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PREDICTIVE ANALYSIS ON START-UP GROWTH IN EAST ZONE WITH REFERENCE TO INDIA

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Abstract

In the dynamic landscape of business, start-ups emerge as pioneers, driven by innovation and a desire to meet unmet market needs. This paper focuses on exploring the unique dynamics of start-ups within the East Zone of India and understanding the factors influencing their growth trajectory. Additionally, it examines the challenges encountered by these budding enterprises. Establishing a start-up entails meticulous planning, securing adequate funding, assembling a proficient team, devising an effective marketing strategy, and maintaining unwavering perseverance. In the East Zone, start-ups flourish under the supportive umbrella of government initiatives, alongside advancements in digital infrastructure and access to a skilled workforce. However, they face hurdles such as funding constraints, navigating complex regulatory frameworks, talent retention, and the limitations posed by a comparatively smaller market size. This research endeavours to provide insights into the evolution of start-ups in the East Zone of India, shedding light on their journey towards innovation and growth.

Keywords: East Zone, Start-ups, Challenges, Growth Factors, India

1. Introduction

Start-ups are key players in economic transformation. They ignite innovation and progress across various industries. These businesses are usually founded with a vision to address societal needs or disrupt existing markets. By using technology, creativity, and understanding market dynamics, start-ups introduce new solutions that meet consumer needs and create new market opportunities. Their flexible nature allows them to adapt quickly to changes, identify new trends, and capitalize on untouched market niches. As growth engines, start-ups contribute to job creation, attract investment, and promote entrepreneurship, thus creating a vibrant innovation and enterprise ecosystem.

Start-ups also promote collaboration and knowledge exchange within the business community. They can form strategic partnerships with established companies, academic institutions, and government agencies to accelerate their growth. Operating in ecosystems characterized by open innovation, start-ups can share ideas freely and encourage collaboration. This not only increases their competitiveness but also contributes to the overall dynamism and resilience of the entrepreneurial ecosystem.

Start-Ups In India

The start-up ecosystem in India has grown significantly in recent years. This growth is driven by supportive policies, expanding digital infrastructure, and a vibrant entrepreneurial culture. Initiatives like Start-up India have provided major support to start-ups by offering incentives, funding, and regulatory reforms. This has encouraged entrepreneurs to pursue their business ideas, leading to a surge in start-up ventures across various sectors

including technology, e-commerce, healthcare, and agriculture. The availability of venture capital, the emergence of angel investors, and the establishment of technology incubators have provided start-ups with more opportunities to access capital, mentorship, and market networks.

India's large population of young and tech-savvy individuals has also supported the growth of start-ups by creating a large market for innovative products and services. The widespread internet penetration and increasing smartphone adoption have democratized access to information, markets, and resources, providing equal opportunities for entrepreneurs. Furthermore, a strong network of academic institutions and research centers has nurtured a pool of skilled talent capable of driving innovation and technological advancements. As a result, India has become one of the fastest-growing start-up ecosystems globally.

Start-Ups In The East Zone

The East Zone of India, including states like West Bengal, Bihar, Odisha, Jharkhand, and the northeastern states, is a diverse and dynamic region for entrepreneurial activities. This region, with its diverse cultural background, economic disparities, and geographical variations, is a fertile ground for the emergence and growth of start-up ventures. This paper aims to thoroughly explore the start-up ecosystem in the East Zone, examining the factors driving their formation, evolution, and the challenges they face.

In the East Zone, start-ups face an array of opportunities and challenges shaped by regional demographics, infrastructure constraints, and socio-economic dynamics. While the region offers a rich cultural heritage, a large consumer market, and untapped potential across sectors, start-ups also face infrastructural gaps, bureaucratic hurdles, and talent retention challenges. However, these challenges also present opportunities for innovation, collaboration, and inclusive growth. Through strategic partnerships, technological innovation, and adaptive business models tailored to local nuances, start-ups in the East Zone can harness their resilience and creativity to overcome obstacles and carve a niche in the competitive marketplace, driving economic development and societal progress.

2. Literature Review

Bala Subrahmanya (2015), focuses on the rise of new generation start-ups in India and explores the lessons that can be learned from their growth trajectory. This study aims to examine the characteristics of the start-up ecosystem, assess its adequacy for fostering start-up promotion, and suggest measures to strengthen it. Additionally, the paper traces the historical development of start-ups in India, analyzes their employment contribution in relation to the organized sector, and emphasizes the importance of new generation start-ups for productive employment generation, economic transformation, and overall growth.

