long-term vision, where human decision-making remains crucial. Studies like Upadhyay et al. 2022 show that entrepreneurs are willing to adopt AI when they believe it enhances performance, such as faster response times, fewer errors, and the ability to operate and complete tasks efficiently.

Few startups build their business models around AI. For example, a content-generation company uses AI to create blog posts and marketing content with little human involvement. In such cases, AI is essential for both operations management and product delivery. Furthermore,

the human founder emphasises partnerships and growth to gain sustainability (Hartmann et al., 2016). However, a review of the literature indicates that, as human oversight remains necessary, owners must strengthen their strategic management. To be more specific, AI systems follow commands accurately and may make poor decisions if not properly directed. An AI marketing tool, for example, might send too many promotional emails if limits are not set, potentially damaging customer relationships. Owners must therefore supervise AI systems and ensure that they align with business goals.

Although automation improves efficiency, there is insufficient empirical evidence on the potential risks of over-automation, including loss of human control and reduced adaptability in dynamic environments.

3.4.Human–AI Collaboration and the Evolving Role of the Entrepreneur

Several studies suggest that owners are increasingly acting as coordinators of AI systems. Instead of just leading human teams, entrepreneurs now need to guide AI agents (Almansour, M. 2023). This involves setting clear goals, defining boundaries, monitoring performance, and ensuring that AI actions align with the company's strategy.

Entrepreneurs need to learn how to give instructions to AI, interpret its outputs, and take corrective actions when issues arise. Since AI systems execute commands precisely, founders must closely supervise them. This new approach combines human intuition with AI data analysis. Few researchers highlight this as an essential skill for modern entrepreneurs.

Research shows that people trust algorithms for data-driven tasks, especially when they observe positive results. When AI helps produce accurate predictions, entrepreneurs feel more confident in using it. However, experts warn that blindly relying on AI without understanding its logic can result in poor decisions. The most effective approach is a balanced partnership in which AI handles data-intensive and analytical tasks, while humans focus on creativity, judgment, strategy, and ethics.

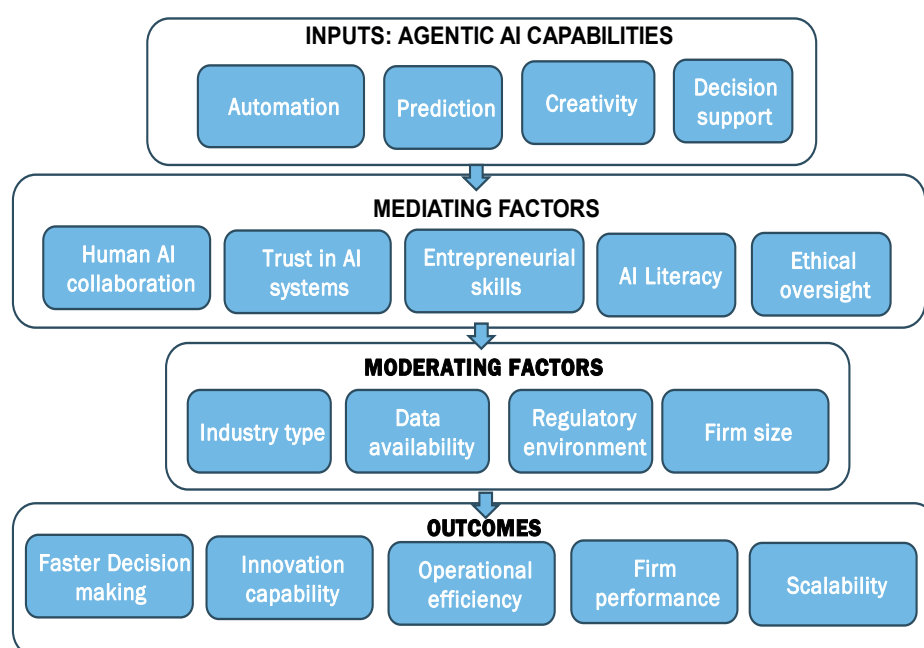
The growth of AI shifts the skills entrepreneurs must develop. Specifically, beyond traditional skills like leadership, networking, and financial knowledge, owners need a basic understanding of technology. They don't need to be programmers but should grasp what AI can

and cannot do, how it utilises data, and where it might make errors. A few researchers suggest that entrepreneurship training programs should include guidance on effectively working with AI tools.

