

Entrepreneurship in 21st Century: A Review

Adina Ambreen¹, Lakshya Rastogi², Mohd Anas Jamil³, Mohd Sami⁴

^{1,2,3,4}BBA Student, Department of Commerce, Aligarh Muslim University, India,

Abstract

Entrepreneurship, as discussed by many scholars, is a process of identifying, seizing and exploiting opportunities to create value and promote economic growth. It refers to the propensity of an individual to disrupt the market. Traditionally, entrepreneurs focused on human efforts, resource mobilisation, experience & intuition, and limited market reach to set up their enterprises. In the contemporary world, rapid advancement is rebuilding the entrepreneurial outlook. This review paper synthesises literature (2019-2026) to lay out how automation impacts entrepreneurship. Key themes consist of the evolution of entrepreneurship, opportunities, challenges and real world examples of AI-generated business innovation. While automation assists in scaling business, data-driven decision-making, output efficiency and effectiveness, it also raises concerns like ethical dilemmas, inequality in accessing and integrating technology, and job displacement. Therefore, by consolidating the findings, this paper aims to provide a brief understanding of entrepreneurship in the automation age.

Keywords: Automation, AI, entrepreneurship, sustainability, innovation, IoT

Introduction:

One of the most well-known and cited definitions of entrepreneurship is by Shane and Venkataraman (2000:218) who defined it as “how, by whom and with what effects opportunities to create future goods and services are discovered, evaluated and exploited.” (Ratten, 2023). According to the Global Entrepreneurship Monitor (GEM), entrepreneurship has a profound impact on a country’s economic growth. GEM states that countries with high inclination towards entrepreneurship tend to have faster economic growth compared to countries which are less active in this domain. Apart from this, entrepreneurship significantly improves employability. It creates jobs and contributes positively to the community.

However, entrepreneurship has significantly evolved with transitions in social, cultural, economic and technological changes. Today automation, sustainable practices and globalization are reshaping entrepreneurship through AI driven innovation and digital platforms. In past eras, entrepreneurial activity was deeply rooted in human effort, intuition based decisions and localised markets. As mentioned by (Dewi, 2024), humans first demonstrated entrepreneurial traits by creating simple tools to survive and meet their needs (human effort). Moreover, vital decisions regarding production and investment did not involve any data-driven insights, systematic analysis or predictive analysis rather was shaped by experiences and personal judgements (Intuition). Entrepreneurial activity is changing, and these changes have opportunities as well as challenges. According to (GHAFAR, 2024), AI, which includes tools like machine learning, natural language processing, and predictive analytics, empowers businesses to sift through vast amounts of data, make smart decisions, and even automate specific tasks. Despite all the ease automation has provided, it yet can be challenging for entrepreneurs. One such

challenge is the skills gap. Diving right into automating business operations is not effective unless the right skill is acquired. Moreover, ethical implications attached to its use can be daunting. Concerns such as protecting customers’ data, ensuring data privacy and security are imperative to success, neglecting which could result in a tarnished reputation.

Evolution of entrepreneurship in the automation age

Entrepreneurial activity has undergone changes over time. It went from being perceived as an activity confined to specific social classes and built on cultural factors like risk-taking and innovation to being a more accessible and liberalized field. As cited by (Dewi, 2024) understanding entrepreneurship is not only related to the individual who sets up the business, but also involves social, economic, and cultural aspects that shape society's perception of this phenomenon. Furthermore (Moşteanu, 2023) argues recent trends in entrepreneurship have been distinctly marked by a paradigm shift toward sustainability, digital transformation, and the integration of artificial intelligence (AI). Combined, these arguments highlight how entrepreneurship has shifted beyond its traditional boundaries to inculcate cultural, technological, environmental dimensions, showcasing its continuous adaptation to changing demands in the world. Contemporarily growing awareness of the environment has positioned sustainability as benchmark, with entrepreneurs expected to commence ventures that are not only profitable but also environmentally conscious.

This perspective is supported by (Afroze nanzneen, 2026) who outlines that in state-driven economies, sustainable entrepreneurial development depends on aligning institutional reforms with human and social capacities , meaning thereby , entrepreneurship today must be inclusive and environmentally conscious , and not merely profit oriented.

