

WOMEN ENTREPRENEURS AND THEIR TRANSFORMING ROLE IN THE INDIAN STARTUP ECOSYSTEM

Nisha Rani¹, Dr. Jasleen Kaur²

¹Research Scholar School Of Applied Management Punjabi University Patiala, India.

²Assistant Professor, School Of Applied Management Punjabi University Patiala, India.

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ABSTRACT

Startups have become significant participants in the formation of modern economies, acting as engines of innovation, employment, and economic progress. The Indian startup ecosystem, which is made up of a network of related organizations, businesses, and resources, has emerged as the third-largest startup ecosystem in the world. Digital revolutions, an entrepreneurial and imaginative mindset, and a competent workforce have made it a reality. The role of women in the entrepreneurial environment has also witnessed a significant transformation. There has been a noticeable increase in the economic impact of startups, particularly those run by women entrepreneurs. In addition to taking care of the family and working together, women are making significant contributions to the economic development of the nation. On the other hand, the government, by stimulating the development of communities, networks, and collaborations among various startup ecosystem stakeholders, is also supporting women entrepreneurs to ensure balanced growth for the country. The present study aims to highlight the contribution of these startups since the emergence of the Startup India Initiative. It is also explored how women entrepreneurs are changing the business landscape and how the government assists them through various programs and initiatives to overcome the challenges they face.

Keywords: Startup, Entrepreneurship, Women Entrepreneur, Government Schemes, Startup India Initiative.

1. INTRODUCTION

Startups and entrepreneurship have long been recognized as key catalysts for economic progress, fostering innovation, job creation, and competition (Jayanthi, 2019). In an ever-evolving global landscape, startups are often the first to identify emerging trends, respond to unmet needs, and pioneer solutions that challenge the status quo (Askew, 2023). Startups, particularly those led by women, are now essential to modern economies due to their entrepreneurial spirit, which is fueled by their desire to innovate and be self-employed (Manshani and Dubey, 2017). Breaking the traditional norms and stereotypes, women are entering several typically male-dominated sectors like technology, healthcare, textiles, and food processing (Kumar and Shobana, 2023). Their startups are playing a crucial role in shaping a more resilient, sustainable, and inclusive future for countries worldwide (Singh, 2023) as entrepreneurs emphasize resolving social and environmental issues (Vedula et al., 2022). In the Indian context, the startup ecosystem is shaping the future of Innovation and entrepreneurship in the country. With over 100+ unicorns, India has emerged as the third-largest startup hub (Choudhary et al., 2022). Based on a technological and problem-solving approach, Indian startups are leveraging technologies such as Artificial Intelligence (AI), Blockchain, and Internet of Things (IoT) to provide cutting-edge solutions to various local as well as global problems (Chilamkurti et al., 2021).

Recognizing the importance of startups, the Indian government has initiated various flagship programs to support this entrepreneurship culture in the country. Startup India Initiative is one of the key initiatives started by the government to nurture the entrepreneurial culture (Singh, 2023), which will boost the economy by generating jobs and making economic contributions, and ensure the inclusive development of the nation (Radas, 2023). The timely study of the startup landscape will help to understand their growth pattern and the potential for future employment generation. It will also assist the government and policymakers in formulating future strategies favorable to these startups that could assist them in coping with the upcoming challenges. This present study will help in the same way by providing current data related to startups in the country. It will portray the journey of Indian startups since the evolution of the Startup India Initiative. The growth and economic contribution in terms of the number of startups and jobs generated over the years are discussed. The study portrays the present status, growth, and transforming role of women entrepreneurs in the Indian startup ecosystem. It also enlists various government initiatives, particularly those addressing the specific needs of women entrepreneurs.

2. LITERATURE REVIEW

Andaleeb and Singh (2016) conducted a study to identify the stages that a start-up has to go through. Their study also attempts to highlight the modes available for financing the startup at each stage. Sonkar (2023) conducted a study on

