



Innovation as a Catalytic Factor for Growth in Indian Small and Medium Enterprises: A Review

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ABSTRACT: Amid the Covid-19 crisis, one of the biggest challenges that developing and even developed countries faced was the disruption in the global supply chain. In past decades, there has been an over-reliance on China, the largest manufacturing hub. But when the pandemic hit the world, subsequent lockdowns were imposed. This greatly affected the efficiency of supply chain management. The paper discusses the importance of the global supply chain and how Covid-19 affected the chain. Also, the difference between the pre-Covid era and the post-Covid era has been studied so to understand the necessity of moving from efficiency to resilience.

Innovation is the pre-requisite of survival & success in each generation. Right from the stone age to the digital age of the present day; the human civilization has gone under countless revolutionary changes. Today's astonishing status is not reached overnight; nonetheless, it is the result of a very lengthy series of umpteen subtle changes. Change is an ever-inevitable phenomenon of nature as well as market; which may be in disguise of a challenge or opportunity to every industry and firm. Whether a change is foreseeable or not; its implications and repercussions are affected in a manner, that how that very change is embraced by an organization or industry. An enterprise may be big or small, however the degree of its refinement to accommodate a change is dependent on the consistency and strength of its innovative capacity. This study is a consolidated review, which seeks to substantiate the existence of a certain correlation between the degree of innovative strategies in the people, product and process of various Indian Small and Medium Enterprises; and the prospective potential of its benefits at the firm level innovation of such enterprises.

KEYWORDS: Innovation, Entrepreneurship, Performance, Competitiveness, Productivity

1. INTRODUCTION

Since the time immemorial, the survival of any organization depends upon, how it embraces the change. A change may be an internal or external to the firm or industry. Although, a change in itself is inevitable; nonetheless, the manner in which a change is accommodated by a particular enterprise (whether big or small), is the key to understand the innovative strategy of its survival and succeed, in an everchanging environment.

Innovation vis-à-vis to the people, product and process; may be an open innovation or a closed one. Although, an open innovation may have its origin from outside an enterprise and a closed innovation may have some internal origin;

nevertheless, the implications and repercussions of each innovation are controlled by the degree, magnitude and its capacity to cope up with the change.

Innovation is considered as an important key for the sustainable growth of any firm (Drucker 1985). In the recent times, there has been a lot of discussion on the effectiveness of open innovation in the small and medium enterprises of India. A firm has its discretion to opt a close or an open innovation strategy for its sustainability and growth. Open Innovation is a widely accepted term in the context of European and western countries small and medium enterprises (SMEs) and also there is a lot of literature available in this regard. But, in context of Indian economy, there are not many studies related to the effect of open



innovation on small and medium enterprises. Other than this, there are lots of issues which are still unaddressed and unclear due to the wide concept of open innovation.

This study mainly focusses on analyzing; various research works at Small and Medium Scale enterprises of the Indian sub-continent. However, irrespective of the size of an enterprise, the primary purpose of this review paper is to reaffirm and boil down the major findings; which establishes an innovation to be a catalytic growth factor for the Indian Small and Medium Scale Enterprises (SMEs).

2. OBJECTIVES

This review paper seeks to justify its objective of proving innovation as a catalytic force for growth in the Indian SMEs by answering the following questions:

- i. What is the significance of Innovation in the sustainability, development and finally success of an SME?
- ii. Does Open Innovation strategy and Close Innovation strategy have distinct impact on the growth and success? Or a fine balance of these two strategies is more beneficial?
- iii. How networking is a valuable product for improving a firm's performance in the long run?
- iv. Does the size of a firm i.e., engaged as a small or medium scale enterprise matter in defining the innovation aptitude for its success potentials?
- v. What is the significance of an organization's learning practices vis-à-vis to its entrepreneurial orientation and market orientation; for developing an innovation and learning mechanism, which is beneficial to improve the potential of its human resources?
- vi. How dynamic capabilities of a firm affect the growth potential through its innovative approaches?
- vii. How innovation and entrepreneurship capabilities of an SME are correlated with the quality of its performance; and what are major parameters of measuring such performance?
- viii. What are the major factors of Innovation in the SMEs which are concerned with enhancing their growth potential?