Furthermore, digital transformation plays vital role in reshaping the entrepreneurial process in present era. Advances such as artificial intelligence (AI), block chain, the Internet of Things (IoT) have assisted entrepreneurs in optimizing operations, taking better decisions, and reducing costs. AI enables processing large volume of data resulting in data driven insights, it also redefines how companies innovate. Moreover, IoT facilitates real-time monitoring, and block chain strengthens transparency and security in business transactions. Altogether, these changes show how entrepreneurship has evolved from labour, resource intensive practice to data enabled, and efficient business models.

Table 3.0

Aspect	Traditional Entrepreneurship(Past)	Automation Age (Present)
Human Effort	High use of manual labour, repetitive tasks, resource mobilization.	Automated repetitive tasks, Integration of advanced technology to reduce human efforts in activities like production, customer interaction etc.
Decision Making	Based on gut feelings, confined local knowledge and personal interaction and experience.	Data driven insights supported by AI and automation, such as predictive analytics, machine learning.
Market Reach	Geographically confined trade and limited	Globalized reach through e -commerce, digital platforms, and cloud ecosystems.

	competition.	
Innovation	Incremental advancement in products and processes.	Innovation driven by technology, such as AI, IoT and various other automation tools.

Opportunities from automation:

Renowned business authors have used the term *automation* more and more frequently in the recent decades to denote the absence of workers in the production line and the adoption of advanced digital technologies like Artificial Intelligence (AI) and robotics used for automation (Matheios, 2022). However, one should not only consider automation as a highly advanced productive technology that efficiently performs tasks at hand, for the number of entrepreneurial opportunities that automation can be used to create and capture is far greater than most entrepreneurs appreciate (Morris, 2022). There is also a paradigm shift in the entrepreneurial landscape as newly funded firms become more geared towards automation in their production technologies, and at the very same time the potential to create business models that utilize automation increases, democratizing innovation.

Expanding the Opportunity Landscape

AI, alongside robotics and automation technologies, is one of the most advanced digital technologies today (Matheios, 2022). AI and automation as advanced productive technologies create pathways for entrepreneurs to make value in new economies, AI enables entrepreneurs to shift more ordinary tasks and repetitive job descriptions to machines focused to do as instructed. As an enhanced productive technology, AI enables the entrepreneurs to focus on more grand strategies and plans that create new value for the economies (Shepherd & Majchrzak, 2022; Giuggioli & Pellegrini, 2022). New automation technologies open previously stagnant highly constrained economies and outsmart previously bottlenecked labor sectors in healthcare, education, and financial (Shepherd & Majchrzak, 2022; Giuggioli & Pellegrini, 2022; N.A & Muhammed, 2024). AI, alongside the Automation technologies fosters innovation in sectors stagnant for decades. (Dr. Adam Swidan, 2026) Further demonstrate that tech enabled ventures consistently accomplish shorter time-to-market and wider global reach, with AI not acting as standalone feature but as a capability multiplier.

Data-Driven Innovation and Market Foresight

Automation presents a unique opportunity for entrepreneurship which focuses on the use of data for innovation and market study. Data analytics and AI tools give entrepreneurs the opportunity to identify and understand market gaps, predict future trends, and manage customized offerings in a personalized way and on a bigger scale (Usman et al., 2024; González-Tejero et al., 2023; Szafarski & Fischer, 2024). Startups use predictive analytics for opportunity recognition, pricing optimization, and product modification to target specific customer segments which increases the agility of the product in rapidly changing markets (Usman et al., 2024; Szafarski & Fischer, 2024). The combination of neural networks with big data analytics offers a new way of decision making and enables rapid pivots to be made with solid backing when market signals are present (Khalidov et al., 2025; González-Tejero et al., 2023). Reinforcing the same, (Yaojie Li a) mentions that a type of artificial intelligence known as “Generative AI” has profoundly augmented the decision making process. Leveraging the power of prompt engineering, Gen AI tools outperform the traditional ones by harnessing large datasets and

dynamic algorithm. This way entrepreneurs assist themselves with gaining entrepreneurial knowledge that could aid in the better decision making process.

Accelerating Product Development and Customization

New automation technologies have changed entrepreneurial processes by shortening the time required for product ideation, design, and development. Development of new AI design tools, rapid prototyping, and digital twins technologies help entrepreneurs rapidly iterate, reduce time to market, and tailor products to suit varied buyer preferences (Usman et al., 2024; Giuggioli & Pellegrini, 2022; Assylbekkyzy & Turmanov, 2024). The ability to innovate and invest in new business models and new value propositions becomes more prominent and less risky. (Giuggioli & Pellegrini, 2022; Assylbekkyzy & Turmanov, 2024).

