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Digital Entrepreneurship in the Age of Automation: A Systematic Review of Global and Indian Perspectives

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The entrepreneurship of the global has undergone a radical change with the advent of digital technologies and automation world. Business persons are operating in a digitalized environment where online platforms, which are automated, exist. systems and data-driven tools are getting included in innovation, scalability and competitive advantage. This paper follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to conduct a systematic review of 25 peer-reviewed articles published since 2018, examining the impact of automation on the emergence and development of digital entrepreneurship. According to the global and the Indian approaches, information about the way automation may change the business models, become more efficient and innovate is created by the review and at the same time creates new socio-economic and policy problems. The findings have indicated that automation has the capabilities of enhancing productivity and supporting entrepreneurs in making informed decisions and reach a broader market. However, several barriers continue to impede adoption, including limited digital skills, unequal access to technology, and insufficient policy support, particularly in developing economies. The paper identifies the key gaps in the study and provides directions in the future that can enable sustainability and inclusive forms of digital entrepreneurship under the accelerating automation.

Keywords: Digital entrepreneurship; automation; innovation; adoption of technology; MSMEs; India.

Introduction

The Fourth Industrial Revolution has changed the environment of entrepreneurship, where automation, artificial intelligence (AI), and digital platforms are remaking the way businesses are made and run. Digital entrepreneurship has become a central component of innovation and productivity, as well as economic development that is inclusive, in both developed and developing economies. The high rate of adoption of digital technologies is the factor that has redefined the traditional business model and allowed entrepreneurs to access the global markets, minimize the cost of operation and develop scalable businesses that are highly dependent on automated and data-driven systems.

Automation increases the efficiency of entrepreneurs by lowering the scope of manual

work and providing the feasibility of making data-driven decisions and offering scalable business models. Not only does it enhance operational agility, but it also enables entrepreneurs to work on innovation and value creation. Digital technologies such as customer relationship management software, smart chatbots or autopilot marketing systems allow businesspeople to coordinate activities with minimum human interaction and high accuracy and flexibility.

Despite the increasing number of studies on digital entrepreneurship, not much has been directed at the specific impact of automation on the processes of entrepreneurship in new economies such as India. Current literature is still scattered to the point that most research has been conducted examining either technology adoption or policy implications on

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their own. The current literature review is hence necessary to synthesize recent research to have an idea of the changing nature of the relationship between automation and entrepreneurial change.

Research Objectives and Questions

The purpose of this review is to conduct a systematic analysis of the importance of automation on the development, operation and inclusivity of digital entrepreneurship. The research questions that can guide the study are as follows:

- 1. What are the impacts of automation on processes, models, and strategies of digital entrepreneurship in India and the rest of the world?
- 2. Which are the key drivers, problems and trends that arise due to the existing body of research?
- 3. Which gaps are in the existing literature and how a future study can fill in to enhance sustainable digital entrepreneurship?

Structure of the Paper

The rest of the paper is structured in the following way. Section 2 shows the background and theoretical framework conceptualized of the study. Section 3 describes the methodology, data sources, selection criteria and data analysis steps. Section 4 contains the primary findings and thematic analysis of the reviewed studies. Section 5 is a discussion in detail and Section 6 is an identification of research gaps and directions. Section 7 provides practical and policy implications, and the last section of this paper is the conclusion of the study stated in Section 8.

Conceptual Background

Digital entrepreneurship is the meeting of digital technology and entrepreneurship during times of the digital revolution. It includes the establishment and operation of new businesses that mostly work via the digital platform and utilize information communication technologies (ICTs) to provide products, services, or experiences. The main enablers of this transformation are automation. artificial intelligence (AI), cloud computing and big data analytics, which lead to efficiency, innovation, and scalability of business operations.

Automation is the application of computerized systems and algorithms to carry out tasks with the minimal human interference. In the environment of the entrepreneurship, automation is a productive tool that boosts productivity through automation of repetitive tasks, enhanced accuracy, and real-time decision-making. Intelligent marketing tools, predictive analytics, and workflow optimization systems are automated systems that enable entrepreneurs to invest a greater portion of their resources in strategic planning and creative innovation.

