

Understanding The Opportunities And Challenges Of Tech Based Start-Up In Haryana

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Abstract: *The objective of this study is to understand the opportunities and challenges of tech-based start-up in Haryana with a particular focus on identifying regional disparities, understanding localized barriers to growth, and evaluating the effectiveness of current policy interventions. The study used structured questionnaire to collect 520 valid and usable responses were finalized for analysis. The data was collected using stratified sampling technique. The findings of the study suggests that government support strongly effect the attitude. RIC (role of incubation centre) and ATT (attitude) both produced substantial standardised direct effects of 0.5416 and 0.3877, respectively, indicating their separate significance in promoting startup involvement. The study has practical implications for some of the stakeholders like the government, investors, entrepreneurs, incubators, and academia. They are practical in assisting the startups to develop and thrive in the market. To governments, there is a requirement to implement policies that are in support of the startups.*

Keywords: *Opportunities, Challenges, tech-based start-up, Haryana, Government support and accelerators.*

1. INTRODUCTION

Startups have emerged as powerful way of innovation and the economic transformation across the world. Defined as newly established enterprises that focused on the innovation, scalability, and the rapid growth, startups are distinct from the traditional businesses in their intent to disrupt the existing markets or to create entirely new ones. Startups Operates in the high-uncertainty environments, they often rely on technology-driven solutions and external funding due to limited initial resources (Festel, 2013; Sefiani & Bown, 2013). Vliamos and Tzeremes (2012) stated that along with institutions like the OECD (2016), have emphasized startups' problem-solving capacities and their reliance on novel business models. While the definition of a startup is different across regions, in India, the Department for Promotion of Industry and Internal Trade (DPIIT, 2019) defines a startup based on its age, turnover, and that focuses on innovation.

Within this landscape, tech startups play a major transformative role. These are enterprises built around technological innovation such as products, services, or processes. They often aim to discover something new solutions. Tech startups are inherently global in nature, providing leverage digital tools such as cloud computing, artificial intelligence, and data analytics to rapidly grow and enter the international markets (Santisteban et al., 2021; Hennart et al., 2021; Zhang & Chen, 2024). These are enterprises built around technological innovation such as products, services, or processes. They often aim to discover something new solutions and are global in nature, providing digital tools such as cloud computing, artificial intelligence, and data analytics to grow rapidly and enter the international markets (Santisteban et al., 2021; Hennart et al., 2021; Zhang & Chen, 2024). Their impact is seen across different sectors such as EdTech, FinTech, and HealthTech, they also offer customized digital solutions that are tailored to industry specific challenges (Chattopadhyay et al., 2024). In India, the tech startup ecosystem has seen remarkable growth between the period of 2019 and 2024, giving rise to 117 unicorns across different domains like e-commerce, finance, healthcare, and education. These startups are driven by a young, digital-first population thus increasing the investor confidence in the advancement (NASSCOM, 2022). The lifecycle of a startup typically evolves through various stages such as ideation and validation to scaling and eventual exit. Each phase comes with its own set of challenges and funding requirements, often involving bootstrapping, angel investment, venture capital, or even public listings (Marmer & Dogrultan, 2011; Salamzadeh & Kawamorita Kesim, 2017). Globally, the tech startups contribute not just to the economic output but also to the technological advancement and the digital transformation. Countries like the U.S., China, and India have emerged as key innovation centres (World Economic Forum, 2021; NASSCOM, 2023). India is now the third-largest startup ecosystem in the world, continuously showing strong sectoral performance in areas like BFSI, EdTech, and HealthTech, supported by flagship initiatives such as Startup India and policy incentives from DPIIT (Startup India, 2016; DPIIT, 2024). Despite the funding slowdown in 2023–24, the Indian

ecosystem is maturing, with growing emphasis on sustainability, DeepTech, and long-term profitability (NASSCOM-Zinnov, 2024).

At the state level, Haryana has emerged as one of the key regional players, especially through the success of its startup hub, Gurugram. As of 2024, Haryana boasts over 8,000 startups and 15 unicorns, with notable strengths in AgriTech, CleanTech, AI, and logistics (DPIIT, 2024). However, the ecosystem remains heavily concentrated in specific districts particularly Gurugram and pointing deep regional disparities. While the state has a vibrant startup culture, over 59% of its startups are still in early stages like ideation and validation, with only 9.8% progressing to the scaling phase (Department of Industry and Commerce, 2024). This imbalance reflects the challenges faced by the startups such as inadequate infrastructure, limited access to investment, and uneven policy implementation.

In response to the imbalance both national and state governments have launched various schemes and frameworks aimed at strengthening the startup ecosystem. These include the Startup India Seed Fund Scheme (SISFS), Fund of Funds for Startups (FFS), and DeepTech-focused initiatives like AIRAWAT, TIDE 2.0, and the National Quantum Mission (MeitY, 2024). The Haryana Startup Policy 2022 further supports entrepreneurs with seed funding, incubation infrastructure, and grants for intellectual property and marketing (Government of Haryana, 2022). However, the policy's benefits remain unevenly distributed across the state, pointing to a critical need for localized interventions.

The present study seeks to critically examine the startup ecosystem in Haryana, with a particular focus on identifying regional disparities, understanding localized barriers to growth, and evaluating the effectiveness of current policy interventions. By adopting an empirical lens, this research aims to generate actionable insights that can inform policymakers, investors, and ecosystem enablers. Ultimately, the goal is to contribute to the development of a more inclusive, resilient, and scalable startup ecosystem—not just in urban centers like Gurugram, but across Haryana's Tier-2 and Tier-3 districts as well.

2. LITERATURE REVIEW

The concept of entrepreneurship has evolved significantly over time. The Oxford English Dictionary defines an entrepreneur as an individual who starts a company, knowing its financial risks in pursuit of profit. While terminology varies across sources, there is a general consensus that entrepreneurship revolves around innovation, risk-taking, opportunity recognition, and value creation. Entrepreneurs are seen as dynamic agents of change, influencing both macroeconomic transformation and microeconomic business growth. Uriarte et al. (2025) stated that an entrepreneur must strategically analyze opportunities, establish value, and lay the foundation for a successful enterprise by leveraging their personal and social capital within a supportive ecosystem. Barua et al. (2025) suggested that the start-ups directly links with entrepreneurship and showing the intrinsic relationship between both concepts. Schumpeter (1934) emphasized the entrepreneur's role as an innovator who disrupts market equilibrium through new products or business models thus helping the economic development. Drucker (1985) viewed change as an opportunity for innovation. Low and McMillan (1988) defined entrepreneurship as the creation of new enterprises, while Churchill and Bygrave (1989) stated it as a dynamic process rather than a static state. Maaßen, Lopez, and Urbano (2025) suggested that starting a new venture is like nurturing a plant .it requires a sustained amount of effort to bear fruit. Family background and cultural context also significantly influence entrepreneurial success. Duchesneau and Gartner (1990) observed that successful entrepreneurs often come from entrepreneurial families, distinguishing between first-generation and second-generation entrepreneurs. Baum et al. (2001) and Kuratko and Covin (2025) stated that organizations driven by highly motivated entrepreneurs often reflect the characteristics of their founders thus leading to enhanced performance. In technology-driven domains, vocational and occupational backgrounds are vital, as they provide the specialized knowledge necessary for product development and commercialization (Colombo & Grilli, 2010). Cultural practices also play a role. Autio et al. (2013), and Zacharakis, Corbett, and Bygrave (2025), revealed that national cultures affect entrepreneurial entry and growth intentions. Similarly, the Ministry of Skill Development and Entrepreneurship (2015) characterizes entrepreneurs as individuals who identify opportunities, resources, take calculated risks, and create jobs through innovation.

The entrepreneur's personality is a key determinant of making the startup successful Greve and Salaff (2003) found that entrepreneurs rely heavily on their social networks in early planning phases, often consisting of family or inherited business connections. This trend showed no difference between novice and experienced entrepreneurs, though variations in network size and development time were evident across countries. Stuart and Sorenson (2007) emphasized that social networks fcontributes towards innovation and resource access,

significantly shaping the entrepreneurial behavior. Abou-Moghli and Al-Kasasbeh (2012) confirmed that social networks enhance the success of manufacturing startups by linking them to local markets and enabling growth. La Rocca and Snehota (2014) further highlighted the symbiotic relationship between networks and innovation, showing how collaborative product refinement drives commercialization. Zaech and Baldegger (2017) showed that transformational leadership positively influences startup performance, unlike transactional leadership, as founders inspire and motivate their teams through vision-driven behavior.

