

**UNDERSTANDING THE USE OF MANAGEMENT TECHNIQUES
USED BY LOCAL INFORMATION TECHNOLOGY COMPANIES IN
INDIA TO OVERCOME MULTINATIONAL BARRIERS**

by

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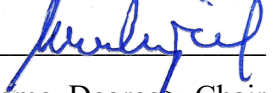
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DEDICATION

This dissertation is dedicated to my wonderful wife, Ipsita Das who has been an inspiration throughout my life and my wonderful parents, Capt. Pranjali Kumar Das and Srilekha Das for giving me hope and strength to keep moving forward and last but not the least my late brother Anurav Kumar Das who continue to be a source of moral, emotional, and divine support.

To our brothers, sisters, cousins, uncles, aunts, mentors, friends, and classmates who gave me their valuable advice. And finally, I dedicate this dissertation to the All-Powerful God and say, "Thank you for guiding me."

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ABSTRACT

In the dynamic landscape of the global information technology (IT) industry, local companies in India face unique challenges when striving to expand their operations beyond national borders. This study delves into the strategic management techniques employed by Indian IT companies to navigate and overcome barriers associated with multinational operations. The research employs a qualitative approach, combining in-depth interviews with key executives, case studies of successful ventures, and a comprehensive review of existing literature.

The study identifies key challenges such as cultural differences, regulatory complexities, and diverse market landscapes that Indian IT companies encounter during their international expansion. Through an exploration of successful case studies, the research aims to uncover patterns of management strategies implemented by these companies to not only mitigate these challenges but also leverage them as opportunities for growth.

By understanding the specific managerial approaches adopted by Indian IT firms, this research contributes valuable insights into how local enterprises can strategically position themselves in the global IT ecosystem. The findings of this study have implications for both practitioners and policymakers, offering a nuanced understanding of the management techniques that foster success in the internationalization efforts of Indian IT companies.

This research contributes to the broader discourse on the globalization of IT enterprises, shedding light on the adaptive strategies that local IT companies in India employ to thrive in an environment traditionally dominated by multinational corporations.

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CHAPTER I: INTRODUCTION

Introduction

In this era of globalization, it is evident that every company wants to take that extra mile and cross the multination barrier. Having said that it is even more important for companies in the IT sector in India to justify globalization with increasing demand of technology and IT across the global, hence, even the smaller players and start-ups across the country are trying to take a dive into this highly competitive market and create a space in the global IT sector. Any firm which wants to enter a global market and build strategic alliances with other business entities is often regulated or influenced by governmental protocols, practices and policies. However, most of the IT firm wants to curb such hurdles and move forward with an optimistic global vision.

Building a business internationally is often challenging and might need different approaches and methods at regular intervals. The first question that arises here that how would one be able to manage his/her business when the company is not based out of that country? Second question is how would one operate within the boundaries where one has minimal experience? Third question is how would one manage stakeholder's expectation?

While expanding a business globally, some of the key areas which needs to be focused on are:

Harnessing local market expertise - Building business in a new local market requires local knowledge. Therefore, it is a mandate to hire local specialist to help a business establish overseas especially in those countries local market. This is specifically important to study the idiosyncrasies of the local market and help any business to lay its foundation there. For example, small things like putting regional language sign- boards, hosting national flag of that country would substantiate and demonstrate commitment to the community and respect for local culture. Also, alternatives like specialists and business advisors who have deep expertise in a particular market and sector often acts as the base source of support in such cases.

Building partnerships in the region having a local partnership is one of the better ways to build business in the local market and develop international reputation. For example, in China, local property developers are always interested to anchor residential development. These people can advise on the best areas for development of properties. Therefore, recommendation would be that anyone looking to internationalize would certainly consider having a local partner.

Ultimately, I need to ensure that both are working towards achieving the same goal. It is no secret that global markets, including India, has a different legislation and jurisdiction in place, which provides a complex backdrop for conducting business. Therefore, to understand and abide by these laws and regulations and how they applied in practice is very important to establish a start-up and much more when these companies scale up globally.

One best method for a global business management is to utilize the skill set of a local lawyer who has an intricate understanding of the region's legislations, that way we can be assured that any business which is expanding globally will have the best possible guidance. I would encourage any business to look to regional legal advisers when internationalizing.

One of the most important aspects of internationalizing is how I communicate and manage resources, manpower and technology to meet the expectations of the people that it will inevitably impact, not least shareholders if the company is quoted. If I take an example of Cropin Technologies, which is an agri-tech startup started engaging with Netherland's government to identify the pain points of European Farmers and Agri-growers. Once they understand the need and requirement, Cropin immediately tied up with local bodies to provide support and alternatively establish its business in the market.

One key take away would be that leaders should work hard to manage shareholder expectations carefully. It is important also be willing to make bold decisions that you believe will fundamentally deliver for the business and shareholders in the long-term. Knowledge sharing is important for any business to succeed. Implementing regional structures across markets is just one way that will allow for cross-border knowledge

sharing to expand and increase acceptance. By asking teams to share insights and best practice tips, you will help to increase productivity and efficiency while also ensuring your business provides the best possible service.

1.2 Introduction to Modern India

The Indian population amounts to 1406 million and above as of June 2023 and a major volume of this population i.e., 62.5% constitutes the working age group of 15 to 59 years. Most of this population is in the age group of 15-30 years, providing an opportunity to develop skills among the working group of the country. Mobile usage among the working class in India has seen a significant rise in recent years. India has one of the largest mobile user bases in the world, with over a billion mobile phone subscribers. That being said, pertaining to the above information the usage of mobile phone among the working class of India has been very significant and plays a key role in the growth and development of India.

The significant increase in the penetration of mobile usage has been witnessing a proportional growth in connectivity and productivity of new age startups and related workspaces. The increase in mobile usage penetration has been 161% in India as per the report by the Economic survey 2019-20. The study revealed that there is an increase in usage of mobile phones by 161% in urban areas and 57% in rural areas. Such usage of mobile phones has also contributed to the tele-density of 90% in India. A report on indiatimes.com (15th Jan 2019) revealed an estimate that by 2020 there will be 442 million users of smartphones in India. Mobile phones have become an essential tool for communication and access to information among the working class in India. The budget friendly availability of smartphones and the low-cost mobile data plans have contributed to the widespread adoption of mobile devices in India too. Mobile phones are also the primary source of internet access for many working-class individuals in India. These provide an easy way internet connectivity and free access to social media platforms, communication on messaging apps and browse the internet. With the expansion of 4G & 5G networks across the country internet connectivity has also improved in terms of speed, reliability and improved connectivity. The mobile phones are typically used for voice

calls, messaging and social networking. Particularly applications like Whatsapp and Facebook are quite popular among the working class not only on a personal front but also for business and working commitments. The usage of smartphones and the 'Digital India' campaign by the Indian Government has been extremely helpful for both buyers and sellers and has significantly disrupted the Indian e-commerce business. Another very popular usage of modern India has been the mobile payment industry where apps like Paytm, Google Pay, and PhonePe allow users to make digital payments for various services, including utility bills, online shopping, and money transfers. This has facilitated financial inclusion and reduced the reliance on cash transactions. Also, mobile phones provide access to e-commerce platforms, online marketplaces, government services, educational resources, and healthcare information. Mobile apps have also emerged as a convenient way to book transportation, order food, and avail yourself of other on-demand services. This has created a unique opportunity for the entrepreneurs to provide solutions to numerous problems in various sectors, such as health and sanitation, education, rural and infrastructure development, which India with its multicultural and socio-economic differences possesses. The venturesome young population with their knowledge and creativity is the driving force behind the innovation leading to the creation of new needs, thereby enhancing the demand and supply for innovative products and services.

1.3 Introduction to Startups

To understand startups, we must first understand the concept about them and why they are formed. The word 'Startup' itself means something that is new and is born out of something new such as an idea, concept or need. 'Startup' is usually an entrepreneurial venture formed out of an idea or need as a small business, is in the initial operation stage, finding avenues for different funding options or has been currently funded by its founders, which is designed to develop, grow, and make an impact in the market through its innovative product, service, process, platform or solutions to address various business and economic problems. In which the founders strongly believe in. In today's world startups are backed by the usage of technology such as the Internet, quick commerce platforms, telecommunications, robotics etc. We often witness that startups have a high failure rate but those with disruptive strategies and innovation often stand out. Any startup which

understands the needs of the market and can build a product or service within the periphery of such demand but at the same time making it disrupt the history can confront the difficulties, scale-up higher and can grow into potential and big influential companies.

While considering a startup, these are always referred to as small scale firms with limited financial resources, small in size and usually provided multiple work opportunities. However, startups usually differ from one another and other existing market players because they work on an independent business model, idea or concept. These often help the startups to create a new customer base, create demand both vertically and horizontally across the market which is representative of scalability and growth. In today's market, where India is one of the fastest growing economies, the number of startups especially in metros like Bengaluru, Hyderabad , Pune and Delhi are thriving and lot of young generations with entrepreneurial ambitions are at its peak. India is the third largest startup ecosystem in the world (NASSCOM, 2019). As per the DPIIT, there were 27,916 startups in India which were recognized as of February 2020. It will not be wrong to depict that startups play a key role in the development and industrialization of economies around the world. It has also been witnessed that technology-based startup companies are more in number than non-technology companies globally. This is primarily because of the growing importance of the new knowledge economy. The typical proportion of innovation and obsolescence of technology has been playing a pivotal role in the growth of startups. In other words, the generation and innovation in knowledge has been rapid and such expansion has also become the cause of obsolescence of technology, the rate of mortality of startup companies has also gone up. Hence, it is paramount for the entrepreneur not only to have the best idea but also to have a great team, evolving and scabble technology, better understanding of market and competition, network with the startup ecosystem, understand the regulatory policies, calculate the risk involved. And overall, implement great strategies for the survival of these startups.

If we consider the volume of startups in India, it has still not reached the maturity stage, but the revolution of startups and its culture has significantly contributed to the Indian economy in multiple ways. It is even more important today to support and study the startup ecosystem to understand the patterns, strategies and various other interrelated and interactive components. It is true that the pandemic COVID-19 has disturbed some

entrepreneurs, but smart and enthusiastic entrepreneurs have found a way to not only sustain but find something new to support mankind and the economy. For example, the Work From Home concept and associated technology, infrastructure, equipment's etc. are born out of the pandemic. Hence. Some entrepreneurs might lose it, but entrepreneurship has been evolving throughout. The recent Startup Pulse Survey- Q1 2020 by NASSCOM reported that 40% of Indian tech startups have shut down their businesses temporarily and few are closing as they were unable to sustain the pandemic situation. To mention further, despite the pandemic situation, most early and mid-stage tech startups were operating in India with bootstrap financing. If we compare a segregation among the startups, various growth verticals like health care and EduTech and grasping the opportunities in various tech sectors such as artificial intelligence, IoT and Cloud technology. If we consider the manufacturing and service sectors, agile automation, supply chain, decentralization, glocalization, resilient, reduced cost of ownership, remote control and automation of plans are the strategies that are implemented for optimal utilization of technology. Hence, it is significant that the role of startups is very important for the economic development of a country. There is not much significant research being done with reference to the underlying importance of the use of management techniques use by local Information Technology companies in India to overcome multinational barriers. This study will be helpful to the startups and local IT companies to understand the concept and strategies to extend local businesses to international corridors.

1.4 Evolution of Startups

The origin of the term startup was referenced in 1550 for the first time in history as a company that is new. The term was first used by Forbes magazine in the year 1976, and in 1977 an article was published in Business Week associating startups with 'fast-growing' and with 'high-technology fields. The first word startup was formed with the British East India company dating back to 18th century. However, the importance of startup came into existence only during the formation of the Silicon Valley business ecosystem. Also, during the late 90s and the 20th century with the birth of the Internet or more predominantly theword.com that came into existence was a game-changing experience. The birth of Internet based companies like IBM, Apple and Microsoft

revolutionized the information technology industry as a whole. Soon these companies gained tremendous acknowledgement across the globe and today these companies became a global sensation. Not only the Stock Exchange value was enhanced but also these companies contributed to the global economy. This kind of growth and revolution in the information technology industry attracted a lot of investors across the globe cool pitched not only to invest but also to vouch for such technology startups to go public with their initial public offer, boosting the entrepreneurial activities across continents. Since then, a lot of entrepreneurs got many extraordinary ideas and concept to build their own startups. Even today we see a lot of youngsters marching into our entrepreneurial journey without giving it a second thought. This has been possible only because of the information technology revolution across the globe. Today a lot of startups would like to enhance their business by stepping into cross-border. As the countries across the globe are converting into knowledge-based economies due to their unorthodox solutions to socioeconomic problems, there is an increase in the IT companies.

If we investigate the Indian startup ecosystem, the emergence was quite recently that is post liberalization of the Indian economy in 1995-1996 where a lot of youngsters interested in software and Information Technology moving to the US and Europe as IT professionals helping India gain a lot of experience and knowledge. India was once the destination for IT outsourcing primarily due to its cheap labor, had 5200 tech startups, according to NASSCOM startup report 2017, and this attracted many more startups to be a part of this hub. Today's popular organization which was Indian Startups back in the days as per the Economic Times report (2017), such as Paytm, FlipKart, Ola, Oyo, Phonepe , Swiggy etc. always influenced young generations to pursue dreams and be a factor in the economic growth of India with innovation and technology. According to the NASSCOM report (2017), the Indian economy is divided by an increased number of investors, with a prolonged digital consumer base, an elevated number of mobile users, an enhanced political environment which is driving the most capable startup disciplines such as IoT, logistic tech, analytics, agri-tech, health-tech and hyper-local ecommerce. As per the same report, Bangalore, Delhi-NCR and Mumbai were the top startup destination contributing to 65% of total Indian Startups followed by cities like Hyderabad, Chennai, Pune, Jaipur, Ahmedabad. Since 2010, India has seen enormous growth in technology and

innovation in so doing creating a new attraction for entrepreneurs to regard India as a 'Startup Nation'. The rise, growth and development of Indian economy has influenced the government also to make various supporting and favorable policies and initiatives to support Startups with innovative technological solutions to address problems such as healthcare, education, poverty, logistics, agriculture, employment etc.

1.5 Building international Business

Building a business internationally is often challenging and might need different approaches and methods at regular intervals. The first question that arises here that how would one be able to manage his/her business when the company is not based out of that particular country? Second question is how would one operate within the boundaries where one has minimal experience? Third question is how would one manage stakeholder's expectation?

While expanding a business globally, some of the key areas which needs to be focused on are: Harnessing local market expertise - Building business in a new local market requires local knowledge. Therefore, it is a mandate to hire local specialist to help a business establish overseas especially in those countries local market. This is specifically important to study the idiosyncrasies of the local market and help any business to lay its foundation there. For example, small things like putting regional language sign- boards, hosting national flag of that country would substantiate and demonstrate commitment to the community and respect for local culture. Also, alternatives like specialists and business advisors who have deep expertise in a particular market and sector often acts as the base source of support in such cases. Building partnerships in the region having a local partnership is one of the better ways to build business in the local market and develop an international reputation. For example, in China, local property developers are always interested to anchor residential development. These people can advise on the best areas for development of properties. Therefore, recommendation would be that anyone looking to internationalize would certainly consider having a local partner. Ultimately, we need to ensure that both are working towards achieving the same goal. It is no secret that global markets, including India, has

a different legislation and jurisdiction in place, which provides a complex backdrop for conducting business. It is no secret that global markets, including India, has a different legislation and jurisdiction in place, which provides a complex backdrop for conducting business. Therefore, to understand and abide by these laws and regulations and how they applied in practice is very important to establish a startup and much more when these companies scale up globally. One best method for a global business management is to utilize the skill set of a local lawyer who has an intricate understanding of the region's legislations, that way we can be assured that any business which is expanding globally will have the best possible guidance. I would encourage any business to look to regional legal advisers when internationalizing. One of the most important aspects of internationalizing is how we communicate and manage resources, manpower and technology to meet the expectations of the people that it will inevitably impact, not least shareholders if the company is quoted. If I take an example of Cropin Technologies, which is an agri-tech startup started engaging with Netherland's government to identify the pain points of European Farmers and Agri-growers. Once they understand the need and requirement, Cropin immediately tied up with local bodies to provide support and alternatively establish its business in the market. One key take away would be that leaders should work hard to manage shareholder expectations carefully. You must also be willing to make bold decisions that you believe will fundamentally deliver for the business and shareholders in the long-term. Knowledge sharing is important for any business to succeed. Implementing regional structures across markets is just one way that will allow for cross-border knowledge sharing to expand and increase acceptance. By asking teams to share insights and best practice tips, you will help to increase productivity and efficiency while also ensuring your business provides the best possible service.

1.6 Need for the study

Local information technology companies in India face several challenges when competing with multinational companies (MNCs). To overcome these barriers, Indian IT companies employ various management techniques. It is furthermore important to understand and use the right strategy and technique to establish an organization especially Startups in such a way that it crosses multinational borders significantly and grow its

business to the fullest.

Indian IT companies and startups often leverage their cost advantage to compete with MNCs. They maintain a lean cost structure by optimizing operational efficiencies, utilizing local talent, and offering competitive pricing to clients. This allows them to provide cost-effective solutions compared to MNCs, which may have higher overheads and wage expectations. Such companies often specialize in niche markets or industry verticals to differentiate themselves from MNCs. By understanding the unique needs of specific sectors such as healthcare, finance, or retail, these companies can provide tailored solutions and domain expertise, giving them a competitive edge over MNCs that may have a broader but less focused offering. Indian IT companies often have an advantage in terms of agility and flexibility. They can quickly adapt to changing market dynamics, customer requirements, and emerging technologies. This allows them to be more responsive and nimbler compared to larger MNCs, which may have more bureaucratic processes and decision-making structures. Indian companies are also known for actively seeking collaborations and partnerships with both local and global organizations. Collaborations with local businesses can provide market insights, access to networks, and help in navigating regulatory challenges. Partnerships with global companies can provide access to new technologies, global markets, and client referrals.

Indian IT companies invest in research and development (R&D) activities to foster innovation and develop cutting-edge solutions. By staying ahead of the curve in terms of technology trends, they can offer unique value propositions and differentiate themselves from MNCs. Many companies also collaborate with academic institutions and participate in innovation hubs and incubators to foster a culture of innovation. Indian IT companies often prioritize building and maintaining strong relationships with their clients. They emphasize personalized service, regular communication, and understanding specific client requirements. This customer-centric approach helps in building trust and long-term partnerships, which can be a competitive advantage over MNCs that may have a more standardized approach. Indian IT companies leverage government support programs and initiatives to overcome multinational barriers. The Indian government has implemented policies and schemes to promote the growth of the IT industry, such as tax incentives,

infrastructure development, and skill enhancement programs. IT companies actively engage with these initiatives to leverage the benefits and support provided.

It's important to note that the management techniques employed may vary among Indian IT companies based on their size, capabilities, and target market. Additionally, each company's approach may evolve over time as market dynamics and competitive landscapes change. This paper is basically to understand and study the “The use of management techniques used by local Information Technology companies in India to overcome multinational barriers”. This will enable and encourage all entrepreneurs to step up and take bold decisions and use this paper as a tool to succeed in internationalization. Another benefit would be the growth of local businesses across the globe which will help in economic development.

1.7 Problem Statement

Local information technology companies in India face several challenges when competing with multinational companies (MNCs). To overcome these barriers, Indian IT companies employ various management techniques. It is furthermore important to understand and use the right strategy and technique to establish an organization especially Startups in such a way that it crosses multinational borders significantly and grow its business to the fullest. Indian IT companies and startups often leverage their cost advantage to compete with MNCs. They maintain a lean cost structure by optimizing operational efficiencies, utilizing local talent, and offering competitive pricing to clients. This allows them to provide cost-effective solutions compared to MNCs, which may have higher overheads and wage expectations. Such companies often specialize in niche markets or industry verticals to differentiate themselves from MNCs.

The questions which the author is focusing on is to understand and find answers for:

- If Indian IT startups which are based and operated out of India are willing to expand its business in the first hand. If yes, then from which region and industry sector and which would be the preferred country or location for such expansion.
- The author is also trying to study the difference between IT and Non-IT startup's global expansion plan and how this will encourage the next generation of

entrepreneurs in India. This is lay a foundation for the right business sector for global startup expansion plans.

- The author is also trying to find the challenges which an entrepreneur experiences during the startup expansion. This will guide the next generation of entrepreneurs for a better future.
- The author is also trying to find the answer towards international expansion of Indian startups. What is the primary factor that motivates such factor and what could be the required resources for it.

1.8 Research Objectives

By understanding the unique needs of specific sectors such as healthcare, finance, or retail, these companies can provide tailored solutions and domain expertise, giving them a competitive edge over MNCs that may have a broader but less focused offering. Indian IT companies often have an advantage in terms of agility and flexibility. They can quickly adapt to changing market dynamics, customer requirements, and emerging technologies. This allows them to be more responsive and nimbler compared to larger MNCs, which may have more bureaucratic processes and decision-making structures. Indian companies are also known for actively seeking collaborations and partnerships with both local and global organizations. Collaborations with local businesses can provide market insights, access to networks, and help in navigating regulatory challenges. Partnerships with global companies can provide access to new technologies, global markets, and client referrals.

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CHAPTER II: REVIEW OF LITERATURE

2.1 Literature Review Introduction

Identifying, exploring and searching for available information and literature in the form of articles, letters, reports, reviews, or references plays an important role in identifying questions, points, key variables, and assumptions about the research topic. This section reviews information about various startups and IT companies. Available data from 1987 to 2023 are analyzed on the importance of initiatives, the IT industry and current opportunities, challenges they confront, national government policies, and central and other support that play a key role in helping these organizations succeed abroad.

2.2 Literature Review Process

The main aim of this study is to understand the challenges and opportunities faced by starting a business, as well as the various motivations that influence entrepreneurs to start their own businesses. It also analyzes the impact of IT organization, IT Startups and other startups on the startup ecosystem and vice versa. This study collects research papers and peer-reviewed articles, books, reports and articles on business and startups from 1987 to the present. It has been observed that the published literature on Indian initiatives is much less.

2.3 Review of Literature Theory

In this chapter, I shall discuss the various theories and themes pertaining to my research subject and will try to develop themes, highlighting major concepts, influential studies, etc. I will analysis different areas of agreement and disagreements to substantiate my thesis along with a thorough study of different investigations by multiple authors on the subject.

Macmillan et al. (1987) investigated the key differences between successful and unsuccessful companies by investing in 150 companies based on 5 key factors. This study identified two factors that prevent competition and showed that business acceptance of the product is responsible for the success of the business. Macmillan and colleagues conducted research to understand why some companies succeed while others fail. They investigated 150 different companies with the aim of identifying key factors that set successful companies apart from unsuccessful ones. In the research conducted by Macmillan et al., the researchers examined five crucial factors that might influence a company's success like **competition**. They looked at how companies dealt with competition in their respective industries. Competition is a common challenge in business, and how a company handles it can impact its success. Second factor is **product acceptance**. The researchers assessed how well a company's product was accepted by the market. In other words, they wanted to determine whether customers and clients liked and embraced the company's offerings. The third factor is **market position**. The study likely considered the position of each company within its industry or market. Being a market leader or having a strong market presence can be indicative of success. The fourth factor is **innovation**. The researchers may have examined the extent to which companies were innovative in their approach. Innovation often plays a crucial role in staying competitive and meeting changing customer demands. The last or fifth factor is resource **allocation**. Efficient allocation of resources, such as money, time, and talent, can greatly affect a company's ability to succeed. Based on these study findings and investigation, the researchers identified two critical factors that seemed to be particularly influential in determining whether a company succeeded or failed that is Competition Management and Product Acceptance. Competition Management found that how a company managed or dealt with competition was one of the key factors. Companies that effectively addressed competitive challenges were more likely to be successful. Similarly, the research on product acceptance highlighted its significance. Companies whose products were well-received and accepted by the market tended to be more successful. This implies that meeting customer needs and preferences is crucial for business success. In essence, Macmillan et al.'s study suggested that successful companies were adept at managing competition and had products that were embraced by their target

audience. These findings emphasize the importance of not only having a good product but also effectively navigating the competitive landscape in the business world.

Audretsch and Vivarelli (1996) examine changes in income options in Italian start-ups between 1985 and 1988. Networks that expand business all contribute to the creation of new companies. Audretsch and Vivarelli conducted research with the aim of examining changes in income options for Italian startup companies during the period between 1985 and 1988. They explored how various factors, including networks that facilitate business expansion, influenced the creation and success of new companies. There were three major findings from the study which are **Income Options in Italian Start-ups**, the study investigated the income options available to startup companies in Italy during the specified period. Income options refer to the various ways in which these companies could generate revenue or profit. **Role of Networks** is one of the significant findings of the study was the importance of networks in the context of business expansion. Networks here likely refer to the connections, relationships, and collaborations that startup companies establish with other entities, such as suppliers, customers, and partners. Lastly, **Contribution to New Company Creation**. The study likely suggested that these networks played a crucial role in not only the growth of existing companies but also in the creation of new ones. In other words, the ability to leverage networks to expand business activities contributed to the establishment of new startup ventures. Overall, Audretsch and Vivarelli's study highlighted that during the studied period, Italian startup companies had various income options at their disposal, and networks were instrumental in both expanding existing businesses and fostering the creation of new companies. This underscores the significance of connections and collaborations in the entrepreneurial ecosystem, as they can positively impact the growth and success of startups.

Evers (2003) examines the challenges beginners face and the complex process they go through to create. Scientists consider it necessary to understand the whole process. Researchers believe most attempts fail within a year. This study also explores the challenges that startups in industries face in their early stages. Evers conducted research with the goal of understanding the challenges that beginners, particularly those starting new ventures or businesses, encounter. The study aimed to shed light on the intricate process that individuals go through when creating something new, especially in the context

of entrepreneurship. Evers recognized the importance of comprehending this entire process, as it is considered vital by scientists and researchers. The study was divided into four major findings such as **Challenges Faced by Beginners**, Evers' study delved into the difficulties and obstacles that individuals face when they are new to a particular endeavor, such as starting a business. These challenges can encompass a wide range of issues, from financial constraints and market uncertainties to the need for acquiring new skills and knowledge. **Complexity of the Creation Process**, the research likely revealed that the process of creating something new, like launching a startup, is inherently complex. It involves a multitude of steps, decisions, and learning experiences. Understanding this complexity is crucial for individuals, researchers, and scientists seeking to support and nurture innovative and entrepreneurial endeavors. **High Rate of Startup Failures**, Evers may have highlighted that, according to researchers' beliefs, a significant number of startup attempts fail within the first year of operation. This underscores the challenges and risks associated with entrepreneurship, especially in the early stages of a venture. **Industry-Specific Challenges**, the study also explored how the challenges faced by startups can vary depending on the industry or sector in which they operate. Different industries may have unique hurdles to overcome in their initial stages of development, such as regulatory constraints, competition dynamics, or technological demands. In essence, Evers' study contributed to the understanding of the intricate and often challenging process that beginners, particularly entrepreneurs and startup founders, go through when creating something new. It emphasized the importance of recognizing and addressing these challenges to increase the chances of success, particularly in industries where startup failures are relatively common. Understanding the unique challenges of different industries can also inform strategies to support and foster innovation and entrepreneurship in those sectors.

Åstebro and Bernhardt (2003) examine the relationship between capital raised through bank loans and its impact on entrepreneurship. Research has shown that the survival of start-ups does not depend on bank loans; depends on bank loan. On the other hand, research shows that startups that are not funded by the bank have higher survival rates. Åstebro and Bernhardt conducted research to investigate the relationship between the capital raised through bank loans and its influence on entrepreneurship. Specifically,

they sought to understand how the source of funding, particularly bank loans, impacts the survival rates of startups. The study examined the common belief that the survival of startup businesses is closely tied to their ability to secure **bank loans**. Contrary to this belief, the research suggested that the mere availability of bank loans does not necessarily determine the survival of startups. Interestingly, the study found that startups not funded by bank loans tend to have higher survival rates. This implies that entrepreneurs may explore **alternative sources of funding**, such as venture capital, angel investors, personal savings, or crowdfunding, which could contribute to their long-term success. One possible interpretation of these findings is that relying solely on bank loans for startup capital may not be the most advantageous strategy. Entrepreneurs who **diversify their funding** sources might be better positioned to weather financial challenges and uncertainties in the early stages of their ventures. In summary, Åstebro and Bernhardt's study challenged the conventional notion that the availability of bank loans is the primary determinant of startup survival. Instead, it suggested that startups exploring a range of funding options beyond bank loans may have a higher likelihood of succeeding in the long term. This underscores the importance of financial diversity and adaptability in the entrepreneurial landscape, where various sources of funding can play a crucial role in shaping the fate of new ventures.

Bosma et al. (2004) concluded that investing in people and relationships can improve job performance. At the same time, they create important innovations that are used to improve human and financial performance. This study also shows that an intelligent businessperson can do better at his or her own business than others. Bosma et al. conducted research with the aim of understanding the impact of investments in people and relationships on job performance and innovation. They explored how these investments not only enhance individual job performance but also lead to significant innovations that can improve both human and financial outcomes. Three interesting objectives that came into light are **Investing in People and Relationships**: The study revealed that when organizations invest in their employees and foster strong relationships, it has a positive effect on job performance. This suggests that supporting and developing employees' skills and nurturing a collaborative work environment can lead to improved individual performance. **Innovation as an Outcome**: Importantly, the research indicated that these investments in people and relationships also result in the creation of important innovations.

When individuals are encouraged to work together and their skills are honed, they are more likely to generate novel ideas and solutions. These innovations can have wide-reaching impacts on the organization's performance. **Competitive Advantage:** The study's findings imply that individuals who are skilled at fostering relationships and making intelligent business decisions tend to perform better in their own businesses compared to others. In essence, being astute in building relationships and making strategic choices can be a competitive advantage in the business world. In summary, Bosma et al.'s study highlights the significance of investing in people and cultivating relationships within organizations. Such investments not only lead to improved job performance but also drive innovation, which can benefit both human and financial aspects of a business. Additionally, the research underscores the role of individual acumen in business success, emphasizing the value of intelligence and skill in decision-making and relationship-building for entrepreneurs and business leaders.

Day et al. (2004) emphasizes the need to expand the concept of leadership in enterprises and highlights the consequences of shared leadership necessary for enterprise expansion and continuity. The study by Day et al. aimed to broaden the traditional concept of leadership within organizations, emphasizing the importance of shared leadership. It explored how shared leadership is not only necessary for the expansion of enterprises but also critical for their ongoing continuity and success. The study challenged the conventional view of leadership as a role primarily held by a single individual at the top of an organization's hierarchy. Instead, it advocated for a more inclusive perspective where **leadership is a collective and shared responsibility** that can be distributed throughout an organization. The research highlighted that for enterprises to grow and expand effectively, they should embrace **shared leadership**. This means that leadership responsibilities are distributed across various members and levels of the organization, enabling a broader range of individuals to contribute their skills and insights to the growth process. Shared leadership was not only seen as beneficial for expansion but also crucial for the ongoing **continuity and success of enterprises**. By distributing leadership responsibilities, organizations can tap into a diverse set of talents and perspectives, adapt more readily to changing circumstances, and make informed decisions collectively. In summary, Day et al.'s study underscored the importance of redefining leadership within enterprises. It argued

that leadership should not be confined to a single figurehead but should be shared across the organization. This approach not only facilitates expansion by leveraging a broader pool of talent but also ensures the continued vitality and adaptability of the enterprise. In essence, shared leadership is portrayed as a key driver for growth and sustainability in today's dynamic business environment.

Neck et al. (2004) investigate the formation of new companies in their study. Due to the existence of incubators, the amount of division has increased, which has led to the formation of high-tech companies. In their research, they found that the infrastructure and culture of the region contributed to the rise of high-tech companies. Neck and colleagues conducted research to investigate the process of new company formation, with a particular focus on the role of incubators. They explored how the presence of incubators has contributed to an increase in the formation of high-tech companies. The study also examined the influence of regional infrastructure and culture on the emergence of these high-tech ventures. The study has three insights such as **Incubators and New Company Formation**: The study revealed that the presence of incubators has played a significant role in fostering the formation of new companies. Incubators are environments that provide support, resources, and mentorship to entrepreneurs and startups, facilitating their growth and development. **Division and High-Tech Companies**: The research noted that the availability of incubators has led to a greater division of labor and specialization in entrepreneurial activities. This division has, in turn, contributed to the emergence of high-tech companies, which often require specialized knowledge and expertise. **Regional Infrastructure and Culture**: Neck et al. found that the infrastructure and cultural attributes of a region have a substantial impact on the growth of high-tech companies. Regions with well-developed technology infrastructure, access to research institutions, and a culture that encourages innovation are more likely to foster the growth of high-tech ventures. In summary, Neck et al.'s study emphasized the role of incubators in supporting new company formation, especially in the high-tech sector. These incubators provide a nurturing environment for entrepreneurs, encouraging specialization and innovation. Additionally, the study highlighted the significance of regional factors, such as infrastructure and culture, in influencing the growth of high-tech companies. In essence, a

combination of supportive environments and regional attributes can contribute to the success and proliferation of high-tech startups.

Colombo and Grilli (2005) conducted a study on the relationship between venture capital and bank loans. Research has shown that startups that make money from their own resources, family or friends are not small compared to bank loans. Colombo and Grilli conducted research to investigate the relationship between venture capital and the financial resources that startups use to fund their operations. Specifically, they explored whether startups that generate capital from their own resources, family, or friends differ significantly from those relying on bank loans. The study examined the various sources from which startups obtain their initial capital. These sources typically include the startup's own funds, contributions from family or friends, bank loans, and potentially venture capital investment. The research suggested that startups funded through their own resources, family contributions, or support from friends may not significantly differ in size or scale when compared to those relying on bank loans. This implies that startups can achieve similar levels of growth and development regardless of the funding source, at least in terms of size. Although not explicitly mentioned, the implication may be that venture capital investment brings unique benefits beyond just funding. Venture capitalists often provide expertise, mentorship, and access to networks, which can be valuable to startups beyond the initial capital infusion. In summary, Colombo and Grilli's study examined the sources of startup capital and suggested that startups funded through their own resources, family, or friends might not differ significantly in size compared to those relying on bank loans. This finding challenges the notion that external financing, such as bank loans, is always a prerequisite for significant startup growth. However, it's important to note that venture capital investment might offer distinct advantages beyond mere financial support, which can contribute to a startup's success in various ways.

Gelderen, Thurik, and Bosma (2005) conducted a 3-year study on 517 entrepreneurs and found that 195 startups showed signs of success, while 115 startups failed. Research shows that startups perceive business risk as having an impact on their success or failure. Gelderen, Thurik, and Bosma conducted a three-year study involving 517 entrepreneurs to investigate the factors that contribute to the success or failure of startups. Specifically, they examined how entrepreneurs perceive business risk and its

influence on the outcomes of their ventures. Over the course of the three-year study, the researchers observed that out of the 517 startups studied, 195 showed signs of success, while 115 experienced failures. This indicates that there is significant variation in the outcomes of startups. The study revealed that the way entrepreneurs perceive and manage business risk can have a significant impact on the success or failure of their startups. Business risk refers to the uncertainty and potential negative outcomes associated with entrepreneurial activities. Entrepreneurs who had a better understanding of business risk and took proactive measures to mitigate it were more likely to achieve success with their startups. This suggests that risk management plays a crucial role in startup outcomes. Conversely, entrepreneurs who underestimated or failed to adequately address business risk were more likely to experience failure with their startups. Neglecting risk factors can lead to unexpected challenges and setbacks. In summary, Gelderen, Thurik, and Bosma's study highlighted the significant role that **entrepreneurs' perception of business risk plays in the success or failure of startups**. Entrepreneurs who are aware of the risks associated with their ventures and take proactive steps to manage and mitigate those risks are more likely to achieve success. Conversely, underestimating or neglecting business risks can increase the likelihood of startup failure. This underscores the importance of risk management as a critical skill for entrepreneurs and startup founders.

Ensley et al. (2006) examines the impact of vertical and co-leadership on the income and growth performance of startups. The researchers found that while both practices have a significant impact on startups, the leadership role contributes to the growth of the business. Ensley and colleagues conducted research to explore the effects of two specific leadership practices, namely vertical leadership and co-leadership, on the income and growth performance of startups. They aimed to understand how these leadership approaches influenced the outcomes of new businesses. Vertical leadership refers to a traditional leadership structure where one person holds the primary leadership role, often at the top of the organizational hierarchy. The study examined the impact of this conventional leadership style on startups. Co-leadership, on the other hand, involves multiple individuals sharing leadership responsibilities and working collaboratively to guide the organization. The researchers also investigated the effects of this collaborative leadership approach. Vertical leadership was found to contribute significantly to the growth

of startup businesses. This suggests that having a clear leader with defined responsibilities and authority can be beneficial in driving the growth and development of a new venture. Co-leadership, while impactful, was not explicitly identified as a primary driver of growth. It's possible that the collaborative leadership approach may have other benefits, such as fostering a culture of innovation or better decision-making processes, which were not the primary focus of this study. In summary, Ensley et al.'s study examined the effects of vertical leadership and co-leadership on startup performance. While both leadership practices had a significant impact on startups, vertical leadership was particularly associated with business growth. This suggests that having a clear and defined leader may play a crucial role in driving the growth of a startup, while co-leadership may have other benefits that were not the primary focus of this research. The study's findings indicated that both vertical leadership and co-leadership had a significant impact on startups. However, the nature of their impact differed.

Pearce et al. (2006) also explains how ethically shared leadership the potential must explain its advantages and value. It shows that the startup's success story is bad and that the difference between innovation and creativity is a myth, not a fact. Pearce and colleagues conducted research with a focus on exploring the concept of ethically shared leadership and its potential benefits. They aimed to elucidate the advantages and value of shared leadership that is grounded in ethical principles. Additionally, the study addressed the notion that the success stories of startups might not always paint a complete or accurate picture, and it challenged the idea that the distinction between innovation and creativity is a clear-cut fact. The study delved into the concept of ethically shared leadership, which involves leadership roles and responsibilities being distributed among multiple individuals within an organization. Importantly, this form of leadership is guided by ethical principles, emphasizing fairness, integrity, and responsible decision-making. Pearce et al. likely highlighted the advantages of ethically shared leadership, such as improved decision-making, increased employee engagement, and a more inclusive and ethical organizational culture. Ethical shared leadership can foster a sense of ownership and responsibility among team members. The study raised questions about the narratives of startup success stories. It suggested that the portrayal of startups as uniformly successful might not always reflect the reality. Startups face numerous challenges, and their outcomes can vary widely. This

challenges the myth of effortless success often associated with startups. The research may have questioned the clear distinction made between innovation and creativity. While these terms are sometimes used interchangeably, the study suggested that the boundary between them is not as distinct as commonly thought. Innovation often involves the practical application of creative ideas, blurring the lines between the two concepts. In summary, Pearce et al.'s study focused on ethically shared leadership and its advantages, emphasizing the importance of ethical principles in leadership practices. It also challenged the idealized narratives of startup success and questioned the clear demarcation between innovation and creativity. The research encourages a more nuanced and ethically grounded approach to leadership and acknowledges the complexities of entrepreneurial endeavors.

Bhagmar and Verma (2006) study, the findings revealed that the only way that cannot be defeated for entrepreneurial activity to be achieved through the capability of groundbreaking innovation and imagination. However, the approach is limited due to fear of the unknown. Bhagmar and Verma conducted a study with the aim of understanding the factors that contribute to entrepreneurial success. Specifically, they investigated the role of groundbreaking innovation and imagination in entrepreneurial activity. The study found that **groundbreaking innovation and imagination** are critical components of entrepreneurial activity. Entrepreneurs who are capable of thinking creatively and pushing the boundaries of what is known in their field tend to have a higher likelihood of success. Despite the importance of groundbreaking innovation and imagination, the research highlighted a limitation. Many entrepreneurs are constrained by a **fear of the unknown**. This fear can prevent them from fully embracing innovative and imaginative approaches, as these often involve taking risks and venturing into uncharted territory. In summary, Bhagmar and Verma's study underscored the significance of groundbreaking innovation and imagination in entrepreneurial success. These qualities can set entrepreneurs apart and lead to innovative solutions and business models. However, the research also acknowledged that fear of the unknown can limit the application of these qualities. Overcoming this fear may be a crucial step for entrepreneurs seeking to fully harness their creative potential and drive entrepreneurial activity.

Dutta (2006) studied, the 'Startup India movement' which was the main subject of my research and started on 15 August 2015 and I did some research on initiatives taken by

the startup industry and the government of India. The development, analysis, evaluation and research of business objectives by new companies is what we call a "startup". This study examines several important factors in government and those related to entrepreneurship. One of the hottest topics of our time is startups. To promote entrepreneurship and create jobs, the program focuses on raising bank funds for start-ups. Dutta's research centers on the 'Startup India movement,' which was launched in August 2015. The primary aim of the study is to examine the initiatives taken by both the startup industry and the Indian government. The study focuses on understanding the development, analysis, evaluation, and research of business objectives within the context of startups. The study defines startups as newly established companies engaged in the development, analysis, evaluation, and research of business objectives. This broad definition encompasses the innovative and entrepreneurial nature of startups, highlighting their role in driving economic growth. The research emphasizes the significance of government initiatives, such as the 'Startup India movement,' in promoting entrepreneurship and job creation. This movement aimed to foster a conducive environment for startups by simplifying regulations, providing financial support, and encouraging innovation. A key focus of the 'Startup India movement' highlighted in the study is the importance of raising bank funds for startups. Access to capital is a crucial factor for the success of new ventures, and the government's efforts to facilitate funding opportunities play a pivotal role in promoting entrepreneurship. The study underscores that startups are a hot topic in contemporary discussions, given their potential to drive economic growth, create jobs, and foster innovation. Entrepreneurship has become a key focus area for governments worldwide, recognizing its importance in the modern economy. In summary, Dutta's study revolves around the 'Startup India movement' and its impact on the startup ecosystem in India. It acknowledges the broad definition of startups, emphasizes the role of government initiatives in supporting entrepreneurship, particularly in terms of bank funding, and highlights the growing importance of startups as a catalyst for economic development and innovation. The 'Startup India movement' represents a significant effort to create an enabling environment for startups to thrive and contribute to India's economic growth.