Joshi Kshitija's (2014), empirical study, the relevance of ecosystem-related characteristics in the formation and expansion of high-tech start-up clusters in India is established. It is mostly based on secondary data collected between 2005 and 2013 from six significant Indian start-up clusters. First off, it is discovered that the most significant drivers are neither classic infrastructure-related variables nor a generally strong macroeconomic environment. What appears to be most important are start-up ecosystem-specific criteria such as Internet penetration, transaction flow volume, VC financing availability, and a pre-existing critical mass of relevant high technology enterprises and skill sets. Above all, this article makes the point that a thriving start-up environment is not a guarantee that results from strong economic development on its own. Instead, it must be the outcome of deliberate and coordinated legislative initiatives at all levels that specifically address the primary difficulties early-stage startups encounter.

Kalyanasundaram (2021), study highlights the life expectancy of tech start-ups in India and the factors that contribute to their failure were investigated. Notwithstanding vulnerability and a great deal of uncertainty,

entrepreneurs foster their dreams of creating digital start-ups that enable important advancements by aggressively overcoming several obstacles to prevent failures. This essay seeks to address the questions of how quickly tech start-ups fail given their multi-stage formation lifecycle and what characteristics accelerate tech start-up failure over time. In the context of India's rising economy, where an ambitious start-up ecosystem is attempting to expand at an extraordinary rate, these problems have not been sufficiently addressed.

Michael Lounsbury (2018), the core of the contemporary economy is innovation and entrepreneurship. The cultural factors that influence innovation and entrepreneurship are, however, less well understood by academics than the economic factors that have long been studied. Culture has been seen as a limiting factor that restricts and impedes the emergence of novelty in the literature that has already been written about how innovation and entrepreneurship are shaped by culture. This is particularly valid for innovative and entrepreneurial economic initiatives. In this special issue, we emphasise the crucial role that culture plays in creative and entrepreneurial endeavors—a phenomenon we call "cultural entrepreneurship"—and we argue that academics should adopt a more expansive understanding of culture in order to emphasise the symbolic meaning systems that entrepreneurs employ as tools to aid in their quest of novelty. This article discusses how the articles in this special issue use such modern perspectives on culture, helping to shape an interesting academic agenda. Through the use of diverse empirical contexts and approaches, the papers produce innovative and thought-provoking understandings on cultural entrepreneurship. We highlight potential future directions and research issues by using their contributions.

Agnieszka Scala (2018), In the age of the digital revolution, outlines the traits of startups as an expression of creative entrepreneurship. A developed, general definition of a startup is presented as the chapter comes to a close. First, a presentation of the new market reality is made, one that was moulded by the economic, social, and digital revolutions that gave rise to startups—new, distinct organisational forms. The definitions of startups that now exist are then examined, and a model of the startup development process is created. Polish and international startup examples are used to illustrate these assessments. Lastly, the notion of the "spiral definition of a startup" is put out.

Problem Statement

In the Changing technology Scenario, innovation and Product development play a vital role in any developing country. In this respect, the government has initiated and framing guidelines to develop youth skills and Knowledge for innovative ideas are converted into start up. Entrepreneurship culture is not new to India and other developed countries where as in 21st Century, startup creates more economy and employment hence the Indian government formulated good governance and policies for promoting start up in India, based on the initiatives the Indian start up constantly increased 82500 by 2023. Especially in East zone, the area is still to improve in terms of educations, employment and economic development though the constraints are there the east zone performance in start up progress is low as compared to other zone in India. Hence, the researcher has attempted to analyze east zone performance of start up and forecasted till 2027.

Objectives of the Study

- To analyze the growth of start up in east zone in the selected states
- To identify forecasting the growth of start up in the selected zone

3. Methodology

Research design is blueprint to carry out the research objectives and inferences, in this respect the research has focused on the start-up growth in east zone. In this study the researches has used secondary data, and the

information collected from Department of industry and commerce bulletins, magazines and journals. The study has used analytical method to analyze the data's and the period of study for the research is seven years from 2016 to 2022 and the areas covered for the study is eight states like Manipur, Meghalaya, Jharkhand, West Bengal, Bihar, Mizoram, Nagaland, Odisha, and Sikkim. In India there four zones for measuring start up growth, the current study focused on east zone start-up progress from 2016 onwards, the east zone start up performance in number wise is low as compared to other zones in India. The researcher has used regression tool to analyse the data for trend projection of start up in the selected east zone.