Democratizing Access and Lowering Barriers

The current automation wave is transforming entrepreneurship by providing advanced tools and resources to an increasingly wider audience. Entrepreneurs, even those with limited resources, can access high-end technology and global markets through cloud-based AI, open-source automation, and digital marketplace systems (Giuggioli & Pellegrini, 2022; 2024). Such democratization of technological resources fosters inclusivity by enabling those entrepreneurs with emerging economy and non-traditional backgrounds to establish businesses, engage in the digital marketplace, and tackle problems that may be local and global (Giuggioli & Pellegrini, 2022; , 2024; Kreuzer et al., 2022).

Enhancing Entrepreneurial Performance and Scalability

Automation increases the managerial and entrepreneurial capacity of businesses expanding on self serve automation and artificial intelligence (AI) automated customer response systems. Self serve automation and AI customer response systems are amenities for automated supply chains and resource management. They allow businesses to operate with smaller highly responsive and proactive front line customer service teams (Usman et al., 2024; Giuggioli & Pellegrini, 2022; Fernandez et al., 2023). Automation enables the development of platform business models in the form of ecosystems that host peer to peer transactions, facilitate transactional exchanges, and allow entrepreneurs to exploit network economy (Giuggioli & Pellegrini, 2022; Nambisan, 2017).

Fostering Sustainable and Impact-Driven Entrepreneurship

The frontiers of sustainable impact entrepreneurship include automation and sustainability. Intelligent automation optimizes resources, eliminates waste, and develops sustainable business models that balance social and environmental business model challenges (Moşteanu, 2023). Entrepreneurs have the opportunity to automate solution developments focusing on clean automation, the circular economy, and sustainable agriculture. The profit purpose and potential of automation positively impacts social (Moşteanu, 2023; Geetha et al., 2024).

Empowering Entrepreneurial Learning and Adaptation

Automation, Artificial Intelligence (AI), and other emerging technologies facilitate entrepreneurial education and skill training. For instance, AI adaptive training systems provide entrepreneurs with personalized guidance, instant feedback, and access to global knowledge networks while virtual mentors

offer instantaneous assistance (Giuggioli & Pellegrini, 2022; Lévesque et al., 2020). Such a continuous learning approach strengthens an entrepreneur's ability to influence and adapt to technological changes, test entrepreneurial ideas, and develop entrepreneurial cognitivoresilience (Giuggioli & Pellegrini, 2022; Lévesque et al., 2020). Summary of automation-driven opportunities for entrepreneurship, with supporting research references has been presented in the following table:

Table: 3.1
Key Automation-Driven Opportunities for Entrepreneurship

Opportunity Area	Description/Examples	Citations
Opportunity Expansion	New markets, niche sectors, creative focus	(Shepherd & Majchrzak, 2022; Giuggioli & Pellegrini, 2022; N.A & Muhammed, 2024; , 2024)
Data-Driven Innovation	Predictive analytics, market foresight, evidence-based decisions	(Usman et al., 2024; Khalidov et al., 2025; González-Tejero et al., 2023; Szafarski & Fischer, 2024)
Product Development Acceleration	Rapid prototyping, AI-driven design, customization	(Usman et al., 2024; Giuggioli & Pellegrini, 2022; Assylbekkyzy & Turmanov, 2024)
Democratization & Access	Cloud AI, open platforms, global reach	(Giuggioli & Pellegrini, 2022; , 2024; Kreuzer et al., 2022)
Performance & Scalability	Automated operations, platform models, network effects	(Usman et al., 2024; Giuggioli & Pellegrini, 2022; Fernandez et al., 2023; Nambisan, 2017)
Sustainability & Impact	Resource optimization, sustainable models, social entrepreneurship	(Moşteanu, 2023; Geetha et al., 2024)
Learning & Adaptation	AI-powered education, virtual mentorship, adaptive training	(Giuggioli & Pellegrini, 2022; Lévesque et al., 2020)

Challenges & Risks:

Automation technologies like AI, robotics, IoT, and robotic process automation (RPA) have many benefits, but they also come with some big challenges and risks for businesses, workers, and society. Here is a summary of the main risks and challenges, based on recent research. Entrepreneurs in the Industry 4.0 era face several important challenges that they need to deal with to stay competitive. One big challenge is the quick pace of technological change. As automation, AI, and IoT technologies evolve rapidly, entrepreneurs must keep updating their business models and infrastructure. This requires a lot of money and flexibility (Kiradoo,2023;Habratal.,2020).