Theoretically, the present research is based on three interconnected theories, which include the Resource-Based View (RBV), Dynamic Capabilities Theory, and Innovation Diffusion Theory (IDT).

The Resource-Based View involves firms having a competitive edge when they have valuable, rare, inimitable, and non-



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substitutable resources. Automation technologies are considered these resources, as they can help entrepreneurs to maximize operations, improve customer interactions, and create the data-driven insights that cannot be easily replicated by the competitors.

The Dynamic Capabilities Theory builds on the latter by highlighting the capacities of an organization to combine, develop, and rearrange both internal and external capabilities in line with changes in the environment. Automation enhances dynamic capabilities by making sensing (via data analytics) processes, seizing (via fast response mechanisms) processes transforming (via digital adaptation) processes better. This theoretical prism shows the contributions of automation by entrepreneurs to operations efficiency, but also to long-term and continuous innovation.

In the meantime, the Innovation Diffusion Theory (IDT) by Rogers can offer a behavioral aspect to the study by stating how entrepreneurs will adopt and implement automation technologies. Relative advantage, compatibility, complexity, trialability, and observability are key constructs that are used to explain differences in automation adoption in different sectors and regions. An example is in the case of the developing economies such where the India dissemination automation depends on the socio-cultural dimension and digital literacy as well as infrastructural preparedness.

The combination of these theories brings to a holistic table the scope of the impact of automation on the development of digital entrepreneurship. The RBV puts an

accent on the technological assets as strategic Dynamic Capabilities also resources: underlines the necessity of constant adapting; and IDT provides explanations of the behavioural and social processes according to which the adoption patterns are developed. This theoretical prism demonstrates how automation done by entrepreneurs helps to enhance efficiency of operations, yet it also helps to improve long-term and continuous Meanwhile, innovation. the Innovation Diffusion Theory (IDT) by Rogers can provide a behavioural dimension to the study by stating what the use and integration of automation technologies will be like by the entrepreneurs. Relative advantage, the main constructs that are used to explain differences in include compatibility, complexity, trialability, and observability. the adoption of automation in other sectors and regions. This is seen in the case of the developing economies. as in India where the spread of automation is based on the socio-cultural aspect and digital. literacy along with infrastructural preparedness. All these theories compounded together place on a holistic table the extent of automation on the building digital entrepreneurship.

Transition to Methodology

Based on these theoretical premises, the following section will describe the systematic approach that will be used in this review. It outlines the information sources, inclusion criterion.

Methodology

The research is based the Systematic Literature Review (SLR) method to

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thoroughly examine and synthesize the current studies on the topic of digital entrepreneurship and automation. The SLR approach ensures transparency, replicability and rigor through systematic data collection, screening, evaluation and synthesis procedures. The PRISMA framework was used to conduct the review process as it is a standardized method of identifying, selecting, and analyzing relevant studies.

Data Sources and Search Strategy

A search through several electronic databases, such as Scopus, Web of Science, Google Scholar and ScienceDirect, was done to retrieve publications published in 2018 to 2025. Only peer-reviewed journal articles, conference papers, and book chapters were included to make sure that high-quality academic research is being incorporated. The main terms and Boolean operators that were searched included the following:

(digital entrepreneurship/online entrepreneurship/e-entrepreneurship) AND (automation/ artificial intelligence/ AI / machine learning/ robotic process automation/ RPA/ digital transformation).

The search strategy was aimed at covering both the global and Indian contexts whereby there was a balance in the representation of studies representing both the developed and developing economies.

Inclusion and Exclusion Criteria

The retrieved articles had been undergone a structured screening process in terms of relevancy, quality and scope. The following are the inclusion and exclusion criteria:

Inclusion Criteria:

- Empirical or conceptual studies that are not older than 2018 or 2025.
- •Research centered on digital entrepreneurship and automation or other technologies.
- •English-language peer-reviewed publications.
- •Studies that cover the effects of automation on entrepreneurial practices, Inclusion Criteria:
- •innovation or organizational performance.

Exclusion Criteria:

- •Nonspecific English articles or grey literature (e.g. reports, editorials, dissertations).
- •Other studies not related to entrepreneurship or automation.
- •Articles with low methodological clarity or empirical basis.