The existing literature emphasises the benefits of collaboration but lacks clarity on optimal governance structures for managing AI agents. Moreover, issues such as accountability, transparency, and ethical responsibility remain insufficiently addressed.

4. Conceptual Framework

Figure 2 - Showing the Conceptual Framework



This framework illustrates how agentic AI capabilities influence entrepreneurial outcomes through mediating mechanisms, including human–AI collaboration, trust, and AI literacy. The impact is further shaped by moderating factors, including industry context, data access, and regulatory conditions. The framework highlights that AI does not directly replace entrepreneurs but enhances decision-making, innovation, and scalability, ultimately contributing to new venture models and competitive advantage.

5. Discussion

AI does not replace the owner; instead, it emphasises the importance of human judgment, vision, and responsibility. Therefore, entrepreneurs must act as strategists, AI managers, and ethical decision-makers, effectively blending their strengths with AI systems' capabilities.

The literature review shows that agentic AI is transforming entrepreneurship by assuming roles and tasks once performed by humans (Almansour, M. 2023). Additionally, the authors suggest that AI-supported entrepreneurship is becoming more efficient, data-driven, and potentially more accessible to a broader audience. However, this change also introduces new challenges, especially in management, accountability, and ethics.

5.1.A New Paradigm of the Entrepreneurial Team

Earlier, human teams were considered essential for business success. For example, one member focused on technology, another on business, and another on design, among others. Today, hybrid human–AI teams are gaining popularity. In this model, the founder works alongside AI agents. These teams combine human creativity, vision, and strategic thinking with AI’s speed to analyse data effectively and improve operational efficiency (Elia, G., Margherita, A., & Passiante, G., 2020). Additionally, founders need to “lead” AI systems by setting clear goals, defining values, and ensuring the AI’s actions align with the company’s mission. To be more specific, managing AI becomes part of managing the team. This development connects entrepreneurship research with technology management and opens new avenues for further study.

5.2. Entrepreneurial Strategy in the Age of AI

The growth of AI is transforming how startups think strategically. In the past, new organisations had limited resources, so they focused mainly on their core strengths and outsourced many tasks to save time and money. With AI, this approach is evolving. Startups now handle many tasks internally- such as marketing, customer service, and data analysis- by using AI tools instead of outsourcing. This enables them to operate with a small team and a limited budget.

However, another important point to note is that many startups do not develop their own AI systems; instead, they rely on external AI tools such as cloud-based services (Truong, Y., Schneckenberg, D., Battisti, M., & Jabbouri, R., 2023). Since these tools are accessible to many companies, merely having access to AI no longer provides a competitive advantage. In other words, it's not AI itself that matters, but how effectively you use it.

As AI tools become more accessible, more people are entering the market to develop advanced products and services. This could increase competition. Therefore, startups need to develop strategies considering the following:

- Build unique datasets that others do not have.
- Improve their AI systems regularly.
- Create a data-driven network.

Furthermore, in this new environment, competitive advantage derives not only from human skills but also from how effectively entrepreneurs integrate AI capabilities with human judgment, creativity, and strategic thinking.

5.3.Democratisation vs. Inequality in Entrepreneurship

The literature review shows that AI has both positive and negative effects on entrepreneurship. On the positive side, AI helps solo founders with limited resources run businesses that once required a large investment (Elia, G., Margherita, A., & Passiante, G., 2020). This allows people from different backgrounds to start ventures and grow their businesses effectively and successfully.

On the other hand, entrepreneurs who adopt AI early can move faster and perform better than those who rely solely on traditional methods. This could create an “AI divide,” where well-resourced founders gain a significant advantage, while others fall behind. Research also shows that many small businesses are slow to adopt AI because they lack the necessary knowledge. If this continues, it could lead to business closures and job losses.