Indian startups to gain a thorough understanding of the significance of startups in job creation as well as the challenges faced by these startups. Their study makes a state-wise comparison of the startups and further analyzes the supporting role of the government in their growth. The study identified a positive relationship between the number of registered startups and the employment generation in the country. Wagner (2021) conducted a study to identify the opportunities and challenges faced by startups during different stages of their operations. Singh et al. (2023) conducted a study on entrepreneurship and the Indian entrepreneurial ecosystem targeting India's vision for Viksit Bharat @2047. The study attempted to examine India's state of entrepreneurship, challenges, and opportunities faced by startups. It further examined the impact of emerging technologies such as 'Blockchain' and 'Artificial Intelligence' on entrepreneurship and apprehended strategic recommendations for empowering the startup ecosystem. Gupta et al. (2022) analyzed the Startup India scheme, which is a flagship program of the Government of India, initiated to promote entrepreneurial culture and creative spirit among the youth and skilled professionals. The findings of the study reveal the economic as well as social impact of the initiative and its contribution to driving innovation and sustainable growth of the nation. Nehru and Bhardwaj (2013), in their study, identify several factors that influence women to start their own businesses. Their study also highlighted the challenges faced by women entrepreneurs in gaining a competitive edge in the market. The majority of the previously held studies related to start-ups focused on identifying the opportunities and challenges faced by Indian startups. But this present study explores the growth and contribution of Indian startups since the evolution of the Startup India Initiative. In addition to identifying the status and transforming role of women entrepreneurs in the Indian startup ecosystem, it focuses on enlisting various need-based schemes, programs, initiatives, and campaigns run by the Indian government to boost the growth of women-led startups.

3. RESEARCH OBJECTIVES

The following are the three primary objectives of this present study:

- To identify the contribution of Indian startups since the evolution of the Startup India Initiative.
- To explore the status and growth of women entrepreneurs in the Indian Startup Ecosystem.
- To highlight the government's initiatives to support Indian startups, particularly those led by women entrepreneurs.

4. METHODOLOGY

This is a descriptive study based on the secondary data collected through E-resources. Data about the number of startups in the country, their growth, contribution to the employment generation, women's participation, and the government's support is collected through various reports and documents presented by the Department of Promotion of Industry and Internal Trade (DPIIT) on its official website. Moreover, this research will analyze the scholarly literature related to startups, Startup India Initiative, and women entrepreneurs to underpin the growth trends and contributions made by these startups.

5. EVOLUTION OF STARTUP INDIA INITIATIVE

A startup is defined as a new business or venture financed by individuals, investors, or capitalists, operating at its initial stages and striving for growth (Sharma, 2021). These are recognized by the Indian government as organizations that have been in operation for ten years and generate a turnover of at least 100 crore (Kumar, 2021). In the case of women, it is considered a business owned and managed by women who possess at least 51% of the capital and provide a minimum of 51% of the jobs created within the business for women (Pathania, 2022; Manshani and Dubey, 2017).

The Indian government has launched various programs and initiatives aimed at fostering businesses and stimulating entrepreneurship. The Startup India Initiative is one of the biggest policy measures taken by the Indian government to support innovation and entrepreneurial culture in the country (Tiwari et al. 2021). To build a strong startup ecosystem, the government of India, in July 2016, launched a flagship program named 'Startup India Initiative' under the leadership of the honorable Prime Minister Shri Narendra Modi (Manshani and Dubey, 2017). The scheme primarily aims to support entrepreneurship and foster innovation, create jobs, and drive the nation's economic growth by providing a conducive environment for startups (Awan & Hasnain, 2023).

5.1 Role of Startups in Job Creation:

Entrepreneurs are fundamental to the economic development of a nation as they create jobs, introduce innovations, diversify economies, and contribute to wealth creation (Pathania, 2022). India's startup ecosystem has witnessed a significant proliferation in recent years (Subrahmanya, 2021). Various factors, such as increased funding support, the emergence of unicorns, government initiatives, and the availability of a skilled and talented workforce, have helped a lot in positioning India as a global Innovation Hub (Dwivedi, 2022). Table 1. Shows an increasing trend in the contribution of startups in creating jobs for the nation.

Table 1: Contribution to Employment Generation

Year	Employment Generation (in thousands)
2017	43
2018	88
2019	132
2020	161
2021	198
2022	269

Source: States Startup Ranking 2022 National Report

Published by: Department for Promotion of Industry and Internal Trade (DPIIT)

According to the report published by DPIIT, there has been a remarkable increase in the number of jobs generated by startups registered with DPIIT. The total has grown from 43,000 jobs in 2017 to 269,000 jobs by 2022. The rapid digitization process and the growing need for high-quality services have bolstered startup growth, especially in the service sector (Crnogaj & Rus, 2023). Examples of successful businesses in this industry include e-learning platforms, telemedicine, logistics, and online food delivery services.

