Abstract

MSMEs (Micro Small Medium Enterprises) play a very critical role through its contribution towards the economic development of any country and thereby it determines the major economic indicators for a developing nation as such. MSMEs role has been clearly understood as the pillars of our growing economy. MSMEs are flexible with respect to the changes as and when needed by the market and also produce good value added products/services. The MSME sector plays a vital role in the growth of our country. It contributes almost 40% of the gross industrial value added in the Indian economy. It has been estimated that a million rupees of investment in fixed assets in the small scale sector produces 4.62 million worth of goods or services with an approximate value addition of ten percentage points. Since from the inception of five years plan, small sectors have been well promoted and also they have shown a rapid growth rate. As for as manufacturing sectors are considered, its numbers are rapidly increasing over the years since 80’s. When we see the growth of MSMEs, it still needs to be tapped effectively in order to get the advantage to the fullest. This paper would study the role of MSMEs in Indian Economy and its impact on the economic development of India as a whole and also how Innovation will be able to contribute for the Indian MSMEs performance.

Keywords: Economic Growth, Innovation, MSMEs, Manufacturing Firm

1. Introduction

Indian MSMEs are a vital part of our economic sector. The interesting characteristics of this sector are that they need less capital investment as compared to large firms and also provide high job opportunities. This has created a high importance to the MSME sector. Indian MSME is the second highest in employment which is next to agricultural sector as per the Development Commissioner of Micro, Small and Medium Enterprises. This MSME sector is creating job opportunities which is eliminating poverty and also creates an ecosystem for generating high revenue. It is also helping in optimizing the available resources like manpower and capital by adopting different strategies. This small sector is acting as a catalyst to instigate the zeal among entrepreneurs to respond to the ever changing market demands.

MSMEs are able to compete locally and as well as globally and the reason behind this capability is due its strong network and also due to the support from the various financial agencies. Indian MSMEs has got a huge role in the contribution towards the country’s economy. The present data related to Indian MSMEs is that, the sectors contribution is around 45% of the total industrial output, 40 % of exports and around d 1.3 million jobs every year.

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MSME is one of the important and promising sectors which is contributing significantly towards the Indian economy. The foundation stone for this sector was laid by the first Indian government formed right after we got independence in 1947. The present MSME sector is able to emerge as one of the reliable and ever changing sector among all. As a result of this, it is anticipated that there will be growth of around 8% per annum until 2020. MSME sector catering to manufacturing is contributing about 7.09% of GDP. Indian MSMEs are emerging as a strong pillar of Indian economy since its contribution to the Indian GDP is about 37.54%. Our Indian MSMEs are having a great opportunity to contribute more for the country’s economic growth and government has got a great role in creating an absolute supporting ecosystem to gain the competitive advantage.

1.1 Definition of MSMES
The broad classification of Indian enterprises is mainly catering towards manufacturing and service rendering organizations. This is further categorized as Micro, Small and Medium enterprises. As per the Development Commissioner of MSME, 2009, MSMEs under manufacturing sector are categorized based on their investment in plant and machinery and it is on equipments for the service rendering firms. The limit for investment in plant and machinery for manufacturing / equipment for service enterprises after October 2, 2006 is shown by Table 1.

| MANUFACTURING SECTOR | MICRO | SMALL | MEDIUM |
|-----------------------|-------|-------|--------|
| Enterprises Investment in plant & machinery | less than Rs 25 lakhs | over Rs 25 lakhs but not exceeding Rs 5 Crores | over Rs 5 Crores but less than Rs 10 Crores |

| SERVICE SECTOR | MICRO | SMALL | MEDIUM |
|----------------|-------|-------|--------|
| Enterprises Investment in plant & machinery | less than Rs. 10 lakhs | over Rs. 10 lakhs but not exceeding Rs. 2 crores | over Rs. 2 crore but not exceeding Rs. 5 crores |

1.2 Need of MSMES
Indian economy is highly dependent on the growth of MSMEs. Almost more than half of all the global businesses are coming under MSME sector and it is still more than half in some parts of the developed countries of the world. It is very easy for the policy makers to take a strategic decision to promote MSMEs as it is very evident that its growth is directly affecting the economy.

There exists a difference in the definition of MSMEs across the globe and as well among the industries catering to different sectors. As a result this small sector needs utmost importance from the policy makers towards achieving higher returns. These intermediaries are there in all countries but vary in their role towards these small sectors. MSMEs development agencies such as Small Business Administration (SBA) of the US, Small Business Service (SBS) of United Kingdom and SIDO (Small Industries Development Organization) in India are the intermediaries set up by the Government.

1.3 Contribution of MSMES Towards Indian Economy
Overall contribution of MSMEs across India is high as compared to individual MSMEs. Thus MSME is emerging as the strategic player in the economic growth of the country. A very important feature of this MSME is that, they are able to change the life style of people belonging to backward class, minorities and also women’s.