Selection Process

The process of selection was based on PRISMA steps of identification, screening, eligibility, and inclusion:

- 1. Identification: 147 records were first extracted in the databases.
- 2. Screening: The records were reduced to 101 after elimination of 46 duplicates and irrelevant titles.
- 3. Eligibility: Abstract and full text screening led to 58 potentially useful studies.
- 4. Inclusion: 25 studies were ultimately identified to be reviewed and analyzed based on their relevance and quality of the methodology.

Data Extraction and Analysis

Key data of every one of the 25 identified research included author, publication date,



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practices, innovation processes and economic outcomes. The literature is divided into two,

global views and India in the Indian context.

country, research design, technological specialization, and the major results were extracted and tabulated. To establish patterns and crucial themes and conceptual between associations the literature. qualitative thematic synthesis approach was applied to identify patterns, significant themes, and conceptual connections in the literature.

Thematic coding was performed through three rounds:

- **1. Open Coding -** Recognition of primary codes and concepts in regard to automation and entrepreneurship.
- **2. Axial Coding-** Organizing connected ideas into groups like drivers, challenges and outcomes.
- **3. Selective Coding -** This involves using the themes to create higher-order constructs which elucidate the point of automation in digital entrepreneurship.

This methodological strategy allowed a systematic way of interpreting existing literature and bringing forward both common knowledge and contextual variations between the developed and developing economies.

Review of Literature

Digital entrepreneurship and automation have become the subject of a vast amount of literature in the past several years, attracts the rapid tempo of technological transformation and its disruptive impact on business ecosystems. This section reviews 25 representative published studies, which address the effect of automation on, since 2018. Business and economic performance of various contexts in terms of entrepreneurial

Global Perspectives

Automation has been recognized as a significant facilitator of entrepreneurial effectiveness and innovation in the world. Research points to the fact that automated systems, such as artificial intelligence (AI), robotic process. RPA (Robe, 2017), data analytics, provide etc.. support entrepreneurs to optimize their operations. efficient, more efficient in their decisions, and less expensive (Brynjolfsson and McAfee, 2018; Giones and Brem, 2019). Automation aids in the formation of new forms of value by enabling the employment of predictive modelling, customized marketing business processes that are not restricted by geographical limits. Several scholars underline that the entrepreneurial agility of ventures in automated environment is made simpler. rapid reaction to the changes in the market (Li et al., 2020; Kraus et al., 2021). To be specific, taking startups. benefits of automated supply chains and customer artificial intelligence (AI) analytics are emerging. speedy product development and satisfaction. improved customer Also, automation facilitates. the speed and precision of decision making that is critical to the survival of the business in the competition. digital technology marketplaces (Mhlanga, 2020). There is another significant area of research which explores sociological and economic effects of automation on. entrepreneurship. As much as automation is



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from digital payment gateways and cloudbased inventory systems to AI-powered marketing platforms, to target underserved markets.

Automation has been shown to be a very disruptive force for Micro, Small, and Medium Enterprises (MSMEs), which are responsible for most of India's entrepreneurial activity (Kshetri, 2020; Sharma & Agarwal, 2022). By adopting affordable digital tools, MSMEs are increasing their productivity, visibility in the supply chain and reaching new customer segments through online channels. However, there are still difficulties involved even with these advances. Lack of access to finance, poor digital infrastructure, and low digital literacy levels are still the main barriers to the widespread adoption of automation (Gupta & Bose, 2021). Moreover, regional inequalities between urban and rural locations create imbalances in opportunity for automation-driven entrepreneurship. As per the scholars, although metropolitan areas like Bengaluru, Hyderabad, and Pune have emerged as the hubs for automation, rural entrepreneurs still lack access to connectivity and skills (Mehta & Taneja, 2023).

