

Unleashing the Power of Technology: Fueling Entrepreneurship Development Through Innovation

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Unleashing the Power of Technology: Fueling Entrepreneurship Development Through Innovation

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Abstract

This research paper examines the role of technology innovation in the development of entrepreneurship. With the rapid advancement of technology, entrepreneurs have access to innovative tools and platforms that have transformed the way businesses operate and create value. This paper explores the impact of technology innovation on various aspects of entrepreneurship, including idea generation, market analysis, resource utilization, product development, and marketing. It also analyzes the challenges and opportunities that arise from the integration of technology in entrepreneurial ventures. The findings suggest that technology innovation plays a vital role in promoting entrepreneurship by facilitating business growth, enhancing competitiveness, and fostering innovative solutions to societal challenges.

Keywords: technology innovation, entrepreneurship development, idea generation, market analysis, resource utilization, product development, marketing, challenges, opportunities.

Type of paper: Conceptual

Introduction

Entrepreneurship is a driving force behind economic growth, job creation, and innovation. The role of technology innovation in promoting entrepreneurship has gained significant attention in recent years. This paper investigates the impact of technology innovation on various stages of

entrepreneurship, outlining the challenges and opportunities it presents (Griffiths et al., 2019). Entrepreneurship, the driving force behind economic growth and societal advancement, has been significantly influenced by the rapid evolution of technology. In today's interconnected world, technology innovation plays a pivotal role in shaping entrepreneurial landscapes, enabling the emergence of new business models, enhancing operational efficiency, and creating avenues for disruptive market solutions. This essay explores the profound impact of technology innovation on entrepreneurship development, highlighting its multifaceted contributions across various aspects of business creation, growth, and sustainability (Hackbarth et al., 2018).

Technology innovation has given rise to novel business models that challenge traditional paradigms. Digital platforms, for instance, have revolutionized industries by providing innovative ways to connect producers and consumers, fostering the growth of the sharing economy. Companies like Uber and Airbnb have leveraged technology to create platforms that facilitate peer-to-peer interactions, thereby transforming how people access transportation and accommodation services (Kshetri, 2016). Such ventures showcase how technology-driven business models can swiftly disrupt established industries and provide new avenues for entrepreneurial ventures (Chowdhury, Stasi and Pellegrino, 2023). Entrepreneurial ventures often operate in resource-constrained environments, and technology innovation has emerged as a powerful tool for optimizing operations and resource management. Automation, artificial intelligence (AI), and data analytics have enabled entrepreneurs to streamline processes, minimize errors, and allocate resources more effectively. For example, the integration of AIpowered chatbots in customer service operations has allowed startups to provide round-the-clock support without incurring substantial human resource costs. Additionally, data-driven insights have empowered entrepreneurs to make informed decisions, improving the overall efficiency and competitiveness of their ventures (Pham and Turner, 2019).

Innovation is the lifeblood of entrepreneurship, and technology has become a catalyst for driving product and service innovation (Chowdhury and Abdullah, 2023). Rapid advancements in fields like biotechnology, nanotechnology, and renewable energy have paved the way for entrepreneurs to create groundbreaking solutions that address pressing societal challenges. Startups focused on clean energy, for instance, are leveraging technological breakthroughs to develop sustainable alternatives to traditional energy sources, contributing to environmental preservation while

simultaneously tapping into new market opportunities (Maktouf, 2019). Technology has dismantled geographic barriers, enabling entrepreneurs to access global markets with relative ease. E-commerce platforms, social media, and digital marketing strategies have provided startups the means to reach customers beyond their immediate physical vicinity (Menzies et al., 2019). This expanded market reach fosters growth opportunities and allows even small-scale entrepreneurs to establish an international presence. Online marketplaces like Amazon and Alibaba have enabled countless small businesses to connect with customers worldwide, demonstrating how technology can democratize access to global markets.

Entrepreneurial success often hinges on collaboration and networking. Technology has transformed the way entrepreneurs connect with mentors, investors, and fellow innovators. Online forums, social networking platforms, and specialized entrepreneur communities enable individuals to share knowledge, seek advice, and form strategic partnerships. Crowdfunding platforms, powered by technology, have democratized access to capital, allowing entrepreneurs to raise funds from a diverse range of supporters, thereby reducing their dependency on traditional investment avenues. While technology innovation presents immense opportunities for entrepreneurship, it also introduces certain challenges. Rapid technological advancements can render existing business models obsolete, demanding entrepreneurs to constantly adapt to changing landscapes. Moreover, the digital divide may hinder some entrepreneurs' access to technology-driven resources, exacerbating inequalities in the entrepreneurial ecosystem. Striking a balance between technological adoption and preserving human-centric values is crucial to ensuring the sustainable development of entrepreneurship.