According to annual report of Ministry of MSME (2010-11), about half of the total manufacturing output is from MSME and also major exports are from this sector. The range of products manufactured by these MSMEs include from traditional products to high end technological products. This growth was possible due to the successful implementation of five-year plan which was mainly catered to the industrial growth under small sector. The major development that has happened for MSMEs is that they are able to improve the economic status as compared with that of the total industrial growth. In spite of this, Indian government has sensed the importance of MSMEs and also the need to make this sector to compete globally and also to have sustained growth. As a result of this, several schemes and programs were especially designed for the Indian MSMEs.

Indian MSME has become an important player towards the country’s economic growth by increasing employment opportunities, exporting more products and having economic independence. MSMEs have gained higher importance due to the fact that it accounts for 45% manufacturing output, 40% of total exports and also the second biggest in employment generation. In spite of
these facts, Indian economic growth is not adequate when compared with the developed nation’s economy. Hence our MSMEs needs a special attention from the government towards achieving sustained growth and also make them capable to compete globally to take the competitive advantage. There are lots of initiatives taken by the present government of India towards making MSME a highly demanding sector and one such major strategic initiative taken is “Make in India” drive.

2. Review of Literature

MSME is the backbone of our Indian economy and it is facilitating a sustained growth over the years both in terms of employment and economic growth. Its role in exports and industrial growth is significant. In spite of these facts, our Indian MSMEs are lagging as compared with developed economies of the world. MSMEs are facing many hurdles and as a result, the expected high growth has become a nightmare. The hurdles can be listed as financial constraint, lack of strategies in marketing, lack of quality, lack of newness or novelty etc. Hence in this paper, attempt has been made by considering Innovation as one of the main construct which might have considerable impact on the performance of MSMEs of Indian origin.

2.1 Innovation

Today’s Indian economy is characterized by great complexity and its growth mainly depends on the innovation. It is the one which increases the comfort level of a common man by offering value added products/services. These innovative firms create employment, generate revenue and also change the people’s life style by offering quality products or services. However, more innovation happens only if there exists an ecosystem which nurtures the ideas resulting in the creation of good number of technological innovations.

Innovation is a process rather than an event and it is on continuous basis, having taking care of technology, manufacturing and other related activities. The innovation in a firm is an interactive process which happens across the different departments and results in breakthrough products which are ready to be commercialized.

Innovation also happens as a result of organization’s learning capabilities in order to deal the unexpected situations. So firms should try to give due importance for its learning ability, in order to improve innovations. As a result, the employee starts accumulating knowledge and consistently starts using the intellect quickly for producing new products/services.

The innovation also depends on the firm’s ability to respond the ever changing market demands. Proposed that the firm’s innovation ability is defined as a set of characteristics that promotes the organization innovation.

The productivity, profitability, customer satisfaction, overall improvement of an organization is happening in the Indian firms adopting innovations. This is a fact realized after a thorough research done to find how innovations are affecting Indian firms. As a result of this, the firms are able to achieve the competitive advantage. Innovations acts like a catalyst which enhances the performance of a company as compared with the company’s not adopting innovations. Thus, innovation is a process of idea generation, technology management, commercialization of a new product or improvement of an existing product or process.

We are using Technological, Product, Process and System innovation as the four different variables under innovation constructs in our research.

2.2 MSME and Innovation

Innovations are not meant for only large firms which happen through rational and analytical approach. In the existing competitive market, MSME should take an initiative to use all unmet needs and convert them as opportunities for its growth against the large firms.

The literature indicates that MSMEs have a significant potential that favours innovation. As against big players, the MSMEs can distinguish themselves with less bureaucracy in R & D system, ability to react quickly to the market demands and also less of goal conflicts among employee and employer.

In case of MSMEs, employer strategy to grow is only to seek the opportunity and convert them as innovative products/services. All the firms of this type will focus on converting the problem as an opportunity by somehow through trails and errors and also by continuously taking feedback from the customers.

As pointed by, MSMEs tries to meet the demands which were unmet by creating incremental and disruptive innovations. These things happen without any planning. These things are very common in product development companies rather among subcontractors.
3. Research Gap

As per the literature with respect to Indian MSMEs adopting innovation, it is very hard to find any firm adopting product, process, technological and system innovations as all the four different variables under innovation constructs together to improve the performance. It is hard to find such studies with respect to an Indian context. Hence this paper is an attempt to fill the identified gap that exists in Indian MSMEs under manufacturing sector.

3.1 Research Objectives

1. To design a measuring instrument to measure the constructs identified under innovation and check for its reliability and validity.
2. To formulate a research framework using the constructs of innovation and performance.
3. To establish the effect of innovations on MSMEs.

