



Evaluating the effectiveness of government policies on startups and innovation in emerging Indian markets

Priyanka Tiwari, Akriti Sharma, Hamid Abdullah, Harry George

Assistant Professors, Department of Hotel Management and Hospitality, Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur, Chhattisgarh, India

Abstract

Currently, India features as the vibrant incubation ground for startups characterised by free entrepreneurship spirits and policies. Consequently, this research paper assesses the extent to which different Indian government policies intended to support start-ups and innovation in emerging markets have succeeded. Analyzing the interacting effects of policies certainly requires the use of mixed methods, and thus this study is a clear example of such an endeavour.

Primary data comprises a survey with 300 respondents, including startup founders based in the states across India; and the secondary data includes interviews with 15 policymakers, and industry specialists and incubator participants from India. The survey gathers practical views and perceptions of different entrepreneurs regarding three major policies namely 'Startup India,' 'Digital India,' and 'Make in India.' Interviews are also accommodative of perspectives within the policy and the challenges faced as well as the areas of weakness or strength.

This paper also identifies that policies put in place by the government have, in general, had a positive effect on the startup environment. State initiatives have provided much-needed funds and loosened the bureaucratic strings surrounding the registering of new businesses and startups and have seen improvements in their infrastructure.

However, there are still difficulties concerning bureaucracy, regional disparities and insufficient knowledge of the existing measures. **Increasing Awareness and Accessibility:** As a result, the efforts should be made to extend the outreach programs which disseminate the relevant information to the business people regarding the existing policies and resources.

Improving Policy Coordination: One of the key recommendations is to improve cooperation among the departments that are engaged in the support of startups as increased cooperation naturally promotes efficient implementation of the existing measures.

Lastly, the Indian government policies have indeed come a long way in nurturing and promoting new age startups and ideas but yet the improvements can still be made.

Therefore, the suggestions made in the study are to enhance the desired policy environments and provide the right policy mix for the growing and diverse startup landscape in India. It is recommended that the future research should extend to the long-term policy effect and compare this study with other EMs to get more insights and lessons learned. on the side of the entrepreneurs.

The study identifies several key areas for policy enhancement: The study identifies several key areas for policy enhancement:

Addressing Regional Imbalances: Considering these issues, it can be stated that applying relevant measures and policies at the national level can address the problem of policy gaps to a greater extent; however, it is vital to come up with more specific support mechanisms aimed at startups appearing in the regions that can be classified as less developed.'

Keywords: Effort expectancy, information quality, social influence, repurchase intention

Introduction

India, as one of the World's most populous and rapidly developing countries, has increasingly positioned itself as a global hub for entrepreneurial activity. The Indian startup ecosystem has experienced remarkable growth over the past decade, driven by a combination of favorable demographic trends, technological advancements, and supportive government policies. This introduction delves into the context of the Indian startup ecosystem, the significance of government initiatives, and the specific policies under evaluation in this study.

1. The Indian Startup Ecosystem: Context and Growth

The Indian startup ecosystem has become a crucial driver of economic growth and innovation in the country. According to a report by Nasscom and Zinnov, India boasts over 70,000 startups, with over 1,000 new ventures being

launched each year. The ecosystem spans diverse sectors, including technology, finance, healthcare, education, and agriculture. This growth is fueled by factors such as a large, young, and tech-savvy population, increasing internet penetration, and a burgeoning middle class with rising disposable incomes.

The startup boom in India can be attributed to several factors:

- **Demographic Dividend:** India has a youthful population with a median age of around 28 years. This demographic advantage provides a substantial pool of potential entrepreneurs and consumers.
- **Digital Transformation:** The proliferation of digital technologies and the growth of the internet have created new opportunities for tech-driven startups. The

increasing use of smartphones and digital payment systems has accelerated entrepreneurial activity.

- **Investment Inflows:** Venture capital and angel investments have surged in India, providing startups with crucial funding to scale their operations and innovate. According to a report by IVCA, private equity and venture capital investments in India reached \$27 billion in 2022.
- **Education and Talent:** India has a robust education system that produces a large number of graduates skilled in technology and business. This talent pool contributes to the growth of startups and the development of innovative solutions.

2. Government Policies and Their Role

Recognizing the potential of startups to drive economic growth and technological advancement, the Indian government has introduced a series of policies and initiatives aimed at supporting and nurturing the entrepreneurial ecosystem. These policies are designed to address various challenges faced by startups, including access to funding, regulatory hurdles, and infrastructure limitations.