Global competition is getting tougher because digitalization makes it easier for businesses around the world to get similar technology as of which entrepreneurs should focus on quality, innovation, and

customer satisfaction to succeed in markets that are becoming more crowded and get an edge over the other competitors (Kira doo, 2023).

Changing customer behaviour also brings a challenge:

Customers now expect personalized experiences and smooth interactions thanks to new technologies. Entrepreneurs must explain the benefits of these changes and adapt quickly to customer preferences, which needs a lot of resources and changes in how they run their business(Kiradoo,2023).

Large Amount of capital is another Challenge:

Another big problem, especially for small and medium businesses (SMEs) is the high cost of integrating Industry 4.0 technologies like Cloud computing, Internet of Things, Big data analytics, Cyber-Physical Systems and Information and Communication Technologies. These technologies require hefty investments and difficult to acquire continuous findings (Kira doo, 2023).

Skilled Worker poses another major Challenge: There exists shortage of skilled workers required to operate new technologies effectively. Entrepreneurs are up against strong competition to hire and keep people who know AI, IoT, robotics, and data analytics. Investing in training and creating good working environment is key to solving this problem (Kira doo, 2023; George et al., 2025).

Legal and Regulatory Issue: Legal and regulatory issues are much difficult in the digital age. Entrepreneurs must deal with various and changing laws around data protection, cyber security, intellectual property and company responsibility across different regions. This adds to the risk, and needs good legalplanning(Habratetal.,2020).

Cyber security threat: Cyber security threats are growing as more businesses depend on digital systems. Risks include data breaches and cyber attacks, which can cause financial and reputational damage. This means businesses need strong security measures and spending in this area (Mosteanu,2023).

Social challenges: Social challenge includes dealing with job loss and addressing gender imbalance caused by AI and automation. Women are more likely to be in roles that are at risk of being replaced by AI, so focused efforts are needed to create an inclusive workplace (George et al., 2025). Lastly, adding sustainability to digital transformation is another challenge. Entrepreneurs need to combine tech progress with environmental and social responsibility, which requires new ideas, adaptability, and ongoing learning to build truly sustainable businesses (Mosteanu, 2023).

Real World Examples: The following case studies illustrate how automation and digital technologies have reshaped the platforms Uber and Airbnb operate on, fitting the theme, “Entrepreneurship in the Automation Age: Navigating New Frontiers,” based on the most significant scholarship in the domain. Each case describes how these businesses shifted the paradigm on automation in order to not only displace established industries, but also create new entrepreneurial avenues, cutting-edge innovative ecosystems, and lucrative interconnections.

Airbnb: The rapid ascent of Airbnb from a modest start-up to the largest provider of accommodations globally illustrates the significant impact of digital entrepreneurship and automation. Unlike conventional hotel chains, Airbnb does not own any physical properties. Instead, it manages a fully automated, data-driven system that connects a vast network of hosts and guests (Karjalainen & Xiong, 2016). This transformation can be attributed to the company’s utilization of emerging technology, specifically the automation of artificial intelligence (AI), advanced data analytics, and platform

automation, to carve new value, minimize entry barriers, and facilitate a new cohort of micro-entrepreneurs (Lee et al., 2019; Šepel'ová et al., 2021; Sorescu, 2017; Karjalainen & Xiong, 2016).

The key feature of Airbnb's business model is a digital platform with sophisticated automation capabilities that connect hosts and guests globally. Automation facilitates the seamless booking of accommodations and the real-time processing of payments, which, in turn, enables and scales peer-to-peer accommodations by minimizing transaction costs (Kaplan & Nadler, 2015; Karjalainen & Xiong, 2016). AI technology in automation personalizes the user experience by forecasting prices, optimizing searches, and streamlining payment processing, while automated systems for reviews and trust ease concerns about safety and reliability (Lee et al., 2019; Lee, 2024).