In order to seek answer to the above questions, the following literatures have been reviewed.

3. LITERATURE REVIEWS

3.1 Relationship among entrepreneurial orientation, learning orientation and innovation in SMEs

Huang and Wang (2011) have proposed the significance of entrepreneurial orientation and market orientation as key parameters to determine the firm level innovation. With the advent of globalization, the market becomes very tough as customer's needs and their preferences are constantly changing and all this compels an organization to constantly learn new knowledge so that new products and services for satisfying their varied needs. So, innovation is the need of the hour.

According to authors these two variables are complementary to each other and plays a significant role in

identifying industrial environment like analyzing the competitor's strategy, grasping market information, framing business philosophy etc. so that business can respond in an innovative way towards the diverse and varied needs of the customers.

Although these variables (entrepreneurial orientation and market orientation) are complimentary to each other but they are defined in a totally different way by different scholars as far as their impact on firm level performance are concerned.

Authors further said that there exists a very confined literature which shows that entrepreneurial orientation and market orientation have a direct impact on the firm level innovation performance and therefore it is suggested by the authors that these two variables requires something else to create some positive effects towards the innovativeness of the firm and they adopt a third variable known as organizational learning practices so that a high level of learning and innovation can be ensured. Learning mechanisms are very important not only for the employers & employees of an organization but also for the successful implementation of the entrepreneurial orientation and market orientation parameters. Learning also has certain other benefits like building a beneficial and healthy relationship between the employer and employee so that a healthy environment for innovation can be boosted. Therefore, authors have studied the effect of learning mechanism on the relationship between entrepreneurial orientation and market orientation and finally their impact on the innovation levels of the firm (Mittal & Raghuvaran, 2021).

This study can also explore organizational learning on individual's performance related to innovation and that certainly have implications for the Human Resource Management (HRM) professionals. As HRM professionals are considered as the drivers of learning and growth in an organization and they are treated as learning specialists for building an infrastructure of innovation in firm. Their role is now more challenging because other than routine operational functions, they are supposed to play strategic advisor and consultant roles. To ensure innovation and learning at the individual, group and firm level is now the need of the hour and has become the responsibility of HRM professionals.

Authors made a significant contribution, in addition to existing variables entrepreneurial orientation and market orientation, in the form of organizational learning and its practices for producing a conducive environment so that learning and innovation can be promoted for ensuring a high level of firm's performance.

3.2 The role and impact of networking to establish a relationship between innovation and the performance of an SME firm.

Gronum et.al (2012) emphasized a lot on bringing innovation in the small and medium size enterprises so that their survival can be ensured in the long run along with wealth creation. For introducing innovation in the SMEs, authors suggest that establishment of networks can play a

very significant role in bringing innovation in the SMEs. Networks are very important determinant of a firm performance and these networks are embedded in the social capital of a firm. Networks guide the SMEs to explore more resources, capabilities, skill set, dynamic know-how etc. which might be not available internally. All these resources are treated as most crucial for the purpose of implementing innovation in a firm and this further paved the way for attaining the desired firm's performance.

Authors have taken the longitudinal data of approximately 1435 small and medium size enterprise (SMEs) to show that a strong chain of diverse networks or ties contributes significantly towards the development of innovation in SMEs and which leads to firm's performance. Innovation is basically proved to be a mid-element of chain between the two extremes of network ties and firm performance. The authors also tried to prove that innovation is the product of networking but is there any direct connection or relationship between the networking and firm's performance in the long run? They developed a model showing the relationship among these three variables namely networks, innovation breadth and performance of firm.

Authors have developed 9 variables to test their hypothesis related with the firm performance, innovation breadth and network. This hypothesis was tested by adopting hierarchical multiple regression analysis. After the analysis and interpretation of this data, it was finally concluded by the researchers that networks affect the firm's performance by keeping the innovation in center. In this way, innovation is a key element and an important mechanism which enables a firm to unlock the benefits of social capital i.e., networks.