- a. **Startup India Initiative:** The "Startup India" initiative, launched in January 2016, is one of the flagship programs aimed at promoting entrepreneurship. The initiative includes several key measures:
 - **Tax Benefits:** Startups are eligible for tax exemptions under the scheme, including a three-year tax holiday in the first seven years of operation.
 - **Funding Support:** The initiative provides funding through the Fund of Funds for Startups (FFS), which aims to enhance the availability of venture capital for startups.
 - **Ease of Doing Business:** The initiative simplifies the business registration process, reduces compliance requirements, and offers regulatory relief.
 - **Startup India Hub:** A dedicated platform that provides startups with access to information, resources, and support services.
- b. **Digital India Program:** Launched in 2015, the "Digital India" program aims to transform India into a digitally empowered society and knowledge economy. Key components include:
 - **Digital Infrastructure:** Investments in improving internet connectivity, broadband access, and digital infrastructure.
 - **Digital Literacy:** Initiatives to enhance digital literacy among citizens, including programs for skill development and training.
 - **E-Governance:** Implementation of digital platforms to streamline government services and improve transparency and efficiency.

- c. **Make in India Campaign:** The "Make in India" campaign, introduced in 2014, aims to promote India as a global manufacturing hub. While primarily focused on manufacturing, the campaign also supports startups involved in technology and innovation:
 - **Foreign Investment:** Measures to attract foreign direct investment (FDI) and create a conducive environment for manufacturing startups.
 - **Infrastructure Development:** Support for infrastructure projects that benefit startups and businesses in the manufacturing sector.
- d. **Atal Innovation Mission (AIM):** The Atal Innovation Mission, launched in 2016, focuses on promoting innovation and entrepreneurship through various initiatives:
 - **Innovation Hubs:** Establishment of Atal Incubation Centers and Atal Tinkering Labs to foster innovation and provide support to startups and students.
 - **Funding for Research:** Financial support for research and development projects, aimed at driving technological advancements.
 - **Collaboration:** Encouraging collaboration between academic institutions, industries, and startups to enhance the innovation ecosystem.

3. Importance of Evaluating Policy Effectiveness

Evaluating the effectiveness of these policies is essential for several reasons:

- **Understanding Impact:** Assessing the impact of government policies helps determine whether they meet their objectives and contribute to startup growth and innovation. It provides insights into how policies influence various aspects of the startup ecosystem.
- **Identifying Challenges:** Evaluations uncover challenges and limitations in policy implementation, such as bureaucratic inefficiencies, regional disparities, and gaps in support mechanisms. Addressing these challenges is crucial for improving policy effectiveness.
- **Informing Future Policies:** Insights from evaluations guide the development of future policies and initiatives. By learning from past experiences, policymakers can design more effective support mechanisms tailored to the needs of startups.
- **Optimizing Resource Allocation:** Effective evaluation helps in optimizing the allocation of resources and support, ensuring that assistance is directed where it is needed most. This is particularly important in addressing regional imbalances and providing targeted support to emerging entrepreneurs.

4. Objectives of the Study

This study aims to provide a comprehensive evaluation of the effectiveness of government policies on startups and innovation in emerging Indian markets. The specific objectives are:

1. **Assess the Impact of Policies:** Evaluate how policies such as "Startup India," "Digital India," and "Make in India" have influenced startup growth, innovation, and entrepreneurial activity.
2. **Identify Implementation Challenges:** Analyze challenges faced by startups in accessing and utilizing government support, including bureaucratic inefficiencies and regional disparities.
3. **Offer Recommendations:** Provide actionable recommendations for enhancing policy effectiveness, including suggestions for streamlining processes, increasing awareness, and addressing regional imbalances.
4. **Inform Future Policy Development:** Contribute insights that can guide the development of future policies and initiatives aimed at supporting startups and fostering innovation in India.

5. Significance of the Study

The significance of this study lies in its ability to offer a detailed assessment of the impact of government policies on the startup ecosystem in India. By highlighting both successes and areas for improvement, the research provides valuable insights for policymakers, industry stakeholders, and entrepreneurs. The findings will contribute to ongoing efforts to create a more supportive environment for startups, driving innovation and economic growth in emerging Indian markets.

Literature Review

1. Government Policies and Startup Ecosystems

Government policies play a crucial role in shaping startup ecosystems by providing necessary support and creating favorable conditions for entrepreneurial ventures.

According to Mason and Brown (2013), effective government policies can enhance the growth of startups by offering financial support, reducing regulatory hurdles, and fostering a culture of innovation. Lerner (2009) highlights that countries with strong government backing for startups often see accelerated entrepreneurial activity and improved innovation outcomes.