The International Center for Technology and Trade (2007) found in its study from 1991 to 2005 that most technology companies are cooperatives, while technology

companies are private companies. The main goal of most self-employed entrepreneurs is to make money. From a technology standpoint, only a few modern technology companies collaborate with Indian labs and other technologies are provided by the partners themselves. , when tech companies create products from local technologies. The study conducted by The International Center for Technology and Trade aimed to understand the dynamics within the technology industry, particularly the differences between cooperative technology companies and private technology companies. It focused on the period from 1991 to 2005. Their key findings from the study were **Cooperative vs. Private Technology Companies**: The study observed a distinction between cooperative technology companies and private technology companies. Cooperative companies, as the name suggests, tend to collaborate more with other entities, including research institutions and government agencies. In contrast, private technology companies often operate independently and may have limited external collaborations. **Entrepreneurial Goals**: The research highlighted that the primary goal of many self-employed entrepreneurs in the technology sector is profit-making. This aligns with the entrepreneurial nature of many technology ventures, where financial success is a key driver. **Collaboration with Indian Labs**: From a technological standpoint, the study found that only a few modern technology companies engage in collaborations with Indian laboratories. This suggests that while some technology firms leverage local research expertise, many rely on their own internal resources or international partners. **Technology Sourcing**: Additionally, the study noted that some technology companies create products based on local technologies. This implies that technology sourcing can vary, with some firms utilizing indigenous knowledge and others relying on external technologies. In summary, The International Center for Technology and Trade's study provided insights into the technology industry, highlighting the distinctions between cooperative and private technology companies. It emphasized that profit-making is a common goal among self-employed entrepreneurs in this sector. The research also shed light on technology collaboration patterns, indicating that while some technology firms collaborate with Indian labs, others rely on their own or international resources. Overall, the study contributes to a better understanding of the diverse approaches and strategies within the technology industry.

Wadhwa et al. (2007) examined the impact of working capital on knowledge creation, which can create new opportunities for new ventures. Researchers have shown that entrepreneurial knowledge and knowledge enhancement are beneficial for generating new knowledge. The study by Wadhwa et al. in 2007 aimed to investigate the relationship between working capital and knowledge creation, particularly in the context of its impact on generating new opportunities for new ventures. The researchers explored how the availability and management of working capital can influence the process of entrepreneurial knowledge creation and enhancement. The study likely revealed that working capital, which represents the financial resources available for day-to-day operations, can play a significant role in facilitating knowledge creation. Adequate working capital provides the necessary financial stability for entrepreneurs and startups to focus on innovative activities and knowledge development. Researchers found that entrepreneurial knowledge and the continuous enhancement of knowledge are valuable assets for generating new knowledge and opportunities. This suggests that entrepreneurs who are well-informed, adaptive, and committed to learning are better positioned to identify and capitalize on emerging opportunities. The study likely emphasized that the creation of new ventures often relies on the ability to generate and leverage knowledge effectively. Entrepreneurs who can harness their knowledge and apply it to novel situations are more likely to identify and pursue new business opportunities. In summary, Wadhwa et al.'s study explored the relationship between working capital, entrepreneurial knowledge, and the generation of new opportunities for new ventures. It highlighted the importance of financial stability (represented by working capital) in supporting knowledge creation and enhancement. Moreover, it underlined the role of entrepreneurial knowledge as a critical asset for identifying and capitalizing on emerging opportunities in the entrepreneurial landscape.

Premkumar (2008) studied the startup ecosystem in India. We've also seen India become a startup country. An in-depth analysis of the Indian startup ecosystem examines current trends and trends in all dimensions of the Indian startup ecosystem and assesses India's position as a value chain as international startups useful to investors and startups and large companies. In addition, the article provides an overview of the current environment, growth factors, key issues, finances and key policies, among others. Explore

the talent landscape as well as key industries including biotech and fintech and incubators/accelerators. " Premkumar's study delved into the evolving startup ecosystem in India, recognizing the country's emergence as a significant player in the global startup landscape. The research aimed to provide an extensive analysis of various dimensions of the Indian startup ecosystem, assessing India's position as a valuable hub for international startups, investors, and large corporations. It also explored key factors, challenges, financial aspects, policies, talent landscape, and specific industries within the Indian startup scene. The study acknowledged India's transformation into a prominent startup nation, highlighting the remarkable growth and development of its startup ecosystem over the years. Premkumar's research offered an in-depth examination of diverse aspects of the Indian startup ecosystem. It covered current trends, growth factors, key challenges, and policies shaping the startup landscape. India's position in the global value chain for startups was a key focus. The study likely discussed how India has become an attractive destination for international startups, investors, and established corporations seeking innovative solutions and opportunities. The study explored key industries within the Indian startup ecosystem, including biotechnology (biotech) and financial technology (fintech). These industries were likely highlighted for their potential and impact on the broader economy. The research might have delved into the role of incubators and accelerators in nurturing and supporting startups. These entities play a vital role in providing resources, mentorship, and guidance to budding entrepreneurs. In summary, Premkumar's study provided a comprehensive analysis of the startup ecosystem in India, recognizing its rapid growth and global significance. It covered a wide range of dimensions, including trends, value in the global startup chain, industries of focus, support infrastructure, and more. The research served as a valuable resource for understanding India's dynamic startup landscape and its position in the international entrepreneurial arena.

Baptista and Mendonca (2009) reveal an interesting fact from their research that technology-focused start-ups are mostly located in big cities. The reason behind such a place is the need for business that goes beyond the local level. Baptista and Mendonca's research aimed to explore the geographic distribution of technology-focused startups. Specifically, the study investigated the location patterns of these startups and sought to understand why they are predominantly situated in large cities. The study likely found that

startups with a strong focus on technology-related activities tend to be concentrated in major metropolitan areas and big cities. These startups are characterized by their engagement in innovation, research, and technology-driven business activities. One of the key reasons behind the prevalence of technology startups in large cities is the need for these businesses to operate beyond the local level. Technology-driven ventures often have ambitions to reach global markets and customers, necessitating access to a broader network of resources, talent, and opportunities. Large cities typically offer a thriving urban ecosystem that is conducive to technology startups. They provide access to research institutions, universities, venture capital, a diverse talent pool, and a supportive infrastructure for innovation and entrepreneurship. Big cities facilitate networking and collaboration among startups, investors, industry experts, and potential partners. The concentration of these stakeholders in urban areas creates an environment where knowledge sharing, and partnership building can flourish. In summary, Baptista and Mendonca's research revealed that technology-focused startups are predominantly located in big cities due to their global aspirations and the advantages offered by urban ecosystems. These cities provide the necessary resources, networking opportunities, and infrastructure for technology-driven innovation and entrepreneurship, allowing startups to expand their reach and compete on a global scale.

Christiansen (2009) says that one of the most common reasons to start a seed accelerator is to see the potential and need to create a new ecosystem and increase the number of startups from investment, work in the long run. Christiansen suggests that one of the primary motivations for establishing a seed accelerator program is to catalyze the development of a new startup ecosystem and stimulate long-term growth in the number of startups in a region. **Seed accelerators** are organizations or programs that provide early-stage startups with mentorship, resources, and often initial funding in exchange for equity. They typically run short, intensive programs designed to rapidly propel startups to the next stage of growth. Christiansen's idea highlights that seed accelerators are not only focused on supporting individual startups but also play a crucial role in shaping and nurturing broader **startup ecosystems**. By bringing together startups, mentors, investors, and other stakeholders, seed accelerators can help create a collaborative environment that fosters innovation and entrepreneurship. Seed accelerators aim to increase the number of startups

in a region by providing the necessary support and resources to aspiring entrepreneurs. By doing so, they contribute to the **growth of the overall startup community**, which can have long-term economic benefits. Seed accelerators often attract **investment** from various sources, including venture capitalists and angel investors. This investment not only benefits the participating startups but also contributes to the overall growth of the startup ecosystem. Additionally, the intense work and mentorship during accelerator programs prepare startups for sustainable growth beyond the accelerator. In summary, Christiansen's concept underscores the role of seed accelerators in not only nurturing individual startups but also in cultivating entire startup ecosystems. These programs are often initiated with the goal of boosting the number of startups and increasing investment in a region, ultimately contributing to long-term economic growth and innovation. Seed accelerators serve as catalysts for the development of thriving startup communities.

Keskin et al. (2009) conducted research in the UK proving that angel investors play an important role in financing high-performing startups in the early stages. In addition, the researchers say that one of the reasons for the increase in angels' investments is that the government supports their investments through tax exemptions. Keskin and colleagues conducted research in the United Kingdom (UK) to investigate the role of angel investors in financing high-performing startups during their early stages. The study aimed to understand the significance of angel investments and explored the influence of government support, particularly through tax exemptions, on the increase in angel investments. The research likely demonstrated that angel investors play a crucial role in providing financial support to startups, particularly in their early stages. Angel investors are typically high-net-worth individuals who invest their own capital in startups in exchange for equity or ownership stakes. High-performing startups often require significant capital infusion in their early stages to fuel growth, research, development, and market expansion. Angel investors are willing to take calculated risks by investing in these early-stage ventures, which can be vital for a startup's success. The study likely highlighted that one of the factors contributing to the increase in angel investments is government support in the form of tax exemptions or incentives. Governments in some regions, including the UK, offer tax benefits to individuals who invest in startups. These incentives encourage more angel investors to participate in the financing of early-stage companies. The findings may have

indicated that the combination of angel investments and government support contributes to economic growth by fostering innovation, job creation, and the development of new industries. Angel investors bring not only financial resources but also mentorship and expertise to the startups they support. In summary, Keskin et al.'s study conducted in the UK underscored the significant role played by angel investors in financing high-performing startups, particularly during their early stages. The research also recognized the impact of government support, such as tax exemptions, in incentivizing angel investments. This collaboration between private investors and government policies can have positive effects on economic growth and innovation within a region by supporting the development of new businesses and industries.

Giurca Vasilescu (2009) believes that angel investors are the most important link between finance and the formation of companies, from inception to 21 departments the company plans to enter the capital market. Angel investors also provide financial support and management, an additional option for business survival. Giurca Vasilescu emphasizes that angel investors play a pivotal role in bridging the gap between financial resources and the formation and growth of companies. These investors are instrumental not only in the initial stages of a company's journey but also in its expansion and potential entry into the capital market. Additionally, angel investors provide not just financial support but also valuable management expertise, serving as an important resource for business survival and success. Angel investors are portrayed as a critical link in the process of establishing new companies. They often provide essential initial funding that enables startups to transform their ideas into viable businesses. This early-stage investment can be the lifeline for many budding entrepreneurs. Giurca Vasilescu suggests that angel investors can also help companies prepare for entry into the capital market. This implies that the guidance, resources, and connections provided by angel investors go beyond funding and extend to strategic planning and market access. In addition to financial capital, angel investors bring valuable managerial and industry-specific expertise to the table. Their experience and insights can assist startups in making informed decisions, navigating challenges, and improving their chances of success. The presence of angel investors can enhance the survival prospects of a business. Their financial backing, mentorship, and networking opportunities can help startups weather the early challenges and establish themselves as

sustainable enterprises. In summary, Giurca Vasilescu's concept underscores the indispensable role of angel investors in the entrepreneurial ecosystem. These investors are portrayed as the linchpin connecting financial resources to the birth, growth, and potential market entry of companies. Their multifaceted contributions encompass not only capital infusion but also strategic guidance and support, making them a vital resource for startups and emerging businesses.

Sharpe et al. (2009) conducted a study in the UK proving that angel investors play an important role in raising funds in the early stages of high-tech start-ups. In addition, the researchers say that one of the reasons for the increase in angels' investments is that the government supports their investments through tax exemptions. Sharpe and colleagues conducted a study in the United Kingdom (UK) with the aim of highlighting the significant role played by angel investors in raising funds for early-stage high-tech startups. The research also explored how government support, particularly in the form of tax exemptions, has contributed to the growth of angel investments. The study likely demonstrated that angel investors are instrumental in providing crucial funding to high-tech startups during their early stages. High-tech startups often require substantial capital for research, development, and market entry, making angel investments a vital source of financial support. The research likely indicated that one of the driving factors behind the increase in angel investments is government support through tax exemptions or incentives. Governments in certain regions, including the UK, offer tax benefits to individuals who invest in startups. These incentives are designed to encourage more angel investors to participate in funding early-stage companies. The study may have emphasized that angel investments contribute to fostering innovation within the high-tech sector. By providing startups with the necessary capital, angel investors enable these companies to pursue groundbreaking technologies and innovative solutions. Angel investors are often willing to take calculated risks by investing in early-stage ventures. Their investments can help mitigate some of the financial risks associated with high-tech startups, making it more attractive for entrepreneurs and investors alike. The combination of angel investments and government support can have broader economic implications. It can stimulate economic growth by creating jobs, driving technological advancements, and establishing a thriving ecosystem for innovation and entrepreneurship. In summary, Sharpe et al.'s study

conducted in the UK highlighted the vital role of angel investors in funding early-stage high-tech startups. It also underscored the impact of government support, particularly through tax exemptions, in encouraging angel investments. This collaboration between private investors and government policies is seen as a catalyst for innovation, economic growth, and the development of the high-tech startup sector.

Solomon (2010) conducted a study on startups in the electronics industry to understand the transition from start-ups to established companies and vice versa. Research shows that startups create an environment for people to feel more creative than established companies. The study found no significant differences in personal history between the two types of companies. This study focuses only on the electronics industry; it is necessary to extend the research to all verticals of the enterprise. Solomon's research focused on startups within the electronics industry, with the aim of gaining insights into the transition dynamics between startups and established companies. The study aimed to understand how startups foster an environment conducive to creativity and whether there were significant differences in personal backgrounds between startups and established companies. It's important to note that this study concentrated solely on the electronics industry, and the author suggests the need to extend such research across various industry verticals. Solomon's study likely revealed that startups tend to create an environment where individuals feel more creative compared to established companies. This suggests that the innovative and dynamic nature of startups encourages employees to think creatively, adapt to challenges, and come up with novel solutions. The research explored the process of transitioning between startups and established companies. It may have highlighted the challenges and opportunities associated with moving from a startup, which often operates with limited resources and high uncertainty, to an established firm with more stability and resources, and vice versa. Interestingly, the study may have found no significant differences in the personal backgrounds of individuals working in startups versus those in established companies. This implies that personal attributes and experiences were not strongly correlated with a person's choice to work in one type of company over the other. The study concentrated solely on the electronics industry. Solomon's research may have suggested that similar investigations should be conducted across various industry verticals to understand how the transition dynamics and creativity factors may vary in different

business sectors. In summary, Solomon's study in the electronics industry provided valuable insights into the dynamics of startups and established companies, particularly in terms of creativity and personal backgrounds. It suggested that startups often foster environments conducive to creativity but found no significant differences in personal histories between employees of startups and established firms within the electronics industry. The study also highlighted the importance of extending such research to gain a more comprehensive understanding of the dynamics across different industry verticals.

Madireddy (2010) conducted a study on management and leadership challenges for the success of technology startups with a sample of 22 participants from Silicon Valley, California, United States. Captures the success of tech startups associated with Silicon Valley. The findings are arranged and presented in order of success results groups such as Project Planning and Execution Strategy Factors, Project Monitoring Strategy Factors, Project Reporting Strategy Factors, Hiring Strategy Factors, Product Strategy Factors, Patent Strategy Factors, and Outsourcing. Strategy Factors. The findings show that product strategies such as patent strategies, outsourcing and product equity can help startups succeed. The Emergence of Change and Change of Leadership are the most important factors for success. Madireddy's research focused on exploring the management and leadership challenges faced by technology startups in Silicon Valley, California, United States, and their impact on the success of these startups. The study aimed to capture key factors associated with the success of tech startups in this renowned technology hub. Some of the key factors are Sample and Location which is the study involved 22 participants from Silicon Valley, a globally recognized hub for technology startups. Silicon Valley is known for its innovation and entrepreneurial ecosystem, making it an ideal location for studying the success factors of tech startups. Madireddy organized the findings into several categories of success result groups. **Project Planning and Execution Strategy Factors:** These factors may have involved the effective planning and execution of projects, which are critical for the success of tech startups. Successful project management ensures that resources are allocated efficiently, timelines are met, and objectives are achieved. **Project Monitoring Strategy Factors:** Effective monitoring of project progress is essential for identifying and addressing issues early on. This likely involves regular tracking of key performance indicators and adjusting as needed. **Project Reporting Strategy Factors:**

Clear and transparent reporting mechanisms are vital for communication within startups and with external stakeholders. Reporting likely includes sharing progress, challenges, and milestones achieved. **Hiring Strategy Factors:** Talent acquisition and team building are fundamental to startup success. This category may have included insights into how startups attract and retain top talent. **Product Strategy Factors:** Developing a strong product strategy is critical for startups. This likely involves factors related to product development, market fit, and innovation. **Patent Strategy Factors:** Intellectual property protection, including patents, can be crucial for technology startups. This category may have explored strategies for safeguarding intellectual property. **Outsourcing:** Many startups choose to outsource certain functions or tasks. This category likely delved into the reasons for outsourcing and the strategies for successful outsourcing partnerships. In summary, Madireddy's study in Silicon Valley investigated the management and leadership challenges faced by technology startups and their impact on success. The findings were categorized into various success result groups, each focusing on different aspects of startup operations and strategy. This research provides valuable insights for entrepreneurs and leaders in the technology startup space, particularly in the context of Silicon Valley's dynamic and competitive environment.

Goyal & Prakash (2011) Behind successful women entrepreneurs is education, support from family members, positive stories from family and friends, etc. but still they encounter a lot of restrictions and obligations from their family and friends leading to low confidence and social thinking. Goyal and Prakash's research delved into the factors contributing to the success of women entrepreneurs. While they found that education and support from family members and positive stories from family and friends play a pivotal role in the success of women entrepreneurs, the study also revealed that these women often face significant challenges and restrictions imposed by their family and friends. These challenges can lead to lower confidence levels and social pressures. The study likely highlighted that education serves as a strong foundation for women entrepreneurs. Education equips them with the knowledge and skills necessary to navigate the business world effectively. Additionally, support from family members and positive stories shared by family and friends can serve as valuable encouragement and motivation. Despite their educational and familial support, women entrepreneurs often encounter various challenges

and restrictions. These challenges may come from traditional societal norms and expectations, where women are expected to fulfill certain roles and responsibilities that may conflict with their entrepreneurial pursuits. The study likely found that these challenges and restrictions can have a negative impact on the confidence and self-esteem of women entrepreneurs. When they face resistance or criticism from family and friends, it can undermine their belief in their entrepreneurial abilities. Social pressures and expectations can significantly influence the decisions and actions of women entrepreneurs. The study may have explored how these external pressures can sometimes deter women from pursuing their entrepreneurial aspirations or cause them to question their choices. In summary, Goyal and Prakash's study underscored the significance of education and family support in the success of women entrepreneurs. However, it also shed light on the challenges and restrictions imposed by societal norms and expectations, which can lead to lower confidence levels and social pressures for these women. This research highlights the importance of addressing these challenges to create a more inclusive and supportive environment for women in entrepreneurship.

Shukla (2011) pointed out that entrepreneurs are new businesses. For these businesses, it is very important not only to be innovative, but also to be dedicated and talented. The authors argue that the importance of innovation in the market is the main cost of economic development. Small business innovation is important because they are directly involved in the community and therefore generate economic and financial benefits. Shukla's study centered on the role of entrepreneurs in starting new businesses. It emphasized that for these businesses to succeed, innovation is crucial, but it's equally important for entrepreneurs to be dedicated and talented. The study argued that innovation plays a central role in economic development, as it drives market competitiveness. Additionally, the research highlighted the significance of small business innovation, as it directly benefits local communities by generating economic and financial advantages. The study likely emphasized that entrepreneurs, as the drivers of new businesses, need to be innovative. Innovation refers to the ability to create new ideas, products, or processes that bring value to the market. Entrepreneurs who innovate are often more competitive and better positioned for success. In addition to innovation, the study may have underscored the importance of dedication and talent among entrepreneurs. Starting and running a new

business can be challenging, and entrepreneurs must be dedicated to their vision and possess the skills and knowledge necessary to navigate the complexities of entrepreneurship. Shukla's research likely argued that innovation is a key driver of economic development. When businesses introduce innovative products or services to the market, they often gain a competitive edge, attract customers, and contribute to economic growth. The study may have highlighted the unique role of small businesses in fostering innovation. Small businesses are often deeply rooted in their communities, and their innovative efforts can directly benefit these local areas. This can lead to job creation, increased economic activity, and financial advantages for the community. In summary, Shukla's study emphasized the vital role of entrepreneurs in starting new businesses and the importance of innovation, dedication, and talent in their success. It argued that innovation is a cornerstone of economic development, and small businesses, in particular, play a crucial role in fostering innovation at the community level. By encouraging entrepreneurship and innovation, societies can realize economic and financial benefits that extend beyond individual businesses.

Santhi and Kumar (2011) review of entrepreneurship, characteristics of entrepreneurship. Discuss the various challenges they face within the family, social challenges, technological challenges, financial challenges, legal challenges and the many opportunities for those doing business in India. The meeting also discussed the role of entrepreneurs in job creation, innovation and economic growth. Santhi and Kumar conducted a comprehensive review of entrepreneurship, focusing on the characteristics of entrepreneurship and the challenges and opportunities faced by entrepreneurs in India. The study delved into various dimensions, including family challenges, social challenges, technological challenges, financial challenges, and legal challenges. Additionally, it explored the role of entrepreneurs in key aspects such as job creation, innovation, and economic growth. The key focus points were divided into **Entrepreneurial Characteristics**: The study likely discussed the key characteristics of successful entrepreneurs. This could include traits such as risk-taking propensity, creativity, adaptability, and a strong work ethic. Understanding these traits is crucial for both aspiring entrepreneurs and policymakers. **Family Challenges**: Entrepreneurs often face challenges within their families, which could include resistance to non-traditional career paths,

concerns about financial stability, and balancing work and family responsibilities. **Social Challenges:** Social challenges encompass broader societal attitudes and norms. Entrepreneurs may encounter resistance or skepticism from their communities, and societal expectations regarding career choices and success can impact their journey. **Technological Challenges:** In the fast-evolving landscape of business, entrepreneurs encounter technological challenges. This could involve staying abreast of technological advancements, integrating new technologies into their business models, and adapting to changing market trends. **Financial Challenges:** Securing funding is a common hurdle for entrepreneurs. Financial challenges may involve accessing capital for startup costs, managing cash flow, and sustaining the business during periods of growth or economic downturns. **Legal Challenges:** Entrepreneurs navigate a complex legal landscape, including regulatory compliance, intellectual property protection, and contractual agreements. Understanding and addressing legal challenges is essential for the sustainable operation of a business. **Opportunities in India:** Despite challenges, the study likely highlighted the numerous opportunities for entrepreneurs in India. This could include a large and diverse market, a growing economy, government initiatives supporting entrepreneurship, and emerging sectors presenting new business prospects. And finally, **Role in Job Creation, Innovation, and Economic Growth:** The study likely underscored the crucial role of entrepreneurs in job creation, fostering innovation, and contributing to economic growth. Entrepreneurial ventures are often engines of economic development, driving employment opportunities and introducing innovative solutions to market needs. In summary, Santhi and Kumar's study provided a holistic exploration of entrepreneurship, covering its characteristics, challenges, and opportunities in the Indian context. The research shed light on the multifaceted nature of entrepreneurship, emphasizing the need for a supportive ecosystem that addresses challenges while harnessing the potential for job creation, innovation, and economic advancement.

Korenka et al. (2011) investigated the growth of individual entrepreneurs in the European Union based on data from 188 companies over 8 years. This article focuses on determining the long-term growth of an individual enterprise and compares long-term growth forecasts from models developed in different dimensions such as personal attributes, resources, ideas, business and designs, and systems. This study shows many

predictors such as the gender of the founder, the capital created and the growth strategy for the company's development. The constructor feature does not affect development. The researchers argue that startups in the software industry are more customer- and profit-oriented than finance-oriented ones. Researchers believe that the software industry will continue to be successful as it exhibits extraordinary growth and innovation. Korenka and colleagues conducted an investigation into the growth patterns of individual entrepreneurs within the European Union. The study spanned eight years and involved data from 188 companies. The primary focus of the research was to understand the long-term growth trajectories of individual enterprises. The study compared long-term growth forecasts using models that considered various dimensions, including personal attributes, resources, ideas, business and design, and systems. The study employed a multidimensional approach, analyzing factors across personal attributes, resources, ideas, business strategies, and systems to understand long-term growth. This holistic perspective aimed to identify the key drivers influencing the sustained growth of individual enterprises. The research identified several predictors of long-term growth. Notable factors included the gender of the founder, the capital generated, and the growth strategy adopted by the company. Interestingly, the study found that certain characteristics of the founder did not significantly impact the development of the enterprise. The study made industry-specific observations, particularly in contrasting the software industry with finance-oriented ventures. It suggested that startups in the software industry exhibited a greater focus on customer satisfaction and profitability compared to finance-oriented counterparts. The researchers expressed optimism about the software industry's future success, citing its remarkable growth and innovative tendencies. They anticipated continued success, highlighting the industry's potential for sustained growth and ongoing innovation. In summary, Korenka et al.'s study provided valuable insights into the long-term growth dynamics of individual entrepreneurs within the European Union. By considering various dimensions, the research identified predictors of growth and shed light on industry-specific trends, emphasizing the software sector's customer-centric and profit-oriented approach. The study contributes to understanding the multifaceted nature of entrepreneurial success and offers insights that can inform strategies for sustained growth in different industries.

Ries (2011) stated that lean initiatives should follow five principles to avoid failure. These are (1) Entrepreneurs Everywhere, (2) Business Management, (3) Education, (4) Design-Measure-Learn, and (5) Commercial Copy Marketing. The authors claim that the first represents businesspeople around the world whose business ideas can work. The second area talks about the need for new management and the third area talks about production, monetization and serving customers. Fourth, turning the idea into product, evaluating the responses of 4,444 customers, and finally, the fifth, discussing the need for a new type of business for the venture. Ries (2011) introduced a framework for successful lean initiatives, outlining five key principles to prevent failure. The study emphasized the importance of embracing entrepreneurship globally and implementing new management practices. It also highlighted the significance of education, a structured approach to product development (Design-Measure-Learn), and the adoption of effective marketing strategies, termed as Commercial Copy Marketing. **Entrepreneurs Everywhere:** This principle underscores the idea that viable business concepts can emerge from entrepreneurs globally. It emphasizes a broad perspective, recognizing the potential for successful business ideas from individuals worldwide. **Business Management:** The second principle calls for a shift in traditional management practices. It suggests the need for new management approaches that align with the dynamic and fast-paced nature of entrepreneurial ventures. **Education:** The third principle focuses on the importance of continuous learning. It encompasses aspects of production, monetization, and customer service. This reflects the need for entrepreneurs to be well-versed in various business functions for comprehensive success. **Design-Measure-Learn:** The fourth principle outlines a systematic approach to product development. It involves transforming ideas into tangible products, evaluating customer responses (measuring), and learning from this feedback. This iterative process ensures the continuous improvement of products or services. **Commercial Copy Marketing:** The fifth principle introduces the concept of Commercial Copy Marketing, emphasizing the need for a new and effective approach to business ventures. This involves creating compelling marketing strategies that resonate with the target audience and drive commercial success. In conclusion I can say that Ries's study advocates for a holistic and adaptive approach to entrepreneurship, encouraging global collaboration, innovative management practices, continuous learning, systematic product development, and effective marketing strategies.

The framework provides entrepreneurs with a comprehensive guide to navigate the complexities of the business landscape and enhance the likelihood of success in lean initiatives.

Antherton (2012) examined 20 attempts to understand capital and financial models. The researchers found significant differences in the location and size of financial resources. Researchers believe that the survival rates of start-ups decrease with low capital. Antherton (2012) conducted an examination of 20 different attempts to comprehend capital and financial models within the context of startups. The study aimed to understand the dynamics of financial resources in terms of their location and size. The researchers explored the relationship between the availability of capital and the survival rates of startups. **Location and Size of Financial Resources:** The study investigated the various sources and sizes of financial resources that startups access. It likely explored whether startups predominantly rely on local or global funding sources and how the scale of financial resources impacts their operations. **Survival Rates and Capital:** Antherton's research found significant correlations between the survival rates of startups and the amount of capital they have access to. The study suggested that startups with lower capital levels face challenges in terms of survival. This implies that the financial health and resources of a startup play a crucial role in its ability to navigate challenges and sustain operations over time. The implication of the study is that Antherton's study highlight the critical importance of financial resources for startups. Insufficient capital can pose a significant risk to the survival and success of startups, emphasizing the need for effective financial models and strategies. The study contributes valuable insights to the understanding of the financial dynamics that impact the longevity and resilience of startups in the business ecosystem.

Croenewegen and Langen (2012) identify the most important factors driving startups to innovate radically. The study found that certain innovations, consumer products, multi-founders and relationships have a positive impact on corporate revenue growth, while external support in the form of investment and training also has a positive impact in the company. The increase in corporate income had a positive effect. has a positive effect on employment growth. Croenewegen and Langen (2012) conducted research to identify the key factors that drive startups to engage in radical innovation. The study aimed to

understand the impact of various factors on corporate revenue growth, with a specific focus on the influence of certain types of innovation, the presence of multi-founders, relationships, and external support through investment and training. The study identified several factors that were crucial in driving startups to engage in radical innovation. Notable factors included the pursuit of certain types of innovations, the presence of multiple founders, and the importance of fostering positive relationships. Certain types of innovations, particularly those related to consumer products, were found to have a positive impact on corporate revenue growth. Additionally, the study noted that the presence of multiple founders and the cultivation of positive relationships also contributed to increased revenue. External support, in the form of investment and training, was highlighted as a key factor positively influencing startup success. The research suggested that startups benefiting from external support tended to experience positive effects on their overall performance and growth. The study found a positive correlation between increased corporate income and employment growth. This implies that as startups experience higher revenue, they are more likely to contribute to job creation, emphasizing the broader economic impact of successful startups. Croenewegen and Langen's study contributes valuable insights into the dynamics of radical innovation in startups and its impact on key business metrics. The findings underscore the importance of specific types of innovation, collaborative founding structures, positive relationships, and external support in shaping the success and growth trajectory of startups. Additionally, the study highlights the interconnectedness of corporate income and employment growth, emphasizing the role of startups in job creation when they experience financial success.

Dash & Kaur (2012) stated in their research that most entrepreneurs in Odisha chose to start their own business for independence and most of them love funds because of their barriers to accessing financial aid. The study also found that financial risk has a significant impact and is considered a major barrier for young entrepreneurs to start a business. Dash and Kaur (2012) conducted research focusing on entrepreneurs in Odisha, examining the motivations for starting their own businesses and the challenges they face, particularly in terms of accessing financial support. The study aimed to understand the factors influencing entrepreneurial decisions and how financial barriers impact the entrepreneurial landscape in the region. The study highlighted that a significant number of entrepreneurs in Odisha

chose to start their own businesses primarily for the sake of independence. Entrepreneurship, for them, was a means to gain control over their work and professional life. The research revealed that many entrepreneurs faced challenges in accessing financial aid for their ventures. Lack of funds was identified as a notable barrier. This suggests that while there is a desire for entrepreneurship, the practical aspect of securing financial resources posed a significant challenge. The study identified financial risk as a major barrier for young entrepreneurs in initiating their businesses. This finding suggests that concerns related to financial stability and the risks associated with entrepreneurship serve as deterrents, particularly for individuals at the early stages of their entrepreneurial journey. Dash and Kaur's study sheds light on the motivations and challenges of entrepreneurs in Odisha, emphasizing the significance of independence as a driving force for entrepreneurship. The research also underscores the practical difficulties entrepreneurs face, particularly in terms of accessing financial support. The identification of financial risk as a substantial barrier suggests that addressing these concerns and creating supportive mechanisms for securing funds could enhance the entrepreneurial landscape in the region. The findings have implications not only for individual entrepreneurs but also for policymakers and support organizations aiming to foster a conducive environment for entrepreneurial growth in Odisha.

Blank and Dorf (2012) examine the importance of starting an organization from time to time to find a viable, repeatable, profitable business model. Blank and Dorf (2012) conducted a study that emphasizes the critical importance of iteratively and systematically discovering a viable, repeatable, and profitable business model when starting an organization. **Iterative Process:** The study advocates for an iterative process in the early stages of starting an organization. Instead of relying on fixed plans, entrepreneurs should continuously iterate and refine their business model based on real-world feedback and market learning. **Viable Business Model:** The emphasis is on identifying a business model that is not just an idea but is proven to be viable in the market. This involves validating assumptions, understanding customer needs, and adjusting the model accordingly. **Repeatable Success:** A key goal is to establish a business model that is repeatable. This means that the success achieved in one instance can be replicated in subsequent instances. It's about creating a scalable and sustainable framework for the business. **Profitability**

Focus: The study underscores the importance of focusing on profitability. It's not just about having a model that works; it's about ensuring that the model is financially sustainable and can generate consistent profits. Blank and Dorf's study has significant implications for entrepreneurs and startup founders. It challenges the traditional approach of having a fixed business plan from the outset. Instead, it encourages an adaptive and customer-centric approach where the business model is refined based on continuous learning and market feedback. This methodology aligns with the dynamic nature of startups and the uncertainties they face in their early stages. The study provides a strategic framework for entrepreneurs to navigate the complexities of establishing a successful and scalable business.

Maurya (2012) stated that a startup goes through three growth stages during its lifetime. In the first stage of problem solving, the startup investigates whether there is a problem in the business that needs to be solved. In the second stage, the product fits the market to see if the idea is accepted by the customer. In the third stage, it creates and expands the business leading to the expansion and increase of customers and employees. Maurya (2012) proposes a framework that outlines three distinct growth stages that a startup typically goes through during its lifecycle. Each stage is focused on addressing key challenges and validating essential aspects of the business. The Key Growth Stages are **Problem Solving** (Stage 1): The initial stage involves the startup's exploration of whether there is a fundamental problem in the business domain that needs to be addressed. This phase is about identifying pain points, challenges, or unmet needs that present opportunities for a startup to solve. **Product-Market Fit** (Stage 2): In the second stage, the startup shifts its focus to validating whether its product or service resonates with the market. This involves understanding customer needs, preferences, and acceptance of the solution. The goal is to ensure that there is a fit between what the startup offers and what the market demands. And **Business Creation and Expansion** (Stage 3): The third stage marks the transition from validation to scaling. Here, the startup not only establishes a solid product-market fit but also focuses on creating and expanding the business. This involves strategies for growth, increasing the customer base, and scaling up operations by hiring more employees. Maurya's framework provides a structured approach for startups to navigate their growth journey. By recognizing and addressing specific challenges at each stage,

startups can enhance their chances of success. The iterative nature of the process, from problem-solving to scaling up, reflects the dynamic and adaptive nature required in the startup ecosystem. This framework is valuable for entrepreneurs and business leaders in understanding the distinct phases of a startup's evolution and tailoring strategies accordingly.

Miloud et al. (2012) examined investments made by venture capitalists in startups. Venture capitalists play an important role in supporting startups. Since it is difficult to measure the effectiveness of early startups based on results, the need to measure performance based on inputs has been formalized and can be used to measure business interests, founders and their teams, relationships with outsiders, etc. influenced by many factors such as. This study highlights the problem of fundraising by venture capitalists at an early stage. Miloud and colleagues (2012) conducted research focusing on the investments made by venture capitalists in startups. Venture capitalists play a crucial role in supporting early-stage businesses, and this study addresses the challenge of measuring the effectiveness of such investments, especially when traditional metrics based on outcomes are challenging in the early stages of startups. The study recognizes the difficulty in measuring the effectiveness of early startups solely based on outcomes. As a response, the researchers suggest a formalized approach that measures performance based on inputs. This involves assessing various factors such as business strategies, the capabilities of founders and their teams, and the quality of relationships with external entities. The research highlights that the performance of early startups is influenced by a multitude of factors. These include not only internal elements such as business strategies and team dynamics but also external factors like relationships with outsiders. The complex interplay of these factors shapes the overall performance and success of the startup. A significant aspect emphasized in the study is the challenge of fundraising for startups at an early stage. This underscores the crucial role of venture capitalists in providing the necessary financial support during the critical early phases of a startup's development. Miloud et al.'s study sheds light on the intricacies of evaluating the performance of early startups, proposing a shift toward measuring inputs rather than relying solely on traditional outcome-based metrics. This approach recognizes the uncertainties and challenges faced by startups in their initial stages. The study contributes to discussions on the role of venture capitalists

and the importance of strategic and operational factors in shaping the success trajectory of startups. The identified challenges in early-stage fundraising highlight the need for effective support mechanisms to foster the growth of innovative ventures.

Ooi and Ahmed (2012) examined 153 Malaysian undergraduate students' understanding of entrepreneurial motivation and problems. Research shows that young people love initiatives because they have the best talent and are inspired to manage change. Regarding issues, gender and birth have a major impact on job creation among young people. Ooi and Ahmed (2012) conducted research to explore the understanding of entrepreneurial motivation and challenges among 153 Malaysian undergraduate students. The study aimed to gain insights into the factors driving young people toward entrepreneurship and the challenges they face, with a focus on the impact of gender and birth circumstances on job creation. The research revealed that young individuals are attracted to entrepreneurial initiatives due to several factors. Among these, having the best talent and being inspired to manage change were identified as significant motivators. This suggests that a desire for personal development and a passion for driving positive change play key roles in motivating young people toward entrepreneurship. The study highlighted that gender and birth circumstances have a substantial impact on job creation among young individuals. The findings suggest that these demographic factors can influence the entrepreneurial landscape, possibly affecting the opportunities and challenges faced by aspiring entrepreneurs. The research underscored that young people are particularly drawn to entrepreneurial initiatives because they perceive themselves as possessing the best talent. This points to a self-awareness among the youth regarding their skills and capabilities as contributors to the entrepreneurial space. Ooi and Ahmed's study provides valuable insights into the factors that drive entrepreneurial aspirations among Malaysian undergraduate students. The emphasis on talent and the desire to contribute to positive change suggests a dynamic and socially conscious motivation among young entrepreneurs. Additionally, the recognition of gender and birth circumstances as influential factors in job creation highlights the importance of addressing these aspects in policies and support systems aimed at fostering entrepreneurship among the youth. The findings contribute to the broader understanding of the entrepreneurial landscape among young individuals in the Malaysian context.

Radojevich-Kelley and Hoffman (2012) conducted an analysis of the research literature of the top five accelerators in the United States. Research shows that fast and efficient traders and entrepreneurs trained by entrepreneurs get the money they need to increase their profits. The research also shows that accelerator graduates are more successful than non-accelerators. Radojevich-Kelley and Hoffman (2012) conducted an analysis of research literature focused on the top five accelerators in the United States. The study aimed to understand the impact of accelerator programs on traders and entrepreneurs, with a specific focus on the efficiency of training provided by entrepreneurs, the funding obtained by program participants, and the overall success of accelerator graduates compared to non-accelerator counterparts. The research highlighted that accelerator programs, known for their fast and efficient training models, play a crucial role in equipping traders and entrepreneurs with the skills needed for success. The training, often delivered by experienced entrepreneurs, is designed to be effective and responsive to the dynamic demands of the business landscape. One significant outcome identified in the research was that participants in accelerator programs are more likely to secure the funding necessary for scaling and increasing profits. The accelerator environment, with its focus on innovation and growth, appears to enhance participants' ability to attract financial support. The study found that graduates of accelerator programs exhibit higher levels of success compared to non-accelerator counterparts. This success could be measured in various aspects, such as business growth, market penetration, and overall financial performance. The findings suggest that the comprehensive support provided by accelerators contributes to the success of their graduates. Radojevich-Kelley and Hoffman's study sheds light on the positive outcomes associated with participation in accelerator programs. The emphasis on efficient training by entrepreneurs and the enhanced access to funding aligns with the broader goals of accelerators in fostering rapid and sustainable growth among startups. The documented success of accelerator graduates underscores the value of these programs in nurturing and catalyzing entrepreneurial ventures in the United States. The findings have implications for policymakers, investors, and entrepreneurs seeking avenues for accelerated business development and success.