Theoretical Framework

The theoretical framework exploring the role of technology innovation in entrepreneurship development aims to elucidate the intricate interactions and dynamics between technological advancements and the growth of entrepreneurial ventures. This framework draws from several theoretical perspectives to provide a comprehensive understanding of how technology innovation influences various dimensions of entrepreneurship.

Resource-Based View

The RBV posits that a firm's competitive advantage is derived from its unique bundle of resources and capabilities. In the context of technology innovation and entrepreneurship, this perspective suggests that technological resources, such as cutting-edge software, proprietary algorithms, or specialized equipment, can provide startups with distinct advantages. These technological resources enable entrepreneurs to create innovative products or services, streamline operations, and access new markets, thereby enhancing their overall competitiveness (Sarandopoulos et al., 2019).

Innovation Diffusion Theory

Innovation Diffusion Theory explains the process by which innovations spread and are adopted within a society or industry. For entrepreneurship development, this theory highlights how technology innovation serves as a catalyst for creating new ventures or transforming existing ones. Entrepreneurs act as early adopters of technological advancements, integrating these innovations into their business models to gain a competitive edge. As these innovations diffuse throughout the entrepreneurial ecosystem, they contribute to the overall growth and evolution of entrepreneurship (Thomke and Nimgade, 2015).

Network Theory

Network Theory emphasizes the importance of social networks and relationships in shaping entrepreneurial outcomes. In the context of technology innovation, this perspective underscores how entrepreneurs leverage their networks to access knowledge, resources, and opportunities related to emerging technologies (Chowdhury and Nahar, 2017). Technology-driven ecosystems, including incubators, accelerators, and online communities, facilitate knowledge exchange, collaboration, and mentorship, which are crucial for entrepreneurial success (Christensen, 1997).

Resource Dependence Theory

Resource Dependence Theory posits that organizations rely on external resources to function effectively. In the context of technology innovation and entrepreneurship, this theory suggests that startups often depend on external sources of technological expertise and funding. Entrepreneurs seek strategic partnerships, venture capital, and support from technology-focused

institutions to access the resources necessary to develop and implement innovative technologies, thereby fueling their growth (Eisenmann et al., 2006).

Dynamic Capabilities Theory

Dynamic Capabilities Theory emphasizes an organization's ability to adapt, integrate, and reconfigure its resources to respond to changing environments. Applied to technology innovation and entrepreneurship, this theory highlights how entrepreneurs cultivate dynamic capabilities to identify, assimilate, and leverage emerging technologies. Entrepreneurs who possess the ability to rapidly learn and adapt to technological advancements are better equipped to create innovative products, optimize operations, and seize market opportunities (Rogers, 2003).

Institutional Theory

Institutional Theory examines how external norms, values, and regulations influence organizational behavior and practices. In the context of technology innovation and entrepreneurship, this perspective emphasizes how institutional pressures drive entrepreneurs to adopt and incorporate technological innovations. Government policies, industry standards, and societal expectations can shape the extent to which entrepreneurs embrace technology, impacting their ability to drive innovation and contribute to entrepreneurship development (Bapna and Gupta, 2016).

Literature Review

The fusion of technology innovation and entrepreneurship has emerged as a dynamic force shaping contemporary business landscapes. This literature review delves into the multifaceted relationship between technology innovation and entrepreneurship development, exploring key theoretical perspectives and empirical insights that illuminate the pivotal role of technology in driving entrepreneurial endeavors.

At the heart of the intersection between technology and entrepreneurship lies the concept of disruptive innovation. Coined by Christensen (1997), this theory elucidates how technological breakthroughs can empower entrepreneurs to challenge established industry norms. Disruptive entrepreneurs seize upon emerging technologies to create innovative solutions, often targeting niche markets initially and subsequently reshaping mainstream industries. For instance, Uber's

transformation of the taxi industry and Airbnb's reimagining of the hospitality sector underscore how technology-driven ventures can not only revolutionize business models but also redefine societal norms (Alam, Chowdhury and Chowdhury, 2015). The rise of digital platforms has been a defining feature of the technological revolution, offering a fertile ground for entrepreneurship development. Eisenmann, Parker, and Van Alstyne (2006) shed light on the role of platforms in facilitating interactions between producers and consumers. These platforms provide startups with an infrastructure to showcase their products or services, connect with customers, and access a broader market. The platform economy, exemplified by the likes of Amazon and Google, has enabled entrepreneurs to harness technology's power to rapidly scale their ventures and create innovative value propositions.