2. Impact of Financial Incentives on Startups

Financial incentives, such as grants, subsidies, and tax benefits, are vital for supporting early-stage startups. Carpenter and Petersen (2002) found that financial support can significantly improve startup survival rates and encourage innovative activities.

Gompers and Lerner (2001) argue that access to venture capital and other funding sources is crucial for startups to scale and succeed.

3. Regulatory Reforms and Entrepreneurial Activity

Regulatory reforms aimed at simplifying business registration and compliance processes are essential for reducing barriers to entry and promoting entrepreneurship. Djankov *et al.* (2002) ^[4] demonstrate that streamlined regulatory environments facilitate entrepreneurial activity by lowering the costs and complexities associated with starting and running a business. Beck *et al.* (2005) further

emphasize that effective regulatory reforms can boost startup success and growth.

4. Infrastructure Development and Innovation

Infrastructure development, including access to technology, research facilities, and networking opportunities, supports innovation by providing startups with the resources necessary to develop and commercialize new ideas. Audretsch and Feldman (2004) highlight the importance of infrastructure in fostering a vibrant innovation ecosystem. Access to state-of-the-art facilities and collaborative networks can enhance the innovative capabilities of startups.

5. Regional Disparities in Policy Effectiveness

The effectiveness of government policies can vary significantly across different regions. Ketchen *et al.* (2004) point out that regional disparities in policy implementation and support levels can impact startup growth and innovation. Startups in less developed areas often face greater challenges in accessing resources and support compared to those in more developed regions.

6. Public-Private Partnerships (PPPs) in Startup Ecosystems

Public-private partnerships (PPPs) can enhance the effectiveness of government policies by leveraging private sector expertise and resources. Bridgman *et al.* (2015) argue that successful PPPs can drive innovation and startup growth by combining the strengths of both public and private sectors. Collaboration with industry stakeholders can improve policy design and implementation.

7. Challenges in Policy Implementation

Despite well-intentioned policies, challenges such as bureaucratic inefficiencies, corruption, and lack of coordination can undermine their effectiveness. The World Bank (2013) highlights that addressing these challenges is crucial for improving policy outcomes. Streamlining processes and increasing transparency can help overcome implementation issues.

8. Case Studies of Policy Impact in Emerging Markets

Examining case studies from other emerging markets provides valuable insights into the impact of government policies on startups. Sachs (2019) discusses policy measures implemented in Brazil and China, offering lessons for India. Comparing these experiences can inform strategies for enhancing policy frameworks and supporting startups.

Methodology

1. Research Design

This study employs a mixed-methods approach to evaluate the effectiveness of government policies on startups and innovation in emerging Indian markets. By integrating both quantitative and qualitative data, the research aims to provide a well-rounded assessment of policy impacts.

2. Quantitative Analysis

- a. **Survey Development:** A structured survey was designed to gather data from startup founders. It included questions on startup characteristics, perceptions of policy effectiveness, and challenges faced. The survey aimed to capture both quantitative metrics and qualitative feedback.

- b. **Sampling Method:** Stratified random sampling was used to select 300 startup founders from various Indian states, ensuring representation across different sectors and regions.
- c. **Data Collection:** The survey was administered online, with responses collected over four weeks. Reminders were sent to maximize response rates.
- d. **Data Analysis:** Quantitative data were analyzed using statistical software.

Descriptive statistics summarized responses, while inferential statistics examined relationships between policy impact and startup characteristics. Cross-tabulations revealed regional differences.

3. Qualitative Analysis

- a. **Interview Design:** Semi-structured interviews were conducted with 15 key informants, including policymakers, industry experts, and incubator representatives. The interviews explored policy design, implementation challenges, and recommendations.
- b. **Sampling Method:** Purposive sampling identified interviewees with relevant expertise and diverse perspectives on startup policies.
- c. **Data Collection:** Interviews were recorded and transcribed. Data were analyzed using thematic analysis to identify key themes and patterns.
- d. **Data Analysis:** Qualitative data were coded and analyzed to extract themes related to policy effectiveness, challenges, and suggestions for improvement.

Analysis

1. Quantitative Results

- a. **Startup Characteristics:** The survey revealed that 45% of startups were in technology, 20% in fintech, 15% in healthtech, and 20% in other sectors. 60% of startups were early-stage, and 40% were in growth stages.
- b. **Policy Impact**
 - **Funding Access:** 62% of respondents found government funding schemes beneficial.
 - **Business Registration:** 55% noted improvements in registration processes.
 - **Regulatory Environment:** 50% felt that regulatory changes simplified compliance, though 30% still faced bureaucratic obstacles.
- c. **Regional Disparities**
 - **Developed States:** Higher satisfaction and better resource access were reported in states like Maharashtra and Karnataka.
 - **Less Developed States:** Challenges were more pronounced in states like Bihar and Jharkhand, indicating regional disparities in policy effectiveness.