Zhao and Ziendonis (2012) noted in their research that the state government in the United States plays an important role as the financier of new technology companies. Researchers found that the research and development awards Michigan received from 2002 to 2008 increased the company's profitability and reduced financial constraints. The research also shows that the funds are supported by the government and other sources. Studies also show that these companies have a better chance of survival. There is no research that the Indian state government funds startups. Zhao and Ziendonis (2012) conducted research examining the role of state governments in the United States as financiers of new technology companies. The study specifically focused on the impact of research and development (R&D) awards received by Michigan from 2002 to 2008 on the profitability, financial constraints, and overall survival of the supported companies. Additionally, the study explored whether similar government funding support is observed in the context of Indian state government funding for startups. The research revealed that companies receiving R&D awards from the state government in Michigan experienced an increase in profitability. The financial support provided by the government played a role in enhancing the financial performance of these new technology companies. Companies that received R&D awards showed a reduction in financial constraints. This indicates that government funding contributed to alleviating financial challenges faced by these companies, potentially facilitating their operational and growth activities. The study highlighted that companies receiving government funding also tended to secure support from other funding sources. This suggests a positive signaling effect, where government support attracts additional investment from the private sector or other sources. Companies supported by government funding demonstrated better chances of survival. The research indicated that the financial and developmental support provided by the government increased the resilience and viability of these startups. The study noted that there is no existing research on whether state governments in India provide similar funding support to startups. This highlights a potential gap in understanding the dynamics of government support for startups in the Indian context. Zhao and Ziendonis' research underscores the positive impact of state government financing on the performance and survival of new technology companies. The findings have implications for policymakers, suggesting that targeted government support can be instrumental in fostering the growth and sustainability

of startups. The absence of similar research in the Indian context suggests an area for further exploration and consideration by policymakers and researchers interested in understanding the role of government support in India's startup ecosystem.

Lehdonvirta (2013) spoke about the cultural change unfolding in Helsinki. Researchers discussed how young students from Finland started businesses and startups rather than getting together in the spring to make a real difference. This study focuses on entrepreneurship and examines the regulatory changes taking place in Finland. It was called the "Helsinki Spring", meaning a sudden explosion of Silicon Valley-style entrepreneurial aspirations in the cold lands of Finland. Students and young people in Finland are establishing business organizations, creating new ventures, creating business plans and receiving funding from investors. Instead of partying and drinking, they write code and prepare presentations. Instead of protesting and protesting, they spoke in conversation and dreamed of changing the world through innovation. Their activities were enthusiastically received in the media. Political and business leaders were happy.

Sharma (2013), In her research on women entrepreneurs in India, concluded that women entrepreneurs face many problems such as social problems, legal bridge, lack of education, lack of family support. Scholars have explained various factors affecting the market such as pull and push. Sharma's 2013 research on women entrepreneurs in India offers a comprehensive exploration of the challenges faced by women in the entrepreneurial landscape. The study identifies multiple obstacles, including prevalent social issues, legal barriers, insufficient educational opportunities, and a lack of familial support. These challenges underscore the complex socio-economic environment that women entrepreneurs navigate. One of the key findings of the research is the multifaceted impact of societal norms and expectations on women entrepreneurs. Social problems encompass a range of factors that influence women's participation in business activities. Legal barriers are identified as a significant hurdle, suggesting that there may be regulatory challenges or gaps that impede the entrepreneurial journey for women. The study emphasizes the crucial role of education in empowering women entrepreneurs. The lack of adequate educational resources emerges as a constraint that needs to be addressed to enhance women's participation and success in the business arena. Additionally, the research highlights the pivotal role of family support, or the lack thereof, in shaping women's

entrepreneurial endeavors. Scholars cited in the research delve into the intricate dynamics of the market, introducing the concepts of "pull and push" factors. This framework provides insights into the various elements that attract and propel women into entrepreneurship (pull factors) and the challenges or circumstances that compel them to enter this domain (push factors). Understanding these factors becomes crucial for policymakers and stakeholders aiming to create a conducive environment for women entrepreneurs. In conclusion, Sharma's study serves as a valuable resource for comprehending the nuanced challenges faced by women entrepreneurs in India. The identified social, legal, educational, and familial barriers underscore the need for holistic strategies and policies to foster an inclusive and supportive entrepreneurial ecosystem for women.

Vijaykumar and Jaychitra (2013) stated that female entrepreneurship is currently the most advocated and promoted initiative in the world. It inspires entrepreneurs to work with men to overcome business challenges. The researchers said women entrepreneurs should have good business acumen and skills to adapt to changing local and international markets. Researchers have shown that governments of need to implement strategies, create programs and policies that encourage women to bring out their good qualities. Vijaykumar and Jaychitra (2013) conducted a study highlighting the growing emphasis on female entrepreneurship as a globally advocated initiative. The study underscores the collaborative nature of entrepreneurship, encouraging women to work alongside men to effectively address and overcome various business challenges. The researchers emphasize the importance of women entrepreneurs possessing strong business acumen and adaptable skills to navigate the dynamic landscapes of both local and international markets. The study also points to the role of governments in fostering female entrepreneurship. It suggests that governments should implement specific strategies, programs, and policies that actively promote and support women in business. The goal is to create an environment that encourages women to leverage their inherent qualities and capabilities as entrepreneurs. Overall, the study underscores the significance of empowering women in entrepreneurship and advocates for a comprehensive approach involving both individuals and governmental initiatives to harness the full potential of female entrepreneurs.

Viinikainen (2013) tries to follow the business activities of entrepreneurs while creating and creating problems, to follow the problems and to find ways to overcome them. Researchers analyze business problems and how to solve them, and talk about business people's experiences and insights in managing their businesses and making them successful. Viinikainen's 2013 study delves into the intricate landscape of entrepreneurial ventures, aiming to meticulously track the evolution of business activities and the challenges encountered by entrepreneurs. The primary objective of the research is to gain a profound understanding of the problems that arise in the entrepreneurial journey and to explore effective strategies for overcoming these obstacles. The study employs a qualitative analysis, scrutinizing a spectrum of business problems confronted by entrepreneurs. Viinikainen and colleagues dedicate attention to the nuanced nature of these challenges, recognizing that each problem represents a unique puzzle demanding a tailored solution. Through a systematic examination of entrepreneurs' experiences, the research seeks to distill valuable insights into the art of managing businesses successfully. Key elements of the study include an in-depth analysis of the types of problems entrepreneurs encounter in their ventures. These could span financial challenges, market dynamics, operational hurdles, or strategic dilemmas. The research goes beyond mere identification and delves into the strategies employed by entrepreneurs to navigate and resolve these issues. By spotlighting real-world experiences and drawing from the wealth of insights shared by business leaders, the study contributes not only to academic understanding but also offers practical guidance for aspiring and existing entrepreneurs. The narrative woven by Viinikainen captures the dynamic nature of entrepreneurship, where challenges are not roadblocks but rather opportunities for innovation and growth. In essence, the study provides a nuanced exploration of the entrepreneurial landscape, offering a rich tapestry of business problems, solutions, and the wisdom garnered from the firsthand experiences of entrepreneurs. Through this lens, Viinikainen aims to illuminate the multifaceted nature of entrepreneurial problem-solving, enriching both scholarly discourse and the entrepreneurial community at large.

Turker and Selcuk (2013) at Yasar university examines the impact of university students' knowledge on entrepreneurship and creating new products and services in Turkey. Studies have shown that these courses offered by universities stimulate innovation and

knowledge creation, thereby increasing the growth and competitiveness of startups. This work is also about job creation and improving the country's deficit because students are empowered with business knowledge and skills. Yasar University's 2013 study delves into the transformative role of university courses in shaping the entrepreneurial landscape and fostering the creation of new products and services in Turkey. The research centers on assessing the influence of knowledge acquired by university students on entrepreneurship and its tangible outcomes. A key focus of the study is the impact of specialized courses offered by universities. Yasar University's findings highlight the pivotal role of these courses in stimulating innovation and knowledge creation. The nexus between education and entrepreneurship is explored, revealing that such academic initiatives not only nurture innovative thinking but also contribute significantly to the growth and competitiveness of startups. The research sheds light on the broader socio-economic implications of empowering students with entrepreneurial knowledge. Job creation emerges as a noteworthy outcome, with students equipped not only with theoretical insights but also practical skills to embark on entrepreneurial ventures. This nexus between education and employment plays a vital role in addressing national challenges, contributing to the improvement of the country's deficit. In essence, Yasar University's work underscores the dynamic interplay between education, entrepreneurship, and economic development. By empowering students with business knowledge and skills, universities become catalysts for positive change, fostering a culture of innovation that reverberates in the startup ecosystem. The study provides valuable insights for policymakers, educators, and stakeholders, advocating for the continued integration of entrepreneurship education to bolster Turkey's economic landscape.

Xue and Chan (2013) examine and explain the rise of workers to produce faster and cheaper. This work redefines the entire concept of the entrepreneurial community. Xue and Chan's 2013 study offers a nuanced examination and explanation of the ascendancy of workers focused on enhancing speed and cost-effectiveness in production processes. The research fundamentally redefines the conventional understanding of entrepreneurial communities, particularly in the context of heightened emphasis on efficiency and affordability. A central theme of the study revolves around the evolving dynamics within the entrepreneurial landscape. Xue and Chan scrutinize the factors propelling workers

towards achieving swifter and more economical production. The findings shed light on the multifaceted motivations, strategies, and collaborative efforts within this community, underscoring a paradigm shift in the way entrepreneurship is conceptualized. The concept of an entrepreneurial community, traditionally associated with innovation and risk-taking, is redefined in this work. Here, entrepreneurship is intricately linked to the pursuit of efficiency and cost-effectiveness. The study explores how this shift impacts not only individual enterprises but the collective ethos of the entrepreneurial ecosystem. The findings of the research carry implications for businesses, policymakers, and scholars alike. As workers increasingly align their efforts with the imperatives of speed and cost, the entrepreneurial community undergoes a transformation marked by a recalibration of priorities and strategies. This redefined paradigm introduces fresh perspectives into the discourse on entrepreneurship, challenging pre-existing notions and fostering a deeper understanding of the contemporary entrepreneurial landscape. In essence, Xue and Chan's study serves as a thought-provoking exploration into the changing dynamics of entrepreneurial communities, offering insights that extend beyond the conventional boundaries of innovation and risk-taking. The work contributes to a more comprehensive understanding of the forces shaping modern entrepreneurship, emphasizing the significance of speed and cost-effectiveness in the contemporary entrepreneurial narrative.

Chatterji (2013), Almost all states have extended some exemptions to labor and environmental laws for the IT industry; this allows the IT industry to operate 24/7 business hours in 365 days and serve customers in multiple time zones. Chatterji's 2013 study investigates the widespread practice of states extending exemptions to labor and environmental laws for the Information Technology (IT) industry. The primary focus is on understanding the implications of these exemptions, especially in facilitating the IT industry's ability to operate continuously, offering services 24/7 across 365 days and catering to customers in diverse time zones. The research recognizes a prevalent trend across various states where the IT industry enjoys special considerations regarding labor and environmental regulations. This leniency in regulatory frameworks enables IT businesses to maintain uninterrupted operations, a crucial factor in an industry characterized by global clientele and diverse time zone requirements. The key findings of the study revolve around the advantages and challenges associated with these exemptions.

On the positive side, the ability to operate around the clock enhances the industry's responsiveness to clients located in different parts of the world. The study likely explores how this operational flexibility contributes to the competitive edge of IT companies. However, the research may also delve into the potential downsides of these exemptions. It might examine issues related to employee welfare, environmental sustainability, or other social concerns that could be impacted by the relaxation of labor and environmental regulations. In summary, Chatterji's study sheds light on the regulatory environment surrounding the IT industry, emphasizing the role of exemptions in shaping its operational dynamics. The analysis likely encompasses a balanced consideration of the benefits and challenges associated with such exemptions, offering insights into the complex interplay between regulatory frameworks and the globalized operations of the IT sector.

Ashish (2014) said that India is a large country with a population of over 1.3 billion people, it has a wide distribution of public funds due to the large number of young people. The author added that according to the UN report, India has 356 million young people aged 10-24 who are the driving force for research, demand generation and use of products and services. Ashish's 2014 study delves into India's demographic landscape, emphasizing its vast population of over 1.3 billion people. The research highlights the unique demographic dividend that India possesses, particularly due to its substantial youth population. The study underscores the distribution of public funds as a strategic response to leverage the potential of this demographic dividend. A central theme of the study revolves around the demographic dynamics of India, where a large proportion of the population comprises young individuals. According to the UN report cited by the author, there are 356 million young people aged 10-24 in India. This demographic segment is positioned as a significant driver for various aspects, including research initiatives, the generation of demand, and the utilization of products and services. The study likely explores the implications of such a demographic configuration for innovation, economic growth, and societal development. It may discuss how the concentration of young minds can serve as a catalyst for research endeavors, shaping market demands, and influencing the consumption patterns of products and services. In essence, Ashish's work provides a macroscopic view of India's demographic dividend and its potential impact on the nation's trajectory. The study is likely to contribute to the discourse on strategic planning, policy formulation, and economic

development by recognizing and harnessing the unique opportunities presented by the country's demographic composition.

Varitintra (2014), conducted a case study on the effectiveness and innovation of SMEs in Thailand. This study uses qualitative methods and descriptive statistics to explore the relationship between entrepreneurs, innovative ideas, and firm performance of high-tech entrepreneurs in Thailand. Findings are based on case studies of four business organizations and in-depth interviews with CEOs/Founders. The study found that three out of four companies used a leadership strategy and only one company used a first move strategy. Both use the cooperative method. All companies have experienced growth over the past three years, with first movers showing the highest growth. Varit's 2014 case study offers a comprehensive exploration of the effectiveness and innovation dynamics within Small and Medium Enterprises (SMEs) in Thailand. Employing a mixed-methods approach that combines qualitative methods with descriptive statistics, the research aims to unravel the intricate relationship between entrepreneurs, innovative ideas, and firm performance, with a particular focus on high-tech entrepreneurs. The study's foundation lies in a robust methodology encompassing in-depth interviews with CEOs/Founders and an examination of four distinct business organizations. Through a qualitative lens and the application of descriptive statistics, Varit navigates the landscape of entrepreneurial strategies employed by these SMEs, shedding light on their innovation approaches and consequent firm performance. Key findings emerge from the nuanced exploration of the four case study organizations. A notable revelation is the prevalence of leadership strategies among three out of the four companies, contrasting with a singular company adopting a first-mover strategy. The cooperative method surfaces as a common thread, emphasizing collaboration as a pivotal element in the innovative pursuits of these high-tech entrepreneurs. Crucially, all the scrutinized companies exhibit growth over the preceding three years, attesting to the resilience and dynamism within Thailand's SME landscape. Significantly, the first movers emerge as the growth leaders, underscoring the impact of strategic positioning and early market entry. Varit's study not only contributes valuable insights to the specific context of Thai SMEs but also establishes a methodological benchmark for future research endeavors in the realm of entrepreneurial dynamics. The blend of qualitative depth and statistical analysis provides a rich tapestry of understanding, offering a nuanced perspective on the

multifaceted interplay between entrepreneurial strategies, innovation, and organizational growth within the high-tech SME sector.

Davila et al. (2014) examined more than 1,58,000 early-stage companies that create and destroy revenue and performance in 10 countries. While the study, which shows that few companies are creating a drop in employment and income, warns that this is due to "self-harm," the researchers said companies need to take significant steps to reduce conflict and further harm. In a sweeping exploration, Davila et al. (2014) dissected the intricacies of over 158,000 early-stage companies spanning 10 diverse countries. The research, a magnum opus in the realm of entrepreneurship studies, meticulously scrutinizes the intricate dance between the creation and destruction of revenue and performance within this expansive cohort. One of the pivotal revelations from this extensive study is the nuanced understanding that a select few companies wield a dual-edged sword, acting as both creators and extinguishers of employment and income. The researchers, with a cautionary tone, attribute this phenomenon to a form of "self-harm." This distinctive duality in the impact of early-stage companies underscores the complex and varied outcomes that characterize the entrepreneurial landscape. The study not only serves as a diagnostic tool, laying bare the dynamics of economic gains and losses orchestrated by these companies, but it also sounds a clarion call for strategic interventions. Davila et al. advocate for substantial measures to curtail conflicts within the entrepreneurial realm, emphasizing the imperative of mitigating further self-inflicted harm. The significance of this research extends beyond national borders, encompassing a global perspective on the challenges and opportunities embedded in the early stages of company development. The sheer scale of the dataset involved, and the multinational scope of the study bolster its credibility and applicability to diverse entrepreneurial ecosystems. In essence, Davila et al.'s work stands as a seminal contribution to the understanding of early-stage entrepreneurial dynamics on a global scale. By unraveling the intricate threads of creation and destruction woven by these companies, the study not only informs academic discourse but also furnishes actionable insights for policymakers and practitioners striving to navigate the delicate balance between entrepreneurial vigor and inadvertent harm.

Krishna (2014) published a research paper that uses the concept of entrepreneurship (business decisions under uncertainty) to explain the journey of a hard-working startup to survive in the new job. Based on research data from 99tests.com, this article shows that early-stage startups in new businesses can improve their survival using the principle. Krishna's seminal research paper, published in 2014, unfurls a narrative that intertwines the profound concept of entrepreneurship, defined as the art of making business decisions under uncertainty, with the arduous journey of tenacious startups striving for survival in the dynamic landscape of emerging industries. This study, grounded in empirical insights drawn from the data trove of 99tests.com, illuminates a strategic principle that holds the promise of enhancing the endurance of nascent businesses navigating uncharted territories. The crux of Krishna's research lies in employing the lens of entrepreneurship as a theoretical framework to decipher the trajectories of early-stage startups venturing into novel domains. The fundamental premise is that the capacity to make judicious decisions amid uncertainty becomes a linchpin for the survival and success of these fledgling enterprises. Drawing on a robust dataset from 99tests.com, the research unfolds a compelling narrative, showcasing how startups in nascent industries can fortify their survival prospects by embracing the principles of entrepreneurship. This strategic approach is unveiled as a potent tool, guiding these ventures through the intricate dance of uncertainty that defines the early stages of novel businesses. The practical implications of Krishna's work resonate across the startup landscape, offering actionable insights for entrepreneurs, investors, and policymakers. By grounding the theoretical construct of entrepreneurship in the tangible experiences of startups, the research not only advances academic discourse but also furnishes a pragmatic guide for those navigating the turbulent waters of nascent industries. In essence, Krishna's research stands as a beacon, illuminating the path for startups through the lens of entrepreneurship. The strategic principle unearthed has the potential to not only enhance survival rates but also to shape a roadmap for resilience and success in the challenging terrain of emerging business landscapes.

Dey (2014) highlights the various roles women entrepreneurs play. The author believes that there are many factors that affect women's business, such as managing work and family, the balance between work and life, which women entrepreneurs need to manage. In a nuanced exploration of the entrepreneurial landscape, Dey (2014) casts a

spotlight on the myriad roles that women entrepreneurs embody. The research delves into the intricate web of factors shaping women's experiences in the business realm, with a particular emphasis on the delicate balance required in managing both professional and personal spheres. Dey's work unfolds against the backdrop of the multifaceted roles that women entrepreneurs undertake. It goes beyond the conventional lens, acknowledging that the entrepreneurial journey for women is a complex interplay of various factors. At its core, the research underscores the pivotal role of women in entrepreneurship, shedding light on their diverse contributions and the challenges inherent in managing the intricate tapestry of work and family life. A central tenet of Dey's exploration is the recognition that the equilibrium between work and life is a linchpin for women entrepreneurs. The study grapples with the dynamic interplay of responsibilities, offering a nuanced understanding of the unique challenges faced by women in the entrepreneurial arena. This research not only contributes to the academic discourse on gender and entrepreneurship but also serves as a pragmatic guide for policymakers and stakeholders. By illuminating the multifaceted roles of women entrepreneurs and the nuanced factors influencing their business trajectories, Dey's work stands as a seminal contribution, advocating for a more comprehensive and inclusive approach to entrepreneurship studies. In essence, Dey's research is a testament to the diverse and integral roles that women play in the entrepreneurial ecosystem. By acknowledging the intricate dance between work and family life, the study not only enriches scholarly understanding but also advocates for a more supportive and inclusive entrepreneurial landscape for women.

Galope (2014) analyzes the characteristics of small start-ups using small business studies for R&D using data from Kauffman & Co. The results of the research show that the founders of entrepreneurs who are educated and experienced in research and development, as well as startups working in the technology industry, prioritize technology and finance. In a meticulous analysis of small startups, Galope (2014) draws upon insights from small business studies, with a particular focus on research and development (R&D) dynamics. Leveraging data from Kauffman & Co., the research discerns patterns in the characteristics and priorities of these fledgling enterprises, shedding light on the nuanced interplay between education, experience, and industry focus. The crux of Galope's investigation revolves around the characteristics of small startups, especially honing in on the

educational and experiential backgrounds of their founders. Notably, the study underscores that entrepreneurs with a robust educational foundation and experience in research and development are more likely to spearhead small startups. Furthermore, the research ventures into the realm of industry dynamics, with a specific lens on technology-centric startups. The findings illuminate a distinct set of priorities for startups operating in the technology industry, with a pronounced emphasis on both technological prowess and financial acumen. Galope's work stands as a significant contribution to the understanding of small startups, offering both theoretical insights and practical implications. By delineating the contours of founder characteristics and industry-specific priorities, the research provides a roadmap for entrepreneurs, investors, and policymakers navigating the intricate landscape of small businesses, particularly those entrenched in research and development. In essence, Galope's research is a compass for decoding the DNA of small startups, unraveling the crucial factors that influence their formation and trajectory. By linking educational backgrounds, industry focus, and entrepreneurial priorities, the study enriches our understanding of the dynamics propelling these enterprises into the realm of research and development.

Giardino et al. (2014) examined early-stage initiatives to understand why they failed and found that differences with management in strategy development and execution caused them to fail. Studies have shown that even with a good awareness of the need for the product, products start trading quickly without understanding the needs of the market. In a comprehensive exploration of early-stage initiatives, Giardino and colleagues (2014) embark on a quest to dissect the intricacies of failure. Their research, a probing analysis into why these nascent ventures falter, unveils a narrative woven with the threads of management disparities in both strategy development and execution. The cornerstone of Giardino et al.'s work lies in the revelation that divergences in strategic vision and its practical implementation are formidable contributors to the demise of early-stage initiatives. The study delves into the complex dynamics of strategy formation and execution, unearthing the profound impact these factors exert on the fate of budding ventures. One notable finding encapsulates the peril of hastened market entry. The research underscores that, even with a sound awareness of product necessity, premature forays into the market without a deep comprehension of its needs can precipitate failure. This insight

sheds light on the delicate dance between product awareness and market understanding that characterizes the early stages of entrepreneurial endeavors. Giardino et al.'s research is not just a postmortem of early-stage failures; it serves as a guidepost for entrepreneurs and strategists. By unraveling the intricacies of strategy and execution misalignments, the study offers valuable insights that can inform a more robust approach to the initiation and sustenance of early-stage initiatives. In essence, Giardino et al.'s work is a compelling narrative that navigates the labyrinth of early-stage failures. By spotlighting the critical role of strategic coherence and market understanding, the research advances our comprehension of the pitfalls and challenges inherent in the nascent phases of entrepreneurial undertakings.

Gkikas (2014) stated that ten years of developments in ICT technology, the most important of which are Internet services and virtualization technologies, have led to the emergence of various examples of computing, the most important of which are Internet services and virtualization technologies. True cloud computing. The author noted that there are many companies in the world that provide air services, offering solutions to individuals or companies. Thus, according to the authors, numerous service providers have entered the cloud business. Research shows that cloud computing plays an accelerating role in boosting the economy in Greece. In a seminal exploration, Gkikas (2014) casts a spotlight on the transformative decade-long journey of Information and Communication Technology (ICT) evolution, particularly emphasizing the pivotal role played by Internet services and virtualization technologies. The crux of Gkikas' insights revolves around the emergence and proliferation of cloud computing, delineating it as the true manifestation of ICT advancements. The author observes that this transformative wave has given rise to a myriad of computing examples, with Internet services and virtualization technologies standing as the vanguards, ultimately coalescing into what is recognized as true cloud computing. The global landscape, Gkikas notes, is now adorned with companies providing cloud services, catering solutions not only to individuals but also to enterprises. Key to the author's observations is the dynamic entry of numerous service providers into the realm of cloud business, a phenomenon spurred by the technological strides of the past decade. The research underscores the ubiquity of cloud services across the globe, offering diverse solutions tailored to the needs of both individuals and businesses. A notable highlight of Gkikas' findings is the assertion that cloud computing isn't merely a technological paradigm

but an economic catalyst. Through empirical evidence, the study illustrates the accelerating role played by cloud computing in fostering economic growth, particularly in the context of Greece. In essence, Gkikas' work encapsulates the symbiotic relationship between ICT evolution, cloud computing, and economic dynamics. By chronicling the evolution of technology and its tangible impact on businesses and economies, the research provides a lens through which we can appreciate the transformative power of the cloud in Greece's economic landscape.

Yourstory India (2014) conducted a study of why startups in India failed in the first few years (0-2 years after founding) in 2014, collecting data on founders to understand why the business was shutting down. Research conducted is only on IT service initiatives incubated in India. This study first looks at two perspectives: the entrepreneur/creator and their personality. Second, the startups they founded/partnered with failed/successful in their first year. This allows us to understand the failure of attempts (Yourstory, 2014). In a meticulous study conducted by YourStory India in 2014, the enigma of startup failures in the nascent years, specifically within the crucial 0-2 year window, took center stage. Focused primarily on IT service initiatives incubated in India, the research unfolded a narrative deeply entrenched in the motivations, personalities, and contextual nuances of the entrepreneurs behind these ventures. The study wielded a dual lens, peering first into the intricate tapestry of the entrepreneur's personality and then scrutinizing the trajectory of the startups they spearheaded. By aligning these two perspectives, the research sought to unravel the intricacies of success and failure within the pivotal first year of a startup's existence. One facet of the study delved into the nuanced world of the entrepreneur's psyche. By dissecting the personalities of the founders, the research aimed to discern the driving forces and idiosyncrasies that influenced their entrepreneurial journeys. This approach offered a unique angle, acknowledging the profound impact of individual characteristics on the fate of a startup. Simultaneously, the study navigated the labyrinth of startup trajectories in their inaugural year. Scrutinizing the divergent paths of success and failure, YourStory India endeavored to distill patterns and lessons from the outcomes of these ventures. The findings provided a nuanced understanding of the factors that contribute to the success or demise of startups during their formative phase. In essence, YourStory India's 2014 study stands as a comprehensive dissection of the early-stage

startup landscape in India. By marrying insights into founder personalities with the trajectory of their startups, the research not only sheds light on the intricacies of startup dynamics but also furnishes invaluable lessons for aspiring entrepreneurs and the ecosystem at large.

Korosteleva and Mickiewicz (2014) show that financial independence affects the total financial capital of enterprises using external or internal resources. According to World Business Monitor's survey data of 54 countries from 2001 to 2006, a country's economic development affects the total investment of start-up companies. Research has shown that when GDP per capita grows, money is created even to invest in business. The study conducted by Korosteleva and Mickiewicz in 2014 investigates the impact of financial independence on the overall financial capital of enterprises, considering both external and internal resources. Utilizing data from the World Business Monitor's survey covering 54 countries between 2001 and 2006, the research explores the nexus between a country's economic development and the total investment in start-up companies. The findings reveal a significant correlation: as the GDP per capita of a country grows, there is a concurrent increase in available funds for business investment. This underscores the critical role of economic development in fostering financial resources for entrepreneurial ventures, emphasizing the interconnectedness of national economic conditions and the capitalization of start-up enterprises.

Kvedaraitė (2014) examines the entrepreneurship of Lithuanian students, the factors that provide entrepreneurship, and the problems and expectations these students see. Studies show that the percentage of students entering the business life is very low. This may be because students know little about the business and students who participate in business expect to be independent and hope to earn some money from the individual. Kvedaraitė's 2014 research delves into the realm of entrepreneurship among Lithuanian students, aiming to unravel the factors that either facilitate or hinder entrepreneurial endeavors for this demographic. The study meticulously explores the challenges and expectations perceived by these students in the context of entrepreneurship. A notable revelation surfaces—the proportion of students venturing into the entrepreneurial sphere is notably meager. This scarcity might be attributed to a knowledge gap, suggesting that students possess limited understanding of business intricacies. Those students who do

engage in entrepreneurial activities harbor aspirations of independence and financial gains, highlighting their desire for self-sufficiency and economic empowerment. Kvedaraitė's study not only scrutinizes the entrepreneurial landscape among Lithuanian students but also accentuates the imperative of addressing knowledge gaps to foster a more vibrant culture of entrepreneurship within this demographic.

Sardeshmukh and Srinivasan (2014) examine the concept of the 24-hour knowledge factory by asking software engineers to take a physical approach. This gave an insight into a lot of motivational and inspirational factors that lead to the growth and survival of the IT sector. In their 2014 study, Sardeshmukh and Srinivasan explore the paradigm of the 24-hour knowledge factory, employing a tangible approach by engaging software engineers. This unique perspective offers valuable insights into the motivational and inspirational factors contributing to the growth and sustainability of the IT sector. By delving into the physical experiences of software engineers, the study unveils a nuanced understanding of the dynamics propelling the IT industry forward. Beyond the conventional examination of economic or technical aspects, the research sheds light on the human elements that drive innovation, productivity, and the continuous operation of the 24-hour knowledge factory model. Sardeshmukh and Srinivasan's groundbreaking study unfolds a multifaceted narrative around the 24-hour knowledge factory, delving deep into the physical experiences of software engineers. This hands-on approach unveils the intricate tapestry of motivational factors that act as catalysts for the remarkable endurance and evolution of the IT sector. By going beyond the abstract and theoretical, the study captures the essence of what propels the industry forward, providing not just a glimpse into economic drivers but a profound understanding of the human dynamics at play. The research serves as a compass, guiding us through the motivational and inspirational dimensions that underpin the resilience and continuous innovation witnessed in the realm of information technology. In essence, Sardeshmukh and Srinivasan illuminate the human story within the technological evolution, revealing the beating heart behind the 24-hour knowledge factory concept.

Lindtner et al. (2014) examines DIY and how they can be a way to make vision a reality by creating products from prototypes. Studies also show how hardware startups and hackers are using DIY to create new models for their business. The researchers suggest that DIY builders should view their processes as a job rather than a hobby, which can lead to

job opportunities. In their 2014 exploration, Lindtner and team delve into the realm of Do-It-Yourself (DIY), investigating how this hands-on approach can serve as a conduit to transform visionary ideas into tangible products through the creation of prototypes. The study illuminates the intersection of DIY practices, hardware startups, and hacker communities, showcasing how these grassroots movements are reshaping traditional business models. Lindtner et al. emphasize a crucial paradigm shift, encouraging DIY enthusiasts to perceive their endeavors not merely as hobbies but as professional processes with the potential to unlock diverse job opportunities. By shedding light on the fusion of creativity, prototyping, and entrepreneurial spirit, the research provides a nuanced understanding of how DIY practices are not only mechanisms for personal expression but also dynamic engines propelling innovation and economic avenues in the contemporary landscape.

Čalopa et al. (2014) examined the financing offered to Croatian start-ups at different levels and how start-ups moved from traditional financing methods to new financing methods. The researchers found that most startups are funded through traditional personal finance, 3F, and venture capital. Research has shown that the investor's experience also influences the choice of resources such as financial investments and seeds. In their comprehensive examination, Čalopa and colleagues navigate the intricate terrain of financing for Croatian start-ups, discerning shifts from conventional funding approaches to novel methods. The study meticulously dissects the financial landscape, revealing that a significant portion of start-ups relies on traditional avenues such as personal finances, the support of family, friends, and fools (3F), and venture capital. Notably, the research unveils the nuanced interplay between investor experience and the strategic choices start-ups make in resourcing, emphasizing the pivotal role of seasoned investors in shaping the financial trajectory of these entrepreneurial ventures. By shedding light on the evolution of funding methodologies, the study contributes valuable insights to the financial ecosystem of start-ups, offering a roadmap for both emerging enterprises and investors navigating the dynamic landscape of Croatian entrepreneurial finance.

Mason and Brown (2014) argue that creating a single work environment does not help the ecosystem grow companies. Research shows that each ecosystem has its own local dynamics. Some ecosystems are business oriented, some have "start-up cycles" and some

have high entrepreneurial experience. This study also influences many factors such as wealth, culture, and other important factors such as large companies, universities and other service providers. Mason and Brown, in their 2014 study, challenge the notion that a one-size-fits-all approach to work environments is conducive to fostering the growth of companies within entrepreneurial ecosystems. Their research compellingly demonstrates that each ecosystem possesses unique local dynamics, shaped by a myriad of factors. Some ecosystems exhibit a strong business orientation, while others operate within distinct "start-up cycles," and certain locales boast a high degree of entrepreneurial experience. The study underscores the multifaceted influences on these dynamics, ranging from economic factors and cultural nuances to the presence of significant entities such as large corporations, universities, and various service providers. By dissecting the intricacies of these local ecosystems, Mason and Brown provide invaluable insights that challenge conventional wisdom and pave the way for a more nuanced understanding of the diverse factors contributing to the growth and vibrancy of entrepreneurial ventures.

Research reported by Motoyama et al. (2014) analyzed the behavior patterns of local organizations and programs as well as businessmen participating in the Million Cup program. The researchers found that local entrepreneurs influence entrepreneurs, follow their Twitter accounts and Startup Follow accounts, these networks grow over time and find different jobs according to the entrepreneurs' needs. The study conducted by Motoyama and colleagues in 2014 delves into the behavioral patterns of local organizations, programs, and entrepreneurs involved in the Million Cup program. The research sheds light on the dynamic interplay between local entrepreneurs, their engagement with social media platforms such as Twitter, and the growth of networks over time. A notable finding is the reciprocal influence among entrepreneurs, exemplified by the act of following each other's Twitter accounts and those associated with Startup Follow. These evolving networks prove to be instrumental, facilitating diverse job opportunities that align with the evolving needs of entrepreneurs. Motoyama et al.'s research thus unveils the intricate social dynamics within entrepreneurial ecosystems, emphasizing the role of interconnected relationships and platforms in shaping the professional trajectories of local entrepreneurs.

Rossi et al. (2014) Examination of crowd and its characteristics. The authors define crowdfunding as entrepreneurs raising small amounts of money from the crowd. Technological changes have enabled entrepreneurs to use technology platforms to raise capital. Crowdfunding can also help companies promote their products and get feedback, and entrepreneurs can easily use the idea, so the author sees it as a financial tool. In Rossi's 2014 examination, the focus lies on crowdfunding and its inherent characteristics. Crowdfunding is elucidated as a mechanism where entrepreneurs secure modest financial contributions from a diverse group of individuals, facilitated by technological platforms. The advent of technological advancements has significantly empowered entrepreneurs to harness these platforms for capital generation. Beyond its financial aspect, crowdfunding serves as a versatile tool for companies, enabling product promotion and feedback solicitation. Rossi perceives crowdfunding not merely as a financial resource but as a means for entrepreneurs to easily disseminate and test their ideas, underlining its multifaceted role in the contemporary entrepreneurial landscape.

Sharma (2014) states in his research that the process of creating venture capital is very dynamic and does not follow a sequence. Researchers have shown that few studies have examined activities during the steady state, which may result from the complexity of procedures and activities. Researchers believe that most researchers focus on the risk-making process and ignore the work, so the researchers presented a new working model that can be used in practice. Sharma's 2014 research delves into the intricacies of the venture capital creation process, emphasizing its dynamic and non-linear nature. The conventional view of a sequential progression in venture capital creation is challenged, with Sharma contending that the process is marked by dynamism and lacks a predetermined sequence. The study critiques existing research for predominantly focusing on risk-related aspects, neglecting the nuanced activities integral to the steady state of venture capital. Recognizing this gap, Sharma introduces a novel working model aimed at practical applicability, offering a more comprehensive understanding of the multifaceted venture capital creation process. Sharma's research not only challenges conventional notions of venture capital creation but also critiques the predominant focus on risk factors in existing studies. The dynamics of venture capital, according to Sharma, go beyond a linear sequence and involve a multitude of interconnected activities. The study highlights the complexity

of procedures involved in creating venture capital, suggesting that the intricate nature of these processes often gets overlooked. A key contribution of Sharma's work lies in the proposal of a new working model. This model is designed not only to address the complexities of the venture capital creation process but also to provide a practical framework for those involved in the field. By emphasizing the practical applicability of the model, Sharma seeks to bridge the gap between theoretical understanding and the day-to-day realities of venture capital creation. Furthermore, the research underscores the need for a more holistic approach in studying venture capital. While risk factors are undoubtedly crucial, Sharma argues that a comprehensive understanding requires attention to the broader spectrum of activities that characterize the steady state of venture capital. In summary, Sharma's work represents a paradigm shift in how we perceive and study the venture capital creation process. It encourages researchers and practitioners alike to move beyond linear perspectives and engage with the dynamic and multifaceted nature of venture capital dynamics.

Andersen and Mauritzen (2015) pointed out in their research that raising capital is a major challenge for starting a business. They examine the performance, platform and legal aspects of the European crowdfunding industry. Various financial and non-financial crowdfunding models such as equity crowdfunding, crowdfunding, reward crowdfunding, donation crowdfunding, franchise crowdfunding, hybrid crowdfunding is examined. The research mainly focuses on crowd rewards and equity, as these have been shown to work best for startups with limited credit and knowledge. According to the authors, the incentive model works better for Norwegian entrepreneurs because crossing the border is easier, while the equity model presents more challenges. In the case of India, no research has been done on crowdfunding as a financial tool for startups. Andersen and Mauritzen delve into the challenges of capital acquisition for startups, placing a spotlight on the European crowdfunding landscape. Their comprehensive exploration covers diverse crowdfunding models, encompassing equity crowdfunding, crowdfunding, reward crowdfunding, donation crowdfunding, franchise crowdfunding, and hybrid crowdfunding. The study emphasizes the nuanced dynamics of reward and equity crowdfunding, identifying these as particularly beneficial for startups grappling with limited credit and expertise. The researchers acknowledge the contextual intricacies, noting that the reward model appears

more favorable for Norwegian entrepreneurs due to streamlined cross-border processes, while the equity model presents more formidable challenges. The absence of research on crowdfunding as a financial instrument for startups in India is a notable observation made by Andersen and Mauritzen. This underscores a potential gap in understanding how crowdfunding could be leveraged as a tool for financial support in the Indian startup ecosystem. In essence, Andersen and Mauritzen's research contributes significantly to comprehending the multifaceted realm of crowdfunding, offering insights valuable not only to European startups but also prompting reflections on the applicability of these models in diverse entrepreneurial landscapes, such as India.

Blomqvist et al. (2015), studied about offshoring not only affects sales personnel, but also damages the bargaining power of domestic customers. Blomqvist et al. (2015) conducted a study shedding light on the broader impacts of offshoring practices. The research contends that offshoring doesn't merely influence sales personnel; it extends its effects to the bargaining power of domestic customers. The study likely explores how the relocation of business operations to foreign shores affects not only the internal dynamics of a company but also its relationships with domestic clients. By pointing out the potential damage to the bargaining power of local customers, the research may underscore the intricate and interconnected consequences of offshoring decisions. This insight could be valuable for businesses and policymakers, emphasizing the need for a holistic understanding of the ramifications of offshoring strategies beyond the immediate operational and cost considerations. Additionally, it might prompt a reevaluation of the balance between global expansion and maintaining strong ties with the local customer base.

Bilau & Sarkar (2015) stated that business angels provided both financing and managerial experience, which increased the possibility of the survival of innovative startups. Over the last years, European countries with developing informal venture capital marketing have seen governments support in the creation of business angels' networks. Bilau & Sarkar (2015) highlight the pivotal role of business angels in the success and survival of innovative startups. According to their findings, business angels not only contribute financial support but also bring valuable managerial experience to the table. This dual contribution significantly enhances the likelihood of innovative startups thriving in the competitive business landscape. The study recognizes the changing landscape in

European countries, where there has been a growing emphasis on informal venture capital markets. Governments, acknowledging the importance of business angels in fostering innovation and entrepreneurship, have actively supported the establishment of business angels' networks. This research underscores the multifaceted support that goes beyond capital injection, emphasizing the significance of mentorship, guidance, and practical business acumen that business angels bring to the startups they invest in. Such insights can be instrumental for policymakers, entrepreneurs, and investors aiming to cultivate a robust ecosystem for innovation and business growth.

Bischof-dos-Santos et al. (2015) examined the challenges facing Brazilian food startups in a competitive market. The results of this study show that business owners do not trust the company's resources, the study also shows that business behavior affects the planning and implementation of the company. Bischof-dos-Santos et al. (2015) conducted a study shedding light on the challenges encountered by food startups in Brazil within a highly competitive market. The findings of this research point out several critical aspects namely **Trust in Company Resources**: The study reveals a notable lack of trust among business owners in the resources available to their companies. This suggests that a perceived deficiency or uncertainty in the available resources could be a significant hurdle for Brazilian food startups. **Impact of Business Behavior**: The research underscores the influence of business behavior on the planning and execution of strategies within these startups. Behavioral aspects, such as decision-making processes and operational approaches, play a crucial role in shaping the trajectory of these companies. Understanding these challenges is pivotal for entrepreneurs, policymakers, and investors in the food startup ecosystem in Brazil. Addressing issues related to resource perception and business behavior could be key to fostering a more conducive environment for the growth and sustainability of food startups in the country.