6. WOMEN ENTREPRENEURS IN STARTUP ECOSYSTEM

Women are emerging as crucial players in the startup ecosystem, contributing to the diversity, innovation, and growth of the entrepreneurial world (Manshani and Dubey, 2017). From being leaders and innovators to being owners, their role has transformed drastically. Their drive for autonomy, intelligence, inventiveness, risk-taking ability, and managerial skills enables them to thrive in a competitive setting (Nirmala and Priya, 2023). India's economy has also benefited extensively from the steady rise in the economic contribution of female entrepreneurs over the years (Azam, 2021). Women-led businesses have shown themselves to be tenacious, creative, and crucial in promoting social and economic advancement in spite of a number of obstacles (Kumar and Shobana, 2023). By succeeding in fields like health care, education, and social sciences, women have broken the stereotypes and traditional norms that question their ability to become entrepreneurs (Kumar and Shobana, 2023). Now, they are not just empowering other women but also contributing to the economic development of the nation by bringing skills, innovation, creativity, and new employment opportunities (Pathania, 2022).

According to the data published by the Department of Promotion of Industry and Internal Trade (DPIIT), there has been a significant increase in Indian startups, particularly those run by women entrepreneurs. Table 2 shows the increasing trend in women-led startups in the country from 2016 to 2023.

Table 2: Number of Women-led Startups in India

Year	Number of startups
2016	345
2017	4298
2018	7835
2019	10659
2020	13838
2021	19424
2022	26360
2023	32143

Source: States Startup Ranking 2022 National Report

Published by: Department for Promotion of Industry and Internal Trade (DPIIT)

Moreover, in the past five years, a drastic transformation in the role of women entrepreneurs has also been witnessed. The number of women-led startups in the country has increased by 4%, and over 49% of all DPIIT-recognized companies have at least one female director (States Startup Ranking 2022 National Report). It indicates a significant uplift in the status of women entrepreneurs in the country.

7. GOVERNMENT'S INITIATIVE TO SUPPORT STARTUPS

Despite being essential to the country's economic growth, startups encounter a number of obstacles that prevent them from succeeding (Zarrouk et al. 2021). Regardless of gender, startups encounter several major challenges, especially during their early stages, such as financial issues, market penetration, a lack of competitive and consumer knowledge, a complicated legal environment, problems in talent acquisition, and assembling a strong management team (Pathania, 2022; Jayanthi, 2019). Moreover, technological barriers, market dynamics, regulatory hurdles, etc., also impact their pace of growth (Xie et al. 2022). Nonetheless, these issues are more exacerbated for women owing to entrenched structural and societal obstacles (Amaral et al., 2019). In addition to some common challenges faced by all types of ventures, women entrepreneurs also encounter substantial financing inequities and problems like a lack of knowledge, support, training, skills, motivation, and networking.

Hence, a multifaceted strategy is needed to address these issues, which includes targeted financial inclusion, legislation changes, and initiatives to subvert ingrained gender conventions that still influence business ecosystems (Antonites, 2021). Several previous studies have also emphasized the need for government assistance through schemes that target the specific needs of struggling startups in various sectors and regions across the nation (Shah, 2022). Although efforts are being made by the government at both the national and state levels to empower these startups to make themselves self-reliant and progressive (Jayanthi, 2019). As mentioned by the Department of Promotion of Industry and Internal Trade (DPIIT) (States Startup Ranking 2022 National Report), some of the key initiatives and schemes run by the government to assist these startups are listed below:

7.1 Schemes Implemented under the Startup India Initiative:

- **Funds of Funds (FoF) scheme:** The scheme was started in July 2016 with a corpus of INR 10000 crore. It aimed to provide the required financial assistance to the startup ecosystem.
- **Startup India Seed Fund Scheme:** With a corpus of INR 945 Cr, SISF was established for a four-year term beginning in 2021–2022, to give startups financial support.
- **Credit Guarantee Scheme for Startups (CGSS):** CGSS was started to provide credit assistance to startups. The purpose of CGSS was to offer credit guarantees for loans made to DPIIT-recognized startups by various institutions such as Scheduled Commercial Banks, Non-Banking Financial Companies (NBFCs), and Venture Debt Funds (VDFs) that were Securities and Exchange Board of India (SEBI)-Registered Alternative Investment Funds.
- **Startup India Investor Connect:** It is a platform that uses Artificial Intelligence to connect investors with startups to promote investment opportunities. It helps entrepreneurs to make direct contact with the investor with the help of a single application.