Rogers' Innovation Diffusion Theory (Rogers, 2003) serves as a lens through which to understand the adoption and dissemination of technological innovations within the entrepreneurial ecosystem. Entrepreneurs, acting as early adopters, integrate novel technologies into their ventures to gain a competitive edge. The diffusion process unfolds through stages of awareness, interest, evaluation, trial, and adoption, shaped by factors such as perceived relative advantage and compatibility. This framework provides insights into the trajectory of technology adoption by entrepreneurs and the forces that influence their decision-making (Barney, 1991). Technology innovation has effectively transcended geographical boundaries, providing entrepreneurs with unprecedented access to global markets. Bapna et al. (2016) emphasize how e-commerce platforms and digital marketing strategies have leveled the playing field for startups. Online marketplaces such as Alibaba and eBay offer entrepreneurs a virtual storefront to reach customers across the world. This democratization of market access has empowered entrepreneurs to expand their reach, seize international opportunities, and capitalize on the global demand for innovative products and services (Chowdhury and Abedin, 2020).

The Resource-Based View theory provides insights into how technological resources confer a competitive advantage to entrepreneurial ventures. According to Barney (1991), a firm's sustained performance is derived from its unique bundle of resources and capabilities. In the context of technology innovation, startups can leverage proprietary algorithms, data analytics capabilities, or specialized equipment to differentiate themselves and create innovative offerings (Chowdhury and Oscar, 2018). These technological resources enhance operational efficiency,

drive innovation, and position entrepreneurs for long-term success. Entrepreneurship thrives within collaborative networks facilitated by technology. Granovetter's "strength of weak ties" concept (1973) highlights how diverse networks offer access to critical resources and information. Online communities, accelerators, and incubators provide fertile ground for knowledge exchange, mentorship, and collaboration. Entrepreneurs leverage these platforms to navigate challenges, access expertise, and forge partnerships, creating an ecosystem that nurtures innovative ideas and fosters entrepreneurial growth.

The literature review underscores the transformative impact of technology innovation on entrepreneurship development. From driving disruptive business models to facilitating global market access and enhancing competitive advantage, technology serves as a linchpin for entrepreneurial success (Chowdhury and Chowdhury, 2022; Granovetter, 1973). The theoretical frameworks of disruptive innovation, innovation diffusion, and the RBV offer valuable insights into the mechanisms through which technology shapes entrepreneurship. Future research should explore industry-specific nuances, cultural contexts, and policy implications to gain a deeper understanding of how technology-driven entrepreneurship drives economic growth and societal progress.

Findings and Discussion

Asia Perspective

In recent decades, Asia has emerged as a global hub for entrepreneurship and technological innovation. The convergence of these two forces has led to remarkable transformations in the region's economic landscape, driving growth, fostering innovation, and creating new avenues for socioeconomic development. This essay delves into the intricate interplay between technology innovation and entrepreneurship in Asia, highlighting how technological advancements have played a pivotal role in shaping and accelerating entrepreneurship development across the continent.

One of the most striking phenomena in Asian entrepreneurship is the concept of technological leapfrogging. With limited legacy systems, many Asian countries have been able to bypass traditional stages of development and directly adopt cutting-edge technologies. For instance, the widespread use of mobile payment systems in countries like China and India has created

opportunities for a multitude of small businesses to thrive without the need for extensive physical infrastructure. This leapfrogging effect has significantly reduced barriers to entry for aspiring entrepreneurs and enabled rapid market penetration (Chowdhury, Dhar, Thanakijsombat, and Stasi, 2022).

Asia has witnessed an e-commerce revolution that has transformed the way business is conducted. Innovations in digital marketplaces have empowered entrepreneurs to access vast consumer bases both within and beyond national borders. Platforms like Alibaba, JD.com, and Shopee have provided small businesses with the tools to market their products globally, creating new opportunities for growth and entrepreneurship. This digital shift has particularly benefited micro and small enterprises, which previously faced challenges in reaching wider audiences.

Technology-driven financial innovations, or fintech, have played a crucial role in addressing the issue of financial inclusion in Asia. With a significant portion of the population lacking access to traditional banking services, fintech has paved the way for innovative payment solutions, peer-to-peer lending platforms, and digital wallets. These advancements have not only empowered entrepreneurs with convenient and secure payment methods but have also enabled them to access much-needed capital, fostering a conducive environment for entrepreneurship development (Chowdhury and Chowdhury, 2023).

The rise of technology hubs, such as Silicon Valley in the United States and Shenzhen in China, has nurtured vibrant innovation ecosystems. These ecosystems provide entrepreneurs with access to resources, mentorship, funding, and a collaborative environment. In Asia, countries like India, Singapore, and South Korea have invested significantly in building their own innovation ecosystems, attracting both local and international entrepreneurs. The fusion of technology parks, research institutions, and supportive government policies has contributed to the growth of a robust start-up culture across the region (Chowdhury, Dhar and Gazi, 2022).