Entrepreneurship, derived from the French word *entreprendre*, meaning “to undertake,” was profoundly shaped by Schumpeter (1934), who introduced the concept of “creative destruction.” He described entrepreneurship as the continuous disruption and renewal of economic systems through technological innovation. Entrepreneurs introduce new goods and processes and which leads to the economic development and it disrupts market equilibrium. Verstraete (2002) supported this perspective, asserting that constant innovation is essential for competitive advantage, while Polowczyk (2012) noted that entrepreneurship is key factor for the job creation and socio-economic progress.

The establishment and implementation of startups require a blend of behavioral, internal, and external factors. Entrepreneurs must key behavioral attributes such as confidence, risk-taking, and decisiveness. These factors impact the initiating and sustaining of their ventures. These are well-explained by three theories such as Hubris Theory (Hayward et al., 2006), Prospect Theory (Kahneman & Tversky, 1979), and Real Options Theory (McGrath, 1999). Hubris Theory describes how overconfidence may drive entrepreneurs to persist in failing ventures, while Prospect Theory shows that how perceived losses may push individuals to take excessive risks. Real Options Theory equates entrepreneurship to financial options, where entrepreneurs must assess whether to continue or abandon investments based on shifting risk-reward ratios. these theories show that while confidence and risk-seeking behavior are necessary for startup initiation, they can also lead to poor decisions if they are ignored during execution.

Internally, a start-up's structure, leadership, and innovation capacity are the factors that define its operational effectiveness. Key components include the business model, product or service innovation, team dynamics, and resource management. A start-up's success depends on how effectively it can deliver value, differentiate itself from others, and optimize the limited resources. Organizational structure, strategic leadership, and efficient operations further influence scalability and long-term viability. External attributes such as market demand, access to funding, regulatory environments, and cultural factors also significantly affect start-up success. Support from incubators, accelerators, and access to venture capital or government programs can facilitate growth. However, cultural attitudes toward innovation, risk, and entrepreneurship also shape the ecosystem within which start-ups operate.

Technology-based start-ups, or tech start-ups, present a distinct category of entrepreneurship that emphasizes technological advancement and specialization. Walsh and Linton (2011) and Harms and Walsh (2015) argued that the tech entrepreneurs require advanced technical and managerial skills to navigate in the volatile environments. Bailetti (2012) described tech start-ups as ventures that utilize scientific expertise and specialized personnel to develop cutting-edge innovations. Governments around the world including India have implemented policy measures to promote tech entrepreneurship (Kevin, 2018). With the rise of sectors like AI, e-commerce, fintech, and digital health, digital start-ups have grown rapidly (Nagarajan, 2019). Tech Start-up models often integrate Agile and Lean methodologies to foster collaboration and practical problem-solving. Chua (2023) defined tech start-ups as enterprises that distinguish themselves through the application of new technologies and novel business models. Rizwan, Hanif, and Khan (2025) noted a growing interest in tech incubators and accelerators globally. These programs foster skill development and entrepreneurship, crucial in an age marked by digital disruption and automation (Kang, Nanda & Park, 2021). Pittaway et al. (2020) and Olivieri and Hu (2025) emphasized the digital proficiency required by high-tech professionals to thrive in today's omni-digital environment. Furthermore, venture capital plays a central role in enabling innovation, with strong VC ecosystems attracting talent, reducing market entry barriers, and catalyzing regional growth (Winton & Yerramilli, 2008; Pramana et al., 2025). However, Hornuf and Mattusch (2025) caution that while equity crowdfunding often leads to follow-up funding, it also increases risk exposure, particularly if leadership lacks depth or experience. This study explores a quantitative method in probing opportunities and challenges for tech startups in Haryana. it captures all operational tech-based startups within the FinTech, EdTech, AgriTech, AI, and others sectors in Haryana.

3. Conceptual model and hypothesis Development

Start-ups operate in an environment full of emerging opportunities, driven by market dynamics, technological advancements, supportive ecosystems, and evolving policy frameworks. Understanding these opportunities is crucial for entrepreneurs seeking to identify, create, and exploit potential avenues for growth and innovation. The opportunities for start-ups are manifold, ranging from a robust market demand and vibrant ecosystems to supportive policy frameworks, technological innovation, and access to talent. Recognizing and strategically exploiting these opportunities can significantly enhance start-ups' survival, growth, and long-term success prospects. Despite the wealth of opportunities, start-ups—particularly those in technology sectors—face numerous challenges that threaten their sustainability and growth. These challenges stem from uncertainties in the external environment, resource constraints, operational hurdles, and complexities in managing relationships with stakeholders. The study used BRT theory given by Robert Westaby (2005). The main idea behind BRT is that cognitive reasoning, affective reasoning, and motivational drivers all work together to generate behavioural reasoning. These drivers all play a role in forming behavioural intentions, which are the thoughts and feelings that lead to real conduct. Cognitive reasoning is made up of a person's ideas and expectations, or what they believe about an activity and what they predict will happen as a result. For instance, someone could think that doing out regularly is good for their health and anticipate to feel more energized as a result. BRT is especially interesting because it takes feedback loops into account. This means that the effects of an action, whether good or bad, may change how people think and make decisions in the future. This makes BRT a great approach to learn not only why individuals do what they do, but also how their behaviour changes over time. I think this integrated approach closes the gap between rational reasoning and emotional or social factors, making it a more accurate description of how people act, especially when it comes to health, shopping, and social behaviour. The figure 1 below shows the conceptual model of the study.