7.2 Centre Government Initiative:

- **Innovation for Defense Excellence (iDEX):** The Department of Defence Production under the Ministry of Defence, runs the IDEX program, which supports startups and innovators in developing successful prototypes and encourages innovation, design, and development. Around 300 startups, MSMEs, individual innovators, and about 20 partner incubators can receive financial support through the scheme.
- **Innovation and Agri-Entrepreneurship Development Program:** This initiative is funded by the Ministry of Agriculture and Farmers Welfare to foster an incubation ecosystem and encourage innovation and agribusiness in the nation. From 1176 Startups in July 2023, the program seeks to increase the number of agri-startups in the nation by 20%.
- **Atal Innovation Mission (AIM):** Under the AIM mission, over 10,000 Atal Tinkering Labs have been established that involve over 75 L students from 34 states and UTs, and established a robust mentor network with over 6100 members nationwide, and also aided over 2900 startups connecting the dots between innovation, sectoral penetration, and inclusion.
- **Promoting Innovation in Individuals, Startups, and MSME (PRISM):** To fulfill the agenda of inclusive development, by assisting individual innovators, the Department of Science and Institutional Research has approved 132 proposals for the establishment of startups under this program.

7.3 Government Schemes to Assist Women Entrepreneurs:

The Indian government is also empowering women through its financial and cognitive support. As shown in Table 3, the government, through its various ministries, has initiated several schemes and training programs which target each of their particular need for financing, training, capacity building, networking, and mentorship. Awards in different categories are also conferred to emerging women entrepreneurs to promote their encouragement and empowerment.

Table 3: List of the Government's Initiatives to Support Women Entrepreneurs

Sr. No.	Scheme	Ministry	Focus	Key Features
1.	Skill Upgradation and Mahila Coir Yojana	Ministry of Micro, Small and Medium Enterprises	Training And Finance	<ul style="list-style-type: none"> • Skill development in women artisans engaged in the Coir industry • two months of training in Coir spinning • stipend of rupees 3000/- p.m. during training
2.	Mahila Samridhi Yojana	Ministry of Social justice and empowerment	Financial Assistance	<ul style="list-style-type: none"> • Micro Finance for women belonging to the backward class, with a rebate on interest • Financial Aid up to 140000/-
3.	Women Entrepreneurship Platform (WEP)	NITI Aayog	Relevant Information and services for learning and growth	<ul style="list-style-type: none"> • Entrepreneurial skills and mentorship • Tax assistance and compliance • Community and networking • Marketing assistance • Funding and financial assistance
4.	Trade Related Entrepreneurship Assistant and Development (TREAD)	Ministry of Micro, Small and Medium Enterprises	Financial Assistance	<ul style="list-style-type: none"> • Financial aid up to 30% of the total project cost by the GoI • The remaining 70% financed by the lending agency as a loan
5.	Support to Training and Employment Program for Women	Ministry of Women and Child Development	Skill development	<ul style="list-style-type: none"> • provide skills and competencies to women to make them employment-ready and self-employed
6.	Mudra Yojana for Women/Mahila Udyami Yojana	Ministry of Finance	Financial support	<ul style="list-style-type: none"> • Loan up to 10 lakhs with a low interest rate and no collateral security.
7.	Stand-Up-India	SIDBI	Financial support	<ul style="list-style-type: none"> • Facilitate a loan for scheduled caste and scheduled tribe borrowers
8.	Nari Roshni Scheme for Leadership Development of Minority Women	Ministry of Minority Affairs	Training	<ul style="list-style-type: none"> • Provide training, tools, and techniques for interacting with the government system • Impart knowledge of health-hygiene, leadership of women, financial literacy, etc.
9.	Mahila Shakti Kendra	Ministry of Women and Child Development	Training and capacity building	<ul style="list-style-type: none"> • Empower rural women through community participation
10.	Nari Shakti Puraskars	Ministry of Women and Child Development	Encouragement and empowerment of women	<ul style="list-style-type: none"> • 20 Nari Shakti Puraskars are conferred every year on the occasion of International Women's Day on 8th March
11.	Women Scientists Scheme	Ministry of Science and Technology	Financial aid and encouragement of women's	<ul style="list-style-type: none"> • Provide research grants to women to engage them in research in the field of science, engineering, and societal issues.