Technology innovation has also facilitated entrepreneurship with a social impact. In Asia, entrepreneurs are leveraging technology to address pressing societal challenges, such as healthcare accessibility, education, and environmental sustainability. Initiatives like mobile healthcare applications, online education platforms, and clean energy solutions are not only

contributing to economic growth but also enhancing the quality of life for communities across the continent.

Africa Perspective

In recent years, Africa has witnessed a remarkable transformation in its entrepreneurial landscape, largely driven by the convergence of technology innovation and a burgeoning spirit of enterprise. The infusion of technology into various sectors has opened doors to unprecedented opportunities for economic growth, job creation, and societal advancement. This essay explores the profound impact of technology innovation on entrepreneurship development in Africa, highlighting how innovative solutions are reshaping the continent's economic trajectory (Islam and Chowdhury, 2015).

Africa's unique position as a latecomer to technological adoption has enabled it to leapfrog traditional stages of development. The proliferation of mobile phones and the subsequent rise of mobile banking and digital payment platforms, such as M-Pesa in Kenya, have transformed the way businesses operate and reach consumers. Entrepreneurs across Africa have leveraged these technologies to create innovative business models, fostering entrepreneurship even in remote and underserved areas (Chowdhury and Reza, 2013).

The rapid growth of e-commerce in Africa has revolutionized trade and entrepreneurship. Digital marketplaces and online platforms have provided small and medium-sized enterprises (SMEs) with unprecedented access to regional and global markets. Jumia, an African e-commerce giant, has enabled entrepreneurs to showcase their products to a wider audience, transcending geographical limitations (Chowdhury, 2023). The digital connectivity and payment solutions have empowered entrepreneurs to participate in the global economy, driving economic diversification and growth.

Technology-driven financial innovations, or fintech, have addressed longstanding challenges of financial inclusion in Africa. Mobile banking and microfinance services have extended banking services to previously unbanked populations, offering entrepreneurs access to financial tools and capital. Entrepreneurs can now secure loans, manage transactions, and access investment opportunities through digital platforms, promoting a more inclusive entrepreneurial ecosystem.

Africa's innovation hubs, incubators, and accelerators have played a pivotal role in nurturing entrepreneurship. Cities like Lagos, Nairobi, and Cape Town have witnessed the emergence of vibrant entrepreneurial ecosystems. These hubs provide start-ups with mentorship, networking opportunities, and access to funding. With the support of these ecosystems, African entrepreneurs are turning innovative ideas into viable businesses, catalyzing economic growth and job creation (Chowdhury, Abdullah and Tooheen, 2021).

Technology innovation has not only fueled economic growth but has also facilitated social innovation in Africa. Entrepreneurs are leveraging technology to address pressing challenges, such as healthcare access, education, and agriculture. Mobile health applications, e-learning platforms, and agri-tech solutions are transforming lives and communities, exemplifying how technology-driven entrepreneurship can contribute to sustainable development.

Developed Nation Perspective

In developed nations, the synergy between technology innovation and entrepreneurship has redefined economic landscapes, driving innovation, fostering growth, and shaping the way businesses operate. This essay explores how technology innovation has become a driving force behind entrepreneurship development in developed nations, facilitating new opportunities, enhancing competitiveness, and contributing to sustained economic advancement.

In developed nations, technology innovation has been a catalyst for disruptive entrepreneurship, challenging established norms and fostering innovation. Established industries have been reshaped by newcomers leveraging advanced technologies. The advent of ride-sharing platforms like Uber and the proliferation of fintech solutions exemplify how technology-driven entrepreneurs have disrupted traditional business models, introducing novel approaches that redefine markets and consumer experiences.

Digital transformation has revolutionized industries in developed nations. Businesses are adopting automation, AI, and data analytics to optimize processes and deliver value to customers. Entrepreneurial ventures capitalize on these advancements to create efficient operations and innovative products. The integration of IoT devices, for instance, has given rise to "smart" solutions across sectors, from manufacturing to healthcare, driving entrepreneurship through the development of new products and services.

Developed nations boast vibrant start-up ecosystems and innovation hubs that provide a fertile ground for entrepreneurship to flourish. These ecosystems offer access to mentorship, funding, and networking opportunities. Tech clusters like Silicon Valley in the United States and the Silicon Roundabout in the United Kingdom have nurtured entrepreneurship, fostering a culture of risk-taking and innovation that propels technology-driven ventures to success.

Advanced technological infrastructure in developed nations facilitates access to global markets. E-commerce, digital marketing, and online platforms enable entrepreneurs to reach international audiences with ease. Well-established logistics networks, secure online payment systems, and efficient supply chains provide a solid foundation for entrepreneurs to scale their businesses and tap into worldwide market opportunities.