Caliendo et al. (2015) examined the differences between entrepreneurs receiving unemployment benefits and those not receiving unemployment benefits. The report shows that although startups do fewer jobs and have no impact on the economy, they do not receive traditional education. Finally, the researchers concluded that the productivity of the unemployed is an important factor in their personal and credit worthiness. Caliendo et al. (2015) delved into the distinctions between entrepreneurs who receive unemployment

benefits and those who do not. Key findings from this study include three major factors which are **Job Creation and Economic Impact**: Startups led by individuals receiving unemployment benefits were observed to create fewer jobs and had a limited impact on the broader economy. This insight suggests a potential correlation between the receipt of unemployment benefits and the scale of economic influence exerted by startups. **Educational Background**: Entrepreneurs who initiated startups without traditional education were highlighted in the study. This indicates that a lack of conventional educational qualifications might not be a deterrent for individuals starting businesses, especially those receiving unemployment benefits and **Productivity as a Determinant**: The research underscores the importance of the productivity of the unemployed as a significant factor influencing their personal and credit worthiness. This implies that the effectiveness and output of individuals during unemployment can have implications for their financial standing. Understanding these dynamics is crucial for policymakers, workforce development programs, and financial institutions aiming to support unemployed individuals in entrepreneurship. It emphasizes the need for tailored support mechanisms that consider not only financial aspects but also educational backgrounds and productivity levels of aspiring entrepreneurs.

Calvino et al. (2015) examined the power of startups and their role in creating new jobs, showing the value of startups, the average size of startups at the startup level, the survival rate, and the average survival rate. The growth rate is important. Research shows that 40% of startups nationwide survive seven years and those that survive do not grow, while some continue to make more of an impact for businesses. Calvino et al. (2015) conducted an examination of startups, shedding light on their significance in job creation and several key dimensions. The study underscores the intrinsic value of startups in contributing to economic dynamics. By initiating new ventures, startups play a vital role in fostering innovation, competition, and job creation. Understanding the average size of startups at the initiation phase and their survival rate is crucial. This data provides insights into the initial conditions of startups and their ability to navigate the challenging early stages of business. The finding that 40% of startups nationwide survive for seven years is significant. This timeline is often considered a critical benchmark, and the survival rate provides an understanding of the challenges and success factors influencing startups during

this crucial period. The study touches on the growth trajectory of startups. Notably, it suggests that a considerable portion of surviving startups may not experience substantial growth, indicating diverse trajectories for businesses post-survival. This research is valuable for policymakers, investors, and entrepreneurs alike. It emphasizes the multifaceted nature of startups, ranging from their initial size and survival challenges to their potential impact on job creation and business growth. These insights can inform strategies aimed at supporting startups throughout their lifecycle.

Carlson & Usher (2015) examine digital media initiatives that play an important role in the media industry. These digital media are supported by experts, marketers, and companies, and according to current digital marketing research has explored how journalists are responding to the changes taking place in the digital age. Carlson & Usher (2015) delve into the realm of digital media initiatives, shedding light on their pivotal role in the ever-evolving media industry. The study underscores the importance of digital media initiatives in the contemporary media landscape. These initiatives are identified as crucial components, playing a transformative role in how information is disseminated and consumed. Digital media initiatives are portrayed as receiving substantial support from various quarters, including experts in the field, marketers, and companies. This collaborative backing indicates a recognition of the potential and impact of digital media in shaping the media landscape. The research highlights that journalists are experiencing and responding to the profound changes occurring in the digital age. Understanding how professionals in the media sector navigate and adapt to these changes is crucial for comprehending the broader implications for journalism practices. The study delves into the intersection of journalism and digital marketing. This exploration is particularly relevant as the media industry grapples with the integration of digital strategies, and understanding how journalists respond to these shifts can provide valuable insights. This research contributes to the ongoing discourse on media evolution in the digital age. It not only recognizes the transformative potential of digital media initiatives but also sheds light on the adaptive strategies employed by journalists in response to these shifts. The findings have implications for media professionals, marketers, and researchers keen on understanding the dynamics of contemporary journalism.

Blomqvist et al. (2015) examines whether the offshoring process makes office workers more profitable than their Indian counterparts. Thus, by adding a new sub-layer to the organizational hierarchy, India created a level below the employees, thus taking it one step further in the hierarchy and assets. Blomqvist et al. (2015) delve into the intricate dynamics of the offshoring process, specifically exploring its impact on the productivity and hierarchy of office workers. Some of the key insights from their study are **Productivity Disparities**: The research scrutinizes whether the offshoring of certain tasks results in the onshore office workers becoming more productive than their counterparts in India. This suggests an investigation into the efficiency gains or losses associated with the offshoring strategy. **Creation of Organizational Sub-Layers**: The study reveals a notable consequence of the offshoring process—the creation of a new sub-layer in the organizational hierarchy. This sub-layer, situated below the level of employees, signifies a nuanced organizational restructuring prompted by the offshoring strategy. **Hierarchical Adjustments**: By introducing a new organizational sub-layer, the hierarchy within the company undergoes adjustments. This may involve a redefinition of roles, responsibilities, and reporting structures, reflecting the broader implications of offshoring on organizational dynamics and **Hierarchy and Assets**: The study hints at a connection between the restructuring of hierarchy and the management of assets within the organization. Understanding this link provides insights into how offshoring strategies impact not only human resources but also the overall assets and capabilities of the firm. Blomqvist et al.'s research contributes valuable insights into the multifaceted consequences of offshoring beyond the conventional focus on cost savings. It prompts a nuanced exploration of productivity, hierarchy, and organizational restructuring as integral aspects influenced by the strategic decision to offshore certain functions.

Choudhary (2015) pointed out that according to research, 23% of startups fail because members do not work as a team. "Finding and retaining good talent, especially in products and equipment, is still a significant challenge,". Choudhary (2015) sheds light on a critical factor contributing to the failure of startups: the breakdown in team dynamics. The study highlights the following key points like **Failure Rate**: Research findings indicate that a substantial 23% of startups face failure due to challenges in team collaboration and cohesion. This underscores the pivotal role of effective teamwork in the success of a startup

venture. **Talent Acquisition Challenges:** Choudhary emphasizes the persistent challenge of finding and retaining skilled professionals, particularly in roles related to product development and equipment management. This sheds light on the competitive nature of talent acquisition in these specific domains. **Teamwork as a Success Factor:** The insight underscores the significance of teamwork as a critical success factor for startups. In the startup ecosystem, where resources and capabilities are often limited, a cohesive and skilled team becomes indispensable for overcoming challenges and driving success and The study incorporates the viewpoint of author, who highlights the ongoing challenge of talent acquisition, especially in roles related to products and equipment. This perspective from an industry expert adds a practical dimension to the research findings. Choudhary's research serves as a valuable reminder to startups about the importance of fostering strong team dynamics. It suggests that beyond the initial excitement of a business idea, the ability to work collaboratively and retain skilled talent significantly influences a startup's ability to navigate challenges and achieve long-term success.

Giardino et al. (2015) examined the challenges faced by early-stage software companies. Findings from 5,389 companies show that uncertainty over assets and trust, and finding first-time customers willing to pay, are major barriers to starting a business. The study also revealed that software startups develop software without understanding and implementing the appropriate solution. Giardino et al. (2015) delved into the challenges confronted by early-stage software companies, presenting key insights derived from the analysis of 5,389 companies. The study unraveled significant hurdles these companies face which were **Uncertainty Over Assets and Trust:** One prominent challenge identified was the presence of uncertainty, particularly related to assets and trust. This points to the complex landscape these startups navigate, where establishing trust and securing necessary assets pose substantial barriers. **Acquiring First-Time Paying Customers:** For early-stage software companies, finding initial customers willing to pay emerged as a formidable challenge. This highlights the difficulty of monetizing products or services in the nascent stages of a software startup. **Software Development Challenges:** The research shed light on a crucial aspect—software startups often engage in development without a comprehensive understanding and implementation of the appropriate solutions. This emphasizes the importance of strategic planning and understanding market needs in the

software development process. **Implications for Business Startups:** The findings from this study hold implications for aspiring entrepreneurs in the software industry. It underscores the need for a nuanced approach to asset management, building trust, and crafting effective strategies for customer acquisition, especially in the early phases of business development. Giardino et al.'s research provides valuable insights into the intricate challenges faced by early-stage software ventures, offering a foundation for entrepreneurs, investors, and stakeholders to comprehend and address these hurdles effectively.

Grant Thornton (2015), report states that India ranks among the top 5 countries in the world with more than 10,000 start-ups and accounts for 43% of the US-led business community with more than 83,000 start-ups. 9% are led by women. In addition, research shows that the number of incubators exceeded 100 in 2014-15, which encourages the development of start-ups. Grant Thornton's 2015 report provides a comprehensive overview of India's standing in the global startup arena. India secures a prominent position globally, being among the top 5 countries with an impressive count of over 10,000 startups. This signifies the robust entrepreneurial ecosystem and the burgeoning culture of innovation within the country. The report underscores India's substantial contribution to the global business community, particularly in startups. With over 83,000 startups, India accounts for a significant portion—43%—of the US-led business community, showcasing the country's influence in the international startup landscape. While the startup landscape traditionally leans male-dominated, the report notes a positive trend with 9% of startups being led by women. This signals a gradual but noteworthy shift toward greater gender diversity and inclusivity within India's startup ecosystem. An encouraging trend highlighted in the report is the significant increase in the number of incubators. The count surpassed 100 during the period of 2014-15. Incubators play a pivotal role in fostering the growth of startups by providing resources, mentorship, and a conducive environment for development. Grant Thornton's report serves as a valuable resource for understanding India's dynamic startup landscape, emphasizing its global relevance, the emergence of women leaders, and the crucial role played by incubators in nurturing the startup ecosystem.

Henderson et al. (2015) examined the effects of race and gender on startup scores and found that "Black" business owners scored lower than "White" business owners. The study found that "white" people preferred African-Americans, Latinos, and Asians to determine their credit scores, while men preferred women for access to credit. In 2015, Henderson and colleagues delved into the intricate dynamics of race and gender biases impacting startup evaluations. The research reveals a stark contrast in the scores assigned to startups based on the race of the business owners. Specifically, "Black" business owners received lower scores compared to their "White" counterparts. This suggests inherent biases in the evaluation process that disadvantage entrepreneurs from certain racial backgrounds. The study sheds light on how individuals from different racial backgrounds influence credit scores. Notably, it indicates a preference among "White" evaluators to assign credit scores based on stereotypes associated with African-Americans, Latinos, and Asians. These biases likely contribute to the observed scoring discrepancies. Henderson et al. identify a gender dimension to the biases in startup evaluations. Men, in particular, exhibit a preference for evaluating women entrepreneurs unfavorably when it comes to determining access to credit. This points to systemic gender biases within the startup evaluation process. The study by Henderson and team serves as a critical examination of the biases present in assessing startups, emphasizing the need for greater awareness and interventions to ensure fair and equitable evaluations, regardless of race or gender.

Hincks et al. (2015) examines the characteristics of those most likely to be self-employed, summarizes the UK's national policies to promote self-employment and entrepreneurship, and examines a range of issues related to self-employment. The researchers found that start-ups contributed greatly to job creation in the UK, but job creation appeared to be concentrated in a small group of growing economies. Young people aged 18 to 30 in the UK are more entrepreneurial because they are more entrepreneurial and have a positive attitude towards self-employment. In 2015, Hincks and colleagues conducted a comprehensive analysis focusing on self-employment and entrepreneurship in the United Kingdom. Four major points that were taken into account are **Characteristics of the Self-Employed**: The study delves into the characteristics of individuals who are most likely to be self-employed. Understanding the demographics and traits of this group provides valuable insights into the dynamics of self-employment. National Policies to

Promote **Entrepreneurship**: Researchers summarize the national policies in the UK aimed at fostering self-employment and entrepreneurship. This involves examining the regulatory and support frameworks established by the government to encourage entrepreneurial activities. **Job Creation Impact**: The study sheds light on the significant contribution of startups to job creation in the UK. However, it highlights that the creation of jobs tends to be concentrated within a specific subset of growing economies, indicating potential areas for further exploration and policy focus. **Youth Entrepreneurship**: A notable finding is the higher propensity for entrepreneurship among young people aged 18 to 30 in the UK. The research attributes this to the positive attitudes of the youth toward self-employment, portraying a promising trend for entrepreneurial activities in younger demographics. Hincks et al.'s research underscores the multifaceted nature of self-employment, emphasizing the need for nuanced policies that consider demographic variations and the concentrated impact of startups on job creation.

Kandaswamy (2015) defined a start-up as "a business venture or new venture in a business, partnership or ad hoc organization that aims to find a job in order to do business again and be profitable". These are created through the innovation process. The author examines various challenges faced by startups in the Bangalore ecosystem, including the wrong business model, weak management team, lack of funding and lack of product alignment. In 2015, Kandaswamy provided a comprehensive definition of a startup as "a business venture or new venture in a business, partnership, or ad hoc organization that aims to find a job to do business again and be profitable." This definition emphasizes the dynamic and innovative nature of startups, reflecting their core purpose of creating value and profitability. The study primarily focused on the challenges faced by startups within the Bangalore ecosystem, a burgeoning hub for entrepreneurial activities. The identified challenges include: **Wrong Business Model**: Startups often grapple with formulating an effective and sustainable business model. The study sheds light on the critical importance of aligning the business model with the market needs and dynamics to ensure long-term success. **Weak Management Team**: The research underscores the significance of having a robust and skilled management team. Weaknesses in leadership and management can hinder a startup's ability to navigate challenges and capitalize on opportunities. **Lack of Funding**: Access to funding is a perennial challenge for startups. The study recognizes the

financial constraints that many startups face and the importance of securing adequate funding for growth and development. **Lack of Product Alignment:** Ensuring that the product or service offered by a startup aligns with market demands is crucial. The study highlights the need for startups to continuously evaluate and adjust their offerings to meet evolving customer needs. Kandaswamy's work contributes to the understanding of startups not only through a comprehensive definition but also by pinpointing specific challenges prevalent in the Bangalore ecosystem. This insight can guide policymakers, investors, and entrepreneurs in fostering an environment conducive to startup success.

Kirby (2015) examines the entrepreneurship of journalists in the print and digital age. The researchers conducted their research in two contexts, a trade journal and a non-commercial journal for college students. Research shows that the experiences and problems of the two conditions are similar. In 2015, Kirby delved into the realm of journalism, exploring the entrepreneurship endeavors of journalists amid the transformative shift from traditional print to the digital age. The study was conducted in two distinct contexts: a trade journal and a non-commercial journal for college students. Despite the differences in the nature of the publications (trade journal vs. non-commercial journal for students), the research uncovered striking similarities in the experiences and challenges faced by journalists navigating entrepreneurship. This suggests that certain entrepreneurial dynamics transcend the specific characteristics of the journalistic environment. As the journalism landscape undergoes a fundamental shift towards digital platforms, the study likely explored the adaptation strategies employed by journalists. This could encompass the exploration of new revenue models, changes in content creation and distribution, and the utilization of digital tools and technologies. The research likely shed light on the unique challenges encountered by journalists entering the entrepreneurial domain. These challenges might include issues related to funding, audience engagement in the digital space, and the evolving role of journalists in a rapidly changing media landscape. Understanding the entrepreneurial journey of journalists, particularly in the digital age, may have implications for journalism education. Insights from the study could inform curriculum development, preparing aspiring journalists for the multifaceted and dynamic nature of the contemporary media industry. Kirby's work contributes valuable insights into the entrepreneurship landscape within journalism, offering a nuanced understanding of

how journalists navigate the complexities of entrepreneurship in both traditional and digital contexts. This research is relevant not only for journalists but also for media educators and industry stakeholders adapting to the evolving media landscape.

Kumar (2015), study provides a detailed overview of the Indian startup ecosystem in comparison to the United States, Israel, Singapore and New Zealand. Researchers examined online startups in India and the role played by incubators and accelerators. Business segments that have started to invest and are successful, current changes in business establishment such as mobile payment, voice recognition, mobile finance with great usage potential, social media, SaaS model (software as a service) are examined. The study also noted that although 50% of total sales revenue is generated in non-urban areas, the potential of rural India is not being tapped. In 2015, Kumar conducted an extensive study offering a detailed overview of the Indian startup ecosystem, drawing comparisons with startup landscapes in the United States, Israel, Singapore, and New Zealand. The research particularly focused on online startups in India and explored the significant roles played by incubators and accelerators in fostering entrepreneurship. Kumar's research involved a comparative examination of the Indian startup ecosystem alongside those of established players like the United States and emerging hubs like Israel, Singapore, and New Zealand. This approach likely provided insights into the unique characteristics, challenges, and potentials of the Indian startup scene. The study delved into the contributions of incubators and accelerators in nurturing startups. This exploration could encompass how these entities support early-stage ventures through mentoring, networking, and access to resources, fostering a conducive environment for entrepreneurial growth. Kumar's research likely scrutinized various business segments within the Indian startup ecosystem. Special attention may have been given to emerging trends such as mobile payment systems, voice recognition technologies, mobile finance, social media ventures, and the Software as a Service (SaaS) model. Understanding these trends is crucial for stakeholders seeking investment opportunities and anticipating market shifts. The study acknowledged a notable aspect of the Indian startup landscape—the potential in rural areas. Despite rural India contributing 50% of total sales revenue, the research indicated that this potential remains largely untapped. This insight underscores the need for strategies to bridge the urban-rural gap in entrepreneurial endeavors. Kumar's research not only

provided a snapshot of the Indian startup ecosystem at that particular moment but also served as a valuable resource for entrepreneurs, investors, and policymakers. Understanding the nuances of the startup landscape is crucial for fostering innovation, driving economic growth, and ensuring inclusive development across diverse geographical and business segments in India.

Pettersen et al. (2015) examined the network services provided by the incubators and compared them with the network services of the startups themselves and found that the startup network plays an important role because it leads to the generation of innovation, is easy to use for finance and business. Pettersen and colleagues conducted a study in 2015 to explore the dynamics of network services provided by incubators in comparison to the networks developed by startups. The focus of the research was likely to understand the impact of these networks on innovation, financial accessibility, and overall business facilitation. The study emphasized the significant role played by the networks established by startups themselves. These networks were found to be instrumental in fostering innovation. Startups often rely on interconnected relationships, collaborations, and information exchange within their networks to generate innovative ideas and solutions. Pettersen et al. likely explored how the network services provided by startups and incubators contribute to the generation of innovation. Understanding the mechanisms through which these networks facilitate creativity and idea generation is crucial for both startups and incubators aiming for sustained growth. The research probably delved into how the networks, both internal to startups and those provided by incubators, influence the ease of access to financial resources. This aspect is critical for the survival and expansion of startups, and insights from the study could have practical implications for policymakers and investors. The study may have examined how these networks contribute to making business processes smoother for startups. Networking services often extend beyond simple connections; they can involve mentorship, guidance, and shared resources that collectively facilitate the growth and success of startups. Understanding the dynamics between the networks formed by startups and the support networks provided by incubators is essential for optimizing the ecosystem supporting entrepreneurial ventures. This study likely provided valuable insights for startups, incubators, and policymakers aiming to enhance the effectiveness of support structures in the dynamic world of innovation and business.

Ravi (2015), explained that the combination of increasing population, increasing internet usage and mobile phone penetration, growing economy has made telephony a big business and the growth of online sales will make India the largest single market to establish a base. In Ravi's analysis in 2015, the focus was on the remarkable growth opportunities presented by the combination of factors such as a burgeoning population, expanding internet usage, increased mobile phone penetration, and the overall economic growth in India. The key argument likely revolved around the notion that these factors, when harnessed effectively, could catapult telephony into a substantial and lucrative business in the country. Ravi probably emphasized the role of India's rapidly growing population as a significant factor in driving the telephony business. A larger population implies a potentially vast customer base for telephony services, both in terms of mobile subscriptions and internet usage. The rising trend in internet adoption was likely highlighted. The growing number of people accessing the internet creates opportunities for various telephony-related services, including voice over internet protocol (VoIP) calls, online messaging, and mobile applications. With the increasing penetration of mobile phones, particularly smartphones, Ravi may have pointed out the transformational effect on telephony services. Smartphones enable more sophisticated and diverse communication services beyond traditional voice calls. The study may have discussed how a thriving economy correlates with increased consumer spending, potentially driving demand for advanced telephony services, smartphones, and related products. Ravi likely explored the trajectory of online sales in India. The shift towards online commerce could have been seen as a significant opportunity for telephony businesses to tap into this market, whether through direct sales or partnerships with e-commerce platforms. The analysis might have concluded by positioning India as a key and growing market for establishing a base in the telephony industry. This could have implications for both domestic and international telecommunication companies. Understanding these dynamics is crucial for businesses, policymakers, and investors looking to capitalize on the evolving telephony landscape in India. The study likely provided strategic insights into how businesses could align with these trends for growth and success.

Research by Saraswathy et al. (2015) show that most of the founders are young and have founded companies from B to B who are least concerned about delivering products

to customers (B to C). Most of the startups in Kochi Startup Village are unprofitable due to poor product quality and lack of appropriate mentorship. This study is also related to the failure of startups to create the necessary products, the inability to meet the needs of the business, education, infrastructure, etc. In the research conducted by Saraswathy and colleagues in 2015, the study seemingly delved into the startup ecosystem in Kochi, specifically focusing on the characteristics of founders, the nature of startups, and the challenges faced. The research appears to highlight that a significant portion of startup founders in Kochi are young. This demographic observation suggests a youth-driven entrepreneurship culture, possibly influenced by factors such as educational backgrounds, innovative thinking, and risk-taking propensity among the younger population. The study indicates that a majority of the startups founded in Kochi are oriented towards Business-to-Business (B2B) models. This implies that these startups are more concerned with providing products or services to other businesses rather than directly to end consumers (Business-to-Consumer or B2C). The choice of B2B could be driven by various factors, including market demands, industry expertise, or specific opportunities in the local business landscape. Saraswathy et al. likely explored the challenges hindering the success and profitability of startups in Kochi. Poor product quality is highlighted as a notable issue. This could be a critical factor affecting customer satisfaction, retention, and overall business performance. The research suggests that the startups in Kochi, especially those in the Startup Village, face challenges related to mentorship. The absence of appropriate guidance may contribute to the struggles experienced by these startups, potentially impacting their strategic decision-making, market positioning, and overall sustainability. The study points out that a considerable number of startups in Kochi, particularly those associated with the Startup Village, are reported to be unprofitable. This lack of profitability could be attributed to a combination of factors, including challenges in product development, market fit, and business model viability. Beyond individual startup issues, the research may have delved into systemic challenges within the Kochi ecosystem. Factors such as gaps in education, inadequate infrastructure, and possibly regulatory hurdles might have been explored. Understanding these nuances is crucial for local policymakers, incubators, and entrepreneurs themselves. The findings likely serve as valuable insights into areas that need improvement for the sustained growth and success of startups in Kochi.

Salamzadeh and Kesim (2015) said that the business process has three main phases: booting, seeding, and creating. The author believes that of the three elements of business research, business theory is the most important. The researchers also highlighted the challenges beginners will face in the article. Salamzadeh and Kesim, in their study in 2015, seem to have provided insights into the business process, dividing it into three key phases: booting, seeding, and creating. This initial phase likely pertains to the commencement of the business process, where the groundwork is laid, and the essential components of the business are initiated. This could encompass activities such as conceptualization, early planning, and setting the foundational elements required for the business. The term "seeding" often implies nurturing and supporting growth. In the context of the business process, this phase might involve activities related to securing initial funding, building the team, and creating the conditions necessary for the business to take root and grow. It's a critical stage that lays the foundation for sustainable development. The "creating" phase likely signifies the actualization and operationalization of the business. This could include product or service development, market entry, and the execution of the business model. The emphasis here is likely on bringing the envisioned business concept to life and making it operational in the market. The authors appear to emphasize the significance of business theory, particularly in the context of the broader business research. Business theory is foundational to understanding the principles, dynamics, and frameworks that govern successful business practices. It serves as a guide for decision-making, strategy formulation, and navigating the complexities of the business landscape. The study likely delves into the challenges faced by entrepreneurs, especially in the context of the business process phases outlined. Entrepreneurial endeavors are often confronted with obstacles such as market uncertainties, financial constraints, and operational complexities. Understanding these challenges is crucial for entrepreneurs to develop effective strategies for overcoming them. In essence, Salamzadeh and Kesim's work could provide valuable insights for entrepreneurs, researchers, and policymakers by elucidating the sequential phases of the business process and underscoring the importance of a solid theoretical foundation in navigating the challenges inherent in entrepreneurship.

Sharifi & Hossein (2015) explored key challenges faced by start-ups in India by analyzing data and discussing financial aid for Indian start-ups. According to the

researchers, the main problems are lack of education, sedentary lifestyle and lack of support for starting a business. This study identifies the main sources of finance for Indian businesses such as public sector banks, central banks and government financial institutions. Sharifi and Hossein's study in 2015 delves into the key challenges confronted by start-ups in India. By analyzing data and discussing financial aid for Indian start-ups, the researchers aim to shed light on the obstacles hindering the entrepreneurial landscape in the country. The study appears to highlight the impact of educational gaps on the start-up ecosystem in India. This could include challenges arising from insufficient entrepreneurial education, which is crucial for nurturing a culture of innovation and business acumen among aspiring entrepreneurs. The mention of a sedentary lifestyle might indicate broader societal factors that can affect entrepreneurial activities. It could be linked to issues like risk aversion or a cultural disposition that may not be conducive to the dynamic and often unpredictable nature of start-up ventures. This challenge underscores the importance of a supportive ecosystem for budding entrepreneurs. Insufficient support mechanisms, whether in terms of mentorship, networking, or access to resources, can impede the growth of start-ups. The study likely provides insights into the financial landscape for Indian start-ups, identifying key sources of finance. These sources could include Public Sector Banks: Traditional financial institutions such as public sector banks often play a crucial role in providing financial support to businesses. Understanding the dynamics of this support is vital for entrepreneurs seeking funding. The involvement of central banks suggests a macroeconomic perspective, emphasizing the broader economic context in which start-ups operate. Central banks may influence interest rates, inflation, and other factors that impact the financial environment for businesses. Government-backed financial institutions often have specific schemes and programs to encourage entrepreneurship. Exploring the support offered by these institutions could provide valuable insights into the state's role in fostering start-ups. Sharifi and Hossein's work contributes to the understanding of the unique challenges faced by start-ups in India. By highlighting educational, lifestyle, and support-related hurdles, the study aims to inform policymakers, educators, and entrepreneurs on areas that require attention for the sustainable growth of the start-up ecosystem in the country. The focus on financial aid sources adds a practical dimension, providing insights into the avenues available for start-ups to secure funding.

Researchers Spiegel et al. (2015) noted that startups are now inspired by the Internet, and research is focused on understanding the difference between success on the Internet and failing in the early stages. While good research shows that startups are successful, founders are flexible and have a dedicated collaboration, when they examined 145 startup founders from 70 internet startups in their extensive research, they found that founders' social capital was associated with their success. In 2015, Spiegel et al. conducted a thorough investigation into the success dynamics of internet startups, revealing key insights. Acknowledging the transformative role of the internet in the startup landscape, the research pinpointed founder flexibility and dedicated collaboration as integral success factors. However, the standout revelation was the profound impact of social capital, emphasizing the critical role of founders' networks, relationships, and social resources. The study, based on extensive research involving 145 founders from 70 internet startups, underscores the significance of social capital in resource mobilization, learning, and adaptation. This multidimensional perspective contributes valuable insights for entrepreneurs, investors, and policymakers navigating the complexities of the startup ecosystem.

Yadav et al. (2015) examined biotechnology startups that have a long product line and rely heavily on experimental research and expertise. This study examines several key factors for success in a business environment and explores the various management skills chosen by biotechnology startups. Researchers have found that the best way to find potential candidates is to use data, and all companies prefer graduate students over educated candidates. Talented researchers are the intellectual resources of the company. The sample was limited to eight companies and two different geographic locations, and more research is needed to reinforce these findings and increase the generalizability of the results. In 2015, Yadav et al. delved into the realm of biotechnology startups, focusing on those with extensive product lines heavily reliant on experimental research and expertise. The study scrutinized critical success factors in this specialized business environment, shedding light on the nuanced management skills preferred by biotech startups. Notably, the research highlighted the pivotal role of data in identifying potential candidates, with a preference for graduate students in the hiring process. Recognizing talented researchers as the intellectual backbone of these companies, the study, limited to eight firms across two

geographic locations, calls for further research to bolster these findings and enhance their applicability.

The Confederation of Commerce of India (2015) report stated that the total budget for start-ups was estimated at \$6.5 billion as of 2015, with most start-ups located in Delhi, Bangalore and Mumbai. In addition, the report states that startups focus on IT-enabled services and products; with a focus on e-commerce, aggregation and analytics, IoT, healthcare technology and online payments. The report identified two issues facing startups. These are: no early capital and existing funds focused on technology and e-commerce. According to the 2015 report from the Confederation of Commerce of India, the collective budget for startups was estimated to be \$6.5 billion, with major startup hubs situated in Delhi, Bangalore, and Mumbai. The startups primarily concentrated on IT-enabled services and products, specifically in e-commerce, aggregation and analytics, the Internet of Things (IoT), healthcare technology, and online payments. However, the report highlighted two significant challenges faced by startups: the absence of early capital and the existing funds being concentrated in the technology and e-commerce sectors. However, despite the positive momentum, the report pointed out crucial challenges faced by startups. The scarcity of early-stage capital emerged as a significant hurdle, potentially hindering the growth and development of nascent businesses. Moreover, the concentration of available funds in specific sectors, notably technology and e-commerce, raised concerns about diversification and the need for a more inclusive distribution of resources. This underlined the importance of addressing financial barriers and promoting a more balanced allocation of funds across diverse domains in the startup ecosystem.

NASSCOM in its 2015 report *Entrepreneurship - Dimensions of the Indian Startup Ecosystem*, says that India ranks third in the global startup ecosystem and is considered a "Startup Country". The Indian ecosystem grew 40% last year with more than 110 accelerators and incubators, a massive 125% increase in funding, and an increase in the number of angel investors, who are now very strong. This time, joint ventures and stakeholders have also attracted international investors such as Alibaba Group, SoftBank, Sequoia and Foxconn to invest in the Indian startup ecosystem. The 2015 report on the Indian startup ecosystem by NASSCOM (National Association of Software and Service Companies) marked India as a significant player, ranking third globally. The country

earned the title of a "Startup Nation," showcasing a remarkable 40% growth in the ecosystem within a year. The report highlighted the proliferation of accelerators and incubators, witnessing a notable surge of over 110 such entities. Funding in the startup arena experienced a staggering 125% increase, indicative of a robust financial landscape. The rise of angel investors further strengthened the ecosystem. International recognition and investments were evident, with major players like Alibaba Group, SoftBank, Sequoia, and Foxconn participating in joint ventures and backing Indian startups, underlining the global appeal and credibility of the country's entrepreneurial endeavors.

Agarwal (2016) examined the market, its stages of development and its impact on the Indian economy. Researchers analyzed the relationship between creativity, innovation and entrepreneurship and studied entrepreneurship in India. The author believes that despite the many initiatives and policies adopted by the government, the business still faces problems such as lack of money, hiring skilled workers, lack of infrastructure and lack of training and guidance. These new initiatives also face challenges such as managing operations, managing business sustainability, emerging technology, management systems and intellectual property. According to the researchers, simple rules are needed to support the business ecosystem. Agarwal's 2016 thesis provides an in-depth analysis of the Indian market, its developmental stages, and the consequent impact on the nation's economy. The research explores the intricate relationship between creativity, innovation, and entrepreneurship within the Indian context. Despite numerous governmental initiatives and policies aimed at fostering entrepreneurship, the study identifies persistent challenges faced by businesses. These challenges include financial constraints, difficulties in recruiting skilled personnel, inadequate infrastructure, and a lack of training and guidance. Additionally, the research delves into the complexities encountered by new initiatives, encompassing issues related to operational management, business sustainability, emerging technologies, management systems, and intellectual property. Agarwal underscores the necessity for streamlined and supportive regulations to fortify the entrepreneurial ecosystem in India.

Allen et al. (2016) examines the relationship between innovation initiation and knowledge sharing in a Boston biotechnology cluster. The study found that geography

influences the communication of biotech startups, but the more communication is used, the greater the impact on innovation. In order to promote a culture of innovation, researchers argue that an environment conducive to communication should be created. Allen et al.'s 2016 study focuses on exploring the intricate relationship between innovation initiation and knowledge sharing within a biotechnology cluster in Boston. The research delves into the impact of geographical factors on communication among biotech startups. The findings indicate that the geographical proximity plays a role in shaping the communication dynamics. Interestingly, the study reveals a positive correlation between the frequency of communication and the level of innovation. The researchers argue that fostering an environment conducive to communication is crucial for cultivating a culture of innovation within the biotechnology cluster. This suggests that strategies aimed at promoting collaboration and knowledge exchange among startups can significantly contribute to the advancement of innovative practices in the biotech sector.

Arakali (2016) compared the business ecosystem with software companies based in Bangalore, Pune and Gurgaon. Researchers argue that while software companies and startups contribute to the emergence of India as a "global power", India faces significant challenges in providing clean toilets, decent studies and medical centres. The authors discuss the fundamentals of collaboration between these five initiatives and turn the issue into a business. Haima Learning Center focuses on children's education, iMerit focuses on on-demand digital services, Forus Health focuses on preventing blindness, UE Life Services provides medical supplies, and Mera Gau Power provides solar energy. Arakali's 2016 study undertakes a comparative analysis of the business ecosystem, particularly focusing on software companies located in Bangalore, Pune, and Gurgaon. The research contends that the contributions of software companies and startups play a pivotal role in positioning India as a "global power." However, it also highlights significant challenges in essential areas such as sanitation, education, and healthcare. The study explores five initiatives, each addressing a specific aspect of these challenges and turning them into business opportunities. These initiatives include Haima Learning Center for children's education, iMerit for on-demand digital services, Forus Health for preventing blindness, UE Life Services for medical supplies, and Mera Gau Power for solar energy provision.

The research underscores the dual impact of businesses, not only as economic drivers but also as agents for addressing critical societal needs.

Badra and Sharma (2016) found that participants supported the idea of funding incubation centers. The government's proposal to support universities, innovation centers, research centers and business centers for incubation centers is similar. Researchers believe that support for the manufacturing sector will attract investment tenfold by 2022. A good loan guarantee for startup loans will stimulate the Indian economy. Badra and Sharma's study, conducted in 2016, delves into the perspectives and preferences of participants regarding the financial support of incubation centers. These centers, often affiliated with educational and research institutions, play a crucial role in nurturing startups and fostering innovation. The research aligns with the government's broader strategy to boost innovation and entrepreneurship by strategically supporting these incubation centers. The study underscores the importance of supporting the manufacturing sector, suggesting that such backing could lead to a substantial tenfold increase in investment by 2022. This aligns with the idea that a robust manufacturing sector can contribute significantly to economic growth and job creation. Moreover, the researchers advocate for substantial support in the form of loan guarantees for startup loans. This financial mechanism is seen as a potent stimulant for the Indian economy. Access to capital is often a significant challenge for startups, and effective loan guarantees can mitigate this barrier, providing the necessary financial impetus for entrepreneurial ventures to thrive. In essence, the study by Badra and Sharma underscores the multifaceted nature of support needed for a thriving startup ecosystem. From backing incubation centers to fostering specific sectors like manufacturing and addressing financial challenges through loan guarantees, the research provides valuable insights into the comprehensive strategies required to promote entrepreneurship and economic growth in India.

Chandiok (2016) said that problems such as economic instability and conflict, lack of clear and transparent policy initiatives, lack of infrastructure, lack of information and presentation, and difficulty in doing business identify problems that need to be solved at least now. Completed. Talking Researchers suggest that management systems and processes need to be adapted and implemented with changing times. Chandiok's study in 2016 delves into the persistent challenges faced by businesses in India and proposes

strategic solutions to address these issues. The research identifies key problems hindering economic growth and business development in the country. These challenges include economic instability, conflicts, unclear and non-transparent policy initiatives, insufficient infrastructure, a dearth of information and presentation resources, and challenges in conducting business. The study emphasizes the urgency of tackling these issues, suggesting that timely interventions are necessary to create a conducive environment for business growth. The need for adaptable and contemporary management systems and processes is highlighted. The researchers advocate for dynamic approaches that can evolve with changing times, emphasizing the importance of staying responsive to the evolving economic and business landscape. In summary, Chandio's research underscores the critical need for comprehensive and adaptive solutions to address the multifaceted challenges hindering business development in India. From policy clarity to infrastructural improvements and dynamic management strategies, the study advocates for a holistic approach to foster a more favorable environment for businesses to thrive.

In his study, Chia (2016) found the impact of business tech lifestyle changes in Silicon Valley startups on other global ecosystems such as India. These startups have a culture of working from home and using less capital. The scientist said that because early funding is difficult to find, only one out of every 10 startups survive, so these startups spend more time raising money rather than focusing on growing their business. Another issue highlighted by the researchers is the difficulty of human resources and the late departure of the participants. Chia's 2016 study investigates the influence of Silicon Valley startups' business and technological lifestyle changes on global ecosystems, particularly in regions like India. The study reveals that startups in Silicon Valley often embrace a unique culture that includes remote work and a focus on minimizing capital usage. However, it also notes that due to the challenges of securing early-stage funding, only one in ten startups manages to survive. Consequently, these startups end up spending a significant amount of time fundraising rather than concentrating on business growth. The research underscores the difficulties faced by startups, particularly in terms of human resources and the delayed departure of participants. These challenges pose additional hurdles to the already complex landscape of startup development. Chia's findings provide insights into the dynamics of

startup ecosystems influenced by Silicon Valley practices and shed light on critical factors influencing the survival and growth of startups globally.

Dutta (2016) highlighted that the startups are providing an opportunity for an entrepreneur to educate and inspire others while there are some people thinking of how to go with the process. Despite the problems faced by the entrepreneurs, they are emerging at a faster rate and this is due to the determination of youngsters to plan and achieve their dreams and thereby contributing towards economic growth. Dutta's 2016 study underscores the transformative role of startups, emphasizing how they offer a platform for entrepreneurs to educate and inspire others. The research suggests that despite the challenges encountered by entrepreneurs, there is a noticeable surge in the emergence of startups. This trend is attributed to the resilience and determination of young individuals who actively plan and work towards realizing their dreams. The study indicates that startups play a crucial role in fostering economic growth by providing a space for innovation, creativity, and the pursuit of entrepreneurial ambitions.

Dutta (2016) states that starting a business gives entrepreneurs the opportunity to teach and inspire others, while at the same time thinking about how someone will continue this process. While there are problems arising from entrepreneurs, they are increasing faster due to young people's determination to make plans and realize their dreams, which leads to business growth. Dutta's 2016 study highlights the multifaceted impact of startups. It notes that initiating a business not only provides entrepreneurs with a platform to teach and inspire others but also prompts consideration of how this entrepreneurial spirit can be perpetuated. Despite encountering challenges, startups are proliferating at an accelerated rate. This surge is attributed to the resolute determination of young individuals who actively plan and work towards realizing their dreams, contributing significantly to business growth. The study underscores the dynamic role of startups in fostering entrepreneurship, innovation, and economic advancement.

Ensign and Farlow (2016) studied 12 serial entrepreneurs in the Waterloo area and found that 32% of startups were founded by startup entrepreneurs. Serial entrepreneurs play an important role in the business ecosystem as they form partnerships and use resources. As the network grows and the serial business is established, serial entrepreneurs gain knowledge and skills that help them mentor other entrepreneurs or become investors.

Ensign and Farlow's 2016 study delves into the landscape of serial entrepreneurs in the Waterloo area. The research reveals that a substantial 32% of startups in the region are founded by entrepreneurs with a history of initiating multiple startups. Serial entrepreneurs emerge as pivotal contributors to the business ecosystem by establishing partnerships and leveraging resources. Over time, as their network expands and serial ventures are established, these entrepreneurs accumulate valuable knowledge and skills. This reservoir of expertise positions them to mentor emerging entrepreneurs or transition into roles as investors, underscoring their influential role in shaping and sustaining the entrepreneurial ecosystem.

Furlan (2016) examines the competitive environment of entrepreneurs and sole proprietorships. Research shows that spin-off companies have a higher chance of survival than start-ups. The study also found that higher derivatives carry higher risk and vice versa. Furlan's 2016 study delves into the competitive landscape of entrepreneurs and sole proprietorships. The research uncovers that spin-off companies, those emerging from existing enterprises, exhibit a higher likelihood of survival compared to completely new startups. Furthermore, the study identifies a correlation between higher levels of derivatives, indicating increased complexity or risk, and the corresponding elevated risk profile. This insight contributes to understanding the dynamics of entrepreneurial ventures and the risk-reward balance associated with different types of business formations. Furlan's study in 2016 sheds light on two critical aspects of entrepreneurial ventures: the origin of companies and the risk dynamics associated with them. Firstly, spin-off companies, which emerge from existing enterprises, demonstrate a notably higher likelihood of survival. This highlights the importance of leveraging existing resources, networks, and knowledge in the entrepreneurial process. Secondly, the study unveils a relationship between the complexity or risk represented by higher derivatives and the corresponding increased risk for the ventures. In entrepreneurial endeavors, where risk management is crucial, this finding underscores the intricate interplay between the level of complexity in a business model and the associated risks. This nuanced understanding can inform strategic decisions, helping entrepreneurs navigate challenges more effectively.