			participation in research	
12.	National Startup Awards	Ministry of Commerce and Industry	Support and inspiration	<ul style="list-style-type: none"> Awards are conferred to startups under different categories Inspired to be purposeful and create socio-economic impact
13.	BIRAC-Tie WINER Awards	Ministry of Science and Technology	Finance and Mentorship	<ul style="list-style-type: none"> 15 selected women entrepreneurs receive seed funding of INR 5 lakhs Expert mentorship is also provided
14.	Self-Employment Lending Scheme-Credit Line 1- Mahila Samridhi Yojana	Ministry of Minority Affairs	Training and Finance	<ul style="list-style-type: none"> Self-help groups are formed, and craft activity training is provided to a group of 20 women. The maximum duration of the training is six months, and a stipend is also given

Source: Department for Promotion of Industry and Internal Trade (DPIIT, 2023)

https://www.startupindia.gov.in/content/sih/en/women_entrepreneurs.html

8. CONCLUSION

In summary, the emergence of startups has fundamentally changed the global business landscape, and their growth has been primarily ascribed to innovative ideas, revolutionary technologies, and a proactive approach to problem-solving. Startups have played a major role in creating jobs, advancing economic growth, and establishing new industries over the years. The role of women is also transforming as women entrepreneurs challenge traditional norms and contribute to the diversification of leadership in the startup ecosystem. The DPIIT reports claims that there has been a notable increase in the number of women-led businesses and their involvement in management, demonstrating how their role is transforming from being homemakers to wealth makers. However, several unique obstacles, such as a lack of financial knowledge & support, low self-confidence, a lack of training and productive skills, and difficulties with networking and mentorships, hinder their way to success. Addressing these challenges faced by women entrepreneurs has become a necessity as well as a priority of the government, as empowering women in the startup ecosystem not only promotes equality but also leads to a more robust, sustainable entrepreneurial landscape. The Indian Government, through its various schemes, campaigns, and awards, is lending financial as well as cognitive support to them. Alongside support, these initiatives are also motivating other women to transcend their limitations and engage themselves in the entrepreneurial ecosystem.

9. REFERENCES

- [1] Amaral, M., de Oliveira Massad, D., Aparecida Dandolini, G., & Mafra Lapolli, É. (2019). CHALLENGES OF THE WOMAN ENTREPRENEUR. *International Journal for Innovation Education and Research*, 7(7), 347-361.
- [2] Andaleeb, U., & Singh, S. D. (2016). A study of Financing Sources for Start-up Companies in India. *International Review of Business and Finance*, 8(1), 1-4.
- [3] Askew, N. P. (2023). Leading With Principle: The Essential Role of Ethical Leadership in Adaptive Environments. *Journal of Leadership, Accountability & Ethics*, 20(5).
- [4] Azam, A. (2021). Role of Startup India in Economic Development of India. *GIS Science Journal*.
- [5] Chilamkurti, N., Poongodi, T., & Balusamy, B. (Eds.). (2021). *Blockchain, Internet of things, and artificial intelligence*. Crc Press.
- [6] Choudhary, L., Taparia, K., Pandey, A., & Kakkar, A. (2022). Indian startup ecosystem 2021. URL: <https://hanshodhsudha.com/volume2-issue4/Manuscript>, 202.
- [7] DPIIT (10 April, 2023). Women Entrepreneurship in India. Retrieved from: https://www.startupindia.gov.in/content/sih/en/women_entrepreneurs.html
- [8] Gupta, S., Satpathy, B., & Baral, S. K. (2022). A study on Start-up India: a governmental initiative to boost entrepreneurship, growth and employment generation of tribal youth of TSP region of Southern Rajasthan. In *Proceedings of the 2nd Indian International Conference on Industrial Engineering and Operations Management* (pp. 476-486).
- [9] https://www.startupindia.gov.in/content/sih/en/women_entrepreneurs.html