Developed nations prioritize research and development collaboration between academia, industry, and government. Entrepreneurial ventures often emerge from breakthroughs in R&D, driving innovation and commercialization. Government-funded initiatives and grants encourage technology transfer and entrepreneurship, enabling start-ups to translate cutting-edge research into marketable solutions (Chowdhury and Begum, 2012).

Technology innovation is also instrumental in fostering sustainability and social entrepreneurship in developed nations. Entrepreneurs are leveraging technology to address pressing societal and environmental challenges, such as renewable energy, waste reduction, and healthcare access. Social enterprises driven by technology-driven solutions contribute to a more inclusive and sustainable economic future (Abdullah, Chowdhury and Tooheen, 2022).

Prospects of Technological Innovation on the Entrepreneurship Development

The 21st century has witnessed an unprecedented convergence of technology innovation and entrepreneurship, creating a fertile ground for transformative economic growth and societal progress. Technology's rapid advancement holds immense promise for entrepreneurship development, offering a multitude of prospects that empower aspiring entrepreneurs, enhance business operations, and contribute to overall economic prosperity. This essay explores the compelling prospects that technology innovation brings in favor of entrepreneurship development. Technology innovation has shattered geographic barriers, enabling entrepreneurs to tap into global markets with unprecedented ease. E-commerce platforms, digital marketing, and online marketplaces offer entrepreneurs the ability to showcase their products and services to a vast international audience. Small businesses and startups can establish a global presence without the need for extensive physical infrastructure, leveling the playing field and creating opportunities for international trade.

Innovation-driven entrepreneurship has significantly lowered entry barriers across various industries. Technological advancements have democratized access to essential resources, including knowledge, capital, and distribution channels. Cloud computing, for instance, provides cost-effective access to computing power and storage, allowing startups to compete with larger players. Open-source software and online learning platforms provide entrepreneurs with tools for skill development and idea validation, fostering a culture of innovation and entrepreneurship.

Technology innovation has paved the way for disruptive business models that challenge traditional industry norms. Entrepreneurs leverage innovative technologies to create entirely new ways of delivering value to customers. Peer-to-peer platforms, subscription services, and sharing economy models are reshaping industries and providing unique entrepreneurial opportunities. By capitalizing on technological breakthroughs, entrepreneurs can create disruptive solutions that reshape markets and drive innovation.

Efficiency is a cornerstone of successful entrepreneurship, and technology innovation enhances operational processes in unprecedented ways. Automation, AI, and data analytics optimize tasks, reduce errors, and enhance decision-making. Entrepreneurs can streamline supply chains, manage inventories, and personalize customer experiences more effectively, resulting in improved cost structures and better resource allocation.

Technology accelerates the product development lifecycle, enabling entrepreneurs to bring ideas to market more rapidly. Prototyping, 3D printing, and simulation tools facilitate iterative design processes, reducing time-to-market for innovative products. Entrepreneurs can quickly test and refine their concepts, adapt to changing market demands, and stay ahead of competition, fostering a culture of continuous innovation (Chowdhury, 2021).

Technology-driven entrepreneurship has transformed the landscape of funding and investment. Crowdfunding platforms, angel networks, and online venture capital enable entrepreneurs to raise capital from a diverse range of sources. Technology facilitates efficient communication and collaboration between entrepreneurs and potential investors, expanding access to funding opportunities and reducing dependency on traditional financing channels.

Entrepreneurship driven by technology innovation is poised to make significant social and environmental impact. Entrepreneurs are leveraging technology to address pressing global challenges, such as healthcare access, clean energy, and education. Social enterprises and sustainable business models that incorporate technology-driven solutions are creating positive change while generating economic value.

Challenges of Technological Innovation on the Entrepreneurship Development

Though technology innovation has undeniably brought about significant advancements and opportunities for entrepreneurship development, it is important to critically examine some counterarguments that highlight potential drawbacks and challenges associated with this relationship. The following points present a nuanced view against the prospects of technology innovation in favor of entrepreneurship development

Despite the promises of technology-driven entrepreneurship, a significant digital divide persists, especially in less developed regions. Access to technology, reliable internet connectivity, and digital literacy are not evenly distributed. This digital divide can exacerbate existing inequalities, leaving certain populations and communities at a disadvantage in participating fully in the entrepreneurial ecosystem (Chowdhury, 2022). As technology becomes central to entrepreneurship, addressing the digital divide is essential to ensure inclusivity and equal access to opportunities (Chowdhury, 2020).

The rapid adoption of technology and innovative business models can lead to the displacement of traditional industries and livelihoods. As entrepreneurs harness technological solutions to create efficiency and convenience, certain sectors may face disruption, resulting in job losses and economic instability. Striking a balance between technological progress and maintaining the vitality of established industries is crucial to avoid unintended negative consequences.

