

# Determinants of MSMEs entrepreneurs sustainability

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**Abstract.** Micro, Small, and Medium Enterprises (MSMEs) play a vital role in the global economy, contributing to job creation, innovation, and economic growth. However, the sustainability of MSMEs remains a significant concern, as many of them struggle to survive beyond the initial stages of their operation. This review aims to identify and analyze the determinants that influence the sustainability of MSMEs, with a specific focus on the entrepreneurial perspective. The result of the study disclose that innovation and risk taking, tolerance self-efficacy, financial control, managerial self-efficacy, opportunity identification self-efficacy, functional skills, relationship self-efficacy and technical skills are the factors that assists MSME entrepreneurs sustainability.

## 1 Introduction

Micro Small Medium Enterprises (MSMEs) entrepreneurs actively seek out to grasp business opportunities, effective utilization of capital and labour, manufacturer distinctive goods and services and build markets for economic growth. They also help to raise a country's per capital income and gross domestic product. MSMEs play a crucial role on improving the standard of living of the population by using the most cutting-edge innovations in the manufacture and offering goods and services at a lower cost. MSMEs are also in favour of exports, which are essential for a country's economic development. In order to export and to eliminate import of goods to a maximum extent, they produce goods and services in enormous quantities. Operations in the commercial and industrial sectors are logical outcomes of economic strength. Monopolies are more likely to form as a result of industrial progress, which frequently results in the concentration of economic power in the hands of a small number of individuals. The establishment of several businesses will aid in the distribution of the population's economic power and help to solve this issue. The aforementioned fact illustrates how entrepreneurs contribute positively to the development

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of a nation. But in reality, a lot of business owners struggle to stay in operation because of poor planning, a lack of funding, a lack of financial analysis, a lack of knowledge in their field, a poor choice of site for their operation, and, above all, a lack of confidence in their own abilities. Therefore, a sincere effort has been undertaken in this study to determine: What are the qualities an entrepreneur needs have to increase their degree of self-efficacy? and to determine how self-efficacy affects an entrepreneur's long-term viability.

## 1.1 Review of literature

Meredith et al. (1982) indicated that leadership, result oriented, self-confidence and future oriented are the characteristics and traits required for a successful entrepreneur [12].

Patvardhan, V.S. (1990) observed that a successful entrepreneur is one who inculcate leadership qualities among their employees, have knowledge on technical skills, have sense of belongingness and maintain harmonious relationship with employees [16].

Saravanavel, P. (1991) mentioned that a successful entrepreneur must be able to take calculated risks. They must also be self-assured, technologically savvy, alert to new opportunities, willing to embrace change, and able to begin, plan, and manage their business [20].

Basotia, G.R. and K.K. Sharma (1999) mentioned the prerequisites for an enterprise's success include setting goals, good planning, sound organisation, appropriate plant placement and layout, marketing and distribution, and energetic leadership [3].

Saini, J.S. and B.S. Rathore (2001) identified that the ability to take ownership of one's work and learn from mistakes is a prerequisite for success as an entrepreneur [19].

Batra, B.S. (2002) noted that a variety of factors affect an entrepreneur's capacity to succeed, including previous employment, family background, caste, education, technical expertise, financial situation, and entrepreneurial mentality [4].

Wong Ho and Auito (2005) observed that discovery and exploitation of opportunities to introduce goods and services, way of organizing, process of marketing, timely procurement of raw materials lead to business sustainability [23].

Priti Krishnan (2007) outlined that risk taking, opportunistic, growth-oriented, creative, flexible, innovative and dynamic are the characteristics of a successful entrepreneur [17].

Mahima Rai (2010) mentions traits like confidence and optimism, extraordinary energy and diligence, the capacity to take calculated risks, a strong desire to succeed and creativity, the ability to respond favourably to challenges, leadership abilities, flexibility and adaptability, the ability to be open to criticism and suggestions, initiative, resourcefulness and perseverance, and independence of thought with the ability to get along with others [10].

Mary Kay Copeland's (2010) mentioned that successful entrepreneurs must possess the following traits: self-assurance, the ability to take calculated risks, creativity, tolerance, autonomy, optimism, action-oriented, courage and resourcefulness [11].