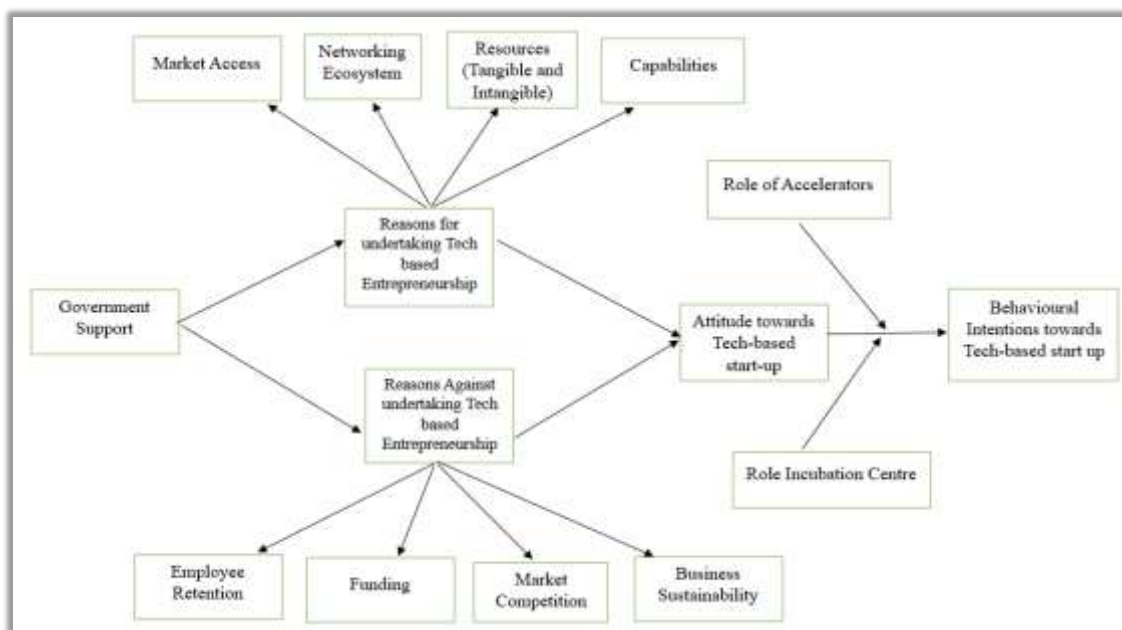


Fig 1 The Conceptual Model of the Study

4. RESEARCH METHOD

Measurement

The questionnaire is meticulously crafted to collect both demographic data and in-depth insights into the opportunities and challenges faced by tech startups in Haryana. It is grounded in an exhaustive review of existing literature, accepted theoretical models, and prior empirical studies, ensuring theoretical robustness. Constructs are selected based on their relevance to the study's objectives, with references to academic works such as Porter (2008), Stam (2015), Teece (2018), Barney (1991), and Ajzen (1991). Tech startups in Haryana were surveyed using a structured questionnaire split into two parts: general profile data and thematic components. While the thematic component evaluated views on opportunities and difficulties, the general section recorded startup demographics. Respondents' attitudes and experiences were measured using a five-point Likert scale ranging from Strongly Disagree to Strongly Agree. The survey addressed ideas such corporate sustainability, talent

availability, government backing, capabilities, networking ecology, and market access. It was first pilot-tested for clarity and then run online under confidentiality guarantee.

Data

A structured questionnaire was disseminated to startup founders throughout Haryana for the quantitative component of the study. To accurately identify the population of technology-based startups for this study, data was collected from the official Startup India portal, a platform developed by the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India. This portal provides verified and categorized information on startups registered across the country, including detailed filters for state, sector, industry, and stage of development.

For the purpose of this research, the state filter was applied to extract startups registered and operating in Haryana. To ensure the relevance of the data to the study, only those startups falling under technology-driven sectors and industries were selected. These included, but were not limited to, sectors such as FinTech, Agri-Tech, Ed-Tech, Clean-Tech, Health-Tech, AI and Robotics, IT Consulting, E-commerce, and related categories. A total of 537 responses were initially received from tech startup founders through the administered survey. However, not all the received responses were deemed suitable for final analysis. During the data cleaning and validation process, each response was carefully reviewed for completeness, consistency, and relevance. Responses with missing critical information, duplicate entries, or inconsistent patterns were excluded from the final dataset. After applying these criteria, 17 responses were identified as invalid and were removed. As a result, 520 valid and usable responses were finalized for analysis. The data was collected using stratified sampling technique.

Normality

The table presents an assessment of normality by analyzing four key statistical measures: Mean, Standard Deviation, Skewness, and Kurtosis for each item in the dataset. Skewness evaluates the symmetry of the distribution—values close to zero suggest a normal distribution, positive skewness indicates a right-skewed distribution (more responses on the lower end), and negative skewness reflects a left-skewed distribution (more responses on the higher end). In this table, most skewness values fall within the acceptable range of -1 to +1, indicating approximate normality. Kurtosis, on the other hand, measures the "tailedness" of the distribution—values near zero indicate a normal distribution, positive kurtosis suggests heavier tails (more extreme values), and negative kurtosis implies lighter tails (flatter distribution). The values in the table show that most items have kurtosis within the acceptable range (-1 to +1), meaning no severe deviation from normality.

	Mean	Std. Deviation	Skewness	Kurtosis
MA1	3.411	.8667	.263	-.058
MA2	3.452	.8648	.295	.108
MA3	3.744	.8643	.563	.387
NE1	3.484	.7639	-.502	.233
NE2	3.494	.7958	-.486	.415
NE3	3.485	.7757	-.488	.356
CB1	4.409	.8445	.527	.478
CB2	3.498	.8367	.313	.298
CB3	4.434	.7908	.378	-.089
RS1	3.646	.8554	.518	.148
RS2	3.626	.8909	.269	.048
RS3	3.625	.8595	.325	.108
GS1	3.596	.9594	-.287	.025
GS2	3.572	.9033	-.209	-.098
GS3	3.604	.9123	-.442	.099
ER1	3.098	1.1674	.454	.098
ER 2	3.054	1.1175	.325	-.368
ER 3	3.154	1.1015	.326	-.139
FND1	3.483	.9335	-.546	.389
FND2	3.482	.9106	-.427	.117
FND3	3.737	.8827	-.388	.139
MC1	3.628	.8719	.428	.059