4. Data Interpretation

Table 1: Growth of Start-ups in INDIA- East Zone

	2016	2017	2018	2019	2020	2021	2022
Manipur	0	4	7	6	12	37	13
Meghalaya	0	0	2	5	0	9	7
Mizoram	0	0	2	1	1	2	1
Nagaland	1	4	2	2	5	7	3
Odisha	4	108	166	184	277	392	198
Sikkim	0	1	0	2	1	3	1
West Bengal	8	171	271	303	398	686	464
Bihar	1	47	145	154	258	390	242
Jharkhand	2	35	85	88	164	191	110
East Zone	**16**	**370**	**680**	**745**	**1116**	**1717**	**1039**

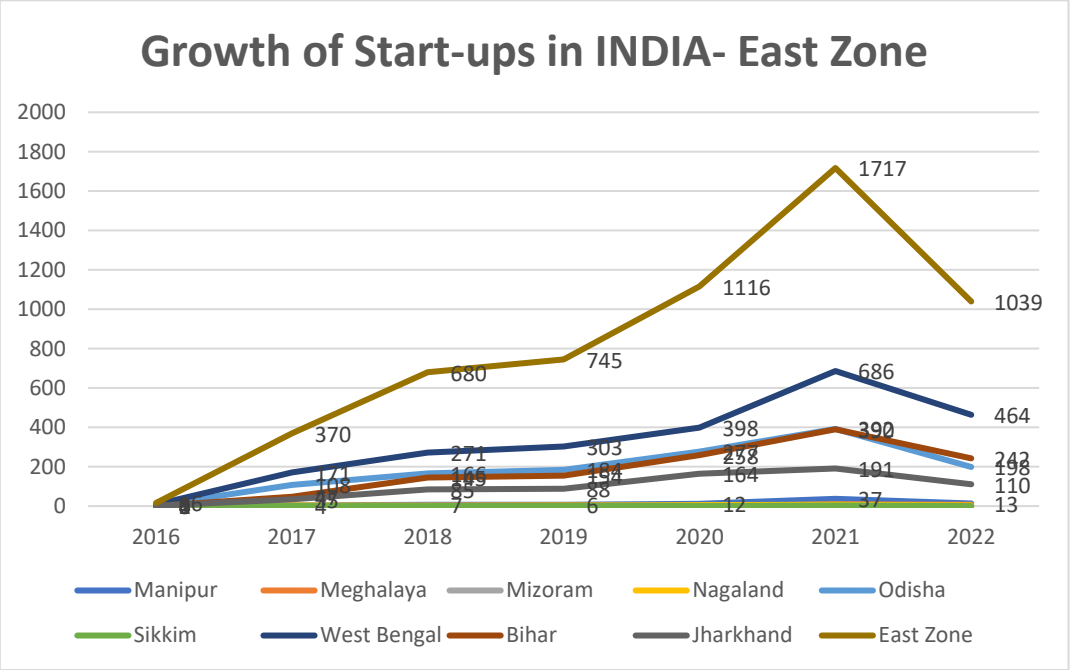

Figure 1: Growth of Start-ups in INDIA- East Zone

The above exhibits the start-up growth performance of the east zone consisting of nine states such as Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, West Bengal, Bihar and Jharkhand. The top performing state in the east zone during the study period was West Bengal, which had only 8 startups in the year 2016 and the startup

number increased to 686 in the year 2021, indicting a growth of 86 times, one of the highest startup growth rates in India. However, in the year 2022 the startups reduced to 464 in number declining by 32%.

Bihar state was the second in terms of startup growth performance in the east zone, starting with just 1 startup in the year 2016 and grew steeply to 390 startups in the year 2021, whereas the startup numbers declined by 38% to 242 in the year 2022.

The third state in this study was Odisha, which had 4 startups in the year 2016 and witnessed a steep growth during the study period and reached 392 startups in the year 2021, which decreased to 198 startups in the year 2022, indicating a decline of 49%. Jharkhand was the fourth state with respect to the startup numbers in the east zone, starting with 2 startups in the year 2016 and number increased the 191 in the year 2021, indicating a growth of 95 times during this period, which declined to 110 startups in the year 2022, depicting a 42% decline.