To prevent this increasing inequality, policymakers and support organisations should offer training to small entrepreneurs on how to use AI tools. This, in turn, helps more entrepreneurs adopt AI and ensures its benefits are shared broadly rather than limited to a small group.

5.4. AI-Driven Industry Transformation

The implications of agentic AI vary across industries. Its role and impact depend on the sector, the type of data used, and the level of guidelines. For example:

- In financial technology, AI plays a vital role in detecting fraud, analysing cost patterns, evaluating creditworthiness, and providing personalised financial advice. For example, AI can screen thousands of transactions in real time to identify suspicious activities. It can also assess alternative data to offer loans to customers who may not have credit histories (Elia, G., Margherita, A., & Passiante, G. 2020). However, because finance is

highly regulated, startups must ensure compliance with these requirements. Biases in decisions can affect customers' financial stability.

- In healthcare, AI supports early diagnosis, analysing medical images, predicting disease risks, and engaging patients through virtual health assistants. It can process large medical datasets faster than human professionals. (Fossen, F.M., & Sorgner, A.2021). However, this sector involves sensitive personal data and life-critical decisions. Therefore, strict ethical standards, patient consent, data privacy, and regulatory approvals are essential. A mistake in AI recommendations could have serious health consequences.
- In education technology, AI helps create personalised learning experiences. It can monitor student performance, identify learning gaps, and adapt lessons to individual needs. Adaptive assessments enable students to progress at their own pace. While this enhances efficiency, concerns remain about data privacy (especially for minors), algorithmic bias, and over-reliance on automated evaluation. (Truong, Y., Schneckenberg, D., Battisti, M., & Jabbouri, R. 2023).
- In creative fields like design, publishing, marketing, and media, AI produces content such as images, videos, music, and written works. This boosts productivity and reduces costs. However, it also raises concerns about intellectual property rights, originality, and the future of human creators' roles (Dellermann et al., 2019). Furthermore, there are ongoing debates about whether AI-generated content should be clearly labelled.

To be more precise, while agentic AI offers significant benefits across various industries, each sector faces distinct ethical, legal, and regulatory challenges. Therefore, AI governance cannot rely on a “one-size-fits-all” approach. Instead, sector-specific guidelines and oversight mechanisms are essential to promote responsible and sustainable AI use.

6. Theoretical Contribution

This study advances entrepreneurship and technology literature in several ways. First, it broadens Effectuation Theory by introducing agentic AI as a strategic resource that enhances entrepreneurs' ability to experiment, adapt, and make data-driven decisions. Second, from a

Resource-Based View perspective, AI capabilities are regarded as valuable, scalable, and increasingly essential resources that can provide a competitive advantage when effectively combined with human skills. Third, the study strengthens Dynamic Capabilities Theory by illustrating how startups utilise AI to identify opportunities, seize them through rapid experimentation, and reconfigure resources efficiently. Overall, the study positions agentic AI not just as a tool but as an active partner transforming entrepreneurial processes and outcomes. (Elia, G., Margherita, A., & Passiante, G., 2020).

7. Practical Implications

As AI transforms the entrepreneurial process, traditional entrepreneurship theories need updating. For example, Effectuation theory explains that entrepreneurs typically start with what they have, such as their skills, knowledge, contacts, and limited funds, then develop opportunities step by step by testing ideas and learning from feedback. Today, those “resources” also include powerful AI tools. AI helps to predict market trends, generate business ideas, test different business models, and simulate possible outcomes. Because of this, entrepreneurs can run many experiments quickly and at a lower cost than before. They can test assumptions, gather insights, and adjust their strategies much faster.

Earlier, entrepreneurs discovered opportunities through their own experience, observation, and intuition. They noticed problems, market gaps, or new trends based on what they saw and knew. Today, AI assists in this process. It analyses large amounts of data, detects hidden patterns, studies customer behaviour, and identifies emerging market trends. It can even suggest new business opportunities (Govindan, K. 2022). As a result, opportunities are no longer discovered solely by humans—they are increasingly shaped through collaboration between entrepreneurs and AI systems. This shows how technology influences the way entrepreneurship works. Because AI is such a powerful tool, it does not just support existing businesses—it can also enable entirely new kinds of companies. For example, some startups are built around big data analytics, AI-driven automation, and AI-generated creative products (such as content, design, or software) that were not possible before.