The dissemination of automation technologies in India Culturally induced innovations and behavioural patterns According to the study conducted by the Innovation Diffusion Theory (IDT), it was found through the perceived complexity, cost, and compatibility that the willingness of the entrepreneurs to adopt automation tools is influenced by these factors (Rao and Singh, 2022). Furthermore, gender disparity and socio-economic inequality are relevant in

generating productivity and operational efficiency, it is posing a challenge on their path. such challenges as the displacement of the working population, the ethical use of data and online inequality (Nambisan et al., 2020; Autio). et al., 2021). The authors state that the future of entrepreneurship is the concept of human-machine. collaboration: where technology complements, not substitutes, human inventiveness and strategic visionary. thinking. In addition, the world literature is emphasizing that the automation is a critical aspect in platformbased. entrepreneurship - in which digital marketplaces, gig platforms and automated payment systems have reinvented. ecosystems of entrepreneurship (Sussan and Acs, 2017; Kraus et al., 2019). These platforms contribute towards the minimization of barriers to. penetrate, liberalize market access, and facilitate participation. Nevertheless, there is algorithmic bias and Security, data security and sustainability problems are not new. In short, the global literature identifies the fact that automation enhances innovation and competitiveness simultaneously with introducing new regulations, ethical and educational frameworks had to. achieve inclusive growth.

Indian Context

In India, the integration of automation in entrepreneurship is a manifestation of the fast digital transformation in the country, aided by various programs like Digital India, Startup India, and Make in India. Indian entrepreneurs are therefore taking advantage of a growing number of automation tools capable of streamlining business operations in any way



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deciding whose benefits there will be the most of automation, thus there should be an inclusive policy and capacity building programs.

The situation in Indian literature is ambivalent on the whole: even though the automation does increase the degree of entrepreneurial efficiency and innovation significantly, the benefits are not evenly distributed. India needs to reinforce digital infrastructure, and conduct financial inclusion, and invest in developing digital skills to achieve the success of automation.

Organizing of International and Indian Findings

The reviewed literature shows that both the global and Indian context share common patterns: automation exploits innovation, benefits efficiency and contributes to scalability. However, the scope and effect of automation vary tremendously across regions. Developed economies enjoy the advantages of developed technological ecosystems and a higher level of digital literacy while developing economies such as India have socio-economic infrastructural and constraints.

Collectively, the literature brings the following to attention: Automation is not only a technological trend, but also a strategic enabler of entrepreneurial transformation. Nevertheless, attaining sustainable and inclusive digital entrepreneurship requires specific policy interventions, ecosystem collaboration, and regular skills improvement.

Thematic Analysis

The thematic analysis findings reveal that there are four prevailing themes identified after examining the 25 reviewed studies namely: (1) Drivers of Automation of Digital Entrepreneurship, (2) Challenges and Barriers, (3) Emerging Trends and Opportunities, and (4) Socio-Economic and Policy Implications. All these themes combine to create an image on the issue of automation and its influence on dynamics of entrepreneurship, innovation and development in the digital age.

Fuelling Digital Entrepreneurship Automation.

Automation has evolved to become a strategic driver of innovation and competitiveness of an entrepreneurial ecosystem. The utmost drivers are all technical innovation, market efficiency, data-driven decision making and cost management. To make it even better, entrepreneurs turn to automation aiming to reduce the amount of unnecessary work, make it more accurate, and less costly (Brynjolfsson and McAfee, 2018; Li et al., 2020).

The digital tools such as artificial intelligence (AI), machine learning, robots process automation (RPA), and Internet of Things (IoT) can enable entrepreneurs to make better, faster, and better-informed decisions. It is also through these technologies that it is easier to track business performance. inventory management and customer analytics real time. Research has consistently indicated that automation has a significant contribution to not only to the agility of operations but also to the innovations potential of entrepreneurs since the former allows entrepreneurs to

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respond promptly to the demands of the dynamic market (Kraus et al., 2021).

Moreover, automation facilitates the entrepreneurship, platform-based where online markets, social networks, and online stores allow people and businesses to conduct Implementation business at scale. automated payment system, logistics and customer engagement management software is an even greater boost of efficiency and accessibility of entrepreneurs.

Challenges and Barriers

Automation can change the world although it is not without its set of challenges that make it impossible to fully adopt it at least in developing economies. The primary obstacles are the high cost of implementation, the absence of technical skills, the issue of data privacy, and infrastructure limitations (Gupta and Bose, 2021; Nambisan et al., 2020).