3.3 Impact of open innovation strategy in SMEs through a dynamic capability approach

Grimaldi et al (2013) proposed a new concept of 'dynamic capabilities' and aims at identifying the significant dynamic capabilities of SMEs so that the implementation of open innovation practices can be enabled in the firms. This research study also used a specific term name as 'open innovation' which represents a set of ideal practices followed by many organizations for developing their innovative capabilities. Building up the relationships by innovative firms with other firms is also one of the aspects of open innovation. Open innovation is an intrinsically self-motivated process. While dynamic capabilities represent a set of knowledge and processes required to identify new business opportunities, skills, competencies and resources for achieving the competitive advantage.

The purpose of this research study was to investigate the open innovation practices followed by small and medium enterprises, in order to come across the critical resources which SMEs should focus for the development of those abilities and factors which are imperative for innovation. In simple words, the authors tried to analyze the correlation between dynamic capabilities of a firm and its open innovation practices. This study therefore makes a significant contribution towards the novel concept of dynamic capabilities and then mapped it with the open innovation processes followed by firms.

For achieving their objectives, the authors have used multiple case study approach and collected the qualitative data from four innovative SMEs by means of focus group discussions, face-to-face interaction and interviews. All SMEs belong to manufacturing industry and researchers derived their dynamic capabilities through an in-depth investigation of their competence, leading to the development of firm's portfolio of dynamic capabilities and finally come up with a mapping with firm's dynamic capabilities and their open innovation processes. Authors intentionally take the SMEs as no research has done so far which studies the role of dynamic capabilities in boosting up the open innovation processes in such kind of firms (Mittal et. al., 2021).

The results of this study concluded that in order to enhance the level of competitiveness, it is imperative for the SMEs to adopt open innovation processes by developing a set of dynamic capabilities, findings also underline the substance of innovative behavior, which is vital for the development of dynamic capabilities of a firm. Authors further suggested that entrepreneurs of SMEs should open up their doors for welcoming the commercial relationships and new partnerships without changing their present approach to innovation.

This research study makes three major contributions in the field of research related to SMEs, like this was the first endeavor to link dynamic capabilities of a firm with its open innovation processes. Secondly this study extends and expands the current literature on innovation in SMEs by discovering factors of dynamic capabilities in this perspective. Finally, this research study provides an empirical and pragmatic evidence of dynamic capabilities in practice, through case-based methods of study.

3.4 Seeking a relationship among entrepreneurship, innovation and their impact on the performance of a SME firms

Ndubisi and Iftikhar (2012), explore a relationship among three variables namely innovation, entrepreneurship and quality performance in small and medium enterprises. Authors made a comparison between small and medium enterprises on the basis of their selected variables i.e., entrepreneurship, innovation and quality performance and make an endeavor to identify if there is any difference between the two groups of firms/enterprises.

Authors suggest that now a day's competition is so intense, that it compels the organisation to leverage their competencies and capabilities for the purpose of improving their performance and competitive advantage. Therefore, it is need of the hour that for achieving higher performance firms should explore and exploit the capabilities of entrepreneurship and innovation. It is a matter of great interest and curiosity for the practitioners and researchers to identify those positive factors which can lead the small and medium enterprises on a path of high performance. Authors further said that there are many resource-based views and theories which emphasize on the broad explanation of the theory of competitive advantage and these theories also explain that how to attain the competitive advantage through its aptitude to deploy its capabilities and resources, but

unfortunately all these theories were developed keeping in view of the large enterprises. Small and medium enterprises are mostly ignored and therefore authors have explored this area of SMEs to study that how the key capabilities i.e., entrepreneurship and innovation affects the performance of a firm. So, the authors are filling this gap that how performance of SMEs get affected through entrepreneurship and innovation (Mittal et. al., 2022).

Authors has defined and measured performance of SMEs in three ways and they are, based on financial indicators, market effectiveness and strategic objectives. Authors now defined entrepreneurship as a combination of three specified behaviors and they are autonomy, proactive and risk captivating behavior. As far as the concept of innovation is concerned, authors have included three dimensions of innovation and they are product innovation, administrative innovation and process innovation (Gupta & Mittal, 2015).