Automation is also addressing challenges such as on boarding new hosts, handling identity verification, and addressing dispute management. This allows rapid scaling without a corresponding increase in personnel and operational expenses. This "asset-light" operational model has been a major factor in the disruption of the hotel industry and the democratization of entrepreneurship, allowing millions to access and monetize underutilized assets (Karjalainen & Xiong, 2016; Kaplan & Nadler, 2015).

Airbnb's agility stems primarily from their deployment of big data and analytics. The company gathers and processes data concerning consumer inclinations, booking activities and other relevant trends to adjust offers and prices (Sorescu, 2017). For hosts, automated tools adjust pricing, predict and manage occupancy, and enhance guest servicing. This helps hosts perform their micro businesses with data and analytics (Sorescu, 2017; Holikatti et al., 2019). The globalization of services is another example of Airbnb's use of automation. Airbnb's ability to enter new, diverse markets is a result of automated localized content, regulation adherence, and the automated management of cross-border payment systems (Anwar, 2018; Lee, 2024).

Airbnb has made it easier for people to join the digital economy. Those who host listings require little technical ability to enter the market. They can and do set their own pricing, and the system automates a large portion of the support for troubleshooting bookings made. Furthermore, entrepreneurship is being democratized, which is made possible by peer-to-peer retail communities, wherein sellers and hosts share their experiences and knowledge to refine what they offer to their clients (Holikatti et al., 2019).

Uber: Automation, Platform Capitalism, and Entrepreneurial Opportunity

The rise of Uber as the world's biggest ride-hailing company shows the extremes automation and digital platforms can reach in entrepreneurship. Uber owns no cars and traditionally does not employ drivers. Instead, Uber uses a fully automated AI system to interface with customers and drivers, manage logistics, and adjust real-time pricing (Karjalainen & Xiong, 2016; Lee et al., 2019; Šepel'ová et al., 2021). Uber's business model has not only transformed the taxi industry but has also changed the definition of work, and entrepreneurial opportunities in the digital era (Grabher & Van Tuijl, 2020; Pollio, 2019).

At the core of Uber's platform, automation, and sophisticated information and communication technologies (ICT) systems exist. The app itself automates the ride-hailing process in its entirety; connecting the rider and driver, fare calculation, payment processing, and real-time navigation and support provision (Šepel'ová et al., 2021; Karjalainen & Xiong, 2016). AI algorithms pivot important business and operational decisions based on real-time data, such as pricing (surge pricing), driver allocation, ride prediction, and overall operational efficiency (Lee et al., 2019; Šepel'ová et al., 2021).

Automation techniques facilitate the running of background checks, the onboarding of new hires, and the tracking of driver performance. This process is streamlined by Uber to expand its business across various cities and countries (Karjalainen & Xiong, 2016). The platform's automated review and rating system increases trust and accountability, which are fundamental for peer-to-peer transactions (Lee, 2024).

Uber's automated platform system has paved the way for new entrepreneurial prospects, since becoming a driver for Uber offers flexible working hours and fewer entry restrictions (Pollio, 2019; Huang, 2024). Uber's automated system illustrates the element of the gig economy, as the company utilizes technology to bridge employment and income streams outside conventional employment (Pollio, 2019; Huang, 2024). The company has a decentralized structure, which is managed through automation, and drivers are provided with tools needed to optimize their routes, track their earnings, and manage clients (Šepel'ová et al., 2021; Pollio, 2019).

Uber has assisted micro-entrepreneurs, especially in cities with limited formal employment. For example, in Cape Town, Uber integrated technology and local entrepreneurial skills, enabling riders to economically and socially contribute to the region, while also being digitally connected to a global economy (Pollio, 2019).

One of the most essential aspects of Uber's entrepreneurship is the incorporation of big data and artificial intelligence. The company assesses ride and traffic data and customer feedback to adjust its algorithms, enhance service delivery, and uncover prospective new ventures (Lee et al., 2019; Šepel'ová et al., 2021). Automation allows Uber to launch new services, such as Uber Eats and self-driving cars, as well as rapidly adapt to and overcome market and legal constraints (Lee et al., 2019; Šepel'ová et al., 2021; Karjalainen & Xiong, 2016).

Automation brings efficiency, but as in the case of Uber, it also brings unresolved regulatory, labor, and data injustice problems (Tseng & Chan, 2021; Pollio, 2019; Pelzer et al., 2019). The gig economy, especially Uber's, is built on unresolved problems of job security, social benefits, and entrepreneurship on platforms (Pollio, 2019; Pelzer et al., 2019). Uber's case is a showcase of how automation can enable an unprecedented entrepreneurial neoliberal drive in work, and in the first place, reconfigure entire industries on a global level (Lee et al., 2019; Šepel'ová et al., 2021; Pollio, 2019; Karjalainen & Xiong, 2016).