Review of literature offers the following practical suggestions for the diverse groups in the entrepreneurship ecosystem:

7.1.1. For Entrepreneurs and Startup Teams

Research studies show that startups that use AI effectively make better decisions, move faster, and operate more efficiently. Therefore, they need to identify which tasks, such as product development, data analysis, and customer service, should be supported by AI.

Though entrepreneurs use AI to process large amounts of data quickly, find patterns, and generate insights, the final decision ultimately depends on their judgment. Therefore, entrepreneurs need to apply their common sense, ethical reasoning, and creativity to accurately understand the context.

Since AI systems require guidance and feedback, owners must know how to give clear instructions, interpret their outputs, and supervise their work. Entrepreneurs need to regularly review what works and what doesn't to improve results.

7.1.2. For Investors and Advisors

While assessing a startup, investors should verify whether the entrepreneurs have a clear understanding of AI's functioning and usage, because an AI-enabled founding team can complete tasks faster, reduce costs, and operate with a smaller team (Kaminski, J.C., & Hopp, C., 2020). This allows them to achieve outcomes like sustainable business growth, product development, and customer acquisition with reasonable funding. As a result, they can provide good returns to investors.

Investors should ask the following questions to stay safe: Does the startup have a clear plan for using AI? Does the founding team have AI skills and access to experts? Is the company building its own data to create a long-term advantage? Are they relying too much on AI without understanding how it works?

Advisors and board members should recognise that AI is used not because it's trendy, but because it adds value to the business. Additionally, they should support founders in contemplating new challenges, such as who owns AI-generated content and whether they are complying with new AI regulations.

7.1.3. For Educators and Support Programs

Universities should incorporate AI training into their curricula. Owners require practical experience in operating AI tools. Specifically, they should learn how to develop

business plans and analyse data using AI tools (Hartmann, P.M., Zaki, M., Feldmann, N., & Neely, A., 2016). To build confidence, hands-on support can be provided to allow experimentation with AI in a safe learning environment. Additionally, educating entrepreneurs on both the technical and ethical aspects of AI will prepare them to use AI tools effectively and responsibly.

7.1.4. For Policymakers and Ecosystem Builders

Policymakers should offer infrastructure support to startups so they can access AI tools. They should also provide training to help startups grow and innovate. The government should work with private companies to offer the following to startups:

- Provide discounted access to AI platforms.
- Offer open data and shared digital services that startups can use.
- Create clear and simple rules for using AI in business.

Clear policies reduce uncertainty and help startups innovate confidently, so they need guidance on issues like automated decision-making, customer interactions, and legal responsibility. Additionally, providing AI training to small businesses is essential. This prevents the “AI gap,” where only a few benefit from it. When powerful tools are accessible everywhere, entrepreneurs in smaller regions can compete with major tech hubs.

8. Future Research

The literature review suggests that AI as a “co-founder” is a novel idea. Several important questions still need answers. Based on identified research gaps in the literature, the authors suggest the following directions for future research:

- Since AI is part of founding teams, it has become essential to understand how humans and AI can collaborate effectively. Authors suggest that researchers examine how founders assign tasks to AI, how they resolve conflicts between their intuition and AI recommendations, and which leadership styles foster strong collaboration (Arshi, T.A., Rao, V., Begum, V., & Çapar, N., 2022).
- AI will reduce human biases, such as overconfidence, by providing objective data. However, it may also introduce new problems, like over-reliance on AI. Therefore, future research is necessary to compare decision-making with and without AI support.