The pursuit of technology-driven entrepreneurship often places heavy emphasis on scaling rapidly and outcompeting rivals. This focus on growth and competition may lead to a disregard for other essential aspects of entrepreneurship, such as fostering community relationships, sustainable practices, and long-term value creation. An overemphasis on rapid scaling can sometimes lead to unsustainable practices, negatively impacting local ecosystems and social cohesion.

Technology's omnipresence in entrepreneurship has the potential to undermine the human element of business interactions. Overreliance on digital communication and automation may diminish face-to-face interactions and impede the personal touch that is crucial for building trust and strong business relationships. Moreover, the creative and innovative aspects of entrepreneurship may suffer if entrepreneurs solely rely on technological tools without nurturing their innate creativity.

Technology-driven entrepreneurship often involves the collection and analysis of large amounts of data. This raises significant privacy and ethical concerns, especially with regards to the use of personal information for targeted marketing and decision-making. Entrepreneurs must navigate complex legal and ethical frameworks to ensure that technology adoption respects user privacy and complies with data protection regulations.

Entrepreneurs leveraging technology platforms for e-commerce, marketing, and communication may become overly reliant on external entities. This dependence on third-party platforms can leave entrepreneurs vulnerable to policy changes, algorithm updates, and shifts in terms of service that can disrupt business operations and impact revenue streams. Building a sustainable business model that is not solely dependent on external platforms is a critical consideration.

Conclusion

The symbiotic relationship between technology innovation and entrepreneurship has unleashed a wave of possibilities in Africa. By embracing technological advancements, the continent is experiencing a profound shift in its entrepreneurial landscape. E-commerce, fintech, innovation ecosystems, and social innovation are converging to drive economic progress and social change. As Africa continues to harness the power of technology, its entrepreneurs are forging a path toward inclusive development, creating a brighter future for the continent and positioning it as a

global force in innovation and entrepreneurship. While technology innovation undoubtedly offers transformative prospects for entrepreneurship development, a balanced perspective acknowledges potential challenges and unintended consequences. Addressing issues related to inequality, displacement, human interaction, ethics, and platform dependence is essential to harnessing technology's potential for positive impact. Entrepreneurs, policymakers, and stakeholders must work collaboratively to mitigate these challenges and ensure that technology-driven entrepreneurship is pursued in a manner that fosters inclusivity, sustainability, and responsible innovation.

References

- Bapna, R., & Gupta, A. (2016). Disintermediation of distribution channel: The case of Indian e-commerce. MIS Quarterly, 40(2), 355-368.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.
- Chowdhury, E, K., & Islam, A. (2017). Role of Foreign Direct Investment in the Stock Market Development of Bangladesh- A Cointegration and VAR Approach. *The Bangladesh Accountant*, April-June, 2017, 63-74. The Institute of Chartered Accountants of Bangladesh. https://tinyurl.com/y8hs2paf
- Chowdhury, E. K (2021). Does Internal Control Influence Financial Performance of Commercial Banks? Evidence from Bangladesh. *South Asian Journal of Management*, 28(1), 59-77. <u>https://tinyurl.com/59nr5axm</u>
- 5. Chowdhury, E. K. (2012). Impact of inflation on bank lending rates in Bangladesh. Journal of Politics and Governance, 1(1), 5-14. https://tinyurl.com/26y2pw6y
- Chowdhury, E. K. (2012). The Impact of Merger on Shareholders' Wealth. International Journal of Applied Research in Business Administration and Economics, 1(2), 27-32. https://tinyurl.com/ycxt59vz
- Chowdhury, E. K. (2016). Investment Behavior: A Study on Working Women in Chittagong. *Premier Critical Perspective*, 2 (1). 95-109. http://digitalarchives.puc.ac.bd:8080/xmlui/handle/123456789/67
- 8. Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press.