MC2	3.682	.8709	.493	.148
MC3	3.656	.8423	.547	.287
BS1	3.529	.9347	.388	.075
BS2	3.603	.8877	.304	.044
BS3	3.557	.9469	.347	.083
ATT1	3.632	.9245	.177	.781
ATT2	3.679	.8406	.288	.663
ATT3	3.589	.8909	.385	.447
BI1	3.781	.8459	.718	.603
BI2	3.733	.8394	.529	.349
BI3	3.649	.9488	.584	.488
RIC1	3.66	.9469	.547	.388
RIC2	3.645	.9258	.333	.239
RIC3	3.566	.8418	.398	.417
RA1	3.532	.8913	.588	.358
RA2	3.634	.8462	.299	.478
RA3	3.689	.8344	.375	.297

Structural equation modeling analysis

4.4.1 Measurement model: Confirmatory factor analysis

The CFA results confirm a strong measurement model, ensuring reliability and validity across all constructs. Standardized loadings (≥ 0.75) indicate high item reliability, demonstrating that each item effectively represents its respective construct. High Cronbach's alpha (≥ 0.80) and composite reliability (CR ≥ 0.83) establish internal consistency, verifying that the items within each construct measure the same underlying concept. The average variance extracted (AVE ≥ 0.598) confirms convergent validity, ensuring that each construct captures sufficient variance from its indicators.

4.4.2 Reliability

The table presents the result showing standardized factor loadings, Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) for each construct. All factor loadings are above the acceptable threshold of 0.70, indicating strong item reliability. Cronbach's Alpha values exceed 0.80 for all constructs, demonstrating high internal consistency. Composite Reliability (CR) values are also well above the recommended 0.70 level, confirming construct reliability. Furthermore, AVE values for all constructs are above 0.50, supporting convergent validity. These results indicate that the model is both reliable and valid.

Constructs	Items	Standardized loadings	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
MA	MA1	0.788	0.839	0.83	0.638
	MA2	0.767			
	MA3	0.828			
NE	NE1	0.898	0.902	0.909	0.748
	NE2	0.892			
	NE3	0.843			
CB	CB1	0.823	0.861	0.834	0.656
	CB2	0.824			
	CB3	0.853			
RS	RS1	0.869	0.842	0.84	0.647
	RS2	0.807			
	RS3	0.788			
GS	GS1	0.798	0.826	0.867	0.598
	GS2	0.805			
	GS3	0.785			
ER	ER1	0.787	0.836	0.87	0.668
	ER2	0.768			

	ER3	0.788			
FND	FND1	0.832	0.875	0.893	0.679
	FND2	0.882			
	FND3	0.869			
BS	BS1	0.793	0.842	0.898	0.638
	BS2	0.790			
	BS3	0.789			
ATT	ATT1	0.7848	0.838	0.875	0.633
	ATT2	0.763			
	ATT3	0.823			
BI	BI1	0.887	0.894	0.899	0.768
	BI2	0.862			
	BI3	0.848			
RIC	RIC1	0.829	0.835	0.867	0.686
	RIC2	0.828			
	RIC3	0.855			
MC	MC1	0.863	0.844	0.85	0.678
	MC2	0.802			
	MC3	0.784			
RA	RA1	0.863	0.847	0.89	0.699
	RA2	0.803			
	RA3	0.782			

4.4.3 Validity

The AVE values are above 0.05, or the threshold value, according to Hair and colleagues (2010). In addition, squared AVE values in above mentioned grid values were greater than intercorrelation approximations for remaining comparable constructs, showing that the measurement model has a high degree of discriminant validity (Fornell and Larcker, 1981). We also checked the independent variables for multi-collinearity. All variance expansion factors (VIF) for independent variables fell below the criterion value of 5.0. (1970; Belsley, Kuh, and Welsch).

	MA	NE	CB	RS	GS	ER	FND	MC	ATT	BI	RIC	RA
MA	0.766											
NE	0.235* **	0.834										
CB	0.363* **	0.453* **	0.865									
RS	0.553* **	0.358* **	0.574* **	0.846								
GS	0.445* **	0.426* **	0.646* **	0.413* **	.797							
ER	0.644* **	0.227* **	0.435* **	0.659* **	0.268* **	0.875						
FND	0.381* **	0.349* **	0.542* **	0.461* **	0.445* **	0.544* **	0.775					
MC	0.482* **	0.374* **	0.574* **	0.464* **	0.349* **	0.539* **	0.478* **	0.746				
ATT	0.564* **	0.445* **	0.668* **	0.564* **	0.249* **	0.623* **	0.414* **	0.454* **	0.827			
BI	0.245* **	0.428* **	0.52* **	0.578* **	0.312* **	0.588* **	0.309* **	0.676* **	0.599* **	0.778		
RIC	0.255* **	0.538* **	0.528* **	0.478* **	0.214* **	0.679* **	0.277* **	0.473* **	0.585* **	0.543* **	0.789	
RA	0.587* **	0.442* **	0.347* **	0.348* **	0.216* **	0.175* **	0.149* **	0.178* **	0.176* **	0.419* **	0.144* **	0.746

4.4.4 Structural model

Hypotheses	Path	Standardized direct Effect	Critical Ratio	Result
1	ATT → BI	0.338	12.58 ***	Accepted
2	RF → BI	0.537	16.83***	Accepted
3	RA → BI	0.225	25.30***	Accepted
4	RF → ATT	0.347	10.87***	Accepted
5	RA → ATT	0.283	5.67***	Accepted
6	GS → RF	0.347	57.042***	Accepted
7	GS → RA	0.243	12.57 ***	Accepted
8	GS → ATT	0.419	16.19***	Accepted
Second Order				
	RF → MA	0.616	12.55 ***	Accepted
	RF → NE	0.747	16.27***	Accepted
	RF → RS	0.638	10.89***	Accepted
	RF → CB	0.678	10.94***	Accepted
	RA → ER	0.549	15.62***	Accepted
	RA → FND	0.543	57.017***	Accepted
	RA → BS	0.627	12.54 ***	Accepted
	RA → MC	0.784	14.93***	Accepted

All hypotheses were supported with significant path effects. ATT → BI ($\beta = 0.338$), RF → BI ($\beta = 0.537$), and RA → BI ($\beta = 0.225$) confirm H1, H2a, and H2b. RF and RA also positively influence ATT (H3a: $\beta = 0.347$, H3b: $\beta = 0.283$). GS significantly impacts RF ($\beta = 0.347$), RA ($\beta = 0.243$), and ATT ($\beta = 0.419$), supporting H4a, H4b, and H5. Second-order paths show RF strongly predicts MA ($\beta = 0.616$), NE ($\beta = 0.747$), RS ($\beta = 0.638$), and CB ($\beta = 0.678$). RA influences ER ($\beta = 0.549$), FND ($\beta = 0.543$), BS ($\beta = 0.627$), and MC ($\beta = 0.784$).

5. DISCUSSION

Innovation plays a crucial role for technology startups as it allows them to differentiate themselves in the marketplace. New advancements such as artificial intelligence, blockchain, and automation are quickly transforming the different industries. Startups that cleverly utilize these innovations have a greater opportunity for growth and can attract more investors. However, funding research and development can be expensive, making financial management a significant hurdle.

The business landscape significantly influences startups as well. Shifts in the economy, changes in customer expectations, and rising competition compel startups to remain adaptable. Many industries are saturated, posing challenges for new companies trying to establish themselves. Additionally, startups frequently encounter funding difficulties. While venture capitalists and angel investors provide assistance, they expect quick growth and returns. Startups that receive guidance from mentors, financial institutions, and supportive government initiatives are more likely to succeed. Incubators and accelerators offer training, funding, and valuable networking opportunities. Collaborations between the public and private sectors are also vital in fostering these ecosystems.

Leadership is essential in startups. Strong leaders promote creativity and support their teams in overcoming obstacles. Poor leadership can lead to bad choices and financial setbacks. Partnerships between universities and startups can help translate research into tangible products, boosting their market prospects.