Obstacles and Prospects:

Automation has helped drive growth for the company, but it also comes with complications of trust, data privacy, regulation, and maintaining trust relationships (Lee, 2024). Nevertheless, automation in the hands of entrepreneurs will serve as the genesis of new business models and innovations that reshape entire industries (Lee et al., 2019; Šepel'ová et al., 2021; Sorescu, 2017; Karjalainen & Xiong, 2016).

Conclusion:

By combining all the findings it is clear that automation is a double-edged sword. It assists immensely in innovating business models and reaching the efficiency, however, poses risks and challenges too. Automation when integrated in an ethical manner results in the unprecedented success of an enterprise. On contrary, an unethical application shall result in penalties and loss of the goodwill. Entrepreneurship automation goes beyond changing the mechanics of entrepreneurship. It expands the scope of entrepreneurship to create new value, democratize entrepreneurship, and empower entrepreneurs to meet

complex and fast-evolving global problems. In crux, those with the best automation tools will be entrepreneurial trailblazers and lead profound societal changes and entrepreneurial revolution.

References:

1. Al-Slais, Y., & Ali, M. (2023). Robotic Process Automation and Intelligent Automation Security Challenges: A Review. *2023 International Conference on Cyber Management and Engineering (CyMaEn)*, 71-77. <https://doi.org/10.1109/CyMaEn57228.2023.10050996>
2. Anwar, S. (2018). Growing global in the sharing economy: Lessons from Uber and Airbnb. *Global Business and Organizational Excellence*. <https://doi.org/10.1002/JOE.21890>
3. Arntz, M., Gregory, T., & Zierahn, U. (2017). Revisiting the risk of automation. *Economics Letters*, 159, 157-160. <https://doi.org/10.1016/J.ECONLET.2017.07.001>
4. Assylbekyzy, F., & Turmanov, O. (2024). Modern Entrepreneurship (Startup) Approaches. *International Journal of Business and Management Research*. <https://doi.org/10.37391/ijbmr.120203>
5. Dakhkilgova, K., & Safarov, I. (2024). CYBERSECURITY RISKS AND CHALLENGES IN AUTOMATED MANUFACTURING SYSTEMS. *EKONOMIKA I UPRAVLENIE: PROBLEMY, RESHENIYA*. <https://doi.org/10.36871/ek.up.p.r.2024.11.07.012>
6. Dewi, D. H. (2024). The Evolution of Entrepreneurship: A Comparative Study of Perspectives Past, Present, and Future.
7. Eulerich, M., Waddoups, N., Wagener, M., & Wood, D. (2023). The Dark Side of Robotic Process Automation (RPA): Understanding Risks and Challenges with RPA. *Accounting Horizons*. <https://doi.org/10.2308/horizons-2022-019>
8. Fernandez, D., Dastane, O., Zaki, H., & Aman, A. (2023). Robotic process automation: bibliometric reflection and future opportunities. *European Journal of Innovation Management*. <https://doi.org/10.1108/ejim-10-2022-0570>
9. Geetha, V., Gomathy, D., DattaVallabh, S., & Reddy, Y. (2024). The Future of Entrepreneurship: Emerging Opportunities. *INTERANTIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT*. <https://doi.org/10.55041/ijsrem37493>
10. GHAFFAR, A. (2024). Entrepreneurship AI Automation. | *IRE Journals*.
11. Giuggioli, G., & Pellegrini, M. (2022). Artificial intelligence as an enabler for entrepreneurs: a systematic literature review and an agenda for future research. *International Journal of Entrepreneurial Behavior & Research*. <https://doi.org/10.1108/ijeb-05-2021-0426>
12. González-Tejero, C., Ribeiro-Navarrete, B., Marín, E., & McDowell, W. (2023). A Systematic Literature Review on the Role of Artificial Intelligence in Entrepreneurial Activity. *Int. J. Semantic Web Inf. Syst.*, 19, 1-16. <https://doi.org/10.4018/ijswis.318448>
13. Grabher, G., & Van Tuijl, E. (2020). Uber-production: From global networks to digital platforms. *Environment and Planning A: Economy and Space*, 52, 1005 - 1016. <https://doi.org/10.1177/0308518X20916507>
14. Habrat, D. (2020). Legal challenges of digitalization and automation in the context of Industry 4.0. *Procedia Manufacturing*, 51, 938-942. <https://doi.org/10.1016/j.promfg.2020.10.132>
15. Holikatti, M., Jhaver, S., & Kumar, N. (2019). Learning to Airbnb by Engaging in Online Communities of Practice. *Proceedings of the ACM on Human-Computer Interaction*, 3, 1 - 19. <https://doi.org/10.1145/3359330>

