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Digital Transformation and Value Addition to SMEs in Haveri District-An Evaluation

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Abstract

Digitalization of SMEs is a key game changer in getting competitive advantage to the organizations. According to research by Industry Association FICCI, digital technology is being used by Small and Medium-sized Enterprises (SMEs) for a variety of purposes. Specifically, 60% of SMEs use it for human resources, 51% for sales and marketing and 48% for finance. Many studies have proved that the digitalization plays a vital role in developing operational efficiency of many SMEs. With this background, present research paper is an attempt to explore the value addition to SMEs through digitalization process by considering the random sample of 50 SMEs considering 25 units each from manufacturing and service sectors in Haveri district, Karnataka state. The collected data was analysed and the set hypothesis is tested using one sample t- test. The study findings reveal the value addition to SMEs through digitalization process in the study area.

Key Words: Digitalization, SMEs, Value Addition

1. Introduction

Small and Medium Enterprises (SMEs) are essential to India's economic and social progress since they create a significant number of jobs at a relatively lower capital cost than major industries. The Ministry of Micro, Small, and Medium Enterprises estimates that MSME sector accounts for 8% of the GDP, boosts economy in a number of ways, including creating jobs, export revenue and industrial output. The basic presumptions of how people live and work are being drastically disrupted and changed by digitalisation in postmodern society which is growing more globalised and technologically advanced than ever. For this reason, in order to acquire flexibility

and to remain competitive in the market, it is becoming more and more crucial for organisations to plan the digital transformation fast, effectively, and responsibly.

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transformation fast, effectively, and responsibly.

Digitalization is centred on implementing innovative solutions and ensuring their market success as well as on using their applications and distributing their effects in the business environment. The digital economy has forced the SMEs sector to implement digitalisation and majority of them have done so by ensuring effective and synergistic relations where science meets economy in consideration of the business environment. As a result, it might end up being one of the most important elements in helping contemporary businesses develop their capacity for innovation which is especially true for small and medium-sized businesses, whose low resources make it difficult for them to conduct independent research and development.

Conceptual overview

Digitalization refers to the process of transforming analogue formats into digital settings, which is applicable in both personal and professional contexts. The process of converting an analogue format into a digital one is called digitalization, or digital enablement. Put another perspective, digitalization is the act of converting an analogue process to a digital version without requiring any modifications to the process itself.

2. Review of Literature

Boomathi and Agilandeshwari (2024) used a mixed-methods approach, performing quantitative surveys and qualitative interviews in addition to interviewing managers, owners, and industry experts to provide a thorough analysis of how digital transformation has affected MSMEs with a focus on the benefits, challenges, and best practices for

its successful implementation. The research highlights the advantages that digital transformation offers MSMEs, including expanded market penetration, enhanced client interaction, and instantaneous data accessibility for informed decision-making.

Raunak Gupta and Anuja Sharma (2024) sought to assemble the body of quantitative studies previously conducted on the relationship between innovation and technology-related factors and entrepreneur's previous quantitative studies' real performance. It was observed that it is not new because research in this area has been done during the last 40 years. However, the fact that more than half of the study in this field has been completed in the previous eight years speaks to the increasing interest of researchers and academics in the ways that innovation, technology, and related issues affect the performance of entrepreneurs.

Anuja Sharma and Raunak Gupta (2024) evaluated the body of literature on studies produced in the area of digital marketing and MSMEs and draws comparisons between Indian and International research in this domain. The bibliometric approach was used to analyse the data for this investigation. The Publish or Perish database was searched for research studies to gather information for the literature review and was revealed that till 2023, 849 research studies have been published globally in this field; the first was in 2005.

Prashant Chaudhari and Asha Bhatia (2024) observed that in emerging nations micro, small and medium-sized businesses are critical to innovation and economic growