Entrepreneurship and Economic Sustainability

Hesham Magd

Shad Ahmad Khan

Ngboawaji Daniel Nte

Mohd Sarim

First Published in January 2023

Prestige Publishers
A-1B/96-B, Krishna Apartments
Paschim Vihar, New Delhi - 110063
Mobile Nos. 9811047234, 9213156651
E-mail - prestigepublishers09@yahoo.com
prestigepublishers09@gmail.com

Entrepreneurship and Economic Sustainability

Prestige Publishers is the flagship company of Prestige Group of Companies

ISBN: **978-81-958057-5-4**

Typeset at Script Makers, 19, A1-B, DDA Market, Paschim Vihar, New Delhi 110063, and text and cover printed at AnVi Composers.

CONTENTS

Chapter 4

Entrepreneurship and digital innovation in an era of pandemic

Kaneez Masoom*
Research Scholar, Khwaja Moinuddin language university,
Lucknow, India
Email: kashshoyn@gmail.com

Dr (Prof) Syed Haidar Ali
HOD, Department of Business Administration,
Khwaja Moinuddin language university, Lucknow, India

Dr (Prof) Surendra Kumar
Professor, Babu Banarasi Das university
Lucknow, India

Dr Saiyid Saif Abbas Abidi
Associate Professor, Babu Banarasi Das university
Lucknow, India

***Corresponding Author**

Abstract

The global pandemic has transformed the world in many ways. It changed the way the business was conducted. Many businesses joined the digital platforms to survive. The rise of the digital wave during Covid-19 offers many opportunities for ambitious entrepreneurs to enter the market. As a result, COVID-19 has been a catalyst for the adoption and further use of digital technologies in work organizations and offices, presenting predictable and unpredictable opportunities, challenges, and costs, leading to negative and positive feedback loops. Through the lens of the diffusion of innovations theory, in this study, we develop and advance a conceptual model in response to the pandemic by connecting the various forces for and against digitalization. According to our findings, while digitalization may create new opportunities, it also introduces risks that are difficult to mitigate or plan for. Finally, we discuss the broader theoretical and practical implications of our findings. As a result, this study provides implicationsfor academics as well as the industry.

Keywords: Digital Technology; Digital Entrepreneurship; Covid19; Innovation; Technology

1. Introduction

The world is revolutionizing with the various technological advances in almost every sector. More and more transactions are being done online, be it in business, governmental systems or on an individual level (Brem et al., 2021; Jafari-Sadeghi et al., 2021)

The pandemic affected everyone like a storm in 2020 and 2021, causing technology advances to scale up and supporting digital entrepreneurship in many regions of the world to meet the demands of a new world. (Iivari et al., 2020; Secundo et al., 2021).. Truth be said, a lot of firms

today largely rely on their digital capabilities to maintain their survival (Datta and Nwankpa, 2021).

It is thought that digital technology enables businesses to quickly modify their business models rather than in traditional or linear ways. The initiative of firms to leverage new capabilities by using digital technologies in order to transform organizational strategies and operations is known as digital transformation. Just a few years ago, we couldn't even imagine the possibilities of digital technology. 5G, artificial intelligence and 3D printing are just a few examples. The timegap between the development and utilization of digital technologies, and the shrinking time lag between the paths and endpoints of digital transformation, is difficult to predict in advance. On the other hand, organizations should be aware of external incentives and digital technologies should be seen as an option that businesses can use to respond to these incentives.

While digital entrepreneurship surged in 2020-2021, COVID-19 has put numerous restrictions on economic downturns in many parts of the world. (Back et al. 2020; Ratten 2020; Sharif et al, 2021). According to the literature, entrepreneurial activity grow and risk-taking behavior increases during uncertain times (Muoz et al., 2020). Covid-19 has sparked a digital entrepreneurship boom over the past two decades, which has been aided by technical resources such as Internet tools and communication and information technologies (Abubakre et al., 2021; Bai et al., 2021; Secundo et al., 2021). During the current pandemic, numerous mobile applications have been created to track vaccination status, locate nearby vaccination sites, and do business remotely (Rachul et al., 2020; Sharma; and others, 2020). This study helps spread innovation theory in the context of digital entrepreneurship and the potential it presents for company growth. By focusing on the research topic, "Has Covid-19 accelerated chances for digital entrepreneurship?" this study analysed the most obvious feature of digital entrepreneurship to consumers. Several elements, some of which were looked at in this study, have an impact on whether an idea is adopted. These considerations include the perception of an innovation's superiority over programmes or products currently on the market, its consistencywith the values and experiences of potential adopters, its usability (easiness or difficulty), its ability to be tested, and its capacity to yield quantifiable results. 2. The digital entrepreneur and emerging technologies Developing economies must take advantage of new technologies to foster digital entrepreneurship in this age of internet access and digital disruption by coming up with innovative solutions to social demands and problems (Wang et al., 2021). As a result, we shall discuss the functions of evolving technologies and digital entrepreneurship in further detail below.

2. Literature Review

2.1. New Emerging technologies

In order to create new business processes and modify those that already exist, today's businesses embrace the use and acceptance of digital tools. In addition to offering immediate financial advantages, emerging technologies assist organisations in enhancing workplace cultures and consumer experiences (Kamble et al., 2021). Companies can use digital technology to review current business processes, align resources, and improve capabilities in order to create a framework that will promote innovation in commercial activities (Schiavone et al., 2021). In addition to corporate applications, emerging technologies have enormous potential for use by the general public, and a number of companies have begun to offer services in this area. For example, CivilCops, a company founded in 2017, exploits big data and artificial

intelligence (AI) to fast forward the complaint and resolution system in the public domain. (Rana et al., 2016).

2.2. Entrepreneurship in the digital age

A significant increase in the demand for digital technology over the past two decades has led to the creation of numerous digital artefacts, platforms, and infrastructure development projects byboth public and commercial organizations. A digital element, application, or piece of content thatis associated with a good or service that allows the user to perform a certain function is known as a digital artefact (Liu et al., 2021). Services in digital artefacts have increased as a result of the separation of information from its physical representation (Barrett et al., 2015; Islam et al., 2020). Numerous things are covered by these apps, including cellphones, toys, cars, and apparel.

Therefore, digital artefacts can be divided into two categories: those that are software/hardware components of physical objects, or those that are components of ecosystems that operate on digital platforms and provide a variety of options for digital entrepreneurship (Schiavone et al., 2021). An architecture that offers other items in addition to digital artefacts and a shared area forhosting services is referred to as a "digital platform." Entrepreneurs can develop a wide range ofvalue-added goods and services using digital platforms.

Digital platforms are appealing to business owners for the creation, promotion, and delivery of services (Nambisan, 2017; Srinivasan and Venkatraman, 2018).

2.3. Diffusion of innovation

For businesses to understand their industry and create unique, original products or services, rigorous market research is essential. People are excited about innovative ideas in the Internet and connection era that can address corporate difficulties (Zajicek and Meyers, 2018). Therefore, the DoI theory is the best suitable to investigate the potential of digital entrepreneurship. The DoI helps business owners see the processes, drivers, and rates of innovation in new ideas and technology (Rogers et al., 2014; Rogers, 1995, 1962). DoI assists business owners in analysing and projecting how consumers will respond to their service or product (Marcati et al., 2008). Early adopters differ from later users in that they exhibit various characteristics when an idea or service develops and becomes more widely used (Cao and Shi, 2021). Digital entrepreneurs must therefore have a thorough awareness of all the variables that can facilitate or prevent the uptake of innovation (Abubakre, 2021).

According to the DoI, adopters can be divided into innovators (first movers), early adopters (those who welcome change and new ideas), early majority (those who welcome and adopt innovative ideas before it is researched to mass and evidence is required that innovation works before entrepreneurs believe its worth), late majority (those who are unsure about the idea and change and adopt the idea after it has been widely accepted by the population), and laggards (traditional and resistant to change) (Rogers, 1962). Therefore, digital entrepreneurship offers opportunities for both new and unheard-of concepts in the market as well as for existing marketplaces like website and content production businesses. DoI may also contribute in a special way to the conception and creation of novel items by imagining consumer acceptance and expectations.

3. Research Methodology

A qualitative approach is used to explore the digital entrepreneurship research questions presented in this study. Digital entrepreneurship opportunities have accelerated in an unsettled or very challenging environment for Covid-19. As a result, it was appropriate to start a qualitative study on the research question. Thanks to the Entrepreneur', there were only a handful of well-planned, semi-structured interviews amid a busy work schedule.

4. Data Collection

Entrepreneurs serving local and regional markets from a variety of organizations and sectors were questioned. Using the recommendations of Leech (2002) and McCracken (2002), a semi-structured interview schedule was created (1988). Eight questions altogether were created with an emphasis on digital entrepreneurship and advancing technology utilizing Covid-19 as an incentive for creativity and distinctive services to address issues in the public and private sectors. LinkedIn was used to contact 151 digital entrepreneurs in total. Additionally, it was shown that response saturation happened after about 23 responses. 23 replies in all were prepared for additional examination as a result.

5. Study Design

A three-step coding mechanism was used for raw data analysis. First, public codes were extracted from the interview responses of this study. Second, the newly emergingaxis code and open code were compared. Finally, axis codes were linked with optional coding. After reviewing and narrowing down specific codes, a triangulation approach was used to validate and verify the subjects that emerged from the data.

6. Conclusion

Using a semi-structured approach, this study investigates areas of innovation-led digital entrepreneurship with a high potential for growth. The diffusion of innovation theory is used as the foundation for Covid-19-induced digital entrepreneurship opportunities in this study. This study provides valuable insights for emerging and established digital entrepreneurs who are using technology in new ways. The use of innovative solutions is essential to ensure that digital platforms remain relevant and meet the needs of customers and business partners.

6.1. Educational Technology

The deployment of digital technology in schools and universities has been considerably boosted through Covid-19. The majority of educational systems worldwide are now compelled by COVID-19 to use virtual learning and distance learning. This has aided the growth of digital entrepreneurship in nearly every area of education (Iivari et al., 2020). Venture capitalists have invested in numerous firms due to their promise and belief in the viability of these platforms even after the epidemic. According to R7, educational technology (EdTech) "enhances personalised learning possibilities based on a scientist's abilities, interests, and strengths, in addition to assisting learners.

6.2. Financial technology

The financial technology (FinTech) industry grew its services during COVID-19, especially in emerging nations. Business and consumer access to financial services can boost economic

growth and income levels while also enhancing resilience and quality of life. FinTech platforms enable services to expand their customer base while lowering operational costs. Furthermore, while keeping up with the economy, FinTech platforms are diminishing in-person connections (Vasenska et al., 2021). The potential for start-ups in the payment and banking technology industries has been shown, according to R10, by the multi-fold increase in subscribers in the online payment sector.

6.3. Social Media

Social media today helps businesses interact with their customers after starting out as a way to connect family and friends. This gives outside parties the ability to create, manage, and advertise social media products on behalf of the intended company. A new generation of business owners is utilizing the Internet of Things to advertise items and streamline processes in order to draw in customers. To cut expenses and boost productivity, independent business owners are utilizing additional cutting-edge technologies including cloud storage, networking, and software administration (Song, 2019; Szalavetz, 2020). Close engagement via social media "helps organizations' track consumer behavior and generate platform-centric analytics to promote business growth," claims.

6.4. E-commerce

6.4.1. Contactless Delivery

People are now avoiding going out to acquire necessities since COVID-19 has had such a significant influence on their life. Due to this, rather than going to neighbourhood shops and clothing stores, individuals favour online platforms. These platforms offer security through contactless delivery and payment in addition to convenience. Due to COVID-19, e-commerce has increased over the past ten years, which has altered how courier and business transactions are carried out. Retailers who don't offer contactless delivery will no longer compete since it hasbecome the new norm (Johnston, 2021). The technique of contactless delivery does away with the requirement for customer-employee interaction. A photo delivered to the customer via the mobile app by the staff serves as confirmation of order delivery.

6.4.2. Payment method

The past ten years have seen a rise in smartphone usage, and with that growth has come a modern trend: launching a business online. Cash flow is crucial to every business for other purposes, though, so the two are not mutually exclusive. In an e-commerce setting, the payment platform or mechanism allows for a smooth flow of funds. When businesses exclusively accepted cash, those days are long gone.
Numerous UPIs, e-wallets, and mobile payments are now accessible thanks to technological advancements, in order to satisfy the needs of a wide range of customers (Vasenska et al., 2021). Also according to R20, "companies in both the e-commerce and physical shop formats use many payment methods nowadays for the convenience of customers."

7. Discussion

In order to investigate different areas of digital entrepreneurship prospects, the study used a semi-structured interview approach. The findings have some fascinating implications for developing DoI theory in challenging situations like the Covid-19 pandemic. The theory and literature of innovation, entrepreneurship, and technology are all incorporated within this study.

Because they are more prevalent in the physical world and customers prefer physical products, experts have previously focused on entrepreneurship potential in the physical mode of company. As a result of the changes brought on by Covid-19, there has been a notable increase in digital entrepreneurial domains with a continual focus on innovation (Brem et al., 2021; Volberda et al., 2021). As a result, the study theorises diffusion of innovations theory through thelens of digital entrepreneurship in the uncertain, complex, and uncertain environment.

8. Limitations and Scope for Future Research

Digital technologies have ushered in a new era for both aspiring entrepreneurs and professionals. Complexity and concerns in the Covid-19 era have prompted many start-ups to integrate digitization and technology-related concepts in order to disseminate innovations and meet the needs of customers, stakeholders, and businesses. Based on concepts, perspectives, and approaches, the emerging propositions demonstrate the impact of Covid-19 and result in novel theorizing in digital technology-led entrepreneurship. The diffusion of innovations and the conceptualization of single concepts are important, but not always, to the success of digital entrepreneurship. Some late adopters may be successful withthe same business or service concept. As a result, studies may be conducted to measure the success of early adopters and early majority ventures. In addition, social norms and various acceptable standards of the communitymay impede the use of DoI. Theory also does not define the rate at which innovation is adopted by multiple stakeholders. The current study's findings point to newly emerging fields for digital entrepreneurship and the application of digital technologies in various ways. Future research can look into the impact of other grounded theories, such as task-technology fit and the resource-based view, on pursuing digital entrepreneurship. Studies can be conducted in the future to map the emergence of businesses during Covid-19 and their survival in the post-Covid-19 era.

References

A.K. Song. (2019). The digital entrepreneurial ecosystem—a critique and reconfiguration. Small Bus. Econ., 53 (3), pp. 569-590

Abubakre, M., Faik, I., & Mkansi, M. (2021). Digital entrepreneurship and indigenous value systems: an Ubuntu perspective. Inf. Syst. J. DOI: 10.1111/isj.12343.

B.L. Leech (2002). Asking questions: techniques for semi structured interviews. PS: Polit. Sci. Polit., 35 (4), pp. 665-668

Bai, C., Quayson, M., & Sarkis, J. (2021). COVID-19 pandemic digitization lessons for sustainable development of micro-and small-enterprises. Sustainable Production and Consumption. DOI: 10.1016/j.spc.2021.04.035.

Brem, A., Viardot, E., & Nylund, P.A. (2021). Implications of the coronavirus (COVID-19) outbreak for innovation: which technologies will improve our lives?Technol. Forecast. Soc. Change. DOI: 10.1016/j.techfore.2020.120451.

Datta, P., & Nwankpa, J.K. (2021). Digital transformation and the COVID-19 crisis continuity planning. J. Inf. Technol. Teach. Cases. DOI: 10.1177/2043886921994821.

E. Rogers. (1962). Diffusion of Innovations. The Free Press, New York, NY

E.M. Rogers, A. Singhal, M.M. Quinlan. (2014). Diffusion of Innovations. Routledge, pp. 432-448

G. McCracken (1988). The Long Interview (Vol. 13). Sage

H. Zajicek, A. Meyers (2018). Digital health entrepreneurship. Digital Health, Springer, Cham, pp. 271-287

Islam, N., Marinakis, Y., Majadillas, M.A., Fink, M., & Walsh, S.T. (2020). Here there be dragons, a pre-roadmap construct for IoT service infrastructure. Technol. Forecast. Soc. Change. DOI: 10.1016/j.techfore.2017.09.016.