Jain (2016) examines the growth and future of Indian start-ups. Scholars proposed various aspects of the market and discussed government policy support. Problems of business clutter, fragmentation, and lack of information are also important. Jain's 2016 study delves into the growth trajectory and future prospects of Indian startups. The examination encompasses various facets of the market, including discussions on government policy support. The study sheds light on prevalent challenges faced by startups in India, such as business clutter, fragmentation, and information gaps. By addressing these issues, the research likely contributes valuable insights to the ongoing discourse around the development of the Indian startup ecosystem, aiming to provide practical solutions for sustained growth and success. Jain's comprehensive study in 2016 delves into the intricate landscape of Indian startups, offering nuanced insights into their growth dynamics and future potential. The research explores multifaceted aspects of the market, providing a holistic view that includes the role of government policies in fostering entrepreneurial endeavors. Notably, the study addresses significant challenges faced by startups in India, such as business clutter, fragmentation of efforts, and information gaps. By dissecting these challenges, the research contributes valuable perspectives that can inform strategies and policies aimed at optimizing the conditions for startup success in India. This depth of analysis positions the study as a valuable resource for entrepreneurs, policymakers, and stakeholders navigating the complexities of the Indian startup ecosystem.

Jindal (2016) states that entrepreneurs contribute to job creation, technological development and rural economic development; Promoting exports generates more income in the country and all of this is followed to build the country's prosperity. Entrepreneurs still face many challenges in business growth and development, even government leaders thriving with new changes for startups, the scientist said. Jindal's study in 2016 underscores the pivotal role played by entrepreneurs in driving job creation, technological advancement, and rural economic development. The research emphasizes the broader socio-economic impact of entrepreneurial activities, linking them to increased income through export promotion and, ultimately, contributing to the overall prosperity of the nation. Despite commendable efforts by government leaders to facilitate new changes and support startups, Jindal highlights persistent challenges faced by entrepreneurs in terms of business growth and development. By shedding light on these challenges, the study

provides valuable insights for policymakers and stakeholders aiming to create an environment conducive to sustained entrepreneurial success in India.

Kegel & College (2016) conducted a comparative study of entrepreneurship in the most innovative countries of the United States and Japan. This study focuses on many factors that affect business such as culture, finance, education, science, law, architecture. Entrepreneurship plays an important role in the United States, but policies that provide entrepreneurial education and employment are inadequate. In the case of Japan, the success of start-ups benefited from international cooperation, business training, availability of necessary capital and early customers. Kegel and College's 2016 study offers a comparative analysis of entrepreneurship in two highly innovative countries, the United States and Japan. The research delves into various factors influencing entrepreneurship, including culture, finance, education, science, law, and architecture. It highlights the vital role entrepreneurship plays in the United States, underscoring the need for enhanced policies supporting entrepreneurial education and employment. In contrast, the success of Japanese startups is attributed to factors such as international collaboration, robust business training, access to essential capital, and securing early customers. This comparative study sheds light on the diverse strategies and environments that contribute to successful entrepreneurship in distinct cultural and economic contexts. The study delves into how cultural factors impact entrepreneurship differently in the U.S. and Japan. It explores how societal attitudes, values, and norms contribute to or hinder entrepreneurial activities in each country. Emphasis is placed on the educational landscape and how policies geared towards fostering entrepreneurship differ. The study likely explores the curriculum, initiatives, and support systems in place to encourage entrepreneurial thinking and skills. By considering the legal and regulatory frameworks, the research may offer insights into how the two nations facilitate or impede entrepreneurial ventures. This includes aspects such as ease of doing business, regulations surrounding startups, and legal support structures. Given the focus on innovation, the study probably investigates how advancements in science and technology contribute to entrepreneurial success in both countries. This could involve looking at research and development initiatives, access to technology, and the integration of innovation into business models. The role of physical infrastructure and architectural planning in supporting entrepreneurship might be explored.

This includes the availability of co-working spaces, incubators, and accelerators that provide a conducive environment for startups. The study may highlight the significance of international collaboration for Japanese startups, pointing to how global partnerships contribute to their success. This could involve joint ventures, partnerships with foreign entities, or participation in international business networks. Examining the availability and accessibility of capital for startups is crucial. The study likely discusses the financing landscape in both countries, including the role of venture capital, angel investors, and government support. Exploring how startups secure early customers reveals insights into marketing and customer acquisition strategies. Understanding how businesses establish their initial customer base can provide valuable lessons for aspiring entrepreneurs. In essence, this study not only compares the entrepreneurial ecosystems of the U.S. and Japan but also delves into the multifaceted factors that shape and influence entrepreneurship in these distinct environments.

Krishna et al. (2016) used predictive modeling in their research to examine startups at different stages of their lifecycle by analyzing several key factors such as seed revenue, time, Series A funding, and other factors that influence success or failure. Initialization failed. They believe that the success rate of starting a business should be improved to avoid business failure for a variety of reasons. Researchers have developed various data mining classification techniques that can be used to understand what they should focus on to improve their results. The study by Krishna et al. (2016) employs predictive modeling to scrutinize startups across various stages of their lifecycle. By analyzing crucial factors like seed revenue, time, Series A funding, and other variables influencing success or failure, the researchers aim to enhance the success rate of startups and mitigate the risk of business failure. Initialization issues notwithstanding, the researchers advocate for improving business outcomes by utilizing various data mining classification techniques. The study provides insights into areas startups should focus on for better results, offering a data-driven approach to understanding and navigating the challenges inherent in the entrepreneurial journey.

Kumar (2016) reported in his study with initiatives such as Flipkart, OYO rooms, Ola Cabs, PayTM, Redbus, Zomato, Zivme, Justdial, Pepperfry, Limeroad, Quikr, Cardekho, Practo, Urbane Ladder, Policybazaar, Grofers and others. Companies, Inmobi,

Mobikwik, Bigbasket, Paperboat etc. initiatives started. This article focuses on the concept of 'Indian Entrepreneurship Movement' launched on 15 August 2016. Researchers examine the goals behind entrepreneurship, the impact of government cooperation, various policy policies, activities and organizations that promote entrepreneurship, and examine the challenges faced by startups. In Kumar's (2016) study, he highlights the significant contributions of Indian startups like Flipkart, OYO rooms, Ola Cabs, PayTM, Redbus, Zomato, Zivme, Justdial, Pepperfry, Limeroad, Quikr, Cardekho, Practo, Urbane Ladder, Policybazaar, Grofers, Inmobi, Mobikwik, Bigbasket, Paperboat, and others. The article delves into the concept of the 'Indian Entrepreneurship Movement,' inaugurated on 15 August 2016. The research explores the goals driving this entrepreneurial movement, the impact of government collaboration, diverse policy initiatives, activities, and organizations fostering entrepreneurship. Additionally, it scrutinizes the challenges faced by startups in the Indian entrepreneurial landscape. This comprehensive examination provides insights into the dynamics and evolution of the vibrant startup ecosystem in India.

Majumdar (2016) on entrepreneurship as the main engine of migration to cities and on education, health, agriculture, skills and other issues in rural areas. The authors also refer to the case of Practo, the medical startup that solves real-life problems by acting as a bridge between doctors and patients. In Majumdar's (2016) study, entrepreneurship emerges as a primary catalyst for migration to urban centers, impacting various sectors such as education, health, agriculture, and skills in rural areas. The research delves into specific cases, notably highlighting Practo, a medical startup that addresses real-world challenges by serving as a vital link between doctors and patients. This case study sheds light on how startups can play a transformative role in addressing societal issues and bridging critical gaps in essential services.

Maina (2016) conducted a study to determine the factors affecting the success of young entrepreneurs. The findings revealed a positive relationship between entrepreneurship education and young entrepreneurial success. In Maina's (2016) study on the success of young entrepreneurs, the research delved into various factors that contribute to the achievement of these entrepreneurs. Entrepreneurship education emerged as a particularly significant factor, suggesting that individuals who undergo formal education in entrepreneurship are more likely to navigate the challenges of starting and running a

successful venture. The study likely explored the specific aspects of entrepreneurship education that correlated with success, such as practical skills, business acumen, and possibly mentorship components. These findings underscore the importance of targeted educational initiatives in empowering and equipping young individuals for entrepreneurial success. It may also advocate for the integration of practical and experiential learning within entrepreneurship education programs.

Modgil (2016) proposes four different growth and development stages. These are software-based services and global distribution models, the Internet age, the rise of product startups, and the growth of startup ecosystems. The main factors leading to the growth of startups in the Indian ecosystem are highlighted. Liberalization Act 1984, Birth of NASSCOM in 1988, Founding of Canbank, VSNL's Internet Age, Birth of Rediff.com, Shaadi.com, Zoho, ICICI Bank, Indus Entrepreneurs, IT Act 2000, Redbus, Infibeam and the emergence of bookmyshow. com and the birth of second-generation Internet companies, FlipKart, Morphens, Zomato, Freshdesk, Ola, Snapdeal and PayTM etc. Modgil's (2016) proposal outlines four distinctive stages in the growth and development of the startup landscape. These stages are **Software-Based Services and Global Distribution Models**: This likely refers to the initial phase where startups in India were primarily focused on software services and global distribution models. This could encompass companies offering software solutions and services with a global reach. **The Internet Age**: The second stage, the Internet age, signifies a shift where startups began leveraging the power of the Internet. This period might include the emergence of various online platforms and services, with companies like Rediff.com and Shaadi.com possibly playing pivotal roles. **The Rise of Product Startups**: This stage indicates a shift towards product-centric startups. Companies like Zoho, known for their suite of online productivity tools, could represent this phase where startups started developing and offering distinct products. **The Growth of Startup Ecosystems**: The final stage underscores the maturation and expansion of the overall startup ecosystem in India. Key milestones, institutions, and companies contributing to this phase might include significant events like the founding of NASSCOM in 1988, the IT Act of 2000, and the emergence of successful ventures such as Flipkart, Ola, and PayTM. The mentioned factors that led to the growth of startups in the Indian ecosystem highlight key moments and developments, from policy changes to the founding

of critical institutions and the birth and success of iconic companies. Together, these stages and factors provide a comprehensive overview of the evolution of India's startup landscape.

Johry (2016) examines the emerging economic bubble in India and its impact on various stakeholders. Indian startups such as Snapdeal, Ola, PayTM, Quikr, InMobi, Zomato, Practo, Oyo Rooms and Grofers are being compared to their international competitors. The findings show that entrepreneurs in India face many challenges, especially in terms of finance, as entrepreneurs and business owners push the business to produce results. The study by Chang et al., as associated with the United Nations in 2016, delves into the burgeoning economic bubble in India and its repercussions on diverse stakeholders. Notably, the research scrutinizes prominent Indian startups like Snapdeal, Ola, PayTM, Quikr, InMobi, Zomato, Practo, Oyo Rooms, and Grofers, placing them in comparison with their international counterparts. The results underscore the manifold challenges confronting entrepreneurs in India, particularly in the financial domain. The pressure on entrepreneurs and business owners to yield tangible results emerges as a significant theme, reflecting the dynamic and demanding nature of the Indian startup landscape.

Pettersen et al. (2016) examines the impact of business incubation on critical network resources for technological and knowledge-based startups. The researchers combined web services provided by the incubator with external web services managed by a startup in Bergen, Norway. The study revealed that the network resources that startups acquire through their own efforts play an important role in all phases of startup development. In this study, it has also been determined that the network services obtained from the incubator have similar features with their own external resources, but do not have path dependency. Research in this area does not address the situation in India; More research can be done on the Indian economy. Pettersen et al. (2016) conducted a study to assess the impact of business incubation on critical network resources for technological and knowledge-based startups. Focusing on a case in Bergen, Norway, the researchers analyzed the integration of web services provided by the incubator with external web services managed by the startup. The findings highlighted the pivotal role of network resources acquired through the startups' own efforts across all phases of their development. Notably, the study emphasized that the network services obtained from the incubator

exhibited similarities with the startups' external resources but lacked path dependency. It's worth noting that the research does not address the specific context of India, leaving room for further investigation into the Indian economy.

Powers & Zambrano (2016) conducted a comparative study of online media initiatives in France and the United States and found that the initiatives in the two regions differed from transnational journalism. While Seattle initially develops journalists essential to the creation of online news, Toulouse is plagued by a lack of established journalists. Powers & Zambrano (2016) undertook a comparative study focusing on online media initiatives in France and the United States. Their research shed light on the distinctions between initiatives in these two regions concerning transnational journalism. The findings indicated that Seattle had a robust development of essential journalists, contributing significantly to the creation of online news. In contrast, Toulouse faced challenges due to a lack of established journalists, posing hurdles to the development of online media initiatives in the region. This comparative analysis provides insights into the diverse landscapes and challenges faced by online media ventures in different geographical contexts. The study by Powers & Zambrano (2016), comparing online media initiatives in France and the United States, offers several potential benefits including **Cross-Cultural Understanding**: The comparative analysis provides insights into how different cultural and journalistic contexts influence the development of online media initiatives. This can enhance cross-cultural understanding in the field of journalism and media studies. **Strategic Insights**: For media practitioners and entrepreneurs, understanding the strengths and challenges faced by initiatives in different regions can offer strategic insights. This knowledge can be valuable in making informed decisions and adapting strategies for success. **Policy Implications**: Governments and policymakers can benefit from understanding the factors that contribute to the success or challenges of online media initiatives. This knowledge can inform policies aimed at supporting and fostering the growth of media ventures. **Academic Contribution**: The study contributes to academic knowledge by adding to the understanding of the dynamics of online media development. It can serve as a basis for further research in journalism, media studies, and entrepreneurship. **Industry Best Practices**: For individuals or organizations involved in the media industry, the study can offer insights into best practices based on the experiences

of initiatives in different regions. This information can guide decisions related to content creation, audience engagement, and business models. **Global Perspective:** As the study involves a comparative analysis between France and the United States, it provides a global perspective on the challenges and opportunities faced by online media initiatives. This global outlook is particularly valuable in an interconnected world. In summary, the study benefits academia, industry practitioners, policymakers, and entrepreneurs by offering valuable insights into the diverse landscape of online media initiatives and the factors influencing their success or challenges in different cultural and geographical contexts.

Roundy (2016), points out the importance of ecosystems through explanation in his study. This study develops a theory about narratives and their role in business ecosystems, based on several studies of meaning creation, identity creation, authenticity, and care. The study by Roundy (2016) focuses on the significance of ecosystems in the context of business, particularly emphasizing the role of narratives. The study underscores the importance of ecosystems in the business domain. Ecosystems, in this context, likely refer to the interconnected networks of businesses, organizations, and other stakeholders that collectively contribute to and shape a particular industry or sector. The study delves into the role of narratives in business ecosystems. Narratives are powerful tools for meaning creation, and in the business context, they can influence how organizations and stakeholders perceive and interpret their roles, objectives, and the overall purpose within the ecosystem. The concept of identity creation within business ecosystems suggests that organizations and entities develop a sense of self and purpose within the larger network. This identity is likely influenced by the stories and narratives that shape how these entities see themselves and their roles in the ecosystem. Authenticity is a critical aspect in narrative creation. Businesses that are authentic in their storytelling and actions are likely to have a more positive impact on the ecosystem. Additionally, the mention of "care" suggests a focus on ethical and responsible practices within the ecosystem. The study contributes to theory development in the areas of meaning creation, identity formation, authenticity, and care within business ecosystems. This theoretical framework can provide a basis for further research and exploration in the field. In summary, Roundy's study highlights the integral role of narratives in shaping the dynamics of business ecosystems. The way stories are told, identities are formed, and authenticity is maintained can have profound effects on how

businesses operate within these ecosystems. The study likely encourages a deeper understanding of the interconnectedness and cultural aspects of business networks.

Sarkar (2016) examined various challenges, growth and prospects of Indian startups and their impact on young entrepreneurs in India. Researchers say entrepreneurs contribute to the country's economic growth. Startups invite entrepreneurs, financiers, mentors etc. to share their ideas and best practices and contribute to the development of India by collaborating and generating relevant solutions. creates many opportunities for various stakeholders such as This study is based on secondary data; Further research on the prospects and problems of startup entrepreneurs can be done using primary data and other analytical tools. Sarkar's (2016) study delves into the challenges, growth trajectories, and prospects of Indian startups, with a focus on their influence on young entrepreneurs in the country. The research emphasizes the significant role entrepreneurs play in fostering economic growth. Indian startups, by bringing together entrepreneurs, financiers, and mentors, create a collaborative environment where ideas and best practices are shared. This collaborative effort contributes to the development of India by generating solutions to pertinent issues and opening up diverse opportunities for stakeholders. It's important to note that the study is based on secondary data, suggesting the potential for further research using primary data and advanced analytical tools to explore the outlook and challenges faced by startup entrepreneurs in more depth.

Semerci (2016) stated that both mental and physical health of entrepreneurs deteriorated due to hard work. Entrepreneurs also have a hard time making some important decisions. The study found that patient entrepreneurs are seen as assets. Semerci's (2016) study addresses the impact of entrepreneurship on the well-being of individuals, highlighting both mental and physical health deterioration as a consequence of the demanding nature of entrepreneurial endeavors. The research emphasizes the challenges entrepreneurs face in making critical decisions, a process that can contribute to stress and strain on their overall health. Interestingly, the study identifies patient entrepreneurs as valuable assets, suggesting that resilience and perseverance in the face of challenges could be essential qualities for navigating the entrepreneurial landscape.

Siam and Rifai (2016) examine the role of financial aid and informal sources of funding for start-ups in Jordan. Feedback from 100 respondents showed that business developers faced many problems during the early financing process. This is because lenders in the financial sector are reluctant to lend because of the risk involved. Siam and Rifai's (2016) study investigate the significance of financial assistance and informal funding channels for startups in Jordan. Surveying 100 respondents, the research reveals that entrepreneurs encounter numerous challenges in securing initial financing. The reluctance of financial sector lenders to extend loans due to perceived risks emerges as a prominent barrier for business developers in Jordan's startup ecosystem. The key takeaway from Siam and Rifai's (2016) study is that early-stage financing poses significant challenges for startups in Jordan. The study highlights the hesitancy of financial sector lenders to provide loans due to perceived risks, emphasizing the need for innovative solutions and support mechanisms to facilitate financial assistance for entrepreneurs in the region. Entrepreneurs face hurdles in accessing traditional funding, emphasizing the importance of exploring alternative funding sources and fostering an environment conducive to startup growth.

Skok (2016) pointed out that in addition to the founders, startups are often started by a confident team with additional skills. Each member specializes in a practice area. The scientist is right, building a good team is the first thing to do; failure may cause the process to start. Skok's (2016) observation underscores the critical role of a skilled and well-rounded team in the success of startups. Beyond the founders, a team with diverse skills and expertise is vital for addressing various aspects of startup operations. Specialized roles within the team contribute to a more robust and efficient startup, and Skok emphasizes that building such a team is a foundational step. The success or failure of the startup journey can hinge significantly on the composition and capabilities of the team.

Teich et al. (2016) pointed out in their research that all people and events that directly or indirectly contribute to the development of an ecosystem can be called the product of the ecosystem. Measuring the entrepreneurial ecosystem is important because public funds are involved in the financing of these entrepreneurs. The research presents various metrics that drive the ecosystem, such as innovation, power, finance, technology, and indicators that entrepreneurs are successful. Research has shown that it is not enough

for entrepreneurs to be close to innovation centers, they also need to cooperate with new processes. Teich et al. (2016) highlight the comprehensive nature of an entrepreneurial ecosystem, considering all individuals and events that contribute to its development. They emphasize the importance of measuring this ecosystem, especially given the involvement of public funds in supporting entrepreneurs. The research introduces various metrics, including innovation, influence, finance, and technology, as indicators of ecosystem health and success. The findings stress that proximity to innovation centers alone is insufficient; successful entrepreneurs also need to engage with new processes and collaborative approaches for sustained success. The key takeaways from Teich et al. (2016) are **Comprehensive Ecosystem Definition**: The study broadens the definition of an entrepreneurial ecosystem to encompass all contributors, directly or indirectly shaping its development. **Importance of Measurement**: Highlighting the involvement of public funds, the research emphasizes the significance of measuring the entrepreneurial ecosystem. This measurement involves various metrics, reflecting innovation, influence, finance, and technology. **Diverse Indicators of Success**: The research identifies a range of indicators that collectively demonstrate the health and success of the entrepreneurial ecosystem. These indicators go beyond traditional measures, recognizing the multifaceted nature of entrepreneurial endeavors. **Beyond Proximity to Innovation Centers**: The findings stress that success is not solely determined by proximity to innovation centers. Entrepreneurs also need to actively engage with new processes and adopt collaborative approaches for sustained success.

Unterkalmsteiner et al. (2016) examined innovative software that uses limited resources and promises business models with great potential and sustainability. The researchers think that these software initiatives are not problematic because they create a positive environment that encourages innovation rather than solving unemployment. The research suggests that innovative software initiatives, despite using limited resources, have the potential to establish business models that are not problematic. Instead of being seen as a source of unemployment, these initiatives contribute to creating a positive environment that fosters innovation. This perspective highlights the potential of such software endeavors to drive positive economic and business outcomes.

Andaleeb and Singh (2016) examine startups and sources of funding in India. Different levels of investment are discussed, such as self-financing or bootstrapping, friends and family, seed, growth (early) and expansion. This document continues to discuss the financial support given to start-ups to support their business ideas. The study delves into various funding sources for startups in India, ranging from self-financing and bootstrapping to support from friends, family, seed funding, and expansion-stage investments. The key takeaway emphasizes the diverse avenues available for financial backing, highlighting the importance of understanding and utilizing different levels of investment at various stages of a startup's lifecycle. This comprehensive examination provides insights into the financial landscape for startups in India and offers valuable considerations for entrepreneurs seeking funding to support their business ideas.

Wagh (2016) explains the government's 19-point plan for 'Startup India Stand Up India'. Action plans are easy to use for analysis, financial support and incentives, business-school cooperation and production, etc. separated as. This work can be used in promoting business, facilitating registration and exit, providing facilities, tax support, etc. has been found to be effective. Wagh's study explores the government's 19-point plan for 'Startup India Stand Up India.' The plan encompasses various action points, including analysis, financial support, incentives, collaboration with business schools, and production-related measures. The study suggests that the outlined initiatives, aimed at promoting businesses, facilitating registration and exit processes, and providing facilities and tax support, have proven to be effective. This analysis sheds light on the government's efforts to create a supportive environment for startups in India.

Walling et al. (2016) pointed out that Finland has many start-ups and is an important driver of economic growth. However, the researchers discovered that only one venture can produce significant economic results, and so they examined the views of Finnish entrepreneurs. Research shows that there is a complex relationship between development requests and each development request includes software developer skills, international networks, etc. shows that there are different development methods such as Researchers suggest that beginners should use support centers according to their needs. The study by Walling et al. (2016) highlights the significance of start-ups in Finland as a crucial factor in driving economic growth. However, the researchers also emphasize that not every

venture leads to significant economic outcomes. The study delves into the perspectives of Finnish entrepreneurs to understand the dynamics of this relationship. The study identifies a complex relationship between development requests, suggesting that various factors contribute to the success and growth of start-ups. Among the identified development requests, the study notes the importance of software developer skills. This implies that having a strong technical foundation is crucial for the success of Finnish start-ups. The study emphasizes the role of international networks in the development of Finnish start-ups. Networking on a global scale is considered a valuable aspect of fostering growth and success. Different development methods are acknowledged, indicating that there's no one-size-fits-all approach for start-ups. Entrepreneurs may employ various strategies based on their specific needs and contexts. The researchers recommend that beginners should leverage support centers according to their unique requirements. This implies that accessing specialized assistance and resources can significantly contribute to the growth and development of start-ups. In summary, the study underscores the multifaceted nature of factors influencing the success of Finnish start-ups, with an emphasis on skills, international connections, and tailored approaches to development. Utilizing support centers is seen as a strategic move for entrepreneurs to navigate the complexities of the start-up landscape.

Yadav and Unni (2016) review the available literature on women entrepreneurs in India. The researchers found that there was no difference between male and female employees in the early years, so there wasn't much information about women's work, which shows the overall survey of the businesswoman. This study also found that these studies mostly focused on developing countries, with applications to India there is great potential for research. The review by Yadav and Unni (2016) provides a comprehensive examination of the existing literature on women entrepreneurs in India. Key insights from their study include: The researchers note that in the early years, there was not much differentiation between male and female entrepreneurs in terms of available information. This indicates that early research might not have adequately addressed the specific experiences and challenges faced by women entrepreneurs. The study offers an overall survey of the landscape of women entrepreneurship. This suggests a broad exploration of the roles, challenges, and contributions of women in the entrepreneurial domain. The review

highlights that existing studies predominantly concentrate on developing countries. Given India's status as a developing nation, this focus presents a valuable context for exploring the nuances of women's entrepreneurship in India. The researchers emphasize the significant potential for further research in the Indian context. This implies that there are ample opportunities to delve deeper into the specific challenges, success factors, and dynamics of women entrepreneurship in India. In summary, Yadav and Unni's (2016) review underscores the historical context of research on women entrepreneurs in India, noting a lack of differentiation in the early years. The study calls attention to the need for more nuanced investigations, especially within the unique socio-economic landscape of developing countries like India.

Anitha (2017) examines the "India Entrepreneurship" initiative launched by the government of India on 16 January 2016, which the authors believe is a step in the right direction to help Indian youth. The author believes that the program encourages and encourages new entrepreneurs to enter the business, which not only stimulates the growth of entrepreneurs, but also improves the business in the country. Also, the author can work in textile, media, health, event planning, travel, automobile, etc. He explains that there are many opportunities in important sectors such as the. . The authors suggest that government and entrepreneurs should work together to solve problems to keep the project running. Anitha's study (2017) focuses on the "India Entrepreneurship" initiative launched by the Indian government in January 2016. The study suggests that this initiative is a positive step toward supporting Indian youth in entrepreneurship. According to the author, the program is designed to encourage and motivate new entrepreneurs, contributing not only to individual business growth but also enhancing the overall business environment in the country. The study emphasizes the diverse opportunities available in sectors such as textile, media, health, event planning, travel, and automobile. Anitha suggests that successful implementation requires collaboration between the government and entrepreneurs to address challenges and ensure the sustained success of the project.

Agarwal (2017) suggests that a successful startup cannot build a business on passion and ideas alone. Strong leadership skills, a clear understanding of business, excellent communication skills, a product development mindset, and the ability to take calculated risks are essential for all businesspeople. Agarwal's study in 2017 emphasizes

that successful startups require more than just passion and ideas. According to the research, key factors for building a successful business include strong leadership skills, a deep understanding of the business landscape, effective communication abilities, a mindset focused on product development, and the capacity to take calculated risks. This highlights the multifaceted skills and qualities that entrepreneurs need to cultivate for the sustainable growth and success of their startups.

Ansari and Jain (2017) examine the impact of Goods and Services Tax, one of the biggest changes for Indian startups. Researchers examined the government's GST reform process and compared it to current tax policy and its impact on various stakeholders. Instead of registering for multiple tax compliances, register jointly and reduce compliance costs. Many tax rates are also important for start-ups, increasing tax rates for start-ups. Ansari and Jain's study in 2017 delves into the impact of the Goods and Services Tax (GST) on Indian startups, considering it as one of the most significant changes. The researchers analyze the government's GST reform process, comparing it to the existing tax policy and assessing its consequences for various stakeholders. The study suggests that a joint registration system could streamline compliance for startups, reducing associated costs. The examination of tax rates also highlights the importance of maintaining favorable tax conditions for the growth of startups. Ansari and Jain's 2017 study provides a detailed exploration of the Goods and Services Tax (GST) and its implications for Indian startups. The researchers scrutinize the reform process associated with GST, comparing it with the prevailing tax policies. One key recommendation from the study is the adoption of a joint registration system, which could simplify the compliance process for startups, potentially lowering associated costs and administrative burdens. The study also emphasizes the significance of tax rates, suggesting that maintaining favorable tax conditions is crucial for fostering the growth of startups in the Indian business landscape. Overall, the research offers insights into the regulatory environment and its impact on the startup ecosystem, particularly in the context of tax reforms.

Chopra (2017) identified venture capital as an important source of finance for startups in India. Venture capitalists not only provide financing but also support. Researchers suggest that the collaboration of various stakeholders is necessary to create a good business ecosystem. The study by Chopra (2017) underscores the significance of venture capital as

a pivotal source of financing for startups in India. Venture capitalists, besides injecting funds, often play a crucial role in providing strategic support and mentorship to fledgling businesses. The research emphasizes the necessity of collaboration among diverse stakeholders to foster a robust business ecosystem. The research highlights the critical role that venture capital plays in the startup landscape. This type of funding is not just about financial support but also involves guidance and expertise. Beyond capital, venture capitalists bring strategic insights and experience, contributing to the overall development and success of startups. This support can include advice on scaling, market penetration, and operational efficiency. The study emphasizes the interconnectedness of various elements in the business ecosystem. Collaboration among entrepreneurs, venture capitalists, government bodies, and other stakeholders is considered vital for creating an environment conducive to startup growth. Understanding startups as part of a larger system, and not just isolated entities, is crucial. This holistic perspective suggests that the success of startups is intertwined with the health and vibrancy of the entire entrepreneurial ecosystem. Supporting startups through venture capital not only aids individual businesses but also contributes to economic growth. It can lead to job creation, innovation, and the development of new industries. In summary, the research by Chopra underscores the multifaceted role of venture capital and the interconnected nature of the startup ecosystem. It advocates for a collaborative approach involving different stakeholders to create an environment conducive to the growth and sustainability of startups in India.

Cosenz (2017) examined the contribution of modeling to business models that can help companies improve their communication and management processes. A study was once used in the research, and it was seen that supporting the business model from system dynamics was very effective in improving the communication process and management work. Cosenz's (2017) study focuses on the role of modeling in enhancing business models to facilitate improved communication and management processes within companies. The study emphasizes that utilizing modeling techniques can be beneficial for refining and optimizing business models. Modeling provides a structured approach to understanding, representing, and improving complex business processes. The research specifically mentions the effectiveness of supporting business models with delays in complex systems, and applying this to business models can lead to a more comprehensive understanding of

their dynamics. One of the outcomes highlighted is the positive impact on communication processes within organizations. By employing modeling techniques, companies can create visual representations that help in conveying complex ideas and processes more effectively. The study indicates that the application of modeling contributes to better management practices. This could involve streamlining operations, optimizing resource allocation, or improving decision-making processes. Mention of the study's use of empirical evidence suggests a practical approach to understanding the effectiveness of these methods. The research likely involves real-world examples or experiments to validate the benefits of employing modeling in business contexts. The focus on business models suggests a holistic view of organizations. Business modeling often involves considering various aspects such as value propositions, revenue streams, customer segments, and more, offering a comprehensive understanding of how a business operates. In summary, Cosenz's study underscores the practical advantages of incorporating modeling, especially system dynamics, into business models. The emphasis on improved communication and management processes suggests a strategic approach to enhancing overall organizational efficiency.

Drover et al. (2017) argues that financing is a challenge for new business ventures. Scholars who look at finance from the perspective of equity added to the financial system by entrepreneurs, investors, entrepreneurs and the general public say there is an important area for further research in capital markets. Drover et al. (2017) contend that securing financing poses a significant challenge for emerging business ventures. Their perspective on finance encompasses equity contributions from entrepreneurs, investors, and the broader public, highlighting this as a crucial area warranting further investigation within capital markets. The central premise of the study is that obtaining adequate funding is a notable difficulty faced by nascent business ventures. This resonates with the common understanding that startups often struggle to secure the necessary capital for their operations and growth. The scholars adopt a holistic view of finance, considering not only the financial activities of entrepreneurs but also the contributions of investors and the general public. This broader perspective likely seeks to capture the multifaceted nature of financial interactions in the context of startup ventures. The mention of equity implies a focus on equity financing rather than debt financing. Equity financing involves raising

capital by selling shares or ownership stakes in the business, and this approach is often vital for startups, especially in industries with high uncertainty and innovation. The study likely delves into the roles played by entrepreneurs and investors in the financial ecosystem. Entrepreneurs not only seek funding but also contribute to the financial landscape, while investors play a crucial role in deciding which ventures receive financial backing. The reference to capital markets indicates an awareness of the broader financial environment. This suggests that the researchers are interested in understanding how startups engage with capital markets and the implications for the overall financial system. By characterizing financing challenges as an essential area for further research, the study is likely advocating for deeper exploration into the dynamics of startup finance. This could involve investigating innovative financing models, the impact of regulatory environments, or the role of emerging financial technologies. In summary, Drover et al. underscore the multifaceted challenges of financing faced by startups and advocate for a comprehensive exploration of this domain, considering the roles of entrepreneurs, investors, and the broader financial system.

Jitender and Pravesh (2017) showed that entrepreneurs face problems, but there are still startups created every day. These entrepreneurs have the determination to create and use energy to plan, support and realize their dreams by contributing to the growth of the business. The new program of the Indian government provides for easy and fast approval to start a business, easy exit, payment of taxes, faster registration of rents and patents. Jitender and Pravesh (2017) highlight the challenges faced by entrepreneurs while emphasizing the resilience and determination that drive the continual creation of startups. The study sheds light on several key points like acknowledging that entrepreneurs encounter challenges is a starting point. The specific challenges are not detailed in the summary, but it's a common understanding that issues such as funding, market competition, and operational hurdles are typical barriers faced by startups. Despite challenges, the study points out that new startups are being established daily. This underscores the entrepreneurial spirit and the willingness of individuals to venture into business despite the uncertainties and difficulties associated with startup endeavors. The term "determination" implies a strong resolve and persistence on the part of entrepreneurs. This quality is often crucial for overcoming obstacles and navigating the complex landscape of starting and

growing a business. The mention of using energy to plan, support, and realize dreams suggests a proactive and energetic approach by entrepreneurs. This involves not just having ideas but actively strategizing, seeking support, and executing plans to turn their business dreams into reality. The study references a new program by the Indian government aimed at facilitating business initiation. The highlighted features include easy and fast approval processes, simplified exit procedures, streamlined tax payments, and swift registration of rents and patents. These initiatives are likely designed to create a more favorable environment for startups. The emphasis on easy and fast approval, simplified exit procedures, and efficient registration processes aligns with the broader global trend of countries striving to improve their Ease of Doing Business rankings. Governments worldwide are recognizing the importance of creating business-friendly environments to foster economic growth. In summary, Jitender and Pravesh's study underscores the tenacity of entrepreneurs in the face of challenges and emphasizes the role of government initiatives in simplifying the startup process. It suggests that a combination of individual determination and supportive policies can contribute to the ongoing creation of startups.

Kaur (2017) shared some of the challenges faced by startups and opportunities for startups. The opportunity to start a business in India is great, but so are the challenges, according to the researchers. Kaur (2017) provides insights into the challenges and opportunities encountered by startups in India. While the specific challenges and opportunities are not detailed in the summary, the key points can be inferred as **Abundant Opportunities in India**: The study acknowledges that there are significant opportunities for startups in India. This could include a large consumer base, emerging markets, or gaps in existing industries that startups can address. **Complex Landscape of Challenges**: The study underscores that, alongside the promising opportunities, startups in India face substantial challenges. These challenges might include issues related to funding, regulatory hurdles, market competition, and operational complexities. Each of these challenges could impact the success and growth of startups. **Balancing Act for Entrepreneurs**: The juxtaposition of opportunities and challenges implies that entrepreneurs in India must navigate a complex landscape. Success in this environment would require a strategic and adaptive approach, where entrepreneurs capitalize on opportunities while effectively addressing and overcoming challenges. **Dynamic Business Environment**: The use of the

term "great" to describe both the opportunities and challenges suggests that the Indian startup ecosystem is dynamic and evolving. What makes the opportunities great also contributes to the complexity of challenges. This dynamism requires startups to be agile and responsive to changes in the business environment. **Need for Strategic Decision-Making:** Given the dual nature of opportunities and challenges, startups in India need to engage in strategic decision-making. This involves not only identifying and seizing opportunities but also implementing effective strategies to mitigate or overcome challenges. In summary, Kaur's study highlights the nuanced and dynamic nature of the startup landscape in India. It emphasizes that while opportunities are abundant, entrepreneurs must be prepared to navigate and address the multifaceted challenges inherent in the business environment. This aligns with the broader understanding that startup ecosystems are characterized by a delicate balance between opportunities and obstacles.

Keller (2017) conducted a comparative study of the opportunities and challenges faced by start-ups in the most promising information technology countries, Germany and Latvia. Research shows that Latvia needs to facilitate business entry and exit and create an environment for information exchange. On the other hand, there are many schools, development conditions for starting a business in Germany. An interesting finding of this study is that while Germany stagnates in the number of entrepreneurs, Latvia considers entrepreneurship necessary for its economic development. Keller's (2017) comparative study focuses on the opportunities and challenges encountered by startups in two prominent information technology countries, Germany and Latvia.

Business Environment in Latvia suggests that Latvia perceives entrepreneurship as crucial for its economic development. This indicates a positive attitude towards startups and their potential contributions to the country's economic growth. Latvia faces challenges related to business entry and exit, suggesting that there is room for improvement in facilitating these processes. Additionally, creating an environment conducive to information exchange is identified as an area that could be enhanced. Similarly, Germany is noted for having many schools and favorable development conditions for startups. This implies that there is a robust educational infrastructure supporting entrepreneurship, and the overall ecosystem is conducive to the development of new businesses. While Germany

offers favorable conditions, the study hints at stagnation in the number of entrepreneurs. This could suggest that, despite a supportive environment, there might be factors hindering the growth of entrepreneurial activities in the country. **Latvia's Emphasis on Entrepreneurship:** An interesting aspect highlighted in the study is that Latvia sees entrepreneurship as a necessary driver for economic development. This might indicate a proactive stance toward encouraging and fostering a culture of entrepreneurship. **Germany's Stagnation:** The observation of stagnation in the number of entrepreneurs in Germany raises questions about potential barriers or factors limiting the growth of startups in a country with otherwise favorable conditions. In summary, Keller's study sheds light on the contrasting situations in Germany and Latvia concerning startup opportunities and challenges. While Germany provides a supportive ecosystem with educational and developmental advantages, Latvia recognizes the importance of entrepreneurship but faces specific challenges that need attention for fostering a more conducive business environment.

Lee and Kim (2017) explore high-tech business ecosystems. The researchers spoke of the "enterprise lifecycle" model, explaining that startups that pass through the "Valley of Death" and "Darwin Sea" checkpoints will go through the optimization, finance, and exit phases. Research shows that each ecosystem is supported by key elements such as South Korea's energy-based ecosystem, Japan's technology-based ecosystem, and China's industry-based ecosystem. In Lee and Kim's (2017) exploration of high-tech business ecosystems, they introduce the concept of the "enterprise lifecycle" model, which identifies critical checkpoints and phases that startups navigate. The researchers describe checkpoints in the enterprise lifecycle, including the challenging phases of the "Valley of Death" and the "Darwin Sea." These checkpoints are likely critical stages where startups face significant challenges and need to overcome obstacles to progress. Following the initial challenges, startups move through optimization, finance, and exit phases. Optimization involves refining and improving business operations, finance involves securing necessary funding, and exit refers to strategies for concluding the startup journey, potentially through mergers, acquisitions, or other exit mechanisms. The study suggests that South Korea's ecosystem is characterized by energy-related factors. This might imply that the country's startup ecosystem is heavily influenced or supported by the energy sector. Japan's

ecosystem is identified as being technology-based. This indicates that technological innovation is a central driver of the startup environment in Japan. China's ecosystem is described as industry-based, suggesting that the startup landscape in China is closely tied to specific industries. The research highlights distinctive features of each country's ecosystem, emphasizing that the nature and focus of startup activities are influenced by the unique characteristics and strengths of each region. In summary, Lee and Kim's study provides insights into the lifecycles of high-tech startups and the distinctive elements of ecosystems in South Korea, Japan, and China. Understanding the challenges and phases of the enterprise lifecycle, as well as the specific characteristics of each ecosystem, is crucial for comprehending the dynamics of high-tech business environments in these countries.

Manzani & Dubey (2017) suggest that when the environment changes rapidly, investors begin to invest in joint ventures for business development. Launched by the Government of India, Indian Startups Stand India aims to promote entrepreneurship by teaching women their hidden potentials and strengths through entrepreneurship education, and to share women's knowledge and experience of development in the business world through their creative cultures. concept was discussed. Manzani and Dubey's (2017) study discusses the response of investors to rapid environmental changes, particularly the inclination towards investing in joint ventures for business development. The research also sheds light on the Indian government's initiative, "Indian Startups Stand India," which is designed to foster entrepreneurship. A key focus is on empowering women by unveiling their hidden potentials and strengths through entrepreneurship education. The initiative aims to facilitate knowledge sharing among women, leveraging their creative cultures, and enhancing their contributions to the business world. In essence, the study explores the dynamics of investor behavior in changing environments and the role of government initiatives, specifically emphasizing the empowerment of women in the entrepreneurial landscape.

Marshall et al. (2017) highlights that finance is seen as an important factor in innovation expansion, thus leading to greater expectations regarding firm performance. However, access to capital for young entrepreneurs is less than for older entrepreneurs. Researchers examine the impact of finance on the development of young entrepreneurs in sub-Saharan Africa. Young entrepreneurs aged 18-24 have higher expectations but lower

incomes than adults aged 21-34. In addition, the authors argue that policies to support young entrepreneurs will create more opportunities for expansion and job creation. Marshall et al. (2017) emphasizes the crucial role of finance in the expansion of innovation, with increased expectations for firm performance. The study delves into the access to capital for young entrepreneurs, revealing that it is comparatively less than that for older counterparts. Focused on the impact of finance on the development of young entrepreneurs in sub-Saharan Africa, the research observes that entrepreneurs aged 18-24 exhibit higher expectations but lower incomes than those aged 21-34. The authors advocate for policies supporting young entrepreneurs, asserting that such measures would create more opportunities for expansion and job creation in this demographic.