- Most experts strongly believe that AI enhances performance. However, more large-scale evidence is necessary. Therefore, future researchers should investigate whether AI-using startups grow faster and survive longer than those that do not. The authors also suggest that researchers need to explore situations in which AI might lead to poor decisions.
- As AI creates new business opportunities, future studies are needed to identify and categorise AI-driven ventures, such as data-based platforms, AI-powered customisation services, or algorithm-based consulting, among others.
- As startups need to use AI responsibly, cooperation among experts in entrepreneurship, law, and ethics is essential. Additionally, startups usually do not have legal teams, so they require simple and practical guidelines (Obschonka, M., & Audretsch, D.B.2020). Moreover, involving different groups—such as founders, customers, and regulators—in creating these guidelines is beneficial. This helps ensure that the rules are realistic, fair, and practical.
- As AI plays a crucial role in entrepreneurship, owners need to acquire new skills. Therefore, future research should prioritise training and development to help entrepreneurs work effectively with AI. For example, they could teach owners how to use AI for market research, product development, or automation, and then evaluate whether this improves startup success.
- Based on a review of the literature, the authors found that there is potential for research in areas such as developing measurement scales for AI integration maturity in startups, conducting longitudinal studies comparing AI-native and non-AI-native ventures, examining cross-cultural differences in AI adoption among entrepreneurs, exploring gender and diversity implications in AI-enabled entrepreneurship, and studying failure cases where AI misuse contributed to startup collapses.

9. Limitations of the Study

This study has several limitations. First, the review includes only English-language publications, potentially excluding relevant research from non-English sources. Second,

although multiple databases such as Scopus, Web of Science, and IEEE Xplore were used, some relevant studies may have been omitted due to database limitations. Third, the study focuses on a relatively small sample of 25 articles, which, while consistent with systematic literature review standards, may not capture the full diversity of emerging research in this rapidly evolving field. Finally, given the dynamic nature of artificial intelligence, particularly agentic AI, some findings may become outdated as new technologies and applications continue to emerge.

10. Conclusion

The systematic literature review examined the role of agentic AI as a co-founder in entrepreneurship between 2015 and 2025. The authors mainly reviewed peer-reviewed academic research articles and a small number of practitioner articles to understand how AI is transforming the way startups are created and managed. From this analysis, the following conclusions emerged:

- As AI agents have become a practical reality, entrepreneurs depend on AI agents to manage complex tasks such as strategic planning, product development, customer communication, and daily operations. Additionally, research shows that AI improves key entrepreneurial activities, such as identifying business opportunities, making better decisions, and increasing work efficiency (Arshi, T.A., Rao, V., Begum, V., & Çapar, N., 2022). Because of this, AI is regarded as an active team member rather than just a simple tool.
- With AI tools, owners can examine ideas, analyse data, and adjust strategies quickly. Furthermore, startups can serve large numbers of customers without hiring additional employees. However, the owner's role shifts from performing routine tasks to focusing more on strategy and supervising AI systems.
- Earlier, entrepreneurs needed a team and a lot of money. Now, a solo owner can use AI to handle many tasks independently. For example, AI helps founders with bookkeeping, scheduling, marketing, customer messages, and even provides innovative product ideas. This saves time and boosts productivity. Some solo founders report working much faster and growing their businesses efficiently without hiring staff. Additionally, small and family businesses can become more innovative by using AI. Overall, AI helps small players compete with bigger companies.

- AI does not replace entrepreneurs, but it transforms their role. Specifically, entrepreneurs must learn to guide, supervise, and collaborate with AI systems. They need to understand AI outputs, question results when necessary, and avoid over-reliance on algorithms. The best outcomes arise when human strengths and AI capabilities complement each other.
- Earlier, vital resources included money, skills, and human talent. Now, AI is becoming a crucial resource that businesses can utilise and expand, almost like an additional team member. Moreover, regions that invest in strong AI training and infrastructure could help their startups become more competitive. This might even shift which cities or countries lead in innovation.

To sum up, even as the tools of entrepreneurship evolve, the essence of entrepreneurship remains human. It continues to be about vision, creativity, courage, and the desire to create value. Additionally, founders now have powerful AI tools at their disposal. AI acts like a strong helper or partner, enabling them to work faster and more effectively. In the future, successful startups will likely be built by humans working alongside AI. The key to success will be learning how to best combine human strengths with AI capabilities.

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