3.2 Research Design

The identified constructs of innovations are used to develop a research framework and thereby establish the relationship between innovations and performance of MSME. A structured questionnaire is designed to collect the primary data. MSMEs under manufacturing sector as listed by the MSME Development Institute were approached for the data collection. A preliminary pilot study was done prior to the main study. During pilot study the reliability and validity of the measuring tool was checked. Further the main study was done by collecting around 100 data points and a detailed multivariate analysis done.

4. Conceptual Research Framework

4.1 Working Hypotheses

The hypothesis is a predictive statement that relates two variables. A null hypothesis will be used in our study.

**Hypotheses 1: Technological Innovation & MSMEs performance**

H$_0$: There is no impact of Technological Innovations on the performance of MSMEs.

H$_a$: There is an impact of Technological Innovations on the performance of MSMEs.

**Hypotheses 2: Product Innovation & MSMEs performance**

H$_0$: There is no impact of Product Innovations on the performance of MSMEs.

H$_a$: There is an impact of Product Innovations on the performance of MSMEs.

**Hypotheses 3: Process Innovation & MSMEs performance**

H$_0$: There is no impact of Process Innovations on the performance of MSMEs.

H$_a$: There is an impact of Process Innovations on the performance of MSMEs.

Innovation Dimensions

![Conceptual Research Framework](image-url)

**Figure 1.** Conceptual Research Framework.
H$_3$: There is an impact of Process Innovations on the performance of MSMEs.

**Hypotheses 4: System Innovation & MSMEs performance**

H$_3$: There is no impact of System Innovations on the performance of MSMEs.

H$_4$: There is an impact of System Innovations on the performance of MSMEs.

### 4.2 Approach

In our paper, a sample is studied to determine its characteristics and inferences are drawn on the population characteristics. This has got an inbuilt qualitative approach wherein subjective assessment of attitudes, opinions and behaviour with respect to innovation and MSMEs performance are converted to quantitative data.

### 4.3 Findings

#### 4.3.1 Reliability and Validity of the Measuring Tool

**Reliability:**

A pilot study was carried out by collecting data points from 15 firms under MSME manufacturing sector. To assess the reliability of the measuring instrument, cronbach alpha values are determined using SPSS (Statistical package for social sciences). The obtained values of cronbach alpha are tabulated in the table (2) given below.

**Cronbach alpha values of innovation variables:**

- X1: Technological Innovation
- X2: Product Innovation
- X3: Process Innovation
- X4: System Innovation

| Table 2. Cronbach alpha values of all the innovation variables |
|---------------------------------------------------------------|
| **Innovation Variables** | **No. of Items** | **Cronbach Alpha** |
|--------------------------|------------------|---------------------|
| X1                       | 10               | 0.859               |
| X2                       | 10               | 0.873               |
| X3                       | 10               | 0.910               |
| X4                       | 10               | 0.770               |

From the above table it can be seen that the measurement scale is highly reliable indicating even the lowest value of Cronbach alpha being **0.770**. For ensuring the validity further data reduction will be carried out by confirmatory factor analysis (CFA). Overall Cronbach alpha value for all items together is **0.853**

#### 4.3.2 Validity – Multitrait Multimethod Matrix

In the current research, the data collected from the pilot study was subjected for validity analysis and the obtained result is mentioned in the table (3).

**Table 3. Average correlation between scores of innovation constructs**

| Pilot Study (15 data points) | X1  | X2  | X3  | X4  |
|-----------------------------|-----|-----|-----|-----|
| X1                          | 1   | 0.22| 0.217| 0.141|
| X2                          | 0.22| 1   | 0.160| 0.32 |
| X3                          | 0.217| 0.160| 1   | 0.231|
| X4                          | 0.141| 0.327| 0.231| 1   |

Finally, when all these are put together, both convergent and discriminant validity could be addressed simultaneously. Here, the four constructs of innovation are measured with different items. In table, the highlighted correlations are within-construct ones. They are a reflection of convergent validity and are the maximum compared to others. The non-highlighted correlations are cross-construct, reflect discriminant validity, and are uniformly lower than the convergent coefficients. This establishes convergent and discriminant validity. Hence, it can be seen that the validity of the measuring instrument is ensured since the average inter correlation between the scores of the same construct is the largest correlation in the matrix.

### 5. Conclusions

This work is an attempt of an initial study done on Indian MSMEs under manufacturing sector by taking several variables of Innovation under consideration. We have also proposed a Research framework taking all the different variables identified under Innovation. This is followed by the hypotheses developed to validate the proposed framework and it is also required to test the validity and reliability of the measuring instrument. We will be using a structured questionnaire designed for measuring the constructs of Innovation. We have tested our measuring instrument for its reliability and validity. Our future
work will examine the probable relationships between Innovation dimensions and MSMEs performance and how it affects its performance. It is then followed by an examination of critical factors of the identified constructs affecting the performance of MSMEs

6. References

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