Result

The survey results indicate that 75% of startup founders view government policies as having a positive impact on their businesses. Key findings include:

1. **Increased Startup Formation:** The policies have led to a significant increase in startup registrations, suggesting a growing interest in entrepreneurship. 68% of respondents reported that financial incentives have played a crucial role in their decision to start a business.
2. **Enhanced Access to Funding:** Financial support mechanisms, such as grants and subsidies, have improved access to venture capital and other funding sources. 62% of respondents indicated that these policies have facilitated their ability to secure necessary capital.
3. **Simplified Business Registration:** Regulatory reforms have reduced bureaucratic barriers, making it easier for new ventures to begin operations. 55% of respondents noted that streamlined registration processes have been beneficial.
4. **Regional Disparities:** The results also highlight regional disparities in policy effectiveness. Startups in less developed areas reported greater challenges in accessing support and resources compared to those in more developed regions.
5. **Bureaucratic Inefficiencies:** 55% of respondents identified bureaucratic inefficiencies as a major challenge, with delays and complications in administrative processes affecting their operations.

Qualitative interviews revealed that while policymakers acknowledge the positive contributions of initiatives like "Startup India," there are areas for improvement. Key challenges include:

1. **Slow Bureaucratic Processes:** Interviewees noted that bureaucratic delays and inefficiencies continue to hinder the effectiveness of support mechanisms.
2. **Lack of Awareness:** Many entrepreneurs are unaware of the available policies and how to leverage them effectively. Increased outreach and education are needed to address this issue.
3. **Policy Implementation Issues:** Inconsistent policy implementation and coordination among government agencies were identified as significant challenges. Enhanced coordination and oversight are necessary for more effective policy execution.

Discussion

The findings of this study provide a nuanced understanding of how government policies impact startups and innovation in India. This discussion interprets the results, explores their implications, and examines how they align with or diverge from existing literature and policy goals.

1. Impact of Government Policies

a. Positive Outcomes

The data reveal that government policies such as "Startup India," "Digital India," and "Make in India" have had a generally positive impact on the startup ecosystem:

- **Funding Access:** The "Startup India" initiative's funding support has been beneficial for many startups, facilitating access to venture capital and financial resources. This aligns with literature that suggests that funding access is crucial for startup growth (Kerr & Nanda, 2015) ^[6].
- **Ease of Business Registration:** Improvements in business registration processes have simplified the startup journey, which is consistent with global findings that reducing bureaucratic hurdles enhances entrepreneurial activity (Djankov *et al.*, 2002) ^[4].
- **Regulatory Relief:** Regulatory reforms have simplified compliance requirements for many startups, though some entrepreneurs still face challenges. This suggests that while progress has been made, further streamlining is needed.

b. Regional Disparities

The study identifies significant regional disparities in policy effectiveness:

- **Developed vs. Less Developed States:** Startups in developed states like Maharashtra and Karnataka reported better access to resources and higher satisfaction with government support compared to those in less developed states such as Bihar and Jharkhand. This finding highlights a persistent issue of uneven policy impact across different regions (Desai, 2018) ^[3]. Regional disparities may be due to varying levels of infrastructure, awareness, and administrative efficiency.

2. Challenges and Limitations

a. Bureaucratic Inefficiencies

A substantial portion of respondents reported bureaucratic delays and complex procedures as major challenges. This reflects broader concerns about government efficiency and suggests that despite reforms, administrative bottlenecks continue to hinder startup operations. Streamlining processes and reducing red tape are critical to improving policy effectiveness (World Bank, 2020) ^[8].

b. Awareness and Accessibility

The issue of policy awareness is significant. Many startups are not fully informed about the available support mechanisms. This lack of awareness undermines the potential benefits of well-intentioned policies. Enhancing outreach and education is essential for ensuring that startups can fully leverage government initiatives (Acs *et al.*, 2014) ^[1].

3. Alignment with Existing Literature

The study's findings align with existing literature on the role of government policies in supporting startups:

- **Policy Impact on Innovation:** Previous research has shown that supportive policies can foster innovation and entrepreneurship by reducing barriers and

providing essential resources (Audretsch *et al.*, 2015) ^[2]. The positive impact of funding and regulatory reforms observed in this study supports this view.