Mihaela Kardos (2012) ascertained that entrepreneurs sustainability depend on their innovativeness on introducing new products or adopting new marketing strategies [13].

Felix Opoku Boabeng and Cai Li (2018) ascertained that innovation and risk taking attitude of entrepreneurs lead to business sustainability [6].

Fokko et al. (2019) identified that opportunity identification is the secret for entrepreneurs sustainability [7].

Anis Dwiastanti et al. (2020) observed that efficient financial literacy and management and motivation lead to business sustainability [2].

Bregman et al. (2020) ascertained that self-efficacy and opportunity identification lead to entrepreneurs sustainability [5].

Lucky Ajour and Nwaiwu (2020) observed that risk taking ability of entrepreneur lead to organizational sustainability [9].

Rahmadi et al. (2020) observed that better customer relationship management and entrepreneurial orientation lead to better business performance [18].

Sulayaman Dauda Gidado et al. (2020) identified that better customer service lead to customer satisfaction and entrepreneur sustainability [22].

Zarah Puspitaningtyas (2020) observed that by minimizing family conflict of interest lead to family business sustainability [24].

Abdullah Hamoud Ali Seraj et al. (2021) ascertained that better financial literacy, entrepreneurial competency lead to business sustainability [1].

Stverkova and Pohludka (2021) ascertained that innovation in business lead to business sustainability [8].

Mivesh Ashwyn et al. (2022) ascertained that identification of business opportunity lead to entrepreneur sustainability [14].

Nadia Abdelhamid and Abdelmegeed Abdelwahed (2022) observed that entrepreneur sustainability is associated with business feasibility, entrepreneur intention and opportunity recognition [15].

Tomasz and Aleksandra Ptak (2022) observed that updating business information and knowledge lead to entrepreneurship sustainability [22].

## **1.2 Statement of the problem**

During the past fifty years, MSME sector has developed into a very active and dynamic component of the Indian economy. The industrialization of rural and underdeveloped areas is supported by MSMEs, which not only significantly contribute to the creation of many job opportunities but also help to reduce regional imbalances and ensure a more equitable distribution of income and wealth across the nation. MSMEs support large businesses and have a substantial positive effect on the socioeconomic progress of the country. Over 110 million people are employed by the Sector, which has 63 million units. The industry, which produces more than 6,000 goods, provides around 33% of the GDP, as well as 45% of the nation's overall manufacturing output and 40% of its exports. Since the MSME is wholly owned and managed by the entrepreneur himself, entrepreneurship function involves a multiple of factors.

## **1.3 Objective of the study**

To ascertain the factors influencing MSME entrepreneur's sustainability

## **1.4 Scope of the study**

The present study has been confined to Coimbatore city of Tamilnadu. Further, entrepreneurial self-efficacy and propensity to sustain in the business of entrepreneurs alone are ascertained in the study.

# **2 Research methodology**

## **2.1 Data**

The study requires primary data. Thus, questionnaires are used to acquire primary data. The questionnaire contains questions about sustainability and self-efficacy.

## **2.2 Sample Design**

A questionnaire has been distributed to 450 MSME business owners in Coimbatore by using the snowball sampling approach. Of them, 45 surveys were not returned, and 21 business owners failed to provide complete information. As a result, the final study sample consists of 384 people.

## **2.3 Framework of Analysis**

Factor analysis has been used to analyse the acquired data.

## **3 Significance of the study**

Indeed, the current study on the determinants of MSMEs' entrepreneurs' sustainability can provide significant benefits to the government, MSMEs, and business owners.

The study helps the government understand the skills and characteristics required by entrepreneurs for long-term sustainability. This understanding can inform the development of policies and initiatives aimed at supporting MSMEs and fostering entrepreneurship. With the insights gained from the study, the government can design and implement targeted EDPs to equip aspiring entrepreneurs with the necessary skills and knowledge for sustainable business practices. By addressing the identified issues affecting entrepreneurs' sustainability, the government can create a conducive business environment that promotes the growth and success of MSMEs.

The study enables MSMEs to identify the skills essential for sustainable entrepreneurship. This knowledge can guide them in designing training programs and capacity-building initiatives for their entrepreneurs and employees, enhancing their competencies. By addressing the determinants identified in the study, MSMEs can improve their sustainability and resilience in the face of challenges. This can contribute to their long-term growth and success.

The study provides insights into the characteristics and abilities required for long-term sustainability. Business owners can evaluate their own skills and competencies in light of these findings, identifying areas for improvement and personal development. Armed with the knowledge from the study, business owners can align their strategic planning with the determinants of sustainability, focusing on areas such as innovation, risk-taking, financial control, and relationship-building to enhance their chances of sustainable growth.

Overall, the study's findings can serve as a valuable resource for all stakeholders, helping them make informed decisions, design effective programs, and create an ecosystem that supports the sustainability and growth of MSME entrepreneurs.

## **4 Limitation of the study**

The study's findings are based on a specific sample of Coimbatore business owners. This sample may not be representative of the entire population of MSME entrepreneurs or applicable to different geographical regions or business contexts. Therefore, caution should be exercised when generalizing the results beyond the specific sample. Entrepreneurs' responses and opinions are subject to potential biases, such as social desirability bias or response bias. These biases can influence the accuracy and reliability of the gathered information. Researchers should have implemented measures to mitigate these biases, such as ensuring confidentiality and anonymity in responses. Due to the study's reliance on a specific sample and the potential biases mentioned, the generalizability of the findings may

be limited. Extrapolating the results to other populations or contexts should be done with caution and should ideally be supported by additional studies conducted in different regions or with more diverse samples.

## **5 Findings**

### **5.1 Managerial Self Efficacy**

Managerial self-efficacy is an important factor in managerial effectiveness and success. When managers possess high levels of self-efficacy, they are more likely to take on challenging tasks, persist in the face of obstacles, and exert effort to achieve desired goals. This confidence in their own abilities can positively influence their decision-making, problem-solving, and overall performance as managers. It is worth noting that managerial self-efficacy can be context-specific. Different managers may exhibit varying levels of self-efficacy in different areas or domains of managerial responsibility. For example, a manager may feel confident in financial management but may have lower self-efficacy in leading teams. Recognizing and developing managerial self-efficacy can contribute to managers' effectiveness and ultimately impact the success and sustainability of organizations.

### **5.2 Opportunity Identification Self Efficacy**

In a broader sense, the term "opportunity" indeed implies a favorable circumstance or a promising situation that presents a chance to achieve success or gain an advantage. In the context of business, an opportunity refers to a favorable set of circumstances that allows for the establishment or operation of a specific firm within a particular context and time frame. Identifying a business opportunity involves recognizing a situation or gap in the market where a product or service can fulfill a need or address a problem. It entails perceiving the potential for creating value, generating revenue, and achieving business objectives by capitalizing on that opportunity. Therefore, the process of identifying an opportunity and selecting the appropriate business to pursue are interconnected and fundamental aspects of entrepreneurship. Entrepreneurial success often relies on the ability to identify and seize opportunities effectively. This involves assessing the market demand, analyzing competitors, evaluating potential risks and rewards, and leveraging one's skills and resources to capitalize on the identified opportunity.

Choosing the right business model, product, or project to pursue within that opportunity is crucial for maximizing the chances of success and sustainability. By understanding and evaluating market conditions, consumer needs, industry trends, and their own capabilities, entrepreneurs can make informed decisions regarding the selection of a business opportunity. This decision-making process should align with their goals, resources, and expertise, ensuring a strategic fit between the opportunity and the chosen business venture. In summary, opportunity identification and selecting the appropriate business are indeed vital cornerstones of entrepreneurial endeavors. Recognizing favorable circumstances, assessing market potential, and strategically aligning business choices with identified opportunities are essential for entrepreneurial success and sustainable business growth.

### **5.3 Functional Skills**

Functional skills are indeed practical skills that enable entrepreneurs to navigate and excel in various aspects of their personal and professional lives. These skills provide entrepreneurs with valuable knowledge, abilities, and competencies that empower them to

function effectively and independently. Functional skills are directly applicable to real-world situations, allowing entrepreneurs to utilize their knowledge and understanding in practical ways. These skills enable entrepreneurs to perform tasks, solve problems, and make informed decisions in both familiar and unfamiliar circumstances. Functional skills help entrepreneurs interact and communicate effectively with others. This includes engaging with employees, partners, customers, and stakeholders, fostering collaboration, and building strong relationships. Interpersonal competence is crucial for successful networking, negotiation, and team management.

Entrepreneurs encounter various challenges and obstacles in their business ventures. Functional skills equip entrepreneurs with problem-solving abilities, enabling them to analyze complex situations, identify viable solutions, and implement effective strategies. These skills help entrepreneurs adapt to changing circumstances and overcome obstacles that arise in their entrepreneurial journey. Functional skills contribute to the holistic development of entrepreneurs. By continuously improving their functional skills, entrepreneurs enhance their personal growth, expand their knowledge base, and develop professionally. These skills enable entrepreneurs to stay relevant in their industries, keep up with technological advancements, and seize new opportunities. Functional skills are essential for entrepreneurs to enhance productivity within their enterprises. They help entrepreneurs effectively delegate tasks, manage resources, prioritize work, and streamline operations. By utilizing their functional skills, entrepreneurs can optimize their efficiency, achieve business objectives, and drive success. Functional skills can be applied in various contexts and situations. They are not limited to a specific industry or domain but can be transferable across different entrepreneurial ventures. This versatility allows entrepreneurs to adapt their skills to meet the demands of their business and industry, regardless of the specific sector they operate in.

In summary, functional skills are crucial for entrepreneurs as they provide the knowledge, expertise, and understanding necessary for success in their enterprises. These skills enable entrepreneurs to navigate daily challenges, interact effectively with others, solve problems, and continuously develop both personally and professionally. By leveraging their functional skills, entrepreneurs can enhance workplace productivity, engage employees, and contribute to the overall success and sustainability of their ventures.

#### **5.4 Relationship Self-efficacy**

Interacting with different individuals allows us to form relationships and connections. These relationships can be with close family and friends, colleagues at work, or even strangers we encounter in social gatherings. Building relationships is essential for effective communication, collaboration, and mutual support. Entrepreneurs and business owners rely on relationships with coworkers, clients, and staff to meet their professional requirements and expectations. Strong relationships with clients can lead to customer loyalty, repeat business, and positive referrals. Positive relationships with coworkers foster a supportive work environment, teamwork, and increased productivity.

Relationships in the workplace or personal life are often mutually beneficial. Entrepreneurs who have developed strong relationships can rely on their coworkers and clients for support, assistance, and resources. Similarly, individuals can find happiness and satisfaction in activities when they have positive reciprocal relationships, where both parties contribute and benefit. Within a team or organization, strong relationships among members contribute to the overall success and achievement of goals. When individuals get along well, communicate effectively, and collaborate, they can work towards a shared purpose and accomplish tasks more efficiently. Positive relationships can contribute to personal happiness and satisfaction. Engaging in activities with others who have positive

reciprocal relationships can enhance enjoyment and fulfillment. Social connections and meaningful relationships are vital for personal well-being and mental health.

In summary, relationships play a significant role in various aspects of our lives, including the workplace and personal interactions. Entrepreneurs and business owners benefit from developing strong relationships with coworkers and clients, as these relationships can contribute to professional success. Positive relationships foster teamwork, collaboration, and mutual support, leading to individual and organizational achievements. Furthermore, positive reciprocal relationships in personal life bring happiness and satisfaction, enhancing overall well-being.

### **5.5 Tolerance Self-efficacy**

Entrepreneurs are aware that stress is an inherent part of running a business, but they strive to improve their ability to handle it effectively. They understand that a certain level of stress can be beneficial, adding excitement and motivation to their work. However, excessive stress can be harmful, leading to physical discomfort and impaired judgment. Recognizing their stress levels and implementing strategies to manage and mitigate stress is crucial for entrepreneurs' well-being and decision-making. Psychologists refer to an individual's stress tolerance as their capacity to withstand a certain amount of stress without becoming overwhelmed. Each person has a different threshold for stress, and it is important for entrepreneurs to understand their own stress tolerance levels. By understanding their limits, entrepreneurs can work towards maintaining a healthy balance between stress and well-being, ensuring they do not become overwhelmed by excessive stress.

Entrepreneurs often face significant risks in their business ventures, which can contribute to stress. By effectively managing business risk, entrepreneurs can minimize stress levels and make informed decisions that promote the success of their business. This involves identifying potential risks, developing risk mitigation strategies, and implementing measures to protect the business against adverse events. Proactive risk management helps entrepreneurs maintain control and confidence in their business operations. High levels of stress can impair decision-making abilities, leading to faulty judgments. By keeping stress levels in check, entrepreneurs can make more rational and informed decisions. Stress management techniques, such as relaxation exercises, time management, and seeking support from mentors or professional networks, can enhance decision-making capabilities during challenging situations. Managing stress and controlling business risk are crucial for entrepreneurs' overall well-being and the success of their business. By maintaining a healthy stress level, entrepreneurs can preserve their physical and mental health, improving their resilience and ability to tackle difficulties with confidence. This, in turn, enhances their chances of making sound decisions and achieving long-term business success.

In summary, entrepreneurs face various challenges that can generate stress. By understanding their stress tolerance, managing business risk, and implementing stress management techniques, entrepreneurs can maintain a healthy balance and minimize stress levels. This enables them to make informed decisions, preserve their well-being, and increase their chances of business success.

### **5.6 Financial Control**

Financial control refers to the policies, practices, and procedures employed by an organization to manage and oversee its financial transactions. It encompasses the systems and processes used to document, control, and report on the financial aspects of the business. Effective financial control is essential for a firm's survival, as it ensures that financial resources are managed efficiently and effectively. It involves activities such as budgeting,

cash flow management, financial analysis, and monitoring financial performance. Financial control plays a critical role in facilitating appropriate financial decision-making. It provides valuable information and insights to management and other individuals responsible for decision-making, enabling them to align financial decisions with the organization's objectives. Effective financial control helps coordinate efforts across different departments towards achieving the company's goals.

Financial control aims to improve the financial performance of the organization. By coordinating financial activities and monitoring financial indicators, financial control helps optimize revenue generation, cost management, and resource utilization. It identifies areas of improvement and opportunities for growth, allowing the company to enhance profitability and overall financial health. Financial control ensures that resources are utilized efficiently and wastage is minimized. It involves monitoring expenses, managing inventory, and implementing cost control measures to maximize the utilization of available resources. This helps reduce unnecessary expenditures and improve the organization's cost-effectiveness. Effective financial control contributes to building a strong credit standing for the organization. By maintaining accurate financial records, adhering to financial regulations and compliance requirements, and demonstrating sound financial management practices, the organization enhances its credibility with lenders, investors, and other stakeholders.

In summary, financial control is crucial for a firm's financial management and overall success. It ensures appropriate financial decision-making, goal alignment, resource optimization, waste prevention, improved financial performance, and enhanced credit standing. By providing valuable insights and information, financial control enables management and responsible individuals to make informed decisions that support the organization in achieving its objectives.

## **5.7 Innovation and Risk Taking**

Entrepreneurs play a crucial role in driving innovation. They analyze the current market, identify gaps or opportunities, and introduce new goods or services that were previously unimagined. They have the ability to envision and create something new, which can lead to advancements and a shift in cultural lifestyle and thinking. Entrepreneurs carefully analyze the market to identify gaps or unmet needs. They observe trends, consumer preferences, and potential demand to determine where there is an opportunity to introduce something innovative and valuable. It's not just about inventing a new product or service; entrepreneurs must also execute all the necessary efforts from manufacturing to consumption and beyond. They are responsible for the entire process, including production, marketing, sales, and customer support, ensuring a seamless experience for consumers.

Bringing a new product or service to market involves taking risks. Entrepreneurs take calculated risks by investing in large-scale production, anticipating future demand, and hoping that their product will sell successfully. However, there is always uncertainty, and the future may not always align with their expectations. Nonetheless, entrepreneurs are willing to take risks in pursuit of their vision. Building a successful brand and product takes time and persistence. It may require years of dedicated effort and perseverance to establish oneself in the market. Entrepreneurs must remain resilient in the face of adversity, overcome challenges, and consistently put in the effort to promote and sell their product. Entrepreneurship involves inherent risks, and the outcome is not always certain. The entrepreneur's calculations and assumptions may prove to be incorrect, and unfavorable circumstances can lead to failure. However, entrepreneurs are willing to take these risks in pursuit of their goals, knowing that the potential rewards outweigh the potential drawbacks.



In summary, entrepreneurs play a vital role as innovators, bringing new products or services to the market. They analyze the market, identify gaps, and introduce novel offerings that can spark cultural shifts and advancements. However, this process involves taking calculated risks, persistent efforts, and the ability to persevere in the face of uncertainty. While there are potential risks and challenges, entrepreneurs are driven by the opportunity to create something unique, valuable, and essential.

### **5.8 Technical Competency**

Technical skills refer to the knowledge, proficiency, and expertise in specific fields or areas. These skills are necessary to perform tasks and understand the intricacies of technology, machinery, processes, and procedures related to a particular industry or domain. Entrepreneurs with technical skills have a better understanding of the technical aspects of their business. This enables them to effectively communicate and collaborate with technical and product personnel, such as engineers, designers, or developers. They can engage in meaningful discussions, provide guidance, and make informed decisions based on their technical knowledge. Technical expertise allows entrepreneurs to grasp what is feasible and what is not in terms of technology within specific time frames. They can evaluate the potential of new technologies, assess their applicability to their business, and make strategic decisions regarding their adoption or implementation.

Technical skills provide entrepreneurs with a solid foundation and confidence in their domain. By possessing technical know-how, entrepreneurs can establish themselves as authorities in their field over time. This expertise enhances their credibility, enables them to make informed decisions, and positions them as industry leaders. Technical skills involve the ability to acquire and adapt new techniques and technologies. Entrepreneurs with this capability can stay updated with industry trends, adopt innovative practices, and adapt to changing circumstances. This agility and willingness to embrace new approaches are vital for sustained success in a rapidly evolving business landscape. Technical skills also encompass the ability to maintain equipment correctly. Entrepreneurs who understand the technical aspects of their equipment can ensure proper maintenance, troubleshoot issues, and optimize the performance and longevity of their machinery.

In summary, technical skills play a crucial role in an entrepreneur's success in business. These skills provide the necessary knowledge, expertise, and confidence to engage with technical personnel, understand technological possibilities, and become an authority in their field. Technical skills also enable entrepreneurs to adapt to new techniques, maintain equipment correctly, and make informed decisions. By leveraging technical expertise, entrepreneurs can enhance their business operations and ensure long-term sustainability.

### **5.9 Entrepreneurial Traits**

Factor analysis is a statistical technique used to identify underlying factors or dimensions within a set of variables. It is commonly employed in research to uncover the important attributes or factors that contribute to a particular phenomenon, such as entrepreneurial success. Before conducting factor analysis, it is important to ensure that the sample size is adequate for the analysis. This is typically assessed using measures like the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity. The KMO test evaluates the sampling adequacy by measuring the proportion of variance in the variables that may be caused by underlying factors. A value above 0.70 is generally considered acceptable, indicating that the data is suitable for factor analysis. Bartlett's test of sphericity, on the other hand, examines whether the correlation matrix among the variables is significantly different from

an identity matrix. A significant result ( $p < 0.05$ ) suggests that the data is appropriate for factor analysis.

**Table 1.** KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.733
Bartlett's Test of Sphericity	Approx. Chi-Square	669.774
	Df	28
	Sig.	0.000

**Table 2.** Entrepreneurial Traits – Factor Analysis

Particulars	1	2
Innovation and Risk Taking	0.842	
Tolerance Self Efficacy	0.759	
Financial Control	0.726	
Managerial Self Efficacy	0.757	
Opportunity Identification Self Efficacy		0.782
Functional Skills		0.612
Relationship Self Efficacy		0.606
Technical Skills		0.584
Eigen Values	2.911	1.333
% of Variance Explained	36.387	16.660
Cumulative % of Variance	36.387	53.047

Eigenvalues greater than unity suggest the presence of significant factors in a dataset. In this case, the mentioned variables have component loadings of 0.5 and above, indicating their importance in improving sustainability for MSME entrepreneurs. Innovation and risk taking, tolerance self-efficacy, better financial control (management) and managerial self-efficacy all have component loadings of 0.5 and above. Hence, these four variables are found to be significant factors and assists for MSME entrepreneurs sustainability.

Innovation involves introducing new ideas, products, or processes to create a competitive advantage. Risk-taking is the willingness to embrace uncertainty and make bold decisions. Both innovation and risk-taking are vital for MSME entrepreneurs to adapt to changing market dynamics, seize opportunities, and differentiate themselves.

Tolerance self-efficacy relates to an entrepreneur's belief in their ability to cope with and manage uncertainties, setbacks, and failures. Building tolerance self-efficacy enables entrepreneurs to persevere in the face of challenges and bounce back from setbacks,

Effective financial management is critical for the sustainability of MSMEs. It involves practices such as budgeting, cash flow management, financial analysis, and cost control. Having better financial control enables entrepreneurs to make informed decisions, allocate resources effectively, and ensure the financial stability of their ventures.

Managerial self-efficacy pertains to an entrepreneur's belief in their ability to effectively manage and lead their business. Strong managerial self-efficacy is associated with better decision-making, problem-solving, and team management skills, which contribute to sustainable business operations.

Opportunity identification self-efficacy, functional skills, relationship self-efficacy and technical skills are found to be significant factors that assists towards entrepreneurs sustainability.

Opportunity identification self-efficacy refers to an entrepreneur's belief in their ability to recognize and capitalize on business opportunities. Entrepreneurs with high opportunity identification self-efficacy are more likely to identify potential market gaps, develop innovative solutions, and seize opportunities for growth and success.

Functional skills encompass the specific competencies and knowledge related to various functional areas of business, such as marketing, finance, operations, and human resources. Possessing strong functional skills equips entrepreneurs with the capabilities needed to effectively manage and operate their businesses in different aspects, contributing to sustainability.

Relationship self-efficacy relates to an entrepreneur's belief in their ability to build and maintain positive relationships with various stakeholders, including customers, suppliers, employees, and partners. Strong relationship self-efficacy enables entrepreneurs to establish mutually beneficial connections, foster trust, and leverage networks for business growth and sustainability.

Technical skills refer to the specific expertise and know-how required in a particular industry or field. For example, in technology-driven sectors, technical skills may include programming, software development, or data analysis. Possessing relevant technical skills is crucial for entrepreneurs to deliver high-quality products or services, stay competitive, and adapt to technological advancements.

The provided percentages indicate the relative contributions of the first factor and the second element to the sustainability of an entrepreneur. Specifically, the first factor contributes 36.387% and the second element contributes 16.660%, collectively accounting for 53.047% of the total sustainability. These percentages suggest that the first factor holds a larger weight in determining sustainability, as it contributes 36.387% compared to the 16.660% contributed by the second element. However, it's important to note that the remaining percentage (46.953%) is not specified, indicating the presence of other factors that may also contribute to the overall sustainability of the entrepreneur. To gain a comprehensive understanding of the factors influencing sustainability, it is valuable to consider all the significant factors collectively. By recognizing and addressing these factors, entrepreneurs can develop a well-rounded approach to enhance their sustainability and increase their chances of long-term success.

## 6 Suggestions

- The success of an entrepreneurs depends on risk taking behavior. Entrepreneurs may take risks by testing out several ideas, evaluate their effectiveness and discover market trends. Risk taking behavior of entrepreneurs lead to innovation.

- Any new product development is done primarily for the target market's benefit. The development of either new or existing products is required due to consumers' increasing need for innovation and new technologies. Otherwise, investing such a big sum of money would be pointless. Thus, MSME entrepreneurs must strengthen their research and development and introduce innovative products, as expected by their customers, at low cost.
- The prime element for any one success is tolerance or patience, thus an entrepreneurs must possess necessary tolerance. Patience can bring us good attention, better sales, greater customer satisfaction or greater financial success and assist entrepreneurs to make making wise decisions.
- Financial management works to help a company comply with regulations while also assuring its growth and profitability (i.e.) maximising earnings for stakeholders, corporate value, and revenue. Success of an enterprise depends not only proper mobilization of finance but also effective utilization of finance. Thus, entrepreneurs should mobilise necessary finance from various source at low cost. Moreover, they should effectively use of capital for productive purpose.
- A company's long-term success depends on developing relationships with its customers. Customers feel safer and more connected to brands when there is a strong relationship built on trust and honest communication. This connection can also increase customer retention and repeat purchase of products. Thus, entrepreneurs have to take necessary initiative not only to attract customers but too retain them by implementing effective customer relationship management practice at their organization.
- The corporate climate of today is complicated and evolving quickly. Giving realistic and long-lasting answers to complicated business problems requires technical competence. All entrepreneurs need some level of technical skills to carry out challenging tasks, jobs, and procedures related to computational and physical technology as well as a wide range of other businesses. A specific education, certification, or training programme that typically includes hands-on experience is required to gain advanced technical skills.
- An entrepreneur needs a certain set of managerial abilities to run a business and make sure that all objectives are achieved. Entrepreneurs with this skill set may manage the operations of numerous departments since they have a firm understanding of each one.

## 7 Conclusion

The study on the determinants of MSMEs entrepreneurs' sustainability has highlighted several important factors that contribute to the long-term viability of these businesses. Through factor analysis and data analysis techniques, key determinants such as entrepreneurial self-efficacy, entrepreneurial qualities, innovation and risk-taking, tolerance self-efficacy, financial control, managerial self-efficacy, opportunity identification self-efficacy, functional skills, relationship self-efficacy, technical skills, and others have been identified. These determinants play a crucial role in enhancing the sustainability of MSMEs. They empower entrepreneurs with the confidence, skills, and abilities needed to navigate the challenges and seize the opportunities in the business environment. By understanding and developing these determinants, MSME entrepreneurs can improve their capacity to make informed decisions, manage finances effectively, foster relationships, adapt to technological advancements, and identify and capitalize on business opportunities. The findings of this study have significant implications for various stakeholders. Governments and MSME support agencies can utilize this knowledge to design and implement targeted entrepreneurship development programs that enhance the relevant skills

and attributes of entrepreneurs. Business owners can leverage these findings to assess their own strengths and weaknesses and make necessary improvements to ensure the long-term sustainability of their ventures.

## 8 Scope for further research

The study on the determinants of MSMEs (Micro, Small, and Medium Enterprises) entrepreneurs' sustainability provides valuable insights into the factors that contribute to the long-term viability of these businesses. However, there is still ample scope for further research in this area. Conducting longitudinal studies can provide a deeper understanding of the dynamics of MSMEs' sustainability over time. By tracking the performance and survival of MSMEs and examining the changes in the determinants of sustainability, researchers can uncover valuable insights into the long-term factors that contribute to their success. Comparing different regions, countries, or industries can shed light on the contextual factors that influence MSMEs' sustainability. Investigating the variations in determinants across different contexts can help identify the specific challenges and opportunities faced by MSMEs in different settings. While quantitative analysis provides valuable statistical insights, qualitative research methods such as interviews, case studies, and focus groups can offer a deeper understanding of the experiences, perspectives, and challenges faced by MSME entrepreneurs. Qualitative research can provide rich narratives and context-specific insights that complement quantitative findings.

While the current study focuses on internal factors (e.g., entrepreneurial self-efficacy, innovation, financial control), further research can explore the impact of external factors on MSMEs' sustainability. Factors such as economic conditions, government policies, market dynamics, access to finance, and networking opportunities can significantly influence the sustainability of MSMEs. Research can focus on evaluating the effectiveness of specific interventions and policies aimed at promoting MSMEs' sustainability. This could include examining the impact of entrepreneurship development programs, access to financing initiatives, mentorship programs, or regulatory reforms on MSMEs' performance and sustainability. Exploring the role of technology adoption, innovation strategies, and digital transformation in enhancing MSMEs' sustainability can be a fruitful avenue for research. Investigating how MSMEs leverage technology, digital platforms, and innovation to improve their competitiveness and sustainability can provide practical insights for entrepreneurs and policymakers.

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