- Sarandopoulos, P., Antoniou, C., Dedoulis, E., & Tzempelikos, N. (2019). When does entrepreneurship strengthen sales growth? A contingency perspective. Journal of Business Research, 94, 335-349.
- Thomke, S., & Nimgade, A. (2015). 3D printing will change the world. Harvard Business Review, 93(11), 44-60.
- Chowdhury, E. K. (2017). Functioning of Fama-French Three- Factor Model in Emerging Stock Markets: An Empirical Study on Chittagong Stock Exchange, Bangladesh. *Journal of Financial Risk Management*, 6(4), 352-363. https://doi.org/10.4236/jfrm.2017.64025
- Chowdhury, E. K. (2017). Measuring the Effect of Macroeconomic Variables on the Stock Market Return: Evidence from Chittagong Stock Exchange. *AU-International e-Journal of Interdisciplinary Research*, 2(2), 1-10. http://www.assumptionjournal.au.edu/index.php/eJIR/article/view/4227
- Chowdhury, E. K. (2021). Financial accounting in the era of blockchain-a paradigm shift from double entry to triple entry system. Available at SSRN 3827591. http://dx.doi.org/10.2139/ssrn.3827591
- Chowdhury, E. K. (2021). Prospects and challenges of using artificial intelligence in the audit process. In Abedin, M.Z., Hassan, M.K., Hajek, P. (eds.) *The Essentials of Machine Learning in Finance and Accounting* (pp. 139-155). Routledge. https://tinyurl.com/4stz7ycj
- Chowdhury, E. K. (2022). Disastrous consequence of coronavirus pandemic on the earning capacity of individuals: an emerging economy perspective. *SN Bus Econ.* 2(153). https://doi.org/10.1007/s43546-022-00333-z
- 16. Chowdhury, E. K., & Abedin, M. Z. (2020). COVID-19 effects on the US stock index returns: an event study approach. Available at SSRN 3611683. http://dx.doi.org/10.2139/ssrn.3611683
- Chowdhury, E. K., & Begum. R. (2012). Reward Management as Motivational Tool in Various Industries in Bangladesh: An empirical study. *International Journal of Contemporary Business Studies*, 3(11), 22-34. https://tinyurl.com/3vzu9cu8
- Chowdhury, E. K., & Chowdhury, G. M. (2014). Applicability of Prediction Techniques in the Stock Market-A Chittagong Stock Exchange Perspective. *International Journal of Advanced Information Science and Technology*, 32(32), 126-136, DOI:10.15693/ijaist/2014.v3i12.124-134

- Le, D., Pham, T., & Turner, S. (2019). Crowdsourcing ideas for entrepreneurial opportunities: Implication for open innovation. Technological Forecasting and Social Change, 142, 140-156.
- Maktouf, S. (2019). The role of cloud computing in digital business transformation. Strategic HR Review, 18(2), 78-83.
- Chowdhury, E. K., & Chowdhury, R. (2017). Online Shopping in Bangladesh: A Study on the Motivational Factors for Ecommerce that Influence Shopper's Affirmative Tendency towards Online Shopping. *South Asian Journal of Marketing & Management Research*, 7(4). 20-35. DOI:10.5958/2249-877X.2017.00019.4
- 22. Chowdhury, E. K., & Chowdhury, R. (2022). Empirical research on the relationship between renewable energy consumption, foreign direct investment and economic growth in South Asia. *Journal of Energy Markets*, 15(2). 1-21, https://DOI:10.21314/JEM.2022.012
- 23. Chowdhury, E. K., & Chowdhury, R. (2023). Role of financial inclusion in human development: Evidence from Bangladesh, India and Pakistan. *Journal of the Knowledge Economy*, 1-26. https://doi.org/10.1007/s13132-023-01366-x
- 24. Chowdhury, E. K., & Nahar, S. (2017). Perceptions of Accountants toward Sustainability Development Practices in Bangladesh. *Journal of Management and Sustainability*,7(3), 112-119. doi:10.5539/jms.v7n3p112
- Chowdhury, E. K., & Reza, T. (2013). Diagnostic Study on Interactive Ads and Its Response towards the FM Radio. *International Journal of Research in Commerce, IT & Management*, 3(2), 36-41. https://tinyurl.com/5n8huanv
- 26. Chowdhury, E. K., Dhar, B. K., & Stasi, A. (2022). Volatility of the US stock market and business strategy during COVID-19. *Business Strategy & Development*, 1–11. https://doi.org/10.1002/bsd2.203
- 27. Chowdhury, E. K., Dhar, B. K., Gazi, M., & Issa, A. (2022). Impact of Remittance on Economic Progress: Evidence from Low-Income Asian Frontier Countries. *Journal of the Knowledge Economy*, 1-26. https://doi.org/10.1007/s13132-022-00898-y
- Chowdhury, E. K., Dhar, B. K., Thanakijsombat, T., & Stasi, A. (2022). Strategies to determine the determinants of financial performance of conventional and Islamic commercial banks: Evidence from Bangladesh. *Business Strategy & Development*, 1–19. https://doi.org/10.1002/bsd2.207