- **Regional Disparities:** The disparity in policy effectiveness across regions corroborates earlier studies highlighting the need for targeted interventions to address regional imbalances (Glaeser *et al.*, 2014) ^[5].

4. Recommendations for Improvement

Based on the findings, several recommendations can be made:

- **Streamlining Administrative Processes:** To address bureaucratic inefficiencies, there is a need for further simplification of administrative procedures and faster processing times. Adopting digital solutions and reducing paperwork can enhance efficiency (OECD, 2019) ^[7].
- **Increasing Awareness:** Expanding outreach efforts through workshops, webinars, and information campaigns can help raise awareness among startups about available policies and support programs.
- **Addressing Regional Imbalances:** Implementing targeted support measures for startups in less developed regions can help bridge the gap in policy effectiveness. This could include tailored funding programs, localized support centers, and regional incubators.

5. Implications for Future Research

The study's findings suggest several areas for future research:

- **Long-Term Policy Impact:** Investigating the long-term effects of government policies on startup growth and sustainability could provide insights into the enduring benefits and challenges of these initiatives.
- **Comparative Studies:** Comparative research with other emerging markets could offer additional perspectives on effective policy strategies and best practices.
- **Sector-Specific Analysis:** Examining the impact of policies on specific sectors could reveal more targeted insights and help design sector-specific support mechanisms.

6. Policy Implications

The study highlights the need for ongoing policy refinement to better support the startup ecosystem. Policymakers should consider the study's recommendations to enhance the effectiveness of existing programs and ensure that support reaches startups across different regions and sectors.

Conclusion

This research paper evaluated the effectiveness of various Indian government policies aimed at fostering startups and innovation, specifically examining initiatives such as "Startup India," "Digital India," and "Make in India." The study employed a mixed-methods approach, combining quantitative surveys with qualitative interviews, to provide a comprehensive assessment of these policies.

1. Summary of Findings

The study revealed that government policies have generally had a positive impact on the startup ecosystem in India. Key findings include:

- **Funding and Financial Support:** Policies like "Startup India" have facilitated better access to funding, which is crucial for startup growth and scaling. The availability of venture capital and financial incentives has been appreciated by many entrepreneurs.
- **Improved Business Registration:** Reforms in business registration processes have simplified the startup journey for many, though the level of improvement varies across regions.
- **Regulatory Relief:** Simplified compliance requirements have benefited startups, but some continue to face bureaucratic hurdles, indicating that more work is needed in this area.

2. Regional Disparities

The study highlighted significant regional disparities in the effectiveness of government policies. Startups in more developed states reported better support and resources compared to those in less developed regions. This disparity underscores the need for targeted interventions to ensure that all startups, regardless of their location, can benefit from government policies.

3. Challenges Identified

Key challenges include:

- **Bureaucratic Inefficiencies:** Despite reforms, bureaucratic delays and complex processes remain significant barriers. Streamlining administrative procedures is essential to enhance policy effectiveness.
- **Awareness Issues:** Many startups are not fully aware of the available policies and support mechanisms. Increasing awareness through targeted outreach and education is crucial for maximizing the benefits of government initiatives.

4. Recommendations

Based on the findings, the following recommendations are made:

- **Streamline Processes:** Simplify administrative procedures and reduce bureaucratic red tape to improve the efficiency of policy implementation.
- **Enhance Awareness:** Expand outreach efforts to ensure startups are informed about available policies and how to access them.
- **Address Regional Imbalances:** Implement targeted support measures for startups in less developed regions to bridge the gap in policy effectiveness.

5. Implications for Policy and Practice

The study's insights are valuable for policymakers, industry stakeholders, and entrepreneurs. Policymakers should consider refining existing programs and introducing targeted

interventions to address regional disparities and enhance overall effectiveness. Industry stakeholders can use these insights to better navigate the policy landscape and advocate for improvements.

6. Future Research Directions

Future research should focus on:

- **Long-Term Impacts:** Examining the long-term effects of government policies on startup sustainability and growth.
- **Comparative Analysis:** Conducting comparative studies with other emerging markets to identify effective strategies and best practices.
- **Sector-Specific Studies:** Investigating the impact of policies on specific sectors to tailor support mechanisms more effectively.

In conclusion, while Indian government policies have made notable strides in supporting startups and innovation, there is room for improvement. The recommendations provided aim to optimize policy frameworks and better support the dynamic startup ecosystem in India, contributing to sustainable economic growth and innovation.

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