Apart from Nagaland, which had 1 registered startup in the year 2016, the remaining states namely Manipur, Meghalaya, Mizoram and Sikkim had no startups registered during the beginning of the study period in 2016. However, Manipur had a considerable increase in the number of startups, which reached 37 startups in the year 202, followed by Meghalaya, Nagaland, Sikkim and Mizoram, which had only 9, 7, 3 and 2 startups in the year 2016 respectively. This number further declined in the following year 2022 and the states Manipur, Meghalaya, Nagaland, Sikkim and Mizoram had 13, 7, 3, 1 and 1 startups respectively at the end of the study period in 2022, indicating the lowest number of startups in the east zone, as well as in all the zones across India.

Table 2: Projected Growth of Start-ups in INDIA- East Zone

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Start-ups	16	370	680	745	1116	1717	1039	1697	1862	2033	2221	2351

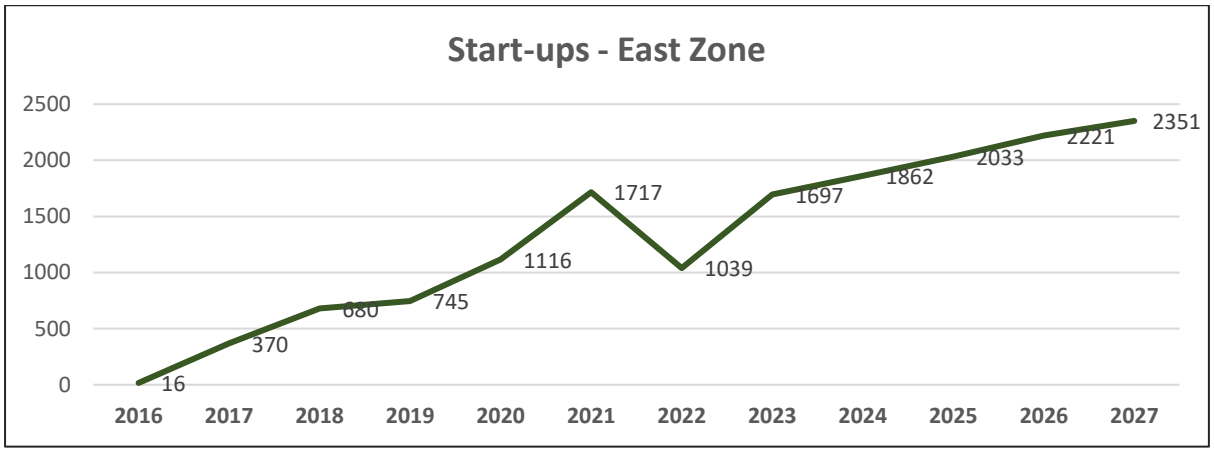

Figure 2: Projected Growth of Start-ups in INDIA- East Zone

The above provided data offers insights into the growth of startups in the East Zone of India from 2016 to 2027. The startup landscape in the East Zone witnessed gradual growth during the study period. Beginning with 16 startups in 2016, the zone saw a steady increase, reaching 1717 startups by 2021. This represents a substantial growth of approximately 106 times over the six-year period from a small initial base, indicating the nascent stage of the startup ecosystem in the region. However, in 2022, the momentum appeared to decline as the number of startups declined to 1039. This decline, amounting to approximately 39.56% from the previous year, suggests a temporary setback in the East Zone's startup growth. The forecasted trend from the year 2023 to year 2027

indicates a gradual recovery and growth in startup activity within the East Zone. Projections anticipate a steady rise in startup numbers, with expectations of reaching 2351 startups by the year 2027. This forecasted growth represents an increase of approximately 126.27% from the year 2022, indicating a positive outlook for the region's startup ecosystem.

5. Conclusion

Start up is one of the key factor for the country economy and employment in the changing scenario, India has empowered and to increased more number of start up in the competitive start up world. The recent studies reveals that there are many Indian fortune start up shining in terms of introducing novel ideas, technologies and scale of operations, the start-up data reveals in east zone in the year 2016 was just sixteen numbers, in many states the start-up number is not satisfactory level where as in 2022 almost all the states are showing a positive progress and the number of start up in double digits performance. In 2016 the total number of start up in the selected states around sixteen where as the start-up is sharply increased to 1717 in the year 2021, for the immediate next year 2022 the start-up growth has reduced to 1039. The reasons for decline the growth rate is due to foreign investors withdraw funds, lack of state government supports, inflation, interest rates, etc the study reveals for the trend projections for all the selected states in east zone the start-up growth is going up which indicates a positive way to develop new start-up and generate more economy and employment in east zone.

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