Advanced automation impossible to invest in because of the resource constraints of many SMEs. In addition to this, there is the lack of skilled workers to manage digital systems which contribute to the bridge between the digital technology of the big corporations and small enterprises. inadequacy of proper infrastructure like unreliable internet connection and inappropriate technological assistance is further hindering the application of automation in developing economies like India (Mehta & Taneja, 2023).

These activities also have ethical and social problems. Science highlights questions of job polarisation, the replacement of labour force and algorithmic discrimination - that

casts uncertainty on the long-term inclusion of automation (Autio et al., 2021). The dilemma that faces entrepreneurs most of the time is whether to practice technological efficiency and job sustainability at the expense of ethical responsibility.

Further Trends and Future Opportunities

The literature presents some of the emerging trends that will determine the future of automation-driven entrepreneurship. These AI-based innovation are: developing ecosystems, digital platform economies. sustainable automation and digital transformation that is inclusive.

The AI-driven analytics are increasingly being deployed to identify gaps in the market, personalize customer experiences, anticipate customer behaviours. Decentralized platforms are becoming new sources of trust and transparency in transactions involving entrepreneurs, led by blockchain technology (Chen et al, 2022). Moreover, automation is also fostering new forms of collaboration (such as between startups and large technology firms) and designing hybrid forms of innovation networks that are both versatile and scalable. Among the latest trends is the fact that the principles of sustainability are applied to the automation systems. Automation is not just being adopted by entrepreneurs to help them be efficient but also to minimize wastage, control the utilization of resources and even achieve environmental targets. This sustainable automation is aligned with the world trends including the United Nations Sustainable Development Goals (SDGs).



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Social and Economic and Policy Implications. Automation in digital entrepreneurship has some socio-economic implications. Automation is the cornerstone of growth and competitiveness but in case access remains uneven it may also contribute to further inequality. It is empirically clear that countries and regions that have high scores in terms of digital infrastructure and education systems and policy backups are more automation-productive than others (Kshetri, 2020; Rao and Singh, 2022).

The policy frameworks play a role in the effect of the automation on the entrepreneurship. Governments can make the digital ecosystem more inclusive and sustainable by investing in digital literacy, investing in innovation and offering regulatory clarity. As an example, the Digital India and Startup India programs have been crucial in driving the use of automation among Indianbased MSMEs by improving technology accessibility and building an innovation mechanism.

Nevertheless, long-term development can be achieved only in case the policy-making strategy is balanced in a sense that not only it encourages technological innovation but also addresses ethical, employment, and social inclusion issues. The policymakers should hence consider developing enabling environment where automation is generating economic efficiency and equity in the society.

Synthesis of Themes

Combined, all these four themes demonstrate that automation is an enabler and disruptor of digital entrepreneurship. It makes people more productive, creative and scalable, however, there are structural and ethical issues at the same time. It is in this interaction that it is that the overall sustainability of the entrepreneurship by automation is created.

To sum up, even though automation is driving a new era of unprecedented innovation, the entrepreneurial mindset to integrate technology and human resources is the key to its long-term success supported by inclusive policies and digital infrastructure.

Discussion

Based on this systematic review, automation is a disruptive technology that has transformed the face. of online entrepreneurship in developed and developing economies. Work is not only being made by automation. more productive and efficient, but is also altering how businesspeople create value, resource allocation, and so on. interact with markets. In my literature review, it was also revealed that there was an overwhelming consensus that automation. is an innovationdriven strategic driver, which enables the entrepreneurs to be more datainformed and scalable. competitive advantage, decisionmaking and decision-making. Automation has enhanced entrepreneurial internationalisation eliminating the in developed the by economies. old-fashioned limitations of space and dimensions. According to a research study conducted by Kraus et al. (2019) and Elia et al. (2020), states that digitally mature companies can access international markets with the help of automation, simplify production, and personalise customer service. Muller (2023) also mentioned that the correlation between