For the purpose of investigating this relationship, authors had collected data of 124 SMEs working in the economy of Pakistan. This data was collected with the help of a structured questionnaire and finally it was analyzed with the help of techniques like factor analysis and multiple regression analysis.

After the analysis and interpretation of data, authors finally concluded that there exists a noteworthy direct relationship among entrepreneurship, innovation and quality performance of SMEs. Specially, the three proportions of entrepreneurship i.e., autonomy, proactive and risk captivating dimension were radically associated with the innovation and quality performance of SMEs. Authors also developed a model where they show that innovation is directly related with the performance of SMEs and sitting in the mid of entrepreneurship-performance link. One more important findings of this study were that, the link among the variables was not dependent on the size of firm i.e., relationships among variables did not vary among the small and medium enterprises and size is not a key element in explaining the involvement of entrepreneurship to the innovation and firm's performance. Therefore, the management of a firm should encourage autonomy, proactiveness and risk-taking abilities in order to bring innovation and superior performance.

3.5 Role of Open Innovation In SMEs

Wynarczyk, P et. al (2013) suggests an open innovative model for strengthen the small and medium enterprises. This model explains that a firm should amalgamate its internal and external technologies and ideas as an effective way for commercializing and advancing its current technologies. In this research study, authors have focused on high technology-oriented firms and critically contribute to the diverse aspects of open innovation within the purview of smaller firms. Authors said that a firm can enhance their assimilation capacity, innovation performance and consequently market share if the firm acquires outwardly developed technology from their outside environment.

The authors made a significant contribution in the body of research by analyzing the open innovation practices currently in practice by the different firms. They also

analyzed the challenges and opportunities related with these firms. Open innovation is a widely used term and various authors used this term in their own way, but in this study, there were four pillars of innovation as used by the authors and they are user innovation, regimes of appropriability, absorptive capacity and strategic alliances. As far as open innovation in SMEs is concerned technological change and innovation are the prominent sources of international competitiveness, productivity growth and an increased standard of living.

Authors have explored different aspects of open innovation in small and medium enterprises at the international level, along with the relevance of model of open innovation through its value chain and also identify the role of external partners and social capital in stimulating the process of open innovation. It is a well acknowledged fact that SMEs must clinch innovation in a wider context and should develop their integrative innovation capabilities other than their technical based innovative models like Research & Development.

Authors finally concluded, based on this inclusive approach, that open innovation practices are equally relevant in the different ecological settings and also identifies the role of outside partners in encouraging and boosting the process of open innovation. Other than this, authors also demonstrate some of the major problems linked with understanding challenges and opportunities brought about by the taking up of open innovation practices and processes in small and medium enterprises.

4. CONCLUSION

Innovation is the sole catalyst sparking the growth engines of every SME (big or small) for defining the parameters of their survival, sustainability and success. Networking contributes as a social capital, incorporating skill sets, resources, and capabilities as a benefactor of enhancing a firm's performance. Organizational learning practices act as a bridge between entrepreneurial orientation and market orientation for establishing a symbiotic learning mechanism between the employers and employees. This further pushes the momentum of innovation and thereby ensures higher performance levels for the SME firms.

Open innovation along with a right pinch of close innovation creates a dynamic capability potential of an SME. This results into a higher degree of a feasible innovation aptitude based on the various qualitative and quantitative data and researches. There is a clear correlation between innovation and entrepreneurship; which improves not only the performance standards of an SME, but also empowers it with a competitive advantage as leverage. Innovation does not work on limited approaches; it is the wholesome effect of seeking new solutions in people, product and the process. This further adds to the proactiveness and risk-taking capability of a firm.

Thus, an appropriate combination of internal and external ideas into an SMEs, ultimately benefits and enhances its capacities in reference to assimilation, performance, market share, competitiveness, standard of living, strategic alliances and so on. Therefore, the social capital of each firm

needs to be stimulated and exploited through distinctive innovation strategies so that each firm can contribute to the growth of Indian economy.

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