16. Horvat, D., Ivanišević, R., & Gluščević, L. (2024). Risks associated with robotic process automation. *Journal of Process Management and New Technologies*. <https://doi.org/10.5937/jpmnt12-50617>
17. Huang, F. (2024). Introduction of Sharing Economy Based on “The Value of Flexible Work: Evidence from Uber Drivers”. *Modern Economy*. <https://doi.org/10.4236/me.2024.154023>
18. Jacobsson, A., Boldt, M., & Carlsson, B. (2016). A risk analysis of a smart home automation system. *Future Gener. Comput. Syst.*, 56, 719-733. <https://doi.org/10.1016/j.future.2015.09.003>
19. Kaplan, R., & Nadler, M. (2015). Airbnb: A Case Study in Occupancy Regulation and Taxation.
20. Karjalainen, J., & Xiong, G. (2016). Social manufacturing and business model innovation. *2016 IEEE International Conference on Service Operations and Logistics, and Informatics (SOLI)*, 18-23. <https://doi.org/10.1109/SOLI.2016.7551655>
21. Khalidov, A., Arsanukayeva, M., & Beriev, I. (2025). STARTUPS AND NEURAL NETWORKS: HOW ARTIFICIAL INTELLIGENCE CHANGES THE RULES OF THE GAME IN ENTREPRENEURSHIP. *EKONOMIKA I UPRAVLENIE: PROBLEMY, RESHENIYA*. <https://doi.org/10.36871/ek.up.p.r.2025.02.01.010>
22. Kreuzer, T., Lindenthal, A., Oberländer, A., & Röglinger, M. (2022). The Effects of Digital Technology on Opportunity Recognition. *Business & Information Systems Engineering*, 64, 47 - 67. <https://doi.org/10.1007/s12599-021-00733-9>
23. Lee, J., Suh, T., Roy, D., & Baucus, M. (2019). Emerging Technology and Business Model Innovation: The Case of Artificial Intelligence. *Journal of Open Innovation: Technology, Market, and Complexity*. <https://doi.org/10.3390/JOITMC5030044>
24. Lee, S. (2024). Is the Sharing Economy Ushering in the End of Ownership in the Fourth Industrial Revolution Era?: Focusing on Uber and Airbnb Cases. *Asia Europe Perspective Association*. <https://doi.org/10.31203/aepa.2024.21.2.185>
25. Lévesque, M., Obschonka, M., & Nambisan, S. (2020). Pursuing Impactful Entrepreneurship Research Using Artificial Intelligence. *Entrepreneurship Theory and Practice*, 46, 803 - 832. <https://doi.org/10.1177/1042258720927369>
26. Marzano, G., & Siguencia, L. (2021). INDUSTRY 4.0: SOCIAL CHALLENGES AND RISKS. <https://doi.org/10.17770/etr2021vol2.6546>
27. Moşteanu, N. (2023). Navigating the intersection of sustainability and intelligent automation: Opportunities and challenges for entrepreneurs. *Human Resources Management and Services*. <https://doi.org/10.18282/hrms.v5i1.3360>
28. Moşteanu, N. R. (2023). Thriving in the Entrepreneurial Landscape of Sustainability and Intelligent Automation Era. *Green and Low-Carbon Economy*, 3(1), 18-25. <https://doi.org/10.47852/bonviewGLCE32021335>
29. N.A, T., & Muhammed, S. (2024). Artificial Intelligence and Entrepreneurship: Opportunities and Challenges. *International Journal of Advanced Research in Science, Communication and Technology*. <https://doi.org/10.48175/ijarsct-15638>
30. Nambisan, S. (2017). Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*, 41, 1029 - 1055. <https://doi.org/10.1111/etap.12254>
31. Nevedov, L. (2025). Risks of Human Capital Development in the Context of the Utilization of Artificial Intelligence. *Humanitarian Vector*. <https://doi.org/10.21209/1996-7853-2025-20-1-74-84>