Okrah and Nepp (2017) point to a strong correlation between the number of attempts created and failed. The authors argue that various factors, such as technology, policy, social and environmental, cause the failure of these initiatives, while the availability of knowledge, skills, finance and job opportunities increase their success. The study also determined that funding contributes to startup innovation. Okrah and Nepp (2017) highlight a robust correlation between the creation and failure of startups. They contend that diverse factors, including technology, policy, social and environmental considerations, contribute to the success or failure of these initiatives. The availability of knowledge, skills, finance, and job opportunities is identified as enhancing their success, while funding is recognized as a significant contributor to startup innovation. The study underscores the complex interplay of multiple factors in shaping the fate of startups.

Pandey (2017) said that the lack of ambition in startups is limiting their rapid growth. Many business startups struggle to create the right brand for their business. According to the researchers, starting a business should have good advertising and good products that can be beneficial to the business purpose, thus creating an image. Pandey (2017) suggests that a lack of ambition is constraining the rapid growth of startups. Many startups encounter challenges in establishing a strong brand identity for their business. The researchers propose that startups should focus on effective advertising and offer quality products that align with the business purpose to create a positive brand image. This emphasis on branding is seen as essential for fostering the growth and success of startups.

Pandita (2017), family members, friends, loans, grants, angel financing, business investment, crowdfunding, etc. He said he could choose from a variety of funding sources, including: The researchers added that financial demand increases with the target market. Expanding business scale requires timely provision of resources. In addition, the researchers said that proper financial management is critical to the success of startups. Pandita (2017) highlights that startups have a range of funding options to choose from, including family members, friends, loans, grants, angel financing, business investment, crowdfunding, and more. The researchers note that the choice of funding sources depends on factors such as the target market and the scale of business expansion. They emphasize that the demand for financial resources increases as a business grows, necessitating timely and effective financial management for the success of startups. **Diverse Funding Options:** Startups have access to a variety of funding sources, such as family and friends, loans, grants, angel financing, business investment, and crowdfunding. The choice of funding sources is influenced by factors like the target market and the scale of business expansion. As a startup grows, there is an increasing demand for financial resources to support expansion. Proper financial management is identified as a critical factor for the success of startups. In summary, the study underscores the importance of strategic financial decisions and effective management in the growth and success of startups.

Patnaik and Pandey (2017) examine the laws facilitating the establishment of universities in the United States, Japan, and India. Researchers have found that these laws play an important role in the creation of startup schools because they are easy to access and protect business owners. The study shows that Japan and the United States have good laws to encourage entrepreneurship, but India does not have such laws. The study by Patnaik and Pandey (2017) highlights the legal landscape for establishing universities in the United States, Japan, and India. Key findings include **Facilitation of Establishment:** Laws in the U.S. and Japan are identified as conducive to the creation of startup schools. They provide easy access and protection for business owners. **Encouragement of Entrepreneurship:** The study suggests that the legal frameworks in Japan and the United States actively support entrepreneurship through favorable regulations. **Challenges in India:** In contrast, the study indicates that India lacks such supportive laws for encouraging entrepreneurship, potentially presenting challenges for the establishment of startup schools. In essence, the

research emphasizes the role of legal frameworks in fostering entrepreneurship and suggests areas for improvement in India's regulatory environment.

Spender et al. (2017) conducted a cross-sectional study of startups participating in open innovation processes. The study found that whether successful or not, startups share the benefits of their innovations with many players, including large corporations, universities and society. Researchers also suggest that industries, investment funds, large corporations and universities can influence the start-up business in terms of new expansions. The study by Spender et al. (2017) presents a cross-sectional analysis of startups engaged in open innovation processes. Key findings include **Knowledge Sharing**: Whether successful or not, startups are found to engage in knowledge sharing, contributing their innovations to various stakeholders. This includes sharing with large corporations, universities, and society at large. **Influence of External Factors**: The research suggests that various external entities such as industries, investment funds, large corporations, and universities play a significant role in influencing the trajectory of startup businesses, especially concerning new expansions. **Open Innovation Dynamics**: The study highlights the dynamics of open innovation, showcasing how startups contribute to and benefit from collaborative efforts in the broader ecosystem. In summary, the research underscores the collaborative nature of innovation in startups and the impact of external entities on their development and growth.

Subramanya (2017) argues that tech startups' business ecosystems are unique and don't happen overnight. It will take some time for this ecosystem to form. In India, Bangalore has recently gained international attention as a tech hub. The authors recommend defining and understanding the structure and key elements of the business ecosystem; Without these, the ecosystem will not form, if it does, it will not survive, and if it does, it will not be a good witness. The study by Subramanya (2017) emphasizes the unique nature of business ecosystems for tech startups, asserting that they don't emerge spontaneously but require time to develop. Particularly, it highlights the **Ecosystem Formation Takes Time**: The research suggests that the formation of business ecosystems for tech startups is not an instantaneous process but rather requires a considerable amount of time. **International Recognition of Tech Hubs**: Using Bangalore in India as an example, the study notes that certain locations, like Bangalore, have gained global

recognition as significant tech hubs, indicating the international importance of such ecosystems. **Need for Defined Structure and Key Elements:** The authors stress the importance of clearly defining and understanding the structure and essential elements of a business ecosystem. Without these components, the ecosystem may not form, or if it does, it might struggle to survive and thrive. In essence, the study underscores the strategic and intentional development of business ecosystems for tech startups, highlighting the critical role of time, location, and a well-defined structure.

The India Telecom Regulatory Authority (2017) report states that India is a multicultural and multilingual region and research is needed to provide solutions for health, education, infrastructure, sanitation and the bottom of the population pyramid. Each question presents an opportunity to build a business around it. Further, the report shows that India's mobile speed has reached 76.55% and its user base has reached Rs 957.6 crore, providing convenience to Chinese consumers with second and third cities. The report by the India Telecom Regulatory Authority (2017) highlights key points such as **Multicultural and Multilingual Landscape:** India is portrayed as a diverse nation with various cultures and languages. The report emphasizes the need for research to address challenges related to health, education, infrastructure, sanitation, and other issues affecting the broader population. **Business Opportunities:** Each challenge mentioned in the report is seen as an opportunity to establish businesses that can provide solutions. The diverse problems in areas like health, education, and infrastructure present potential markets for entrepreneurial endeavors. **Mobile Penetration and Speed:** The report provides statistics on India's mobile landscape, indicating a mobile speed of 76.55%. The user base has reached a substantial number, amounting to Rs 957.6 crore. The report suggests that the widespread adoption of mobile technology provides opportunities, particularly in catering to consumers in second and third-tier cities. In summary, the report emphasizes the entrepreneurial potential in addressing diverse challenges faced by the population and underscores the significance of mobile technology in reaching consumers across various cities in India.

Crozdesk (2018) states that the software-as-a-service market will grow by 22% in 2018. As trends in fintech and artificial intelligence increase, fields such as business analytics, accounting and finance are attracting money. The study also revealed that 89

percent of startups in the US are dedicated to cloud computing and software, followed by Europe (22 percent) and Silicon Valley (16 percent). The Crozdesk report from 2018 provides insights into the software-as-a-service (SaaS) market and startup trends. The report predicts a substantial growth of 22% in the software-as-a-service market for the year 2018. This growth is attributed to increasing trends in financial technology (fintech) and artificial intelligence (AI). The fields of business analytics, accounting, and finance are highlighted as particularly attractive for investment. This suggests that startups operating in these domains are likely to receive significant attention and funding. The distribution of startups engaged in cloud computing and software is outlined. The United States dominates this space with 89% of startups, followed by Europe at 22%, and Silicon Valley at 16%. This indicates the concentration and global distribution of startups in the cloud computing and software sectors.

In summary, the report underscores the robust growth anticipated in the SaaS market, identifies key areas of interest for investors, and provides insights into the geographical distribution of startups in the cloud computing and software domain.

Cukier and Kon (2018) discuss the leadership style that supports entrepreneurship in software startups in Israel. Institutional mechanisms, the role of education, various mechanisms to promote entrepreneurship, characteristics of successful innovation teams and entrepreneurs, motivation of software entrepreneurs, and technical factors are analyzed to see how they affect the progress of software. Beginning. The research shows that all four aspects of Boulder's research are present in the Israeli ecosystem. The study by Cukier and Kon (2018) delves into the leadership styles that foster entrepreneurship in software startups in Israel. The research comprehensively examines several factors influencing the initiation and progress of software startups. The study likely explores how institutional frameworks and support structures contribute to the creation and growth of software startups. This could include government policies, funding mechanisms, and regulatory environments. Education often plays a vital role in the entrepreneurship ecosystem. The research may highlight how educational institutions contribute to the development of skills and knowledge necessary for software entrepreneurship. Identification and analysis of various mechanisms employed at both institutional and individual levels to encourage and support entrepreneurship within the software industry. Examination of the traits, skills, and

characteristics that distinguish successful innovation teams and entrepreneurs in the software startup landscape. Understanding the driving forces and motivations that lead individuals to venture into the software entrepreneurship domain. Evaluation of the technical aspects and innovations that contribute to the success of software startups. The key finding, as mentioned, is the presence of all four aspects of the Boulder thesis in the Israeli ecosystem. The Boulder thesis is a framework that outlines four critical factors—university, risk capital, a culture of openness, and a supportive local government—that are considered essential for a successful entrepreneurial ecosystem. In the context of Israel's software startup landscape, these elements likely contribute significantly to the thriving entrepreneurial environment.

Davidwest et al. (2018) examines the models that startups use when launching business platforms in sub-Saharan Africa. The study found that the business ecosystem is controlled by private owners without public involvement. The standalone model dominates the market for platform startups, and we see accelerators and incubators not working in platform startups. The study conducted by West et al. (2018) focuses on the models adopted by startups when launching business platforms in sub-Saharan Africa. Several key findings from this research include the business ecosystem in sub-Saharan Africa appears to be predominantly controlled by private owners. This suggests that startups in the region operate with limited public involvement in their ownership structures and decision-making processes. The standalone model emerges as the dominant approach among platform startups. This likely implies that startups in sub-Saharan Africa are opting for independent business models rather than collaborative or networked models. The study indicates that accelerators and incubators may not have a significant impact on platform startups in the region. This suggests that unlike in some other contexts, these support structures may not be as instrumental in the early stages of platform startups in sub-Saharan Africa. Overall, these findings shed light on the unique dynamics of the startup ecosystem in sub-Saharan Africa, emphasizing the role of private ownership and the prevalence of standalone business models in the context of platform startups. The study provides valuable insights into the factors influencing the growth and development of startups in this region.

According to Kalyanasundaram (2018) failed startups can raise many questions about the ecosystem and provide guidance to potential entrepreneurs, a relatively unexplored area for successful startup. The researchers studied tech startups in Bengaluru and found the time taken for a startup to reach minimum investment, time to earn fund income, age of founder, attitude of financial independence, etc. identified various factors such as ups are different from startups that use money. complete the application. Kalyanasundaram's study (2018) delves into the often-neglected domain of failed startups, recognizing them as valuable sources of insights that can guide potential entrepreneurs. The research focuses on tech startups in Bengaluru and explores several key factors differentiating failed startups from those that successfully secure funding. Some of the identified factors include the time taken for a startup to reach a minimum investment threshold, the duration required to generate fund income, the age of the founder, and the founder's attitude towards financial independence. By shedding light on the nuances of unsuccessful startups, the study provides valuable lessons and guidance for aspiring entrepreneurs in understanding the intricacies of the startup ecosystem.

Kumar (2018) discusses the drivers of new business start-ups in India such as large population with increasing income, educated and digitally literate youth newspaper. The document also talks about the need for government officials and entrepreneurs to understand the scale of the business and build a team. The author writes about financial, housing, etc. problems encountered when starting a business. It talks about many problems. Also, the authors said there are many opportunities for startups to offer products and services such as food, retail and hygiene to solar and computing forms at a cheap price. Kumar's (2018) work delves into the drivers of new business startups in India, emphasizing factors such as the large population with rising income levels and a digitally literate youth base. The document underscores the importance of comprehending the business scale and building a proficient team for both government officials and entrepreneurs. Kumar addresses challenges encountered during startup initiation, including financial and housing issues, while highlighting a plethora of opportunities for startups. These opportunities span a variety of sectors, from food, retail, and hygiene to affordable solar solutions and computing services.

Madhvapathy and Rajesh (2018) on challenges facing HR tech startups such as lack of job base for recruiting. Also, the researchers say the real challenge is to find the right product-market fit. Madhvapathy and Rajesh (2018) conducted a study on the challenges confronting HR tech startups, identifying issues like a shortage of job bases for recruitment. The research emphasizes that the primary challenge lies in discovering the appropriate product-market fit, suggesting that aligning the product with the demands of the market is a crucial hurdle for HR tech startups. In Madhvapathy and Rajesh's (2018) study on HR tech startups, they delve into the intricacies of the challenges faced by these startups, particularly in the realm of human resources and technology. The shortage of job bases for recruitment is highlighted as one of the specific hurdles, indicating a difficulty in finding suitable positions for potential recruits. Moreover, the study emphasizes that the central and critical challenge revolves around achieving the right product-market fit. This underscores the importance of aligning the product or service offered by HR tech startups with the specific needs and demands of the market, a task that requires a deep understanding of industry dynamics and user requirements. Addressing this challenge is pivotal for the success and sustainability of HR tech startups in a competitive landscape.

Mittal and Madan (2018) examine financial models and their impact on the profitability of energy initiatives in India. "Return on Equity" and "Return on Assets" are examined to analyze the financial model from debt and equity. Research shows that debt does not affect profitability, while equity has a very positive effect on profitability. Mittal and Madan's (2018) study delves into the financial models of energy initiatives in India, particularly analyzing their impact on profitability. The research scrutinizes key financial metrics, including "Return on Equity" (ROE) and "Return on Assets" (ROA), to understand the dynamics between debt and equity in influencing profitability. Interestingly, the findings suggest that, contrary to expectations, debt does not significantly impact profitability. On the other hand, equity demonstrates a notably positive effect on profitability. This insight underscores the nuanced relationship between financial structures and the success of energy initiatives in the Indian context, with equity emerging as a more influential factor in driving profitability.

O'Connor et al. (2018) examined the complexity involved in ecosystems that help create new jobs. The study revealed that the location and dynamics of business ecosystems are unique, with the strong support of many players in the ecosystem and the organizations involved. O'Connor et al.'s (2018) study delves into the intricate dynamics of ecosystems fostering job creation. The research sheds light on the complexity inherent in these ecosystems, emphasizing their unique characteristics shaped by factors such as location and dynamics. The study underscores the multifaceted support required from various stakeholders within the ecosystem and the collaborating organizations to effectively contribute to the generation of new jobs. This insight emphasizes the need for a comprehensive understanding of the intricate interplay between diverse elements within business ecosystems to facilitate successful job creation initiatives.

Pandey (2018) examines the impact of education, experience, gender, and funding type on startup funding for startups. The second study found that start-ups are mainly financed through venture capital or private equity; There are other liberties associated with fundraising. Researchers also said that compared to other ecosystems in India such as Mumbai, New Delhi and Chennai, the Bengaluru ecosystem is the best for beginners. Pandey's (2018) research focuses on exploring the influence of education, experience, gender, and funding type on startup funding. The study reveals that startups predominantly secure funding through avenues like venture capital or private equity, and different facets, such as education and gender, play a role in fundraising outcomes. The study further indicates that, in comparison to other startup ecosystems in India like Mumbai, New Delhi, and Chennai, Bengaluru stands out as the most favorable environment for aspiring entrepreneurs. Pandey's (2018) research delves into the intricate dynamics of startup funding, scrutinizing the impact of various factors. The study identifies education and experience as pivotal elements influencing funding outcomes, along with the significant role of gender in shaping the funding landscape. Moreover, the research highlights the dominance of venture capital and private equity as primary sources of funding for startups. Notably, the study provides valuable insights by emphasizing that Bengaluru's startup ecosystem, among major Indian cities, stands out as particularly conducive for entrepreneurs seeking financial support and growth opportunities.

Pisoni and Onetti (2018) do a comparative study of start-ups in Europe and America. Researchers believe that Silicon Valley's success is due to large successive acquisitions. Big companies find it easier and faster to innovate and disrupt the market by acquiring startups. According to research findings, startups in America are higher than in Europe. The authors say the initiative should not be called business closure, but simply a change of management and business. Pisoni and Onetti's (2018) comparative study of startups in Europe and America offers insights into the dynamics of innovation and acquisition in these two regions. The researchers attribute Silicon Valley's success to a pattern of substantial acquisitions by large companies. The study underscores that the acquisition route allows established firms to rapidly innovate and disrupt markets through assimilating startups. The findings reveal a higher prevalence of startups in America compared to Europe. The authors advocate a nuanced perspective, suggesting that the cessation of a business should be viewed not as closure but as a transition in management and operations. The key takeaway from Pisoni and Onetti's (2018) study is the notable influence of large successive acquisitions on Silicon Valley's innovation ecosystem. The research emphasizes that the strategy of major corporations acquiring startups has contributed significantly to the dynamism and growth of the American startup landscape. Furthermore, the study highlights the higher prevalence of startups in America compared to Europe, and it challenges the perception of business closures by suggesting that such transitions should be viewed as changes in management and business strategy rather than outright closures.

Shukla and Chauhan (2018) examine the factors limiting first-generation women entrepreneurs in cities in South Asia. The research focuses on the "plexiglass ceiling" effect of discrimination and conflict among women entrepreneurs. Research has shown that women entrepreneurs face financial problems in the early stages of starting a business, and there is a general perception that women cannot run technology businesses. The study by Shukla and Chauhan (2018) sheds light on the challenges faced by first-generation women entrepreneurs in South Asian cities. The research particularly emphasizes the concept of a "plexiglass ceiling," which signifies the barriers and discrimination that hinder women entrepreneurs' progress. The findings reveal that women entrepreneurs encounter financial difficulties during the initial phases of their ventures. Moreover, there is a prevalent

stereotype that questions women's capability to lead and operate technology-focused businesses, contributing to gender-based challenges in the entrepreneurial landscape. The key takeaways from Shukla and Chauhan's (2018) study include **Financial Challenges:** First-generation women entrepreneurs in South Asian cities face financial difficulties during the early stages of their businesses. This highlights the need for improved financial support structures for women-led startups. **Plexiglass Ceiling Effect:** The study emphasizes the presence of a "plexiglass ceiling," indicating the existence of barriers and discriminatory practices that impede the progress of women entrepreneurs. Overcoming these barriers is crucial for fostering gender equality in entrepreneurship. **Gender Stereotypes in Technology Businesses:** The research identifies a common perception that questions women's abilities to lead and manage technology-focused businesses. Addressing these stereotypes is essential to create an inclusive environment for women in diverse sectors, including technology. **Conflict and Discrimination:** The study points out the existence of conflict and discrimination among women entrepreneurs. Tackling these issues is vital for creating a supportive ecosystem that encourages the growth and success of women-led startups. In summary, the findings underscore the multifaceted challenges faced by first-generation women entrepreneurs in South Asia, emphasizing the importance of targeted support, breaking gender stereotypes, and fostering an inclusive business environment.

Korreck (2019) said that the Indian economy has had many opportunities for startups that have led to growth and job creation over the past two decades. Many startups are emerging in India and the ecosystem is thriving. This work also includes training and support meetings, infrastructure and workspace, financial opportunities, etc. as well as a variety of support. According to Korreck (2019), the Indian economy has experienced numerous opportunities for startups, contributing significantly to growth and job creation in the last two decades. The study highlights the emergence of a thriving startup ecosystem in India, attributing this growth to various factors. The research recognizes the rise of numerous startups in India, indicating a dynamic entrepreneurial landscape. The study emphasizes the presence of a supportive ecosystem for startups. This ecosystem encompasses training and support programs, infrastructure and workspace facilities, and financial opportunities. The growth of startups in India has not only contributed to

economic expansion but has also been instrumental in job creation. The research notes that startups in India benefit from a diverse range of support mechanisms, suggesting a comprehensive approach to fostering entrepreneurial ventures. In summary, Korreck's study underscores the positive impact of startups on the Indian economy, emphasizing the supportive environment and various mechanisms that contribute to the growth and success of these ventures.

Sardar (2019) said that the Indian government has recently announced many new projects in various fields to promote new ideas and create better business conditions of the public sector in India. The researchers added that young people are positive about entrepreneurship as a career option but are not yet aware of the latest policies or development processes in the field. According to Sardar (2019), the Indian government has recently introduced several projects across various sectors with the aim of fostering new ideas and improving business conditions in the public sector. The study also highlights the perception and awareness of entrepreneurship among young people in India. The research emphasizes the Indian government's proactive stance in promoting entrepreneurship through the introduction of numerous projects. These projects likely cover diverse sectors to create a conducive environment for business development. The study notes a positive attitude among young people towards entrepreneurship as a career option. This suggests a growing interest in venturing into business and startups. Despite the positive inclination towards entrepreneurship, the study identifies a gap in awareness among the youth regarding the latest policies and developmental processes in the field. This implies a need for increased dissemination of information about government initiatives and support structures. In summary, Sardar's research underlines the Indian government's efforts to stimulate entrepreneurship through various projects, while also pointing out the importance of enhancing awareness, especially among the youth, about the existing policies and opportunities in the entrepreneurial landscape.

Thyagi (2019) found that beginners grow like fruit. Women come with many ideas and the business environment consists of education, talent, innovation, incubation centers and many financial institutions. The researchers added that according to NASSCOM, India ranks third in the world's startup ecosystem. Researchers believe that starting a business is an opportunity for many entrepreneurs to teach, support and develop others. Thyagi's

research (2019) explores the growth dynamics of startups, particularly emphasizing the role of women entrepreneurs in India. The study metaphorically describes the growth of startups as akin to the growth of fruit, suggesting a natural and potentially fruitful development process for emerging businesses. The research highlights the active participation of women in the entrepreneurial landscape. This involvement is attributed to a combination of factors, including education, talent, innovation, the presence of incubation centers, and support from various financial institutions. Referring to NASSCOM, the study mentions that India holds the third position in the global startup ecosystem. This ranking underscores the vibrancy and significance of India's startup environment on the world stage. According to the researchers, starting a business is viewed as an opportunity for many entrepreneurs, particularly women, to not only create and grow their ventures but also to contribute to the development, support, and mentorship of others in the entrepreneurial community. In summary, Thyagi's study portrays the growth of startups in India using a metaphorical lens, particularly focusing on the noteworthy participation of women entrepreneurs. The acknowledgment of India's high standing in the global startup ecosystem and the recognition of entrepreneurship as an avenue for mentorship and development add depth to the understanding of the entrepreneurial landscape in the country.

Levin (2019) said that today's youth are incredibly valuable compared to previous generations. The ability to create more knowledge and skills than previous generations. Young people learn to think for themselves and to overcome problems with creativity. Young people need the courage and patience to take advantage, but starting a new business that can change their lives for the better isn't easy, the researchers say. Levin's study (2019) delves into the characteristics and challenges faced by today's youth, emphasizing their immense value compared to preceding generations. The research underscores the exceptional value of today's youth, highlighting their advanced capabilities in creating knowledge and acquiring skills compared to earlier generations. A significant emphasis is placed on the youth's ability to think critically and address challenges with creativity. The study applauds the development of independent thinking skills among young individuals. Levin's research acknowledges the necessity for courage and patience in the entrepreneurial journey. While the youth possess the potential to bring about positive life

changes through new business ventures, the study recognizes the inherent difficulties associated with entrepreneurship. The researchers stress that initiating a new business, despite its transformative potential, is not an easy task. It requires a combination of courage, patience, and resilience to navigate the complexities of entrepreneurship. In essence, Levin's study paints a positive picture of today's youth, attributing to them advanced knowledge, skills, and the capacity for independent thinking. The acknowledgment of the challenges involved in entrepreneurial endeavors adds a pragmatic layer to the narrative, suggesting that while the youth possess tremendous potential, realizing this potential through business ventures requires perseverance and fortitude.

Bullock et al. (2020) found a positive relationship between bootstrapping and crisis and bootstrapping, which is one of the main sources of funding during the covid-19-induced pandemic and found that self-employment experience was higher. There is dignity. good idea to boot. Bullock et al. (2020) conducted a study to examine the relationship between bootstrapping, especially during the COVID-19 pandemic, and its impact on self-employment experience. The focus was on understanding how entrepreneurs, facing crises induced by the pandemic, resorted to bootstrapping as a primary funding source and how this influenced their self-employment experience. The study identified a positive relationship between bootstrapping and crisis situations. This suggests that entrepreneurs, particularly during the COVID-19 pandemic, turned to bootstrapping as a viable means of managing and navigating through the challenges posed by the crisis. The research highlights that bootstrapping emerged as one of the main sources of funding for entrepreneurs dealing with the COVID-19-induced economic uncertainties. This implies that, in times of crisis, entrepreneurs relied heavily on internal resources and creative financial solutions rather than external funding. Entrepreneurs who engaged in bootstrapping, especially during the pandemic, reported a higher sense of self-employment experience. This suggests that the act of relying on internal resources and finding innovative ways to sustain and grow the business during challenging times contributed positively to the overall experience of being self-employed. The study also noted a sense of dignity associated with bootstrapping. This implies that entrepreneurs, while facing challenges, perceived bootstrapping as a self-reliant and dignified way of managing their ventures, particularly during a crisis. The research suggests that having a good business

idea is crucial in the context of bootstrapping. This aligns with the understanding that a solid and innovative business concept enhances the effectiveness of bootstrapping efforts, especially during crisis situations. Bullock et al.'s study provides insights into the dynamics of bootstrapping during a crisis, particularly focusing on the COVID-19 pandemic. The findings emphasize the resilience and adaptability of entrepreneurs who, faced with challenges, leveraged bootstrapping as a dignified and effective means of navigating uncertainties. In summary, the study contributes to our understanding of the positive relationship between bootstrapping and crisis management, highlighting the importance of self-reliance, innovation, and the quality of business ideas in the context of self-employment experiences during challenging times.

Brown and Rocha (2020) explain in their research how the covid-19 crisis is affecting the financial capital of UK start-ups and SMEs. Research shows that equity investment is declining, leading to a decline in seed investment in early-stage startups. Brown and Rocha (2020) conducted research to explore the impact of the COVID-19 crisis on the financial capital of start-ups and small and medium-sized enterprises (SMEs) in the United Kingdom. The primary focus was on understanding the changes in equity investment and how these changes influenced seed investment in early-stage startups during the pandemic. Brown and Rocha's study sheds light on the financial challenges faced by start-ups and SMEs in the UK during the COVID-19 crisis. The decline in equity investment and its impact on seed funding for early-stage startups highlight the vulnerabilities of these businesses in the face of economic disruptions. The implications of the study include the need for supportive measures, both from government policies and private initiatives, to address the financial strains on start-ups. Additionally, it emphasizes the importance of fostering an environment that encourages investment even during times of crisis, as the availability of capital is crucial for the resilience and growth of the entrepreneurial ecosystem. In summary, the research contributes valuable insights into the specific financial challenges brought about by the COVID-19 crisis in the context of equity and seed investments for start-ups and SMEs in the United Kingdom.

Chokhani (2020) suggests that tech professionals are reluctant to join startups as they see massive staffing and layoffs. Beyond this challenge, raising capital is the biggest challenge startups have faced in a long time. In startups, the researchers added, there is an

uncertainty about performance as companies reach scale first and then scale back to improve performance. Chokhani (2020) conducted research to explore the challenges faced by startups, particularly in attracting tech professionals. The study delves into the reasons behind the reluctance of tech professionals to join startups, emphasizing concerns related to massive staffing and layoffs. Additionally, the research highlights the overarching challenge of raising capital for startups, examining the uncertainty surrounding performance as companies undergo scaling processes. Chokhani's study provides insights into the complex dynamics that impact the hiring landscape for startups, especially in the technology sector. The findings emphasize the need for startups to address concerns related to job security and provide a more stable and predictable work environment for tech professionals. The implications of the study extend to the broader entrepreneurial ecosystem, highlighting the critical role of securing capital for the sustained growth and innovation of startups. Efforts to streamline the scaling processes, minimizing disruptions and uncertainties, are crucial for building trust among tech professionals and fostering a positive perception of startups as viable career options. In conclusion, the research contributes valuable insights into the challenges faced by startups in attracting tech talent, shedding light on the interconnected issues of job security, capital raising, and performance scaling. Addressing these challenges is essential for creating a conducive environment for tech professionals to engage with and contribute to the startup ecosystem.

Devi (2020) study discusses the impact of the coronavirus on various industries in India such as MSMEs, operations and supply chains. The business environment is expected to change, with government support again playing an important role in the recovery, the researchers said. Devi's study (2020) aims to analyze and understand the impact of the coronavirus pandemic on various industries in India. The focus of the study includes examining the repercussions on MSMEs (Micro, Small, and Medium Enterprises), operations, and supply chains. Additionally, the study anticipates changes in the business environment and emphasizes the potential role of government support in the recovery process. Devi's study contributes to understanding the multifaceted impact of the coronavirus on the Indian business landscape. The findings highlight the vulnerabilities of MSMEs, the complexities in maintaining operational continuity, and the intricate dynamics of supply chains. Anticipating and adapting to changes in the business environment are

identified as critical considerations for businesses. The emphasis on the role of government support signals the need for coordinated efforts between the public and private sectors to navigate the challenges posed by the pandemic. Collaborative initiatives, financial assistance, and policy adaptations are essential components of a comprehensive recovery strategy. In conclusion, Devi's study provides valuable insights into the ongoing effects of the coronavirus on Indian industries, shedding light on the challenges faced and the potential pathways to recovery. The implications extend to policymakers, business leaders, and stakeholders involved in shaping the recovery landscape, emphasizing the importance of strategic responses to navigate the evolving business environment.

Jain (2020) examines the impact of the Covid-19 crisis on employment in his study. Researchers see uncertainty in income and job creation in the coming years. Researchers discovered that post-pandemic conditions will favor startups because many unemployed would now find entrepreneurship as an alternative. Researchers have discovered that there are challenges to working from the post-Covid-19 situation, which they say supports startups. Jain's study (2020) investigates the repercussions of the Covid-19 crisis on employment, with a focus on understanding the dynamics of income uncertainty, job creation, and the potential role of startups in the post-pandemic landscape. Jain's study holds implications for understanding the nuanced effects of the Covid-19 crisis on employment patterns and the potential role of startups in the recovery phase. The uncertainty surrounding income and job creation underscores the need for adaptive strategies in response to evolving economic conditions. The identification of entrepreneurship as an alternative to traditional employment aligns with the broader narrative of how individuals and businesses are reshaping their approaches in the wake of the pandemic. The study implies that startups, with their agility and innovative potential, could become crucial players in absorbing the workforce and contributing to economic revitalization. In conclusion, Jain's research contributes valuable insights into the shifting employment landscape and the emerging role of startups in a post-pandemic world. The findings emphasize the importance of resilience, adaptability, and strategic thinking as individuals and businesses navigate the complexities of the evolving economic environment.

Joern et al. (2020) found in their study that self-efficacy has a positive effect on self-esteem. Research shows that experienced investors are better able to manage money during financial crises like the covid-19 pandemic. They also show in their research that government policies and guidance play a supportive role and create incentives for entrepreneurs. Joern et al.'s study carries several implications for understanding the psychological dimensions of investor behavior, especially during crises like **Psychological Dynamics**: The positive relationship between self-efficacy and self-esteem highlights the importance of addressing psychological factors in the realm of financial decision-making. Understanding and nurturing individuals' confidence in their financial abilities could positively influence their overall well-being. **Investor Resilience**: The finding that experienced investors with higher self-efficacy cope better during financial crises aligns with the notion of resilience. Financial education and strategies aimed at enhancing individuals' confidence in their financial decisions may contribute to more resilient investor behavior. **Government Support**: The research underscores the pivotal role of government policies in influencing both investor behavior and entrepreneurial activities. Well-designed policies that provide stability, guidance, and incentives can be instrumental in navigating financial crises. In summary, Joern et al.'s study contributes valuable insights into the intricate relationships between psychological factors, investor behavior, and the impact of government policies, particularly in the context of the Covid-19 pandemic. These insights have implications for both individual financial decision-making and broader economic strategies during times of crisis.

Kuckertz et al. (2020) conducted a study examining the shock and stress for startups from the Covid-19 outbreak in Germany and how startups are facing the situation, and demanded what is needed to support the initiative during the crisis. long right They point out that innovation is one of the most important prerequisites for any enterprise, a prerequisite that allows them to constantly hope and improve. On the other hand, the researchers found that while the cost of treatment remained stable, sales began to decline, posing a threat to the survival of the venture. The study advocates for the pivotal role of innovation in the survival and resilience of startups. The ability to innovate allows startups not only to adapt to unforeseen challenges but also to continuously improve and remain competitive in the market. The findings highlight the acute financial challenges startups

are facing, particularly in terms of declining sales. The financial threat posed by the pandemic emphasizes the need for financial support and interventions to ensure the survival of these ventures. Startups are prompted to reassess their long-term vision and strategies in response to the economic impact of the pandemic. This adaptation reflects the dynamic nature of the business environment and the necessity for startups to adjust their goals to align with changing market conditions. The study underscores the immediate need for supportive measures for startups. Policymakers, industry stakeholders, and support organizations are encouraged to implement measures that alleviate the financial burden on startups, allowing them to overcome the challenges posed by the crisis. In conclusion, Kuckertz et al.'s study provides valuable insights into the impact of the Covid-19 outbreak on startups in Germany. The emphasis on innovation, financial challenges, and the need for supportive measures highlights the complex landscape startups navigate during times of crisis. These insights can inform strategies aimed at fostering the resilience and sustainability of startups amid ongoing uncertainties.

In an interview, Fairlie (2020) discusses the impact of Covid 19 on small businesses in America and shows that jobs in all industries fell in the two months from February to April. The report also discusses the impact of the shutdown on unemployment, income inequality and the longer-term economic impact. Fairlie's interview in 2020 addresses the repercussions of the COVID-19 pandemic on small businesses in the United States. The discussion encompasses the period from February to April, highlighting the widespread job losses across various industries and exploring the ramifications of the shutdown on unemployment, income inequality, and the broader economic outlook. In summary, Fairlie's interview provides a snapshot of the immediate and enduring effects of the COVID-19 pandemic on small businesses in America. The widespread job losses, diverse industry impact, implications for unemployment, concerns about income inequality, and considerations of the long-term economic impact collectively contribute to a comprehensive understanding of the challenges faced by small enterprises during this unprecedented crisis.

Sedláček and Sterk (2020) show that startups are important and that these young businesses are creating 2.9 million new jobs per year in the United States. The rapid growth and exit of these young companies, called "up or down workouts," indicates that these

startups are classified as job creators. The researchers showed good behavior and money for money, noting that these startups respond well to the policies and support systems given to them and can support their growth for a long time. Sedláček and Sterk (2020) aimed to assess the significance of startups in the United States, particularly in terms of job creation. The study explores the impact of startups on employment, highlighting their role as job creators and the potential for sustained growth. In conclusion, Sedláček and Sterk's study sheds light on the substantial role of startups in job creation in the United States. The dynamic nature of startups, their classification as job creators, and their responsiveness to policies indicate their potential for sustained growth and positive impact on the economy. These insights contribute to a better understanding of the multifaceted contributions of startups to employment and economic development.

Ashok et al. (2021) examined the organizational determinants of successful innovation by Indian start-ups and found that India has become a global innovation hub and Indian start-ups play an important role in driving innovation and innovation. Using the right strategy to drive innovation drives Indian entrepreneurs to create new services and products. The study by Ashok et al. (2021) aims to explore the organizational determinants that contribute to the successful innovation of Indian startups. The focus is on understanding how Indian startups, in their role as global innovation contributors, utilize effective strategies to drive innovation, ultimately leading to the creation of novel services and products. Ashok et al.'s study highlights the significance of strategic approaches within the organizational structure of Indian startups. The findings imply that innovation is a deliberate and structured process within these startups, contributing not only to their success but also to India's reputation as a global innovation hub. In summary, the study provides insights into the organizational determinants of successful innovation in Indian startups. It emphasizes the intentional strategies employed by startups, positioning them as key players in the global innovation landscape and drivers of positive change through the creation of innovative services and products.

Ganesaraman (2022) examines the characteristics of life cycles and outputs of Indian tech startups, finding that entrepreneurs try to solve problems with limited resources (called internal use of products) and strengthen ecosystems called other key resources. shows certain behaviors. If entrepreneurs fail to overcome these challenges, startups fail,

and it has been found that 90% of startups fail early in their lives. The impact of business failure exceeds manufacturers and companies as it affects the entire business and the country's economy. Ganesaraman's study (2022) provides insights into the life cycles and outcomes of Indian tech startups, highlighting the entrepreneurial efforts to address challenges with limited resources and emphasizing the significance of ecosystem strengthening. Entrepreneurs in Indian tech startups are identified as actively engaging in problem-solving with constrained resources, referred to as the internal use of products. This indicates a strategic approach to innovation within resource limitations. The study underscores the importance of entrepreneurs strengthening ecosystems by leveraging key resources. This suggests that successful startups not only focus on internal problem-solving but actively engage with and contribute to the broader business ecosystem. Ganesaraman's research notes that startups face challenges, and the failure to overcome these challenges often leads to startup failure. A notable finding is that a significant proportion, 90%, of startups experience early failures in their life cycles. The study recognizes that the consequences of business failure extend beyond the individual startups. It affects manufacturers, companies, and has broader implications for the entire business landscape and the country's economy. In summary, Ganesaraman's study sheds light on the proactive problem-solving strategies employed by Indian tech startup entrepreneurs within resource constraints. The emphasis on ecosystem strengthening and the acknowledgment of challenges leading to startup failure contribute valuable insights into the dynamics of the startup landscape. The study highlights the broader impact of startup failure on the economy, emphasizing the need for strategic approaches to address challenges and ensure sustained business success.

Sharma et al. (2023) examined the sustainability of the technology industry in India and found that the sustainability of initiatives is important to drive economic growth and development. It is another way that can help solve the problems caused by the dysfunctional government. Therefore, it is important to highlight the conditions and constraints that determine the sustainability of Indian startups. The technology industry in India has shown remarkable growth, with the country becoming a global technology hub. Several factors contribute to the sustainability of this industry. India has a large pool of skilled IT professionals and engineers. The focus on education in science, technology,

engineering, and mathematics (STEM) fields has contributed to a workforce that is well-equipped for the demands of the technology industry. India has witnessed the emergence of a vibrant startup ecosystem, especially in tech-related domains. Initiatives like "Startup India" have encouraged entrepreneurship and innovation. Indian tech companies have formed partnerships and collaborations with global counterparts, fostering knowledge exchange and creating a global footprint. Government initiatives, like 'Make in India' and incentives for research and development, have provided a supportive environment for tech companies. The push towards a digital economy and the adoption of technologies like cloud computing, artificial intelligence, and the Internet of Things (IoT) have opened new avenues for growth. Both domestic and international investors have shown significant interest in Indian tech startups, providing the necessary capital for expansion and innovation. However, challenges such as infrastructure gaps, regulatory complexities, and global competition continue to be areas that need attention for sustained growth. The ability to navigate these challenges will play a crucial role in determining the long-term sustainability of the technology industry in India.

2.4 Theoretical and Conceptual framework

This is a study where various groups of factors have been identified to initiate an ecosystem for information technology. After reviewing the literature of previous studies, the unstudied features and their relationship to the characteristics and success of Indian technology companies and other IT startups are analyzed. This study will lay down the path to understand how an organization primarily an Indian IT startup establish itself into the market and how it grows to a boundary beyond its limit. The international expansion of such organization has always been a challenge and interest area for many entrepreneurs. Hence, it is furthermore important to study and find the best practices, area of development and the significance of such a study.

2.5 Literature Review Discussion

The research methodology employed in this study encompasses a literature review and the development of a conceptual model. The initial phase of the research is dedicated

to the systematic identification and classification of constraints within the Indian start-up ecosystem which specifically wants to establish itself abroad. To accomplish this, the study initiates with an extensive review of various constraint types prevalent in IT start-up ecosystem in India, with a focus on their distinctive characteristics. Building upon this comprehension, the research will formulate a structured classification system for categorizing constraint factors. In the subsequent phase of the study, existing constraint modeling methods will be meticulously identified. This process entails an exhaustive review of both industry practices and academic research in the field. By assimilating these methodologies, the study aims to compile a comprehensive overview of prevailing approaches to constraint modeling.

Ultimately, as the constraint classification and modeling techniques are ascertained, the study will culminate in the development of a conceptual framework for holistic constraint management. This framework is envisioned to offer a systematic and integrated approach to address constraints in the IT start-up ecosystem in India.

The timeline for this research endeavor spans from 2021 to 2023, during which the various phases, including literature review, classification development, identification of modeling methods, and conceptual framework formulation, will be diligently executed.