- [10] Jayanthi, D. R. (2019). A Study about entrepreneurship in india and its promotion under'startup India'Scheme. *Iconic research and engineering journals*, 2(11), 118-26.
- [11] Kumar, J. S., & Shobana, D. (2023). Evolution and significance of women entrepreneurs in India. *World Journal of Advanced Research and Reviews*, 19(2), 1445-1458.
- [12] Kumar, K. K., Mishra, S. K., & Budhwar, P. (2021). Employee turnover in India: insights from the public–private debate. In *Global talent retention: Understanding employee turnover around the world* (pp. 213-238). Emerald Publishing Limited.
- [13] Manshani, S., & Dubey, A. (2017). Startup women in startup India: A study of women entrepreneurs in India. *International Journal of Business Management (IJBGM)*, 6(4), 91-100.
- [14] Nehru, J., & Bhardwaj, S. (2013). Women Entrepreneurship in India: Issues & Problems “You Can Tell the Condition of a Nation by Looking at The Status of Its Women. *Spectrum: A Journal of Multidisciplinary Research*, 2(7), 8-16.
- [15] Nirmala, G., & Priya, K. (2023). WOMEN ENTREPRENEURS IN STARTUP INDIA: CHALLENGES AND OPPORTUNITIES. *Current Advances in Multidisciplinary Research*, 150.
- [16] Pathania, A. (2022). Women-led startups in India: Funding schemes and challenges. *Trinity Journal of Management, IT & Media (TJMITM)*, 12(Special Issue), 33-38. DOI: 10.48165/acspublisher.tjmitm.2022.01
- [17] Radas, A. (2023). Inclusive business models as drivers of sustainable growth and social progress. *Journal of Policy Options*, 6(3), 9-14.
- [18] Sharma, A. (2021). Entrepreneurial Finance: External Financing Mechanisms of Start-ups with Special Emphasis on the Role of Venture Capital in the Indian Start-up Ecosystem. *International Journal of Scientific and Management research*, 4(8), 32-47.
- [19] Singh, r. (2023). Startup india: evaluating the impact of government initiatives on entrepreneurship, innovation, and economic growth. *Sudarshan Research Journal*, 52-64.
- [20] Singh, R. K., Kumar, A., Kumar, R., Kumar, R., & Pawar, S. (2023). The Role of Higher Education Institutes in Achieving the Gole of Developing. Prof.(Dr.) Anju Singh Prof. Bharti Dixit, 223.
- [21] Sonkar, N. (2021). An Analytical Study on Problems and Challenges Faced by Startup India Initiative and its Role on Economic Development of India. *Turkish Online Journal of Qualitative Inquiry*, 12(9), 6000-6005.
- [22] States Startup Ranking 2022 National Report. Re
- [23] Tiwari, A., Hogan, T., & O'Gorman, C. (2021). The good, the bad, and the ugly of 'Startup India'-a review of India's entrepreneurship policy. *Economic & Political Weekly (EPW)*, 56(50), 45-52.
- [24] Vedula, S., Doblinger, C., Pacheco, D., York, J. G., Bacq, S., Russo, M. V., & Dean, T. J. (2022). Entrepreneurship for the public good: A review, critique, and path forward for social and environmental entrepreneurship research. *Academy of Management Annals*, 16(1), 391-425.
- [25] Wagner, S. M. (2021). Startups in the supply chain ecosystem: an organizing framework and research opportunities. *International Journal of Physical Distribution & Logistics Management*, 51(10), 1130-1157.
- [26] Awan, A., & Hasnain, M. H. (2023). Technopreneurship for Driving Economic Growth in Pakistan: A Comprehensive Literature Review. *Journal of Policy Research*, 12(4), 60-66.
- [27] Subrahmanya, M. B. (2021). Entrepreneurial ecosystems for tech start-ups in India: Evolution, structure and role (Vol. 1). Walter de Gruyter GmbH & Co KG.
- [28] Dwivedi, D. P. K. (2022). Startup Ecosystem in India: Investment Concentration, Unicorns and Performance of Government. *Stochastic Modeling & Applications*, 26(3).
- [29] Crnogaj, K., & Rus, M. (2023). From start to scale: Navigating innovation, entrepreneurial ecosystem, and strategic evolution. *Administrative Sciences*, 13(12), 254.
- [30] Zarrouk, H., El Ghak, T., & Bakhouch, A. (2021). Exploring economic and technological determinants of FinTech startups' success and growth in the United Arab Emirates. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 50.
- [31] Xie, Z., Qu, L., Lin, R., & Guo, Q. (2022). Relationships between fluctuations of environmental regulation, technological innovation, and economic growth: A multinational perspective. *Journal of Enterprise Information Management*, 35(4/5), 1267-1287.
- [32] Antonites, C. M. (2021). Meeting people where they are at: The role of small-scale gender advocacy organisations in promoting digital inclusion in South Africa (Doctoral dissertation, Queensland University of Technology).
- [33] Shah, F., & Jokhi, M. E. (2023). A study on effect of government policies on startup. *Gap Gyan*, 5(1), 50-57.