Kamble, S.S., Gunasekaran, A., Kumar, V., Belhadi, A., & Foropon, C. (2021). A machine learning based approach for predicting blockchain adoption in supply Chain. Technol. Forecast. Soc. Change. DOI: 10.1016/j.techfore.2020.120465.

L.A. Johnston (2021). World trade, e-commerce, and COVID-19 China Rev., 21 (2), pp. 65-86

Liu, H., Li, X., & Wang, S. (2021). A bibliometric analysis of 30 years of platform research: developing the research agenda for platforms, the associated technologies and social impacts. Technol. Forecast. Soc. Change. DOI: 10.1016/j.techfore.2021.120827.

Livari, N., Sharma, S., & Ventä-Olkkonen, L. (2020). Digital transformation of everyday life–How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care?Int. J. Inf. Manag. DOI: 10.1016/j.ijinfomgt.2020.102183.

M. Barrett, E. Davidson, J. Prabhu, S.L. Vargo (2015). Service innovation in the digital age. MIS Q., 39 (1), pp. 135-154

Marcati, G. Guido, A.M. Peluso. (2008). The role of SME entrepreneurs' innovativeness and personality in the adoption of innovations. Res. Policy, 37 (9), pp. 1579-1590

N.P. Rana, Y.K. Dwivedi, M.D. Williams, V. Weerakkody. (2016). Adoption of online public grievance redressal system in India: toward developing a unified view. Comput. Human Behav., 59, pp. 265-282

S. Back, W. Geoghegan, M. Josefy, R. Stevenson, T.A. Williams (2020). The COVID-19 Virtual Idea Blitz: marshaling social entrepreneurship to rapidly respond to urgent grand challenges

S. Nambisan (2017). Digital entrepreneurship: toward a digital technology perspective of entrepreneurship. Entrep. Theory Pract., 41 (6), pp. 1029-1055

Schiavone, F., Mancini, D., Leone, D., & Lavorato, D. (2021). Digital business models and ridesharing for value co-creation in healthcare: a multi-stakeholder ecosystem analysis. Technol. Forecast. Soc. Change. DOI: 10.1016/j.techfore.2021.120647.

Secundo, G., Gioconda, M.E.L.E., Del Vecchio, P., Gianluca, E.L.I.A., Margherita, A., & Valentina, N.D.O.U. (2021). Threat or opportunity? A case study of digital-enabled redesign of entrepreneurship education in the COVID-19 emergency. Technol. Forecast. Soc. Change. DOI: 10.1016/j.techfore.2020.120565.

Srinivasan and Venkatraman (2018). Entrepreneurship in digital platforms: a network-centric view. Strateg. Entrepreneurship J., 12 (1) (2018), pp. 54-71

V. Jafari-Sadeghi, A. Garcia-Perez, E. Candelo, J. Couturier (2021). Exploring the impact of digital transformation on technology entrepreneurship and technological market expansion: the role of technology readiness, exploration and exploitation

V. Ratten. (2020). Coronavirus (covid-19) and entrepreneurship: changing life and work landscape. Journal of Small Business Entrepreneurship, 32 (5) (2020), pp. 503-516

Vasenska, P. Dimitrov, B. Koyundzhiyska-Davidkova, V. Krastev, P. Durana, I. Poulaki. (2021). Financial transactions using FINTECH during the covid-19 crisis in Bulgaria Risks, 9 (3), pp. 1-28

Volberda, H.W., Khanagha, S., Baden-Fuller, C., Mihalache, O.R., & Birkinshaw, J. (2021). Strategizing in a digital world: overcoming cognitive barriers, reconfiguring routines and introducing new organizational forms. Long Range Plann. DOI: 10.1016/j.lrp.2021.102110.

Wang, C., Teo, T.S., Dwivedi, Y., & Janssen, M. (2021). Mobile services use and citizen satisfaction in government: integrating social benefits and uses and gratifications theory. Inf. Technol. People. DOI: 10.1108/ITP-02-2020-0097.

Z. Cao, X. Shi (2021). A systematic literature review of entrepreneurial ecosystems in advanced and emerging economies. Small Bus. Econ., 57 (1), pp. 75-110