32. Pelzer, P., Frenken, K., & Boon, W. (2019). Institutional entrepreneurship in the platform economy: How Uber tried (and failed) to change the Dutch taxi law. *Environmental Innovation and Societal Transitions*.<https://doi.org/10.1016/J.EIST.2019.02.003>
33. Pollio, A. (2019). Forefronts of the Sharing Economy: Uber in Cape Town. *International Journal of Urban and Regional Research*.<https://doi.org/10.1111/1468-2427.12788>
34. Ratten, V. (2023). Entrepreneurship: Definitions, opportunities, challenges, and future directions. *Global Business and Organizational Excellence*.<https://doi.org/10.1002/joe.22217>
35. Role of Technology Innovations in Providing Cutting Edge- Entrepreneurial Opportunities in India.. *Journal of Informatics Education and Research*.<https://doi.org/10.52783/jier.v4i1.613>
36. Šepel'ová, L., Calhoun, J., & Straffhauser-Linzatti, M. (2021). Sharing Economy Business Models: Informational Services Innovation and Disruption in Uber and Airbnb. *Developments in Information & Knowledge Management for Business Applications*.https://doi.org/10.1007/978-3-030-76632-0_18
37. Shepherd, D., & Majchrzak, A. (2022). Machines augmenting entrepreneurs: Opportunities (and threats) at the Nexus of artificial intelligence and entrepreneurship. *Journal of Business Venturing*.<https://doi.org/10.1016/j.jbusvent.2022.106227>
38. Sorescu, A. (2017). Data-Driven Business Model Innovation. *Journal of Product Innovation Management*, 34, 691-696.<https://doi.org/10.1111/JPIM.12398>
39. Szafarski, D., & Fischer, M. (2024). Machine Learning for Forecasting Entrepreneurial Opportunities - A Literature Review. **, 69-78.https://doi.org/10.1007/978-3-031-61963-2_8
40. Tseng, Y., & Chan, C. (2021). When the Sharing Economy Meets Established Institutions: Uber and Airbnb in Taiwan. *IEEE Transactions on Engineering Management*, 68, 1895-1906.<https://doi.org/10.1109/TEM.2019.2934520>
41. Usman, F., Eyo-Udo, N., Etukudoh, E., Odonkor, B., Ibeh, C., & Adegbola, A. (2024). A CRITICAL REVIEW OF AI-DRIVEN STRATEGIES FOR ENTREPRENEURIAL SUCCESS. *International Journal of Management & Entrepreneurship Research*.<https://doi.org/10.51594/ijmer.v6i1.748>
42. Van Roosmale, S., Audenaert, A., & Meysman, J. (2024). Understanding the opportunities and challenges of building automation and control systems to support facility management – an extensive literature review. *Facilities*.<https://doi.org/10.1108/f-05-2023-0042>
43. Woods, D. (2016). The Risks of Autonomy. *Journal of Cognitive Engineering and Decision Making*, 10, 131 - 133.<https://doi.org/10.1177/1555343416653562>
44. Yendluri, D., Thatikonda, R., Thatikonda, R., Ponnala, J., Kempanna, M., & Bhuvanesh, A. (2024). Risk Management in Robotic Process Automation. *2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI)*, 2, 1-6.<https://doi.org/10.1109/IATMSI60426.2024.10503443>
45. Yaojie Li, John Kirk Ring, Dan Jin, Saleh Bajaba, Elevating entrepreneurship with generative artificial intelligence, *Journal of Innovation & Knowledge*, Volume 10, Issue 6, 2025, 100820 <https://doi.org/10.1016/j.jik.2025.100820>
46. Nazneen, A., Bokhari, R. M., Qazi, S., & Arafat, M. Y. (2026). Mapping Entrepreneurial Ecosystems for Sustainable Development in a State-Driven Economy. *Sustainability*, 18(7), 3380. <https://doi.org/10.3390/su18073380>
47. Swidan, A., & Kishk, A. (2026). THE IMPACT OF TECHNOLOGY ON MODERN DAY ENTREPRENEURSHIP. *European Journal of Economic and Financial Research*, 10(1).



doi:<http://dx.doi.org/10.46827/ejefr.v10i1.2134>