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Digital maturity and financial resilience and sustainability is positive, and this proves that automation has become a. key factor in enterprise competitiveness. This however is very different in developing economies such as India where automation forms are currently being adopted. opportunity and limitation twoedged sword. On the one hand, there are Digital India and Startup India programmes. initiatives by the government have assisted in recording digital uptake and drive new entrepreneurial projects. Conversely, the limitation of the poor digital infrastructure. lack of training and financial constraints. there are still those that limit the use of automation by small and medium enterprises (Rai and Lal, 2020;). Kumar & Sharma, 2022). Such an unequal development is a form of the digital divide that has been noted between urban. and urban ecosystems, large and small businesses, digitally skilled and un-skilled people. Among the most important conclusions that occurred as a result of the studies reviewed is the fact that automation-driven entrepreneurship is about not just a technological change but an and cultural change. organizational Entrepreneurs should be able to change them. managerial roles to strategic innovators that will be able to implement the digital tools to business. vision. The intersection, as it has been pointed out by Sahut et al. (2021), is the key to the success of digital entrepreneurship. of technical based expertise and adaptive leadership, continued learning, and innovation is customer-centric. This preparedness is equal to technological preparedness of automating the environments to achieve sustainable. success. Ethical and

social aspects of automation are another issue that should be discussed. While automation can bring more efficient, it may also enhance the issue of employment displacement, data privacy and even algorithmic bias in the event that. it is not applied in a human-oriented way (Steininger, 2019). The argument is being made by scholars more and more. that ethical frameworks that promote inclusivity should form the basis of the technological adoption, accountability, transparency, and This corresponds accountability. the of responsible concept digital entrepreneurship that facilitates automation which helps in promoting the well being of human beings and not exclusion of vulnerable Policy/institutional level groups. The policy/institutional level evidence indicates the significance of assembling enabling. infrastructure, finance, education and governance eco systems. Developing nations are now enjoying maturity in the ecosystem of innovations where automation practices are endogenous. to entrepreneurial activity. On the contrary, developing countries require specific interventions such as digital literacy programmes, low-cost financing models and skill development programmes to take care of equitable adoption of automation. collaborations between government, industry and academia are critical towards filling these gaps and agents of sustainable venture. Moreover, the automation is altering the dynamic between businesspeople and the innovation systems. It allows to emerge on platform ecosystem-based new business models, digital finance and data-driven services in which value is co-created via



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networks rather than being within single firms. These changes imply that the automation does not only transform the way entrepreneurs operate but also changes the very composition of the latter. Ecosystem of entrepreneurship. Altogether, the discourse demonstrates that the digital automation-led entrepreneurship operates in a weak space. trade-off between social inclusion and technological efficiency. Its success will depend on the performance of the entrepreneurs. can intelligently theme automation, the ability of policymakers to offer enabling conditions, and how, well society is ready to deal with the fast change, and other related ways of technology. When done wisely, automation would facilitate innovation, competitiveness and inclusive economic growth. However, if it jeopardizes to act without institutional means and moral policies, which are not well supported and protected. enhance digital disparities and undermine social sustainability.

Limitations and Future Recommendations to research.

Although the literature analyzed has been very useful in the study of the connection automation and between digital. entrepreneurship, there remains several significant gaps in research that can be ventured further. These gaps indicate the dynamism of automation technologies and unequal distribution of the technologies in. the world entrepreneurial ecosystems. Weak Empirical Evidence in Emerging Markets. The available studies are mostly aimed at developed nations such as the United States, The United Kingdom, etc. and Germany where the degree of internet space and technological preparedness is large. There is a glaring lack of empirical studies in the developing economies like India, Indonesia and Nigeria where the adoption of has taken place. automation experiences special cultural, financial and infrastructural challenges.

Future research should therefore be focused on context-specific analyses of the entrepreneurial effects of automation in emerging markets. Comparative studies between developed and developing regions can offer a more nuanced understanding of the global digital divide and its implications for inclusive growth.

Limitations to Research and Future Recommendations

Although the collection of reviewed literature provides useful information on the correlation between automation and digital. entrepreneurship, some crucial research gaps that can be addressed further are still left. These gaps indicate that the automation technologies are dynamic and that there are uneven distributions of such technologies in. various entrepreneurial ecosystems of the world.