2.6 Research Gap

This section presents a literature review on the IT industry as a whole and how the emerging IT startups are laying the foundation, progressing and growing and finally understanding the fundamentals of moving abroad as an organization beyond international barriers. If we investigate studies prior to 2015, the number of research papers or studies conducted into startups, IT sector or even major IT companies were limited. However, after 2015, the number of studies on start-ups is also quite high. The study found that most of the studies are not specific to the Indian sample, as they cover other developed countries with business ecosystems. Many examples would be taken from Silicon Valley in the USA. Various studies have shown the importance of IT startups and organizations about their contribution to economic growth. This literature review focuses on the role of entrepreneurs, the needs of start-ups, and the challenges faced by start-ups and government officials. This literature study will make the

foundation of Indian IT companies crossing international borders and excelling there. The literature review revealed that there are not many significant studies on the Indian business ecosystem particularly in the IT sector. Existing studies are mostly based on secondary data analysis and refer to the government's "Startup India" action plan. Entrepreneurs and investors in India and other countries are looking to the Indian ecosystem that can provide them with more business opportunities and watch out for the challenges they will confront. Hence the researcher felt the need for conducting very specific research pertaining to Indian IT organization particularly IT startups pertaining to India which is today one of the most significant startup destinations in the world where many experiments are conducted regularly to beat the competition. Hence the present research on “Understanding the use of management techniques use by local information technology companies in India to overcome multinational barriers” becomes relevant.

CHAPTER III: RESEARCH METHODOLOGY

3.1 Overview

This section summarizes the methodology followed in this study. The main purpose of this section is to summarize the methods used to test hypotheses developed based on research objectives. This section describes the research design in detail, including measuring different subjects, questionnaire design, sampling procedure, data collection, and analytical methods used to assess opinions. Dependent and independent variables were discussed in detail according to the questionnaire. This section also describes the methodology of the preliminary experiments and the research design. In addition, data analysis procedures are described. In addition to the questions mentioned above, the scope of the study and sample selection are also important points.

Descriptive research was used to examine the profile of IT entrepreneurs, such as age, education, and background; Analytical research was used to identify various motivations factors for IT start-ups, the impact of the IT start-up ecosystem on startups, and the role of IT from an overall perspective. This is obtain using Chi-Square and ANOVA. Research design includes a broad set of research methods, guidelines, research planning, and research methods.

3.2 Research Methodology and Plan

Research methods for this thesis is aimed at IT companies particularly the new IT companies which often involve the process of collecting, analyzing and interpreting data about research objectives. The entire research plan can be carried out via:

Research Design: Identify the appropriate research design for the study. It can be exploratory, descriptive or explanatory, depending on the nature of the research questions and goals. For IT start-ups, research work may be necessary to gain insights and better understand what's going on.

Literature Review: Conduct a literature review to understand the available information and research on the topic. Review academic literature, books, articles, and

other online resources to identify gaps in the literature and develop a theoretical framework for the research.

Research Objectives and Questions: Clearly define the research objectives and formulate research questions that align with the objectives of the publication. These questions will guide the data collection and analysis.

Data sources: Describe the data from the research. Primary data can be collected through surveys, interviews and observations. Secondary data can be obtained from reports, newspapers, archives and other publicly available sources.

Data Collection: Choose the appropriate data collection method based on the research objectives and questions. Observations and interviews are data collection methods for IT startup research. Surveys can be made online; interviews can be done face-to-face or on virtual platforms.

Sampling: Determine the target population and sample size. For IT startups, the team may include founders, employees, investors or customers. Select a representative sample to expand on the study's findings.

Data Analysis: Use appropriate data analysis techniques to interpret the data that has been collected. Thematic analysis or content analysis can be used for qualitative data such as interview responses. For large amounts of data such as answers to questions, software such as SPSS or Excel can be used for statistical analysis.

Research and Analysis: Present the research findings clearly and consistently. Use tables, figures, and charts to support the results. Link the findings to research questions and available literature.
Discussion and Interpretation: Describe and explain the results of the findings in the context of the research objectives. Discuss the significance of the results and how it can contribute to the IT startup scene.

Conclusions and recommendations: Summarize the main points of the research and make recommendations to new IT companies, investors, policy makers or other stakeholders. Based on the limitations of the study, make recommendations for future research.

Ethical considerations: Addressing ethical issues such as obtaining informed consent from participants, keeping information confidential, and conducting research ethically.

Citation: Provide a complete list of all sources cited in the article following the appropriate format.

Table 1 Stages of research

First Phase	<ul style="list-style-type: none">•A detailed survey on the literature of IT startups, IT eco-system etc.•Identification of problems, gaps and further scope of study.•Identification of Key constraints, reason for achievement and failure.
Second Phase	<ul style="list-style-type: none">•Research proposal and research hypothesis.
Third Phase	<ul style="list-style-type: none">•Preparation of the questionnaire.•Pilot study.•Redefining and finalising the questionnaire.
Fouth Phase	<ul style="list-style-type: none">•Questionnaire administration.
Fifth Phase	<ul style="list-style-type: none">•Data analysis.•Interpretation of the data.
Sixth Phase	<ul style="list-style-type: none">•Final result•Reporting of the result.

Source: Author's work

3. 3 Research Design

This study aims to explore the impact of IT companies and IT startups in India and how are they exploring the challenges of multinational barriers and methods to overcome such problems through quantitative analysis (i.e., digital data collection and interpretation process). It is theory-based, referring to the testing of theories developed by ordinary positivist scientists. Some of the advantages of quantitative research are that more people are involved, and results can be demonstrated. Another advantage is efficiency and accuracy; this means that few variables are included as the data comes from closed questions. The fact that data collection can be done through digital surveys or mobile phones makes it faster and more efficient, allowing thousands of interviews to be conducted simultaneously in different countries. Another advantage is that some people who participate in many studies often cost less than some people who participate in a good conversation. The method used in this study is exploratory research. It is often qualitative because of its simplicity and open-ended character and is also known as translation research or grounded theory. Like qualitative research, the purpose of exploratory research is to ask questions, clarify concepts, and develop hypotheses. Research may begin with a literature review, focus group discussions or questionnaires. As the title suggests, the main objective of this study is to identify, investigate and explain the “Understanding the use of management techniques use by local information technology companies in India to overcome multinational barriers”. Therefore, data collection for this study will be done through surveys and websites. The research is divided into several stages. After that, it is passed to the stages of determining the criteria used to measure the differences, analyzing the data collected from different sources, reaching the research objectives and reporting the results.

3.4 Period of the study

The period of study was between 2021 to 2023, during which the research was conducted. The primary purpose and source of the research was to understand the IT segment and IT startups in India and how are they focusing on expanding mainstream business globally.

3.5 Research instrument

As the positivist concept of research design suggests, researchers are guided to find the most effective and efficient way to obtain the most information for validity and reliability (Smith et al, 1991). We created a survey designed to gather the information needed by the participants.

3.6 Questionnaire Design

Before a good test to collect valid data, we prepared and prepared a survey. Data is collected through surveys to get positive feedback from participants in a natural and direct environment. There is a fair call for Startup Entrepreneurs participants to provide information on a variety of topics such as issues, opportunities, challenges, responsibilities, information about Startup policies and government officials, and more.

The polarity of the opinions expressed by the participants was calculated using the Likert scale method, followed by analysis of variance to assess the differences in the data and the quality of agreement. This study used a bipolar scale that gave participants the opportunity to evaluate other options on the other side of the process. This method has been proposed by Paul et al. (1988), Kinnear and Taylor (1996) stated that there was no significant difference between the results of the different scales, but they suggested using a 7-point scale since the wider range increased the reliability of the scales. However, in this study, the Likert-anchor was easily handled, and the collected data were easily fitted.

Table 2. Questionnaire Design Variables

Demographic Information	Awareness Level	Challenges
1. Respondents Age	1. Government Initiatives	1. Financial challenges
2. Academic Background	2. Awareness of startup schemes	2. Marketing challenges
3. Background of Respondents	3. Factors responsible for New Startups	3. HR challenges
4. Characteristic profile of entrepreneurs	4. Rating the factors helped in setup	4. Establishment related challenges
5. Key strength of startups	5. Agreeable responses of statements	5. Business Scaleup challenges
6. Age of Start-ups	6. Agreeable responses on Incubations	6. Pandemic challenges
7. Respondents classification based on setup		
8. Sector-wise classification		
9. Classification- Innovativeness		
10. Classification- Stage wise		
11. Classification- Strength of employees		
12. Classification- Business model		
Ecosystem Impact on Entrepreneurs	IT Startup Entrepreneurs Role On Ecosystem	Advantages
1. Economic impact	1. Economic role	1. Classification based on professional services
2. Technological impact	2. Social and cultural role	2. Non-financial support
3. Social impact	3. Success role	3. Classification based on competitive advantage.
	4. Business establishment role	4. Opportunities during Covid-19 situation

Source : Author's Work

3.7 Pre-testing

It is very important for researchers to pretest after developing the questionnaire and before collecting master data. To assign a value to the survey, the questions are tested for validity, including accuracy, relevance, relevance, and specific use. The purpose of the pretest is to eliminate unsuitable questions and keep the appropriate ones. Test it by interviewing 20 businesspeople and collecting the necessary information before choosing. The final survey was revised based on the experience of the 20 entrepreneur's pretest.

3.8 Pilot Study

20 entrepreneurs from different fields were selected for this study. I initially selected these three locations for research. Bangalore, Delhi and Pune in India. During the study, it was found that there are many initiatives even in other parts of India. Therefore, as a result of the research and the validity of the revised survey, Hyderabad, Mumbai, Kolkata etc. were also included in other locations. Due to various factors such as budget,

company size and workplace, some start working from their own residence. These new initiatives are spread all over India and are listed under "Other regions". The table below summarizes the analysis of Pilot results.

Table 3 Selection of samples

Before Pilot study (Primary Regions)	After Pilot Study (Other Regions)
Bangalore	Hyderabad
Delhi	Mumbai
Pune	Kolkata
	Ahmedabad
	Delhi NCR
	Chennai

Source : Author's Work

3.9 Sample of the study

To understand the challenges and expectations IT startups confronted, I researched a selected sample of startups from various startup verticals in India. The study covers a large sample of 200 startups weighted by geographic region.

3.10 Sampling Technique

The purpose of the snowball sampling process is to collect usable data from enterprising entrepreneurs. It's often difficult to interview businesspeople because they must use referrals from business organizations, trade funds, and fast workers to reach people. When the details were explained clearly, the businessmen gave good answers.

3.11 Sample Formula

As per the journal published in 2021 on Sample Size Calculation in Medical Research: A Primer by Jaykaran Charan, Rimplejeet Kaur , Pankaj Bhardwaj , Kuldeep

Singh, Sneha R. Ambwani and Sanjeev Misra, I have chosen the calculation method based on the formula.

Reference : https://www.nams-india.in/anams/2021/NAMS57_2_article2.pdf

$$\text{Sample size} = \frac{Z(1 - \alpha/2)^2 p(1-p)}{d^2}$$

$Z(1 - \alpha/2)$ = standard deviation, 1.96 at 5% Type I error ($p < 0.05$), 1% In , Type 1 error is 1.96 and error ($p < 0.01$) is 2.58. In most studies, the p-value is considered less than 0.05, so 1.96 is used in this model.

p= Expected proportion in population based on previous studies or pilot survey.

d= Absolute error or precision - Has been decided by the researcher

Expected Value = 15%

= $1.962 \times 0.15 (1-0.15)$

0.052

= 3.8416×0.1275

0.0025

= 195.92 rounded to the nearest number 200.

3.12 Sources of data

The present study includes both primary and secondary data. Master data provides insights into the problems and prospects faced by the IT startup and provides information about the process, startup financing, etc. from incubators, venture capitalists and accelerators. collected through questionnaires to create an appropriate interview time to collect information about Secondary data is taken from websites, e-journals, research articles and books.

3.13 Statistical tools

The method used here was to calculate, classify, tabulate, analyze and interpret data collected from various sources. Analyze and interpret data using quantitative techniques such as chi-square and ANOVA to assess the variance and goodness of fit of the data. frequency and percentage.

3.14 Scope

This research study has a wide range of area to cover in the future. This study not only touch base on the present data but also lays a foundation for future research. The data that has been collected can be used to understand the current status of Indian IT startups and how are the expanding business across verticals and around the globe. Also, we can target the upcoming entrepreneurs like students, fresh management graduates, people from business background etc. This data will help the future researchers to identify unique and distinct data source when it comes to comparison, identifying trends and analysis patterns. Thus, this research will hold significant contribution to the future of Indian IT startup ecosystem.

CHAPTER IV: CONCEPTUAL FRAMEWORK

4.1 Conceptual Framework Introduction

India's start-up business has caught the attention of the world. The Indian startup market is expected to be larger than before, with many international entrepreneurs seeing the Indian startup scene. But the road to success is not what it seems. Business ventures in India are heavily hampered by the Indian economy's lack of corporate governance, lack of openness and transparency, lack of infrastructure, lack of information and accuracy. Therefore, when it comes to expanding an IT startup globally, it becomes even more challenging due to unknown factors and territorial disadvantages. Tech startups in India are a new phenomenon and growing rapidly. With business and technology, these startups use innovative ideas to solve a variety of social and environmental problems in a profitable business. The unorganized and fragmented nature of business is a problem for successful startups. The behavior of Indian consumers is constantly changing, changing every 30-50 km, making it difficult to establish an effective business or market for their product or service. Most start-ups stall and gradually fail. In this episode, researchers try to explain startups and their successful ecosystems, what it means to be a startup, what influences startups, the challenges they face, and the support systems they can use.

4.2 Background

As the country transitioned to a knowledge economy, business technology became a reliable tool for job creation, innovation and wealth (Kirchhoff and Spencer, 2008). Business leaders and new business models that take advantage of changes in the external environment are key to this change. The speed with which new technologies, inventions and their spread to the masses has increased exponentially over the past five years. As a result of this rapid technological change, new markets are emerging that create new products, methods and processes to meet people's needs (Genome Report on Startups, 2012). Bailetti (2012) defines a techno-enterprise as "an investment in a project that collects and presents unique personal, scientific and technological information to create

and maintain a price for security". As entrepreneurs around the world try to turn their ideas into new products and services, many startups are emerging.

India is no exception. Although still in its infancy, India has the world's third largest startup ecosystem in terms of startups (NASSCOM Startup Report, 2019). The number of start-ups in India has grown steadily over the past decade, with nearly 9,000 technology start-ups operating in the country growing from 12% to 15% on an annual basis. The Indian startup ecosystem has attracted more than 390 venture capitalists, raising over \$4.4 billion in funding in the first nine months of 2019 alone. There are about 24 unicorns (startups valued at more than \$1 billion) operating as of 2019, the industry has created approximately 60,000 direct jobs and approximately 150,000 indirect jobs (NASSCOM Startup Report, 2019). From a macro perspective, the above-mentioned development prospects of the technology market seem broad. However, it is worth noting that the failure rate of technology startups is very high, and most startups do not see the light of day after the first few years of operation (Certo, 2003; Stincomb, 1965). Ajitabh and Momaya (2004) point out that the survival and success of companies in the twenty-first century depend on their competitiveness. Previous studies have shown that tech startups have to deal with a lot of uncertainty in different areas in the early stages. Therefore, it is reasonable to think that all the contributions of the tech industry come from small startups that can solve many problems, survive and succeed in their first few years of operation. (Bala-Subramanya, 2017; Krishna, 2019). The above observations highlight the importance of competition in influencing the survival and success of new technology companies. The competitiveness of the enterprise refers to the ability of the enterprise to compete effectively in a particular market, thereby increasing its market share and then entering the international market. - Long-term growth and profitability (Çetindamar and Kilitcioğlu, 2013). Wu et al. (2008) define competitive advantage as a company's ability to optimize and use its assets and capabilities to gain competitive advantage in the market. The outbreak and aftermath of the COVID-19 pandemic has led countries to increasingly seek to reduce their external dependence in competitive areas (Koleson, 2020; Viola, 2020), which adds to how tech startups can help. Increasing India's competitiveness.

4.3 Startup's Definition

The meaning of startups has been defined by many scholars over the years and can be considered as an amalgamation of these information. That said, according to Steve Blank, entrepreneur, investor, and university professor at Stanford and UC Berkeley (2016), "A startup is a temporary organization that seeks a scalable, repeatable, and profitable business model." Blank, (2014) Kristof (2016) and Przem (2017) also suggested the same business strategy. "A start-up is an organization that wants to replicate and innovate ways to make money," says Peter (2016). It refers to new ideas that use existing technologies and new business models to create products and services that can gain access to new markets or that were previously unprofitable. Przem (2017) also sees start-ups as "a generally new, fast-growing type of business that aims to meet business needs by creating or delivering a new product, process or service". Paul Graham (2012), founder of Y Combinator, defines "startups built for rapid growth". According to Graham, a company does not become a company by creating new products or staying small, working on technology, acquiring capital or making some exit. He also said that an organization can be considered a startup even if it is old or large. Graham pointed out that taking risks, finding new business models, going deep into the unknown and growing fast are the most important things to start a business. Growth and expansion prospects are driven by fast-growing markets driven by strong demand for new products. In a statement issued on 17 April 2015 by the Ministry of Commerce and Industry, Government of India, regarding the usage and legal meaning of the word "start-up", it said that an organization should be considered as a "start-up" within 5 years. from its creation. It was created to undertake the innovation, development, distribution or marketing of new products, processes or services driven by smart technology or intellectual property with transfers not exceeding Rs. It is certified by the Board of Trustees." The Government of India Department of Industry and Domestic Trade Promotion (DPIIT) has stated in its policy that startup programs will be appropriate if the company is at least about ten years old. It can be registered as a sole proprietorship, partnership or limited liability company and its capital should not exceed 100 crores.

As can be seen from a careful analysis of the content provided by many experts, a "startup" is a business venture created as a small growth, rapid growth and scaling of the business model, often focusing on new products, services, methods. Solutions to solve

various business and financial problems related to platforms or business goal, were firmly believed by the founders. Startups often use technologies such as the internet, e-commerce, telecommunications or robotics. In general, startups have a very high failure rate, but startups that have the best ideas and plans, have new products, and have a good understanding of the environment and its structure may encounter, multiply, and know about problems. capacity. and influential large companies. Startups differ from SMEs in that they focus on a scalable business model for new needs in the market, whereas compared to large companies, especially sales companies, startups are concentrated in the hands of a small number of founders with little background and no track record. And there are some assets that cannot be proven or guaranteed to stakeholders. Start-ups have a higher mortality rate due to uncertainty due to ever-changing processes compared to large companies.

4.4 Startup's Ecosystem

India has steadily been building an entrepreneurial ecosystem over the past decade, with the government and the private sector working together to create a conducive environment for entrepreneurs. As a result, India has become one of the world's largest venture centers with many successful ventures across many industries. In this thesis, we take a closer look at how the startup ecosystem works in India.

The Indian startup ecosystem is built on several key pillars, including government support, access to capital, a large pool of startups, and a culture that supports entrepreneurship. One of the most important factors in starting a business in India is the government's emphasis on promoting entrepreneurship. The government has implemented various policies and initiatives to encourage startups, such as the "Startups in India" competition launched in 2016. The government has also created a national network of incubators and accelerators to help start-ups start from scratch. Another important factor in the growth of startups in India is access to capital. While financing is a major challenge for Indian startups, the situation has improved in recent years. There are currently a large number of investment companies and commercial investors in India, and startup funding has been on the rise in the country over the past few years. The Indian economy raised a record \$10.1 billion in funding in 2021, according to risk intelligence firm Tracxn

Technologies. Beyond finance, India has a growing potential of talented engineers, inventors and entrepreneurs. Many return to India after gaining experience and education abroad, bringing valuable skills and experience that have helped Indian start-ups grow. Finally, India has a culture that supports entrepreneurship, and more and more people are seeing entrepreneurship as a viable career path. This was reflected in the growth of offices and incubators, as well as the increasing number of startup events and meetings held nationwide. One of the most important aspects of the Indian startup ecosystem is the role played by incubators and accelerators. These organizations provide start-ups with resources and support, including training, funding, and communication. Some of the most popular incubators and accelerators in India include Indian Angel Network, 500 Startups and Microsoft Accelerator. Another important aspect of the Indian startup ecosystem is the presence of venture capital firms. These companies provide start-ups with the capital they need to grow and expand, as well as valuable advice and support. Some of the most active VC firms in India are Sequoia Capital, Accel Partners and SAIF Partners. Although the Indian startup ecosystem has come a long way in the last decade, there are still challenges to be addressed. One of the biggest challenges facing startups in India is the lack of early capital, which can make starting a startup from scratch difficult. In addition, the absence of experienced trainers and consultants can make it difficult for entrepreneurs to enter the business world. Another challenge facing startups in India is the lack of infrastructure. While there are many co-working spaces and factories in India, more support is needed in areas such as legal and financial services. This is especially true for startups operating in regulated industries such as healthcare and finance.

Despite these challenges, India's entrepreneurial ecosystem is poised for continued growth and prosperity in the years to come. With a supportive government, a growing talent pool, and a culture that values entrepreneurship, India is a great place to be one of the world's startups.

Sipola, (2013) and Daniel, (2018) argue that researchers and policymakers should focus on the complexity of the business ecosystem because innovation and entrepreneurship are an essential part of achieving sustainable business in the near future. The concept of the business ecosystem was first proposed by Moore, J. F (1993), who argued that businesses develop not in isolation but through the interaction among suppliers,

finance, and customers. Although the Indian startup ecosystem has come a long way in the last decade, there are still many challenges to be addressed. One of the biggest challenges facing startups in India is the lack of early capital, which can make starting a startup from scratch difficult. In addition, the absence of experienced mentors and counselors can make it difficult for newcomers to the business world.

4.5 Prominent Researcher's Explanations

This section provides details about different opinions and explanations by eminent researchers and how relevant do they think about the startups and its ecosystem.

As per "Boulder Thesis", Feld (2012) notes that there has been a dramatic shift from a 'hierarchical' society to a 'networked' society. He firmly believes that "enterprise communities" can be created in any region. He believes that creating, building and maintaining a business community in the long run will lead any country to success. In the "Boulder Papers," Feld B outlined the four principles necessary for creating a successful business community. Entrepreneurs lead the startup community with long-term commitments, welcome everyone in the startup community, and hold regular events that interest all startups.

As per the Daniel Isenberg's Domains of the Entrepreneurship Ecosystem (2010), Isenberg's complex and dynamic business ecosystem represents 6 interconnected areas of successful personal business: finance, culture, human capital, business, policy and support. Isenberg's business ecosystem is characterized by multifaceted, high-level interactions. Successful businesses interact with personal networks or social structures for feedback.

Zacharakis et al. (2003) stated that every business consists of an "ecosystem" that requires knowledge, skills and financial support. They proposed an "ecosystem perspective" to study Internet business development. Researchers have found that progress in the Internet business predicts innovations occurring worldwide due to the growth of software companies, the development of Internet infrastructure, the development of Internet service providers, advances in hardware, and the emergence of e - trading companies.

CHAPTER V: DATA ANALYSIS & INTERPRETATIONS

5.1 Data Research Introduction

The startup ecosystem in India has received international attention in recent years. The development of the ecosystem is driven by big money, integration, innovation, technology and big business. Beginnings bring wealth, jobs, interests and future possibilities. India has accepted the harsh reality and complexity of modern trade. The central government is solving the problems faced by young entrepreneurs and their entertainment is internationally recognized. Legal paralysis and lack of transparency are just a few examples of business pioneers confronts regularly. Technology plays a special role in IT startups. IT Startups have been the top choice for Indian business for the past few years. As a result, countless native unicorns have popped up all over the country. India has the third largest business ecosystem in the world; Annual growth should continue at 12-15%. There are around 50,000 startups in India in 2018; about 8,900 to 9,300 of them are technology-led initiatives. In 2019 alone, 1,300 new tech startups were born, which means 2-3 tech startups are born every day. In 2018, the growth of the startup ecosystem increased to 15% compared to the previous year, and the growth in the number of incubators and accelerators increased to 11%. It is worth noting that the rate of women entrepreneurs has increased from 10% and 11% to 14% in the last two years. Startups in the country have created around 40,000 new jobs this year, bringing the total number of jobs in startups to 160,000-170,000. In the 2019 Business Genome Initiative ranking, Bengaluru is among the top 20 cities in the world for startups. It was also named one of the five fastest growing cities in the world.

Indian startups are also raising substantial funds from various global and local funds. The first 15 deals accounted for around 40% of the total deal value, suggesting that most funds prioritized quality over quantity. Private equity increased for the second year in a row in India and the average deal fell slightly from the previous year, while the total value reached \$26.3 billion in 2018, the second highest in nearly a decade. The number of deals over \$50 million has increased compared to last year. Businesses recognize the impact of startups and therefore participate/invest in them. Facebook has partnered with

Startup India to provide \$50,000 in cash grants to every 5 startups. Goldman Sachs' 10,000 Women program provides business and management education, training, networking and access to capital for women entrepreneurs worldwide. Microsoft's venture capital acceleration program in India has recently attracted 16 startups. The Indian government understands the value of partnering with innovators from all sides and using their innovations to improve public services. The Ministry of Animal and Dairy, together with Startup India, organized a Grand Contest giving Rs 1 million to the best startups in 5 categories. Small Business Company of India announced its plans to provide assistance to existing SMEs in need of a capital increase. Commercial laws are in effect in more than 26 states in the country. (Source: <https://www.startupindia.gov.in/>).

Good investment shows that investors like to get involved and invest early, even before the company is founded. Overall, the consumer market remains strong, showing signs of exponential growth. This should conclude that India and particularly Bangalore has a bright track record of successful startups.

Current research focuses on examining the challenges and prospects of selected IT startups in India. This chapter attempts to examine the profile of entrepreneurs and startups, especially the problems of establishing a foreign enterprise, the motivation to set up such an IT venture, the impact on the role of the IT startup ecosystem in the ecosystem. This study explores primary and secondary data. Initial data is collected from startups in India from the idea stage to the scale-up stage. A total of 203 responses were collected by administering a questionnaire designed to find information on demographics and different definitions in the study area.

5.2 Graphical Interpretation and Analysis (Chi Square Test)

Graphical interpretation and analysis, particularly in the context of a chi-square test, involves visually representing and understanding the relationships between categorical variables. The chi-square test is a statistical method used to determine if there is a significant association between two categorical variables. The graphical interpretation can enhance the understanding of these relationships.

Table 4. Current location and expanding business outside of India

The first set of tests were conducted based on a relation between current location and expanding business outside of India.

		What is your current location?					
		India		Outside India		Total	
		n	%	n	%	n	%
Have you considered expanding your business outside of India?	Maybe	58	28.57%	0	0%	58	28.57%
	Yes	137	67.49%	2	0.99%	139	68.47%
	No	6	2.96%	0	0%	6	2.96%
	Total	201	99.01%	2	0.99%	203	100%

Source : Author's Work

Figure 1 – Location of Business

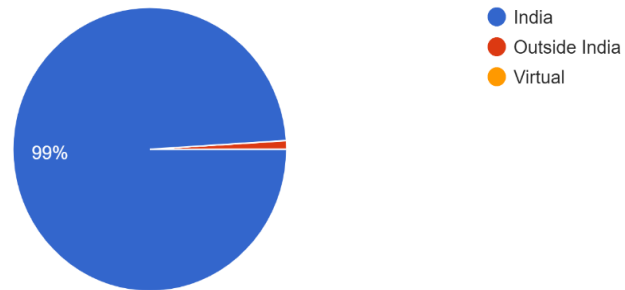


Source : Author's Work

Figure 2 - Current Location of Business

What is your current location?

203 responses

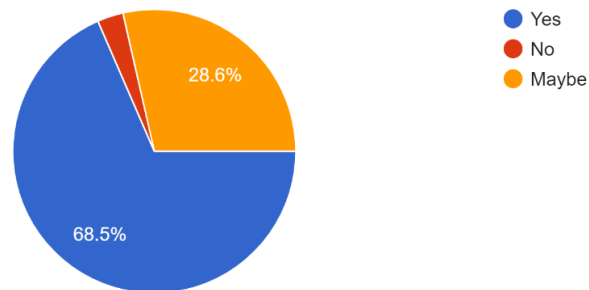


Source : Author's Work

Figure 3 – Expanding Business

Have you considered expanding your business outside of India?

203 responses



Source : Author's Work

Table 5. Chi2 Test – Scenario 1

Hypothesis

H0	There exists no significant variation in the location and business expansion of startups	Reject
H1	There exists significant variation in the location and business expansion of startups	Accept

		Have you considered expanding your business outside of India?			
		Maybe	Yes	No	Total
What is your current location?	India	58	137	6	201
	Outside India	0	2	0	2
	Total	58	139	6	203

		Have you considered expanding your business outside of India?			
		Maybe	Yes	No	Total
What is your current location?	India	57.43	137.63	5.94	201
	Outside India	0.57	1.37	0.06	2
	Total	58	139	6	203

Chi-square table

Chi ²	0.93
df	2
p	.628

Source : Author’s Work

A Chi2 test was performed between What is your current location? and Have you considered expanding your business outside of India?. At least one of the expected cell frequencies were less than 5. Therefore, the assumptions for the Chi2 test were not met. There was no statistically significant relationship between What is your current location? and Have you considered expanding your business outside of India?, $\chi^2(2) = 0.93$, $p = .628$, Cramér's $V = 0.07$

The calculated p-value of .628 is above than the defined significance level of 5%. The Chi2 test is therefore not significant, and the null hypothesis is not rejected.

Inference: Table and graph 5.2.1 show the classification of an entrepreneur's current location and if he/she wants to expand the business outside India. Variation analysis of the data reveals that there are % 68.5 % startup entrepreneurs want to move abroad and expand business whereas 28.6 % is not sure. Chi-square quantitative test clearly revealed that there was no statistically significant relationship between What is your current location? and Have you considered expanding your business outside of India?, Hence, this could be understood that the expansion of business outside India is solely based on multiple factor which amount to success perhaps and not just because the entrepreneur belongs to India and is effected by the opportunities abroad.

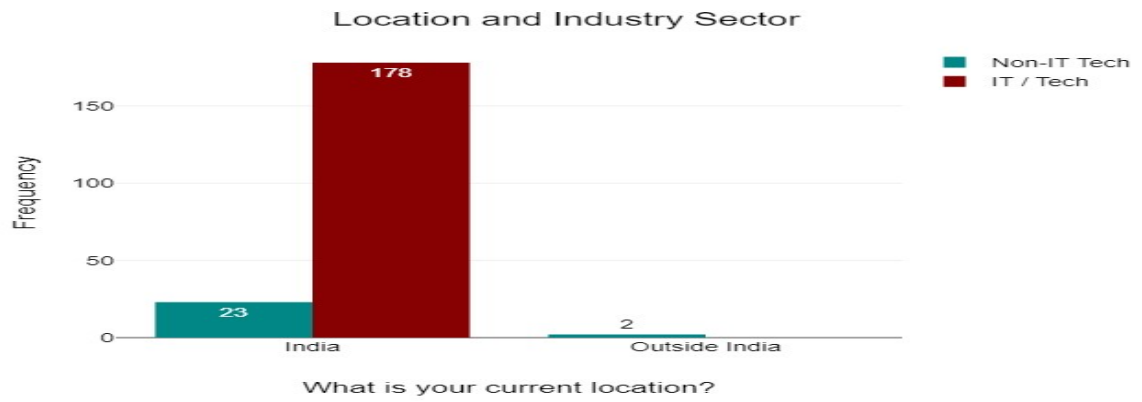
Table 6 Current location and the industry Domain

The second set of tests were conducted based on a relation between current location and the industry that the startup belongs to.

		What is your current location?					
		India		Outside India		Total	
		n	%	n	%	n	%
What industry does your startup operate in?	Non-IT Tech	23	11.33%	2	0.99%	25	12.32%
	IT / Tech	178	87.68%	0	0%	178	87.68%
Total		201	99.01%	2	0.99%	203	100%

Source : Author's Work

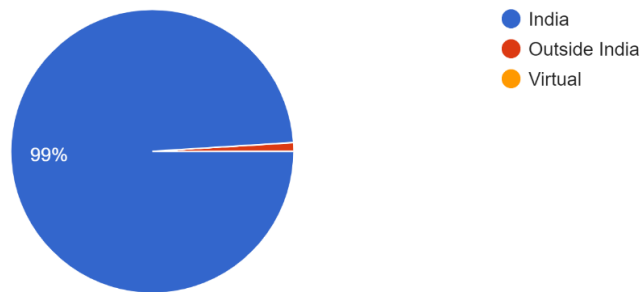
Figure 4 – Industry Location



Source : Author's Work

Figure 5 – Current Location

What is your current location?
203 responses

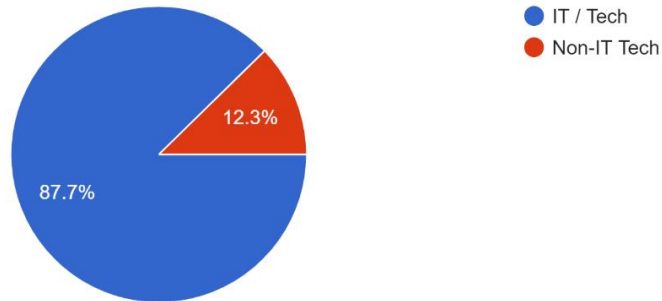


Source : Author's Work

Figure 6 – Startup Operation Sector

What industry does your startup operate in?

203 responses



Source : Author's Work

Table 7 Chi2 Test – Scenario 2

Hypothesis

H0	There exists no significant variation in the location and industry of startups	Reject
H1	There exists significant variation in the location and industry of startups	Accept

		What industry does your startup operate in?		
		Non-IT Tech	IT / Tech	Total
What is your current location?	India	23	178	201
	Outside India	2	0	2
Total		25	178	203

		What industry does your startup operate in?		
		Non-IT Tech	IT / Tech	Total
What is your current location?	India	24.75	176.25	201
	Outside India	0.25	1.75	2
Total		25	178	203

Chi-square table

Chi ²	14.38
df	1
p	<.001

Source : Author's Work

A Chi2 test was performed between What is your current location? and What industry does your startup operate in?. At least one of the expected cell frequencies were less than 5. Therefore, the assumptions for the Chi2 test were not met. There was a statistically significant relationship between What is your current location? and What industry does your startup operate in?, $\chi^2(1) = 14.38$, $p = <.001$, Cramér's $V = 0.27$

The calculated p-value of <.001 is lower than the defined significance level of 5%. The Chi2 test is therefore significant, and the null hypothesis is rejected.

Inference: Table and graph 5.2.2 show the classification of an entrepreneur's current location and what industry sector does the business belong to particularly is it Information Technology or Non-IT. Variation analysis of the data reveals that there are 87.7 % startup belongs to IT sector and only 12.3 % startups belong to Non-IT sector. Therefore, it was observed that there was a statistically significant relationship between What is your current location? and What industry does your startup operate in? Hence, we

can predict that most of the startups in India belongs to the IT sector and perhaps wants to move abroad for expansion.

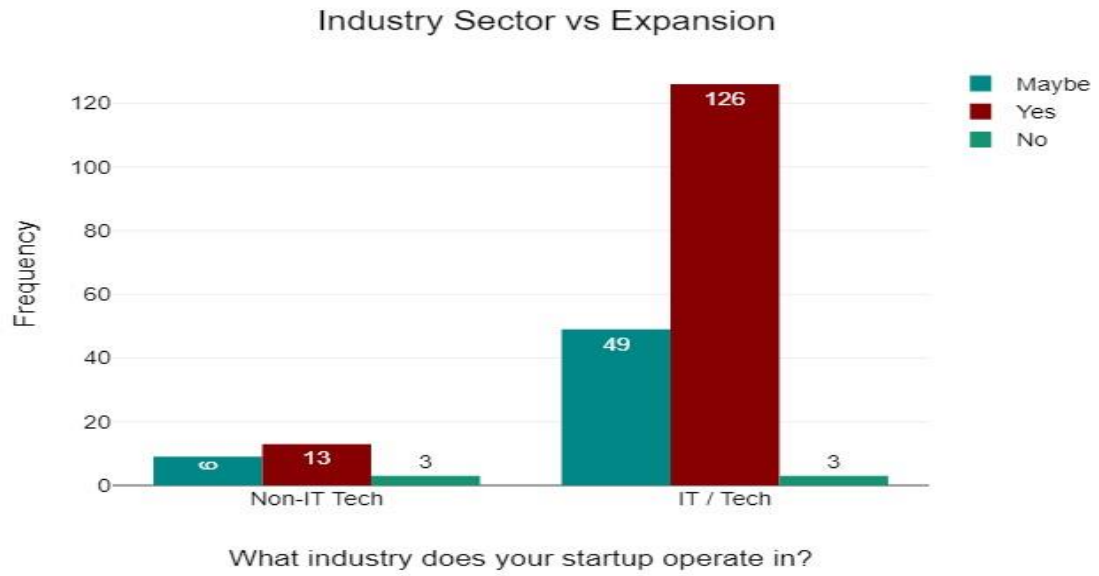
Table 8 Industry Domain vs abroad expansion desire

The third set of tests were conducted based on a relation between the industry that the startup belongs to and if the startup wishes to expand the business abroad.

		What industry does your startup operate in?					
		Non-IT Tech		IT / Tech		Total	
		n	%	n	%	n	%
Have you considered expanding your business outside of India?	Maybe	9	4.43%	49	24.14%	58	28.57%
	Yes	13	6.4%	126	62.07%	139	68.47%
	No	3	1.48%	3	1.48%	6	2.96%
	Total	25	12.32%	178	87.68%	203	100%

Source : Author's Work

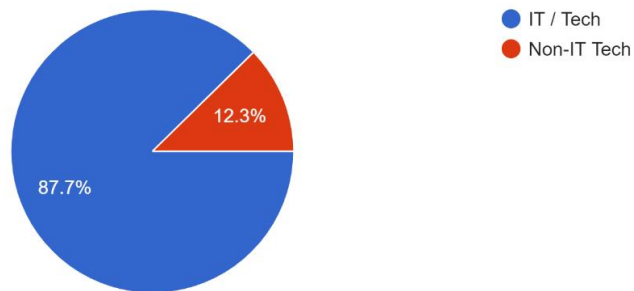
Figure 7 - Industry Sector Vs Expansion



Source : Author's Work

Figure 8 – Industry of Operation

What industry does your startup operate in?
203 responses

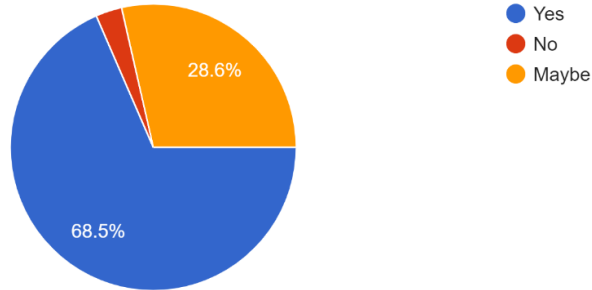


Source : Author's Work

Figure 9 – Business Expansion

Have you considered expanding your business outside of India?

203 responses



Source : Author’s Work

Table 9 Chi2 Test – Scenario 3

Hypothesis

H0	There exists no significant variation in the industry and business expansion of startups	Reject
H1	There exists significant variation in the industry and business expansion of startups	Accept

		Have you considered expanding your business outside of India?			
		Maybe	Yes	No	Total
What industry does your startup operate in?	Non-IT Tech	9	13	3	25
	IT / Tech	49	126	3	178
Total		58	139	6	203

		Have you considered expanding your business outside of India?			Total
		Maybe	Yes	No	
What industry does your startup operate in?	Non-IT Tech	7.14	17.12	0.74	25
	IT / Tech	50.86	121.88	5.26	178
Total		58	139	6	203

Chi-square table

Chi ²	9.57
df	2
p	.008

Source : Author's Work

A Chi2 test was performed between What industry does your startup operate in? and Have you considered expanding your business outside of India?. At least one of the expected cell frequencies were less than 5. Therefore, the assumptions for the Chi2 test were not met. There was a statistically significant relationship between What industry does your startup operate in? and Have you considered expanding your business outside of India?, $\chi^2(2) = 9.57$, $p = .008$, Cramér's $V = 0.22$

The calculated p-value of .008 is lower than the defined significance level of 5%. The Chi2 test is therefore significant, and the null hypothesis is rejected.

Inference: Table and graph 5.2.3 show the classification of what industry sector does the business belong to particularly is it Information Technology or Non-IT and it's interest in the business expansion abroad. There was a statistically significant relationship between What industry does your startup operate in? and Have you considered expanding your business outside of India?. Hence, we can conclude that most of the IT startups wishes to expand business abroad.

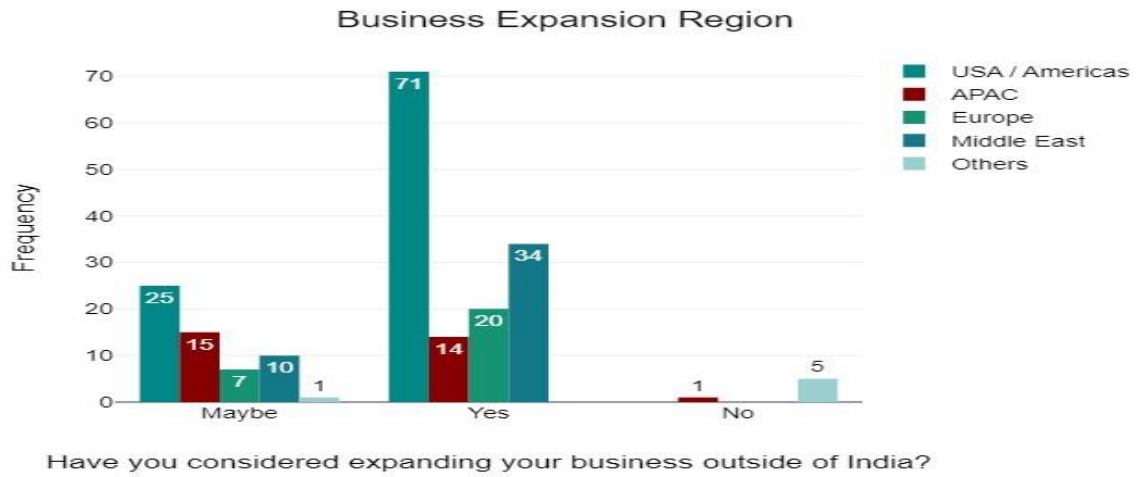
Table 10 Expanding the startup and expanding into which regions of the world.