- Menzies, A., Siemsen, E., & Zhao, M. (2019). Talent and technology: The impact of information technology certification on individual performance and labor market outcomes. MIS Quarterly, 43(1), 317-333.
- Chowdhury, E. K., Stasi. A. & Pellegrino. A. (2023). Blockchain Technology in Financial Accounting: Emerging Regulatory Issues. *Review of Economics and Finance*. 21 (1), 862-868. <u>https://refpress.org/ref-vol21-a94/</u>
- 31. Chowdhury, E.K. (2018). An Assessment of Return Spillover Among Selected Stock Markets in SAARC Countries. *South Asian Journal of Management*, 25 (1), 51-63. Association of Management Development Institutions in South Asia. https://tinyurl.com/y2bd39tk
- 32. Chowdhury, E.K. (2018). Does Foreign Direct Investment Stimulate Economic Progress of a Developing Country? Empirical Evidence from Bangladesh. *CIU Journal*, 1 (1), 71-86. Chittagong Independent University. https://tinyurl.com/3scz3jzh
- Chowdhury, E.K. (2019). An Empirical Study of Volatility in Chittagong Stock Exchange. CIU Journal, 2 (1), 19-38. Chittagong Independent University. https://tinyurl.com/3w6k89k8
- 34. Chowdhury, E.K. (2019). Transformation of Business Model through Blockchain Technology. *The Cost and Management*, 47(5), 4-9. The Institute of Cost and Management Accountants of Bangladesh. https://tinyurl.com/bdz4ns7t
- 35. Chowdhury, E.K. (2020). Catastrophic Impact of Covid-19 on Tourism Sector in Bangladesh: An Event Study Approach. *The Cost and Management*, 48(4), 43-52. The Institute of Cost and Management Accountants of Bangladesh. https://tinyurl.com/ccu6mkbx
- 36. Chowdhury, E.K. (2020). Is Capital Market Integration among the SAARC Countries Feasible? An Empirical Study. *Eurasian Journal of Business and Economics*, 13(25), 21-36. https://doi.org/10.17015/ejbe.2020.025.02
- 37. Chowdhury, E.K. (2020). Non-Performing Loans in Bangladesh: Bank Specific and Macroeconomic Effects. *Journal of Business Administration*, 41(2), 108-125. University of Dhaka. https://tinyurl.com/54f5pexw
- Chowdhury, E.K. (2020). Volatility in Cryptocurrency Market–Before and During Covid-19 Pandemic. *CIU Journal*, 3(1), 69-86. Chittagong Independent University. https://tinyurl.com/mr3djzcn

- Griffiths, M., Chua, R., Kiepuszewski, B., & Karavetian, A. (2019). The role of digital connectivity and smart technologies in regional rural development: A systematic literature review. Journal of Rural Studies, 72, 117-128.
- 40. Chowdhury, E.K. (2022). Strategic approach to analyze the effect of Covid-19 on the stock market volatility and uncertainty: a first and second wave perspective, *Journal of Capital Markets Studies*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JCMS-05-2022-0015
- 41. Chowdhury, E.K. (2023). Integration of Artificial Intelligence Technology in Management Accounting Information System: An Empirical Study. In: Abedin, M.Z., Hajek, P. (eds) Novel Financial Applications of Machine Learning and Deep Learning. International Series in Operations Research & Management Science, vol 336. Springer, Cham. https://doi.org/10.1007/978-3-031-18552-6_3
- 42. Chowdhury, E.K., & Rozario, S. O. (2018). Impact of Attitude and Awareness of Investors on their Investment Behavior- A Study on Bangladesh Stock Market. *The Bangladesh Accountant*, July- September, 81-89. The Institute of Chartered Accountants of Bangladesh. https://tinyurl.com/4av6swas
- 43. Chowdhury, EK (2020). India's NRC, CAA may take Bangladesh closer to China. Asian Regional Review, Diverse Asia, Seoul National University Asia Center, 3(2). https://diverseasia.snu.ac.kr/?p=4525
- 44. Chowdhury, M.R.A., & Chowdhury, E. K. (2010). Estimation of Stock Market Risk-A Value at Risk Approach. *The Cost & Management*, 38(4), 22-27. https://tinyurl.com/4ax978ud
- 45. Chowdhury, M.R.A., Chowdhury, E. K., & Chowdhury, T. U. (2015). Application of Capital Asset Pricing Model: Empirical Evidences from Chittagong Stock Exchange. *The Cost & Management*, 43(3), 38-44. <u>https://tinyurl.com/bddv24cy</u>
- 46. Christensen, C. M. (1997). The innovator's dilemma: When new technologies cause great firms to fail. Harvard Business Review Press.
- Eisenmann, T., Parker, G., & Van Alstyne, M. W. (2006). Strategies for two-sided markets. Harvard Business Review, 84(10), 92-101.
- 48. Granovetter, M. S. (1973). The strength of weak ties. American Journal of Sociology, 78(6), 1360-1380.

- 49. Hackbarth, G., Qureshi, S., & Nitzburg, T. (2018). Protecting user privacy and security in the Internet of Things. Computer, 51(6), 28-36.
- 50. Kshetri, N. (2016). The sharing economy and digital platforms: A review and research agenda. Journal of Information Technology, 31(3), 310-324.