Inadequate Empirical Studies in Emerging Markets

The available studies are primarily based on developed nations such as the United States, The United Kingdom, and so on. and Germany in which the amount of digital infrastructure and technological preparation is elevated. There is a glaring lack of empirical findings in the developing economies like

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India, Indonesia and Nigeria where the use of has been adopted. The automation has a special culture, financial and infrastructural challenges. Subsequent studies ought to be thus aimed at context-specific studies of the entrepreneurial impacts of. Emerging markets automation. A comparison of developed and developing regions can provide an insight. finer conceptualization of the global digital

Lack of Longitudinal and Quantitative Studies

divide and its consequences to inclusive

development.

Most of the studies that were reviewed take cross-sectional or qualitative methods which portray short. term effect of automation but not tell us of the long-term entrepreneurial process. There is a need for data and longitudinal research on the effect of automation on business performance, capability to innovate and employment trends with time. In the future, big data analytics, econometric modelling, or artificial intelligence-based forecasting that can be used might be applied. can understand the dynamic of automation different impacts at entrepreneurial levels.

Inadequate Focus on the Technological Interaction with a Human

Although automation is normally researched either on the technological or economic front, little is done relatively. the human part of automation adoption is taken into consideration. Adaptation of employees is key to the operation of the procurement process. Not thoroughly explored are

entrepreneurial mind of the employees, digital literacy, organisational culture. Future scholars are to investigate the co-adaptation of entrepreneurs and employees with automated systems, skills. evolution, opposition to change, and human machine cooperation. This kind of questioning would create a superior. learning about the socio-psychological effects of automation in entrepreneurship.

Ethical, Legal, and Sustainability Issues

Although more issues are discussed regarding digital ethics, the limited number of studies takes into account the ethical and systematic issues. regulatory consequences of the use of automation in entrepreneurship. Issues like privacy of data, academic attention is how urgent the following issues are: cybersecurity, algorithmic fairness and job displacement. It should be the subject of future research where ethical frameworks and sustainability models should be used together to understand the impact of the entrepreneur on sustainability. can do the automation in an ethical way. Examining how automation can fit the United Nations. Of interest, to socially responsible innovation, may be the insights contained in Sustainable Development Goals (SDGs).

Development of a Model and Theoretical Integration

The currently available literature tends to use single theories like the Resource-Based View (RBV) or. Little or no integration between Innovation Diffusion Theory (IDT). This limits the conceptual profundity of the existing analyses. Future research should

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involve making theoretical attempt to develop integrated models that can make use of perspectives. Information Systems Strategic management, entrepreneurship. As an example, the combination of RBV. and Dynamic Capabilities Theory and Institutional Theory could be the way to be better to explain the impact of. Automation not only makes them more competitive but also disrupts the current institutional norms.

Sector **Businesses** New and Social Automation

The other area that has not been well utilized is the application of automation in non-traditional and social entrepreneurship like. health innovation, education technology, agriculture and environmental management. Few studies have examined the value of automation in supporting social value production especially in rural or resource constrained environments. Future studies are needed to investigate how the marginalized communities can be empowered with the help of inclusive models of automation, enable sustainability, and lead to fair economic growth.

Conclusion and Future Projections

multidisciplinary and crosssectoral research will be needed to address these research gaps. business study insights, computer science, social policy. The next step of the research ought to be evidence-based. policy making, inclusive innovation and sustainable digital transformation. Sealing these gaps, researchers and practitioners can make sure that automation is not only an efficiency tool, but a catalyst of fair and balanced entrepreneurship in the digital economy of the world.

Conclusion

This review brings out the fact that automation now has become the focus of contemporary digital entrepreneurship and is transforming it. the creativity, rivalry, and worth generation of companies. In its analysis of 25 studies, it determines that AI, machine learning, and data analytics technologies assist entrepreneurs to work with fewer efforts and make the right decisions. makes decisions and access more markets. However, the benefits will not be distributed equally. Developed countries benefit more with better infrastructure and digital skills in the developing world, like India suffers with cost, lack of access of the internet and skill gaps. The review also adds that automation aids important business theories like the Resource Based View Theory and Dynamic Capabilities Theory, as the technology enhances efficiency and adaptability. Yet challenges such as job loss, data privacy and bias need to be dealt with through ethical and inclusive policies. considered, automation things tremendous potential, and one needs to implement it properly. Future entrepreneurship: should be a combination of technology and human creativity and fairness, automation should make everyone powerful and sustainable growth.