The fourth set of tests were conducted based on a relation between the expanding the startup and expanding into which regions of the world.

		Have you considered expanding your business outside of India?							
		Maybe		Yes		No		Total	
		n	%	n	%	n	%	n	%
If yes, which regions are you considering for expansion?	USA / Americas	2	12.32	71	34.98	0	0%	96	47.29
		5	%		%				%
	APAC	1	7.39	14	6.9%	1	0.49	30	14.78
		5	%				%		%
	Europe	7	3.45	20	9.85	0	0%	27	13.3
			%		%				%
Middle East	1	4.93	34	16.75	0	0%	44	21.67	
	0	%		%				%	
Others	1	0.49	0	0%	5	2.46	6	2.96	
		%				%		%	
Total		5	28.57	13	68.47	6	2.96	20	100%
		8	%	9	%		%	3	

Source : Author's Work

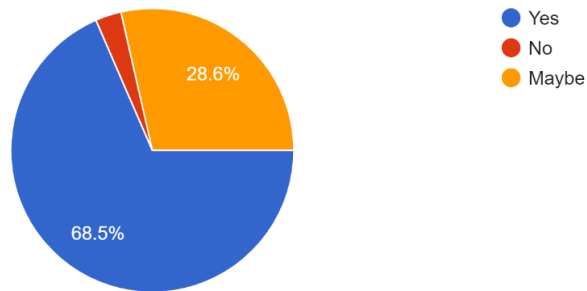
Figure 10 – Business Expansion Regions



Source : Author's Work

Figure 11 – Consideration of Abroad Expansion

Have you considered expanding your business outside of India?
203 responses

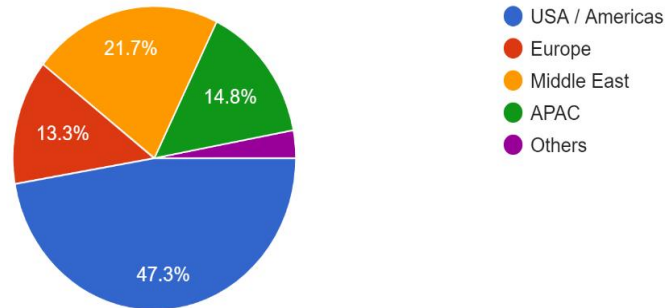


Source : Author's Work

Figure 12 – Regions for Consideration of Abroad Expansion

If yes, which regions are you considering for expansion?

203 responses



Source : Author’s Work

Table 11 Chi2 Test – Scenario 4

Hypothesis

H0	There exists no significant variation in the business expansion and region of business expansion among startups	Reject
H1	There exists significant variation in the business expansion and region of business expansion among startups	Accept

If yes, which regions are you considering for expansion?

		USA / Americas	APAC	Europe	Middle East	Others	Total
Have you considered expanding your business outside of India?	Maybe	25	15	7	10	1	58

If yes, which regions are you considering for expansion?						
	USA / Americas	APA C	Europe	Middle East	Others	Total
Yes	71	14	20	34	0	139
No	0	1	0	0	5	6
Total	96	30	27	44	6	203

If yes, which regions are you considering for expansion?							
		USA / Americas	APA C	Europe	Middle East	Others	Total
Have you considered expanding your business outside of India?	Maybe	27.43	8.57	7.71	12.57	1.71	58
	Yes	65.73	20.54	18.49	30.13	4.11	139
	No	2.84	0.89	0.8	1.3	0.18	6
	Total	96	30	27	44	6	203

Chi-square table

Chi ²	149.26
df	8
p	<.001

Source : Author's Work

A Chi2 test was performed between Have you considered expanding your business outside of India? and If yes, which regions are you considering for expansion? At least one of the expected cell frequencies were less than 5. Therefore, the assumptions for the

Chi2 test were not met. There was a statistically significant relationship between Have you considered expanding your business outside of India? and If yes, which regions are you considering for expansion? $\chi^2(8) = 149.26$, $p = <.001$, Cramér's $V = 0.61$

The calculated p-value of $<.001$ is lower than the defined significance level of 5%. The Chi2 test is therefore significant, and the null hypothesis is rejected.

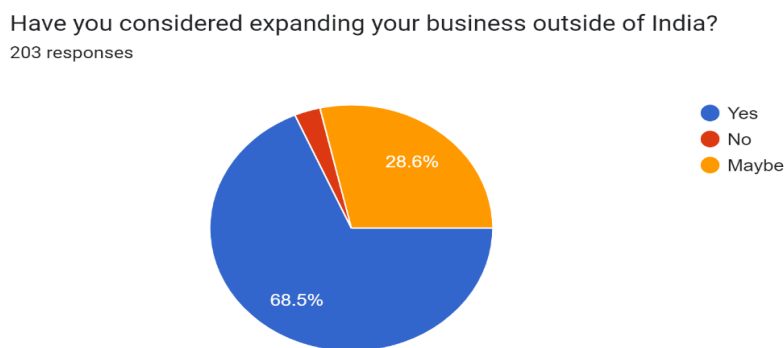
Inference: Table and graph 5.2.4 show the classification of an entrepreneur's decision of considering expansion of business outside of India with the region of the world like APAC, America etc. Variation analysis of the data reveals that there was a statistically significant relationship between Have you considered expanding your business outside of India? and If yes, which regions are you considering for expansion? Hence, we can predict that most of the startups in India who wishes to expand business abroad chooses USA as a selected region pertaining to multiple factors.

5.3 Graphical Interpretation and Analysis (ANOVA Analysis)

Below is the primary metric considered for the ANOVA analysis:

- Have you considered expanding your business outside of India?
- If yes, which regions are you considering for expansion?
- What are the main challenges you anticipate when expanding your business internationally?

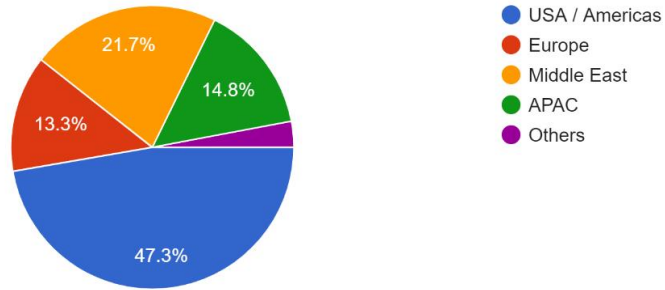
Figure 13 - Indian Businesses Consideration of Abroad Expansion



Source : Author's Work

Figure 14 – Regions of Consideration for Abroad Expansion

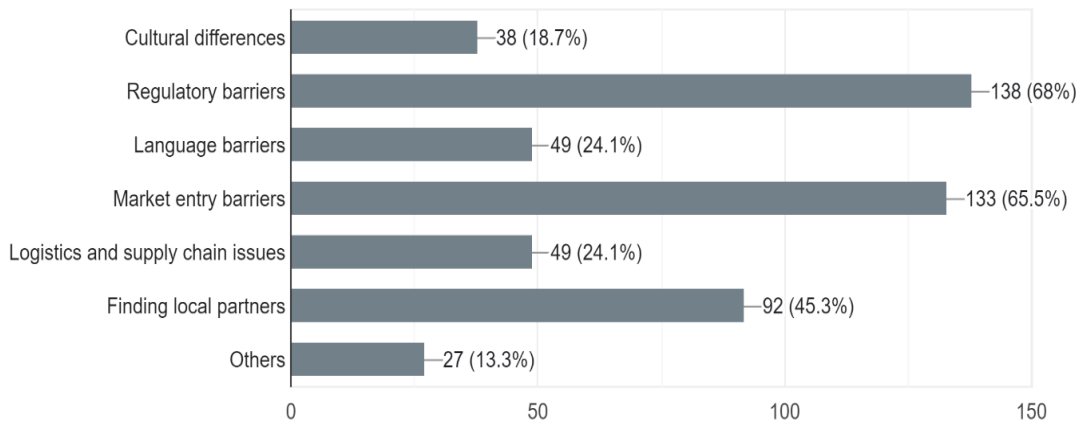
If yes, which regions are you considering for expansion?
203 responses



Source : Author’s Work

Figure 15 – Main Challenges for Business Expansion

What are the main challenges you anticipate when expanding your business internationally?
203 responses



Source : Author’s Work

Table 12 ANOVA – Scenario 1

Hypotheses

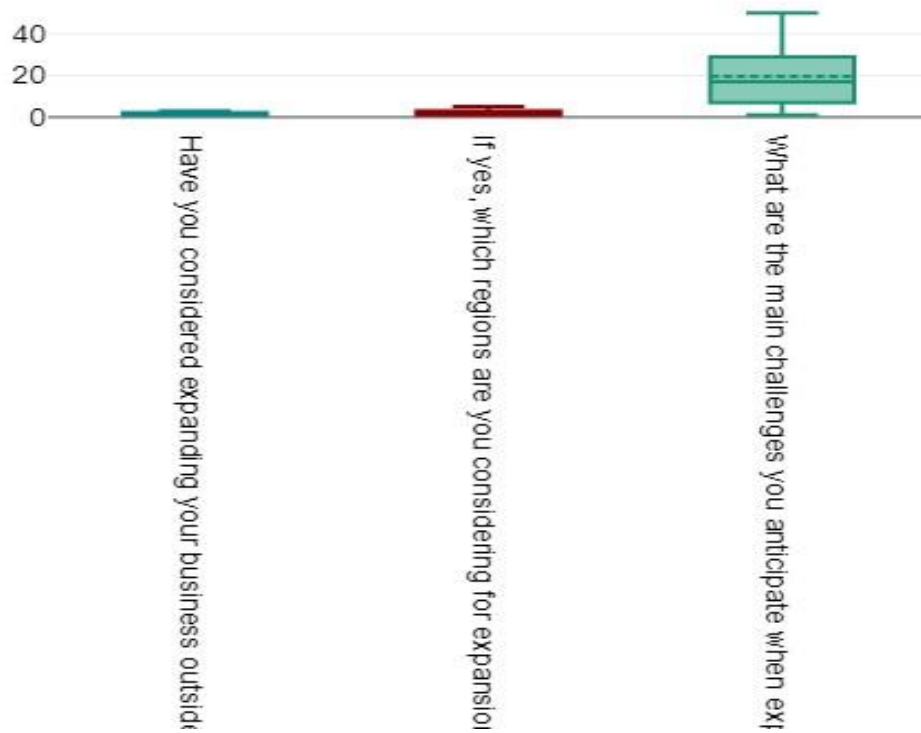
Null hypothesis	Alternative hypothesis
There is no difference between the 3 categories of the independent variable with respect to the dependent variable.	There is a difference between the 3 categories of the independent variable with respect to the dependent variable.

Descriptive statistics

	n	Mean	Std. Deviation
Have you considered expanding your business outside of India?	203	1.74	0.5
If yes, which regions are you considering for expansion?	203	2.18	1.31
What are the main challenges you anticipate when expanding your business internationally?	203	19.49	12.92
Total	609	7.8	11.16

Source : Author's Work

Figure 16 - ANOVA – Graphical Plot



Source : Author’s Work

Table 13 Levene test of variance equality

Levene test of variance equality

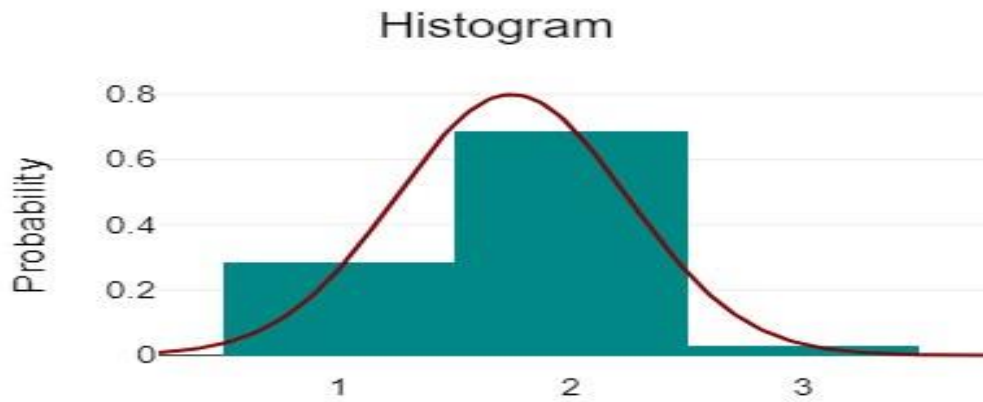
Test	F	df1	df2	p
Levene's Test (Mean)	699.34	2	606	<.001
Brown-Forsythe-Test (Median)	540.22	2	606	<.001

Tests for normal distribution of Have you considered expanding your business outside of India?

	Statistics	p
Kolmogorov-Smirnov	0.41	<.001
Kolmogorov-Smirnov (Lilliefors Corr.)	0.41	<.001
Shapiro-Wilk	0.66	<.001
Anderson-Darling	35.9	<.001

Source : Author's Work

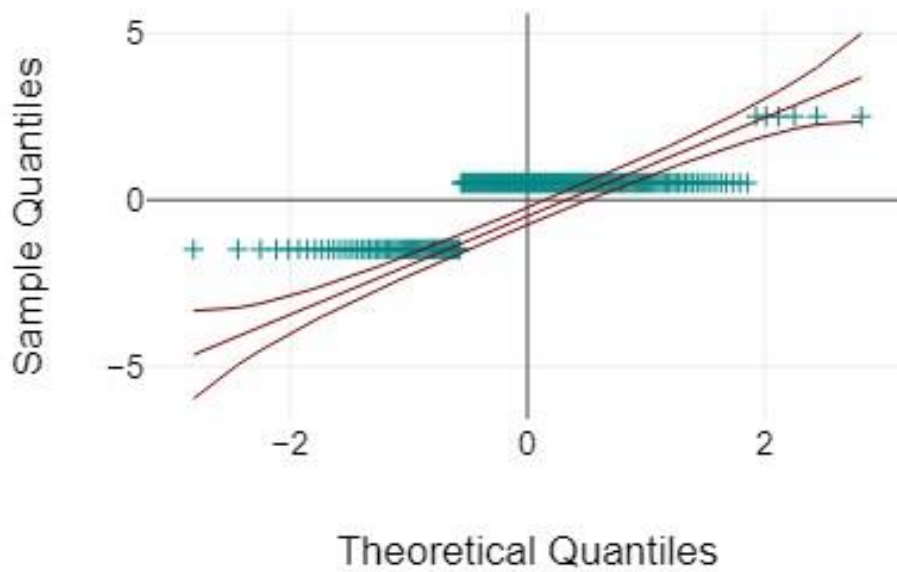
Figure 17 - Histogram Plot Levene Test



Have you considered expanding your business outside of India?

Source : Author's Work

Figure 18 - Quantile Plot Levene Test
Quantile-Quantile Plot



Source : Author's Work

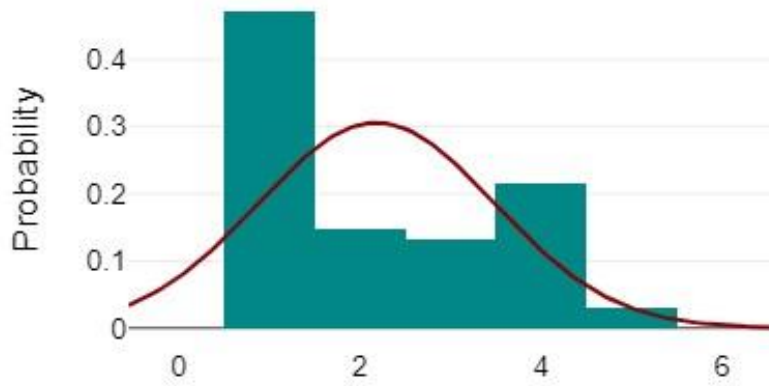
Table 14 Tests for normal distribution

Tests for normal distribution of If yes, which regions are you considering for expansion?

	Statistics	p
Kolmogorov-Smirnov	0.29	<.001
Kolmogorov-Smirnov (Lilliefors Corr.)	0.29	<.001
Shapiro-Wilk	0.79	<.001
Anderson-Darling	17.94	<.001

Source : Author's Work

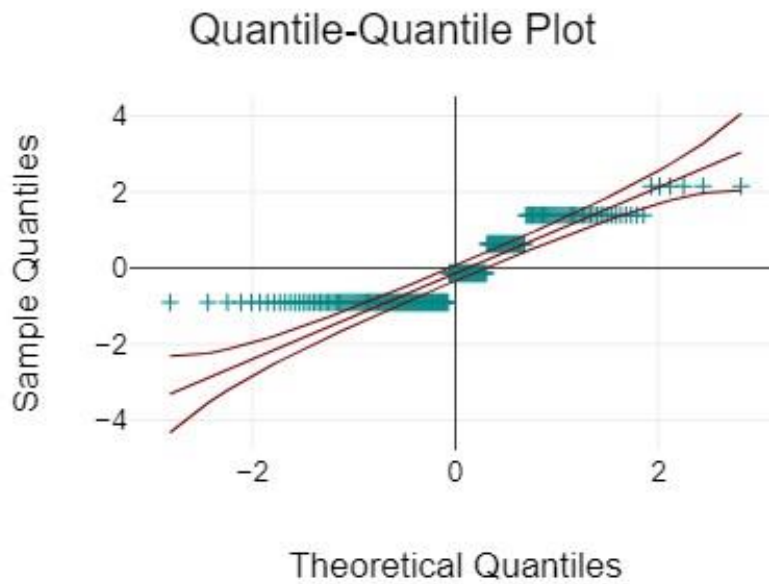
Figure 19 - Histogram Plot Normal Distribution
Histogram



If yes, which regions are you considering for expans

Source : Author's Work

Figure 20 - Quantile Plot Normal Distribution



Source : Author's Work

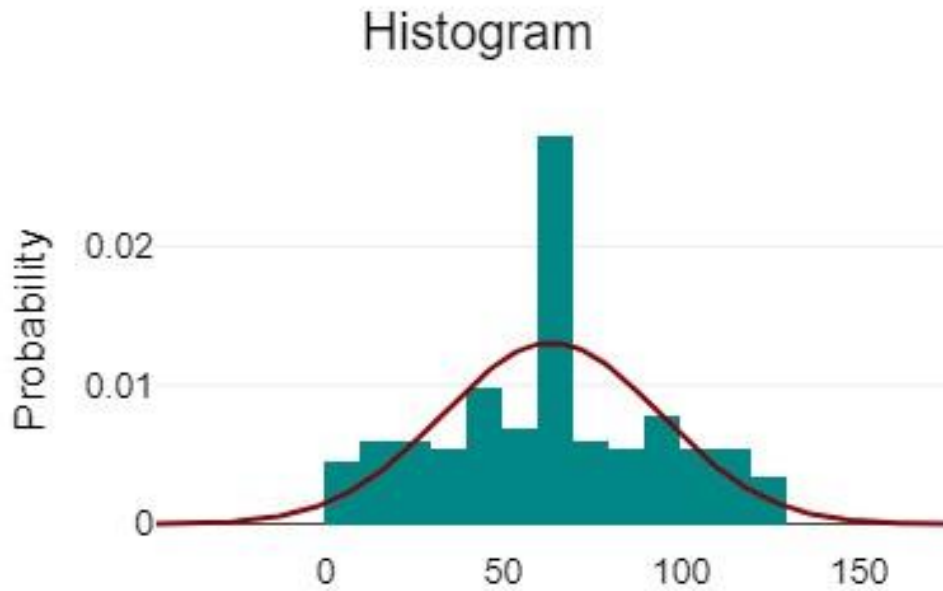
Table 15 Tests for normal distribution for international expansion

Tests for normal distribution of What resources or support do you think would be helpful for international expansion?

	Statistics	p
Kolmogorov-Smirnov	0.1	.028
Kolmogorov-Smirnov (Lilliefors Corr.)	0.1	<.001
Shapiro-Wilk	0.97	.001
Anderson-Darling	1.52	.001

Source : Author's Work

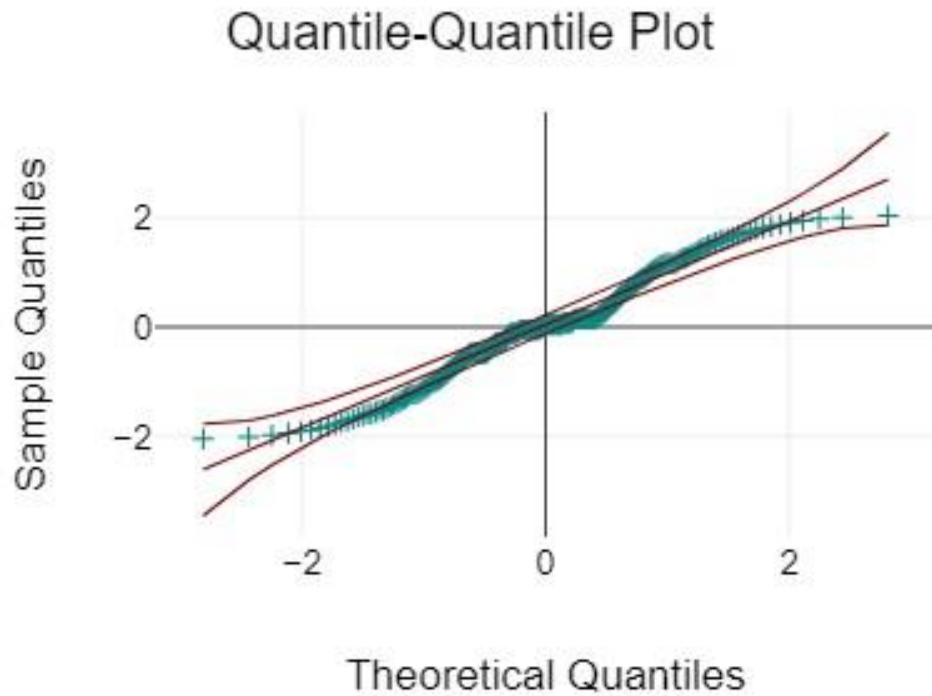
Figure 21 - Histogram Plot Normal Distribution for International Expansion



resources or support do you think would be helpful for intern

Source : Author's Work

Figure 22 - Quantile Plot Normal Distribution for International Expansion



Source : Author's Work

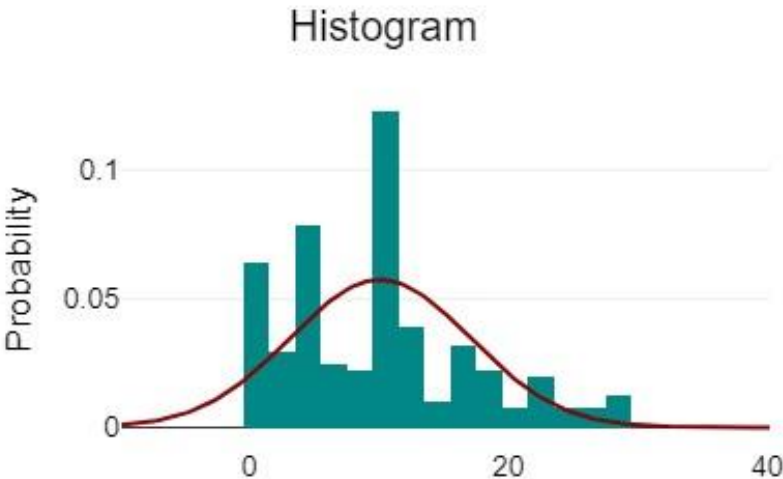
Table 16 Tests for normal distribution for aim for expansion

Tests for normal distribution of What goals did you aim to achieve through international expansion?

	Statistics	p
Kolmogorov-Smirnov	0.13	.001
Kolmogorov-Smirnov (Lilliefors Corr.)	0.13	<.001
Shapiro-Wilk	0.93	<.001
Anderson-Darling	3.87	<.001

Source : Author's Work

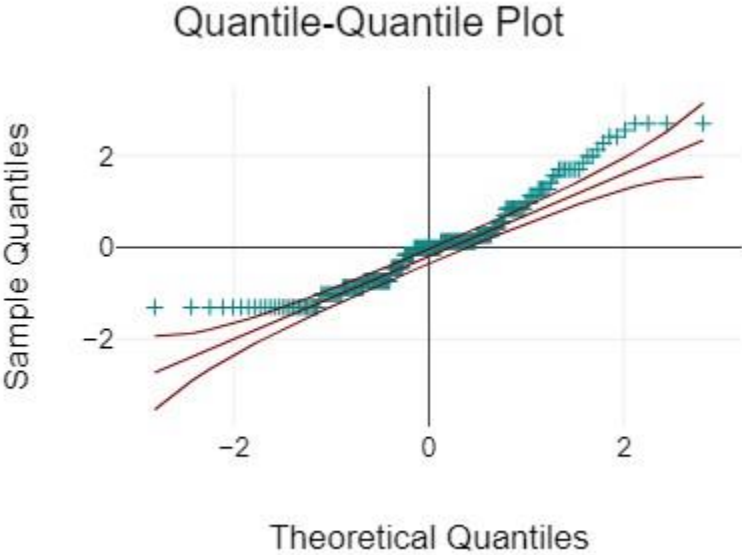
Figure 23 - Histogram Plot Normal Distribution for Aim of Expansion



What goals did you aim to achieve through international expansion?

Source : Author's Work

Figure: 24 - Quantile Plot Normal Distribution for Aim of Expansion



Source : Author's Work

Table 17 Welch's ANOVA

ANOVA

	Sum of Squares	df	Mean Squares	F	p
Factor	451601.82	2	225800.91	685.97	<.001
Residual	199476.62	606	329.17		
Total	651078.44	608			

Effect size

η^2	η_p^2	Cohens f^2
0.69	0.69	2.26

Welch's ANOVA

	F	df1	df2	p
Welch-Test	528.17	2	278.95	<.001

Source : Author's Work

Table 18 Bonferroni Post-hoc-Tests

Bonferroni Post-hoc-Tests

		Mean diff.	Std. Error	p	95% CI lower limit	95% CI upper limit
If yes, which regions are you considering for expansion?	What resources or support do you think would be helpful for international expansion?	-61.32	1.801	<.001	-65.7	-56.94
If yes, which regions are you considering for expansion?	What goals did you aim to achieve through international expansion?	-7.93	1.801	<.001	-12.3	-3.55
What resources or support do you think would be helpful for international expansion?	What goals did you aim to achieve through international expansion?	53.39	1.801	<.001	49.02	57.77

Source : Author's Work

Table 19 Post-Hoc-Test Scheffe

Critical Scheffe value	6.02		
Variables	Average difference	F	
If yes, which regions are you considering for expansion? - What resources or support do you think would be helpful for international expansion?	-61.32	1159.45	
If yes, which regions are you considering for expansion? - What goals did you aim to achieve through international expansion?	-7.93	19.37	
What resources or support do you think would be helpful for international expansion? - What goals did you aim to achieve through international expansion?	53.39	879.09	

Source : Author's Work

Table 20 Fisher's Least Significant difference

Fisher's Least Significant difference

Variables	Average difference	t	p
If yes, which regions are you considering for expansion? - What resources or support do you think would be helpful for international expansion?	-61.32	-34.05	<.001
If yes, which regions are you considering for expansion? - What goals did you aim to achieve through international expansion?	-7.93	-4.4	<.001
What resources or support do you think would be helpful for international expansion? - What goals did you aim to achieve through international expansion?	53.39	29.65	<.001

Source : Author's Work

Analysis of variance

A one-factor analysis of variance has shown that there is a significant difference between the categorical variable and the the dependent variable $F = 685.97$, $p = <.001$ Thus, with the available data, the null hypothesis is rejected.

Effect size

η^2	η_p^2	Cohen's f^2
0.69	0.69	2.26
f	Classification according to Cohen (1988)	
0.2		weak effect
0.15		moderate effect
0.35		strong effect

Post hoc Test

The ANOVA showed that there was a significant difference. A Bonferroni Post hoc test was used to compare the groups in pairs to find out which was significantly different.

The Bonferroni post-hoc test revealed that the pairwise group comparisons of If yes, which regions are you considering for expansion? - What resources or support do you think would be helpful for international expansion? If yes, which regions are you considering for expansion? - What goals did you aim to achieve through international expansion? and What resources or support do you think would be helpful for international expansion? - What goals did you aim to achieve through international expansion? have a p-value less than 0.05 and thus, based on the available data, it can be assumed that these groups are each significantly different pairwise.

CHAPTER VI: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary of Findings

The thesis titled " Understanding the Use of Management Techniques by Local Information Technology Companies in India to Overcome Multinational Barriers" studies and examines how Indian IT companies use the process to deal with migration-related challenges. Focusing on the context of the Indian IT industry, this study delves into the strategies these companies are adopting to compete with the global giant.

Through a comprehensive review of the research literature and evidence, this study proposes several practical strategies. These strategies include developing specific expertise to meet customer needs, utilize cost effectiveness, and maintain operational speed. This study highlights the importance of building strong customer relationships, emphasizing innovation and research, and seeking collaboration with international partners.

In addition, this study highlights the importance of compliance with quality standards and strategies to maintain credibility in the global market. Using these technologies can help Indian IT companies expand their businesses and differentiate themselves from multinational competitors. Also, this study discusses the role of Indian government policies and policies in supporting the local IT industry.

Looking at the management processes used by Indian IT companies, this study provides an insight into the strategies that enable these local organizations not only to survive but also thrive in the face of transnational competition. It provides a unique perspective on how these technologies are adapted, developed and transformed in a dynamic and competitive global environment, ultimately shaping the business-level path of Indian IT.

6.2 Findings

Around 200 plus participants were taken into consideration and received a survey out from 203 participants for the thesis on " Understanding the Use of Management Techniques by Local Information Technology Companies in India to Overcome

Multinational Barriers". These participants were selected according to the technique mentioned previously in the thesis particularly from a pool of startup entrepreneurs and aspiring startup entrepreneurs. The data collected from these participants were also subsequently analyzed using descriptive and inferential statistic methods like Chi-square and ANOVA testing. The term "Chi-Square" refers to a statistical test that is used to determine the association between categorical variables in a dataset. It is commonly used to analyze the relationship between two categorical variables and determine if they are independent or if there is a significant association between them. The Chi-Square test assesses whether the observed frequencies of categorical data differ significantly from the expected frequencies that would occur if the variables were independent. In other words, it helps you determine if the observed distribution of data is significantly different from what we would expect by chance. Also, the main objective of ANOVA is to determine whether the variability between group means is greater than the variability within the groups. In other words, it helps you assess whether the observed differences between group means are likely due to true differences in the population or if they could have occurred by random chance. ANOVA works by comparing the variance between groups to the variance within groups. If the variance between groups is significantly greater than the variance within groups, it suggests that there are meaningful differences among the groups' means.

- The first observation from the data was to analyze the relation between an entrepreneur's current location and its contribution in the expansion of the business outside India. After carefully determining the data, it was observed it is simply does not account to overseas migration just because a startup was born out of India. Location preference is not dependent of the current location of business, but it is accountable for multiple other factors. Variation analysis of the data reveals that there are % 68.5 % startup entrepreneurs want to move abroad and expand business whereas 28.6 % is not sure. Chi-square quantitative test clearly revealed that there was no statistically significant relationship between the two observations of What is your current location? and Have you considered expanding your business outside of India? The minority data set of 28.6 % is not sure because they can still expand business in India, or it could be they are not sure on the opportunities abroad. Hence, only India being a location of business cannot be a factor associated for business expansion and migration.

- The second set of data revolves around the classification of an entrepreneur's current location and what industry sector does the business belong to particularly is it Information Technology or Non-IT. The data reveals that there are 87.7 % startup belongs to IT sector and only 12.3 % startups belong to Non-IT sector. Therefore, it was observed that there was a statistically significant relationship between What is your current location? and What industry does your startup operate in? Hence, it was also determined from the tests that there is a direct and proportional relationship among IT startups and those who want to migrate or expand business abroad. The percentage among the IT startups is much higher when it comes to business expansion, so it is evident that most of the IT startups in India wants to expand business and expand internationally.

- The third set of findings were based on the classification of what industry sector does the business belong to namely Information Technology or Non-IT and its interest in the business expansion abroad. There was a statistically significant relationship between What industry does your startup operate in? and Have you considered expanding your business outside of India? The made a definite conclusion that IT startups in India wishes to move abroad for business expansion.

- The fourth finding was the classification of an entrepreneur's decision of considering expansion of business outside of India with the region of the world like APAC, America etc. the finding reveals that there was a statistically significant relationship between Have you considered expanding your business outside of India? and If yes, which regions are you considering for expansion? Therefore, it is evident that all the IT startups in India prefers USA as the first option. To be precise 47.3 % of the startup entrepreneurs chose USA as the preferred destination for business expansion. This will have its subsequent challenges which are observed during other analysis.

- The final two ANOVA analysis of data provided information on two aspects by considering a relation between two sets of data. The first set of data revealed that the primary three questions are important for a startup business expansion and choosing the right region and opportunities.

- o Have you considered expanding your business outside of India?
- o If yes, which regions are you considering for expansion?

- o What are the main challenges you anticipate when expanding your business internationally?

The data set clearly establishes that USA is the preferred region and there are multiple challenges that the startup faces while expanding its business. Out of the total sample collected, regulatory barriers stand as the first and most common challenge that the entrepreneurs witness. Around 68% startup finds it the no one challenge for business expansion in USA followed by market entry barriers in USA which is second as per 65.5% startup entrepreneurs and followed by finding local partners as the third most challenging factor considered by 45.3 % startup business owners.

- The final set of analysis was conducted on three parameters or questions such as:
 - o If yes, which regions are you considering for expansion?
 - o What resources or support do you think would be helpful for international expansion?
 - o What goals did you aim to achieve through international expansion?

With reference to the first question, it is observed that the most preferred location for an IT startup in India to expand business globally is USA followed by Middle East region and the third choice is the APAC. This is based on the count from entrepreneurs who stands at 47.3 %, followed by 21.7% and 14.8% respectively. While considering the second question i.e support required for international expansion the most popular support required is having some financial aid and support. This is a choice of 48.8% startup entrepreneurs. This is followed by the choice of 46.8% startup owners which is finding the right local partners. The third popular choice of 45.8% entrepreneurs is having support in terms of government initiatives, supports and incentives. Similarly, the primary goal for such expansion of startup businesses is building a global brand presence as chosen by a sample of 60.6%. This is followed by partnerships and collaboration opportunities which stands as a popular choice of 54.7% startup entrepreneurs. Lastly, 54.2 % startup entrepreneurs want to expand their business abroad for the purpose of increasing the revenue.

6.3 Conclusion

In conclusion, the comprehensive exploration into the realm of local Information Technology (IT) companies in India and their adept use of management techniques to overcome the challenges posed by multinational barriers has yielded insightful findings. This research has illuminated the dynamic strategies and innovative approaches employed by these enterprises as they navigate the complex landscape of global competition. The study unveiled a multi-faceted landscape wherein Indian IT companies have harnessed their strengths, tailored their operations, and strategically applied management techniques to surmount the barriers that often accompany multinational expansion. These techniques encompassed a diverse spectrum, ranging from leveraging specialized domain expertise and cost-efficiency advantages to fostering agility in operations and nurturing customer-centric relationships.

Furthermore, this research has underlined the pivotal role of innovation and research as a cornerstone of competitive advantage for Indian IT companies seeking to compete effectively with multinational counterparts. The ability to adapt and innovate, coupled with strategic collaborations with global partners, has facilitated these local entities in establishing their unique value propositions on the global stage. Importantly, the findings also underscore the significance of adhering to quality standards and certifications, which enhance credibility in the international market and reinforce the confidence of clients and partners. By aligning with international standards, Indian IT companies solidify their position as reliable and high-quality service providers. Additionally, the influence of governmental initiatives and policies emerged as a noteworthy element in nurturing the growth of the local IT ecosystem. The support provided by the Indian government has played a catalytic role in fostering an environment conducive to innovation, growth, and global competitiveness. In essence, this study not only delves into the tactical intricacies of management techniques but also captures the spirit of resilience, adaptability, and ingenuity inherent in the Indian IT sector. It showcases the industry's remarkable journey from a local sphere to a global platform, highlighting how these enterprises have become key players in the international arena.

As the Indian IT landscape continues to evolve, this research serves as a roadmap for both industry stakeholders and policymakers, offering valuable insights into the

strategies that enable local IT companies to successfully navigate and flourish amidst the challenges and opportunities posed by multinational barriers. It is a testament to the transformative power of strategic management techniques in shaping the trajectory of an entire industry on the global landscape.

6.4 Suggestions

Finance plays an important role in business, regardless of the size of the business. Most startups have a hard time managing their finances. Startups spend a lot of time raising the capital they need to best plan and run their businesses. If business founders do not have the skills to manage money, it can be difficult to raise capital as well as manage it and distribute it according to various needs. Lack of timely financial planning, financial management will cause insufficient working capital and business will fail due to lack of capital in the first stage. Starting a business without previous experience and skills should learn about products and services, costs, resources, and other business-related issues. That's why it's important to build a team with the skills to manage the business or learn about finance, business and other business.

Complete market research to identify country targets. Understand the local market, customer preferences, competition and regulatory environment. Tailor products and services to meet the specific needs of the target market. It is also important to adapt products, services and products to local culture, language and preferences. Localization includes translating content, fine-tuning content creation, and optimizing content for local audiences. Identify the appropriate entry for each business; options include partnerships, joint ventures, direct sales, licensing or setting up a local office. Choose a strategy that fits your company's resources, goals, and business needs.

Unlike traditional businesses that are consumer businesses, startups need to identify problems or gaps that may be at the heart of the business ecosystem. The purpose of the ecosystem is created by people with foresight and foresight who can identify the needs of the business and produce new solutions to solve them. Therefore, businessmen need to think beyond the problems faced by customers.

Provide multiple payment methods to meet the needs of global customers. Consider accepting different benefits and offering transparent pricing to avoid confusion. Also build a strong global economy. Use digital marketing, advertising and native advertising to increase brand awareness and attract customers. However, such business expansion is also associated with risk, so the risk associated with international expansion must be assessed and managed. This includes economic changes, political conflicts, changes in cultural understanding and local policies.

Finally, recruit local talent who understand the business well and can contribute to your expansion. A mix of local and international employees can bring different perspectives to your team. Be open to learning and adapting when you take on a new job. Know about business trends, customer feedback and business development to improve your strategy. Consider doing a testing phase on a new business before it's fully rolled out. This allows you to gather insights, adjust strategies, and respond to unforeseen challenges. All this can be done by understanding that international expansion takes time and effort. Be patient and be prepared to iterate and adjust your approach based on the suggestions and results you receive.

Remember that every business is unique; so, tailor the approach to the unique characteristics of each target country. Global success requires a combination of strategic planning, adaptability and customer needs.

6.5 Research's Limitation

The limitations of this research paper are listed below:

- The research might have limitations related to the sample size and representation of local IT companies in India. If the sample is not diverse or representative of the entire industry, the findings might not be generalizable to the broader context.
- Depending on the data collection methods used, there could be a risk of bias, such as self-reporting bias from participants. The accuracy of responses might be influenced by participants' perceptions and interpretations.
- While the research explores the use of management techniques by local IT companies, establishing a direct causal relationship between these techniques and

overcoming multinational barriers might be challenging due to the complexity of real-world business scenarios.

- The study might not capture long-term impacts of the management techniques, as the research scope and timeline might limit the ability to assess outcomes over an extended period.
- External factors such as global economic conditions, political changes, or technological disruptions can impact the findings and outcomes of the research. These factors might not be fully controllable or predictable.

6.5 Research's Future Scope

The future scope or direction of the research is listed below:

- Conducting longitudinal studies that span multiple years could provide deeper insights into the long-term effectiveness of management techniques in overcoming multinational barriers. This would capture changes and adaptations over time.
- Future research could involve comparative analyses between local IT companies and multinational competitors, exploring the differences in management techniques and their outcomes in overcoming barriers.
- Conducting in-depth case studies of specific local IT companies that have successfully overcome multinational barriers would provide rich qualitative insights into the nuances of their strategies.
- While this study focuses on the IT industry, future research could explore management techniques in other industries, comparing the approaches taken to overcome multinational barriers.
- Investigating how cultural and contextual factors impact the effectiveness of management techniques would contribute to a deeper understanding of the dynamics involved in international expansion.
- Including the perspectives of customers or clients of these IT companies could provide a well-rounded view of the effectiveness of management techniques in enhancing customer satisfaction and international partnerships.

- Research could delve into the role of collaborations, alliances, and partnerships with other local or international entities in strengthening the management techniques' impact.
- Exploring how local IT companies adopt and integrate new technologies (such as AI, automation, etc.) as part of their management techniques for international expansion could be an intriguing area of study.
- Investigating the influence of economic trends, trade policies, and regulatory changes in both India and target countries on the effectiveness of management techniques would add depth to the research.
- Combining quantitative data with qualitative interviews or focus groups with industry experts and practitioners could provide a holistic view of the challenges and opportunities faced by local IT companies in India.

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