Mentorship holds significant importance. Seasoned mentors provide startups with advice on financing, legal issues, and competitive strategies. Startups with access to mentors generally perform better. Favorable government measures like tax incentives and intellectual property protections instil confidence in startups. However, slow procedures and unclear regulations still pose challenges for many businesses. Digital transformation is reshaping the startup landscape. Technologies like artificial intelligence, cloud services, and big data enhance decision-making and improve customer service. These innovations enable startups to work more efficiently and scale their operations. Research indicates that startups focused on AI and sustainable development will shape the future, so it is vital for startups to pay attention to these trends. Networking is highly valuable as well. Entrepreneurs who cultivate strong connections can secure funding, find partners, and gain knowledge. Participating in events and leveraging online platforms can lead to meaningful business relationships. Furthermore, understanding local cultures is crucial, especially for startups looking to expand internationally.

Startups need to continuously adapt their business models to remain competitive. Subscription and platform-based approaches can help maintain consistent revenue. In addition, startups must adhere to regulations, prioritize customer satisfaction, and remain agile to thrive and expand.

6. Implications for practice

The study has practical implications for some of the stakeholders like the government, investors, entrepreneurs, incubators, and academia. They are practical in assisting the startups to develop and thrive in the market. To governments, there is a requirement to implement policies that are in support of the startups. They need to simplify procedures and provide tax exemptions to firms in growth industries. Permitting startups to pilot new products in secure environments can lead to innovation. Strict cybersecurity rules will protect startups' data. Second, providing startups an entry to international markets by offering trade agreements is important. Investors need to give priority to promising sectors such as artificial intelligence, fintech, and e-commerce. Providing flexible loans and encouraging repayment-based lending can assist startups in controlling finances. Tax relief for startups that invest money in research and development will motivate entrepreneurs. Entrepreneurs must continue to come up with new ideas and make quality financial plans.

Flexible strategies enable new businesses to easily respond to changes in the market. Online marketing plays an important role as far as acquiring customers and investors is concerned. New businesses should be willing to implement some adjustment of strategy following feedback and include sustainability in business. Incubators and accelerators should have industry-specific programs for rendering and provide marketing, finance, and risk management advice. They should hold networking sessions and give assistance to women entrepreneurs in terms of funds and training. Universities should incorporate entrepreneurship as a subject and carry out research projects with startups. Digital skills, financial planning, and leadership should be taught to equip students for the future. Incentivizing cross-disciplinary research involving business, technology, and psychology can give startups a competitive edge against their peers.

7. Limitations and future scope of work

This study provides valuable insights but have a few constraints such as it mainly discusses tech startups in particular in geographic areas. so the results may not be universal. the population size of the participants is small and it's also only a one-time study also showing that more longer-term studies are needed. This does not cover risk-taking attitude and sentiment of the entrepreneurs or the impact of social media. There is also a strong need to cover crowdfunding and team diversity. The impact of new technologies such as AI and blockchain on startups can be covered in the future. Empirical research studies on entrepreneurial behavior, leadership, and mentoring will reveal further insights. Focus on recession trends in finance and studies of alternative funding mechanisms such as crowdfunding is also to be given priority.

Comparative studies of startup environments in various nations and how social entrepreneurship impacts them would be helpful. Legal and policy matters need more scrutiny. Gender diversity, cultural internationalization strategies, and entrepreneur risk management can be studied to increase the success rate of startups.

8. CONCLUSION

Innovation is a deciding parameter for the success of startups. Startups need to match the requirements of the market and develop from them in time. The majority of startups fail due to improper utilization of resources; hence financial planning is necessary for the growth of the startup. Mentoring, networking, and good government policies can enhance their chances of success in the startup.

Startups need to be adaptable in order to survive during market fluctuations. Use of new technology in the right manner and integrating them can reduce costs and improve productivity. High-emotional-intelligence leaders are able to lead the team and make decisions that are in the best interest of the startup. Feedforward by customers in terms of ongoing improvement of the product assists in building strong brands. Alliances with other startups, companies, and educational institutions can assist in faster growth for startups. Although technology offers a huge advantage, risk management is the essence. Knowing why startups fail saves other startups from repeating similar mistakes. Sustainability is more important today and brings better investors and loyal clients. With adequate funds, mentorship, and reduced regulations, startups can survive but flourish in today's.

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