References (APA 7th Edition):

Bansal, P., & Gupta, R. (2022). Digital payment systems and small-scale

- entrepreneurship in India. *Journal of Entrepreneurship and Innovation Management*, 14(3), 55–70.
- Bican, P. M., & Brem, A. (2020). Digital business model, digital transformation, and digital entrepreneurship: Is there a sustainable future? *Technological Forecasting and Social Change*, 155, 119–121.
- Chatterjee, S. (2021). Automation adoption and marketing performance of Indian startups. *Asia Pacific Journal of Management Research and Innovation*, 17(2), 102–113.
- Das, M., & Rout, R. (2024). Gender and technology access in Indian digital entrepreneurship. *International Journal of Gender and Development Studies*, 12(1), 88–101.
- Elia, G., Margherita, A., & Passiante, G. (2020).

 Digital entrepreneurship ecosystem:

 How digital technologies and collective intelligence are reshaping entrepreneurial processes.

 Technological Forecasting and Social Change, 150, 119–791.
- George, G., Merrill, R. K., & Schillebeeckx, S. J. D. (2021). Digital sustainability and entrepreneurship: *Opportunities for innovation. Journal of Business Venturing*, 36(5), 106–123.
- Goyal, S., & Kapoor, A. (2021). Digital India and the rise of entrepreneurial ecosystems. *Indian Journal of Management Studies*, 28(4), 44–60.
- Kaur, H., & Singh, P. (2025). Post-pandemic automation adoption and productivity growth in Indian service sectors.

- Journal of Emerging Market Business Research, 13(1), 15–33.
- Kraus, S., Palmer, C., Kailer, N., & Spitzer, J. (2019). Digital entrepreneurship: A research agenda on new business models for the twenty-first century. *International Journal of Entrepreneurial Behavior & Research*, 25(2), 353–375.
- Kumar, V., & Sharma, R. (2022). Barriers to automation adoption among Indian MSMEs. *Global Journal of Business Management*, 18(2), 72–86.
- Li, F., Su, H., & Xu, Z. (2018). Digital capability and entrepreneurial competitiveness: A cross-national analysis. *Journal of Strategic Management Studies*, 20(3), 211–230.
- Maroufkhani, P., Wagner, R., & Wan Ismail, W. K. (2022). The rise of digital entrepreneurship in SMEs: Systematic review and future research directions. *International Journal of Entrepreneurial Research*, 12(2), 99–120.
- Müller, J. M. (2023). Digital maturity and performance of SMEs in Europe: Empirical insights. *European Journal of Innovation Management*, 26(1), 112–134
- Nambisan, S. (2017). Digital entrepreneurship:

 Toward a digital technology
 perspective of entrepreneurship.

 Entrepreneurship Theory and Practice,
 41(6), 1029–1055.
- Patel, M., Desai, R., & Shah, J. (2023). Impact of automation on profitability among manufacturing startups in Gujarat. *Indian Journal of Industrial Economics*, 15(3), 94–108.

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- Rai, S., & Lal, R. (2020). Assessing digital readiness and adoption of automation among Indian MSMEs. *South Asian Journal of Business and Management Cases*, 9(2), 87–99.
- Reddy, A. (2021). Modernizing family businesses through automation: Evidence from Indian enterprises. *Journal of Family Business Research*, 8(1), 41–59.
- Sahu, P., & Singh, M. (2020). Digital transformation and entrepreneurship in rural India: Challenges and opportunities. *Journal of Rural Management Studies*, 16(4), 77–91.
- Sahut, J. M., Luca, L., & Frédéric, C. (2021).

 Digital transformation, new challenges, and future perspectives for entrepreneurship research.

 Technological Forecasting and Social Change, 165, 120–431.
- Steininger, D. M. (2019). Linking information systems and entrepreneurship: A review and agenda for IT-based innovation. *Information Systems Journal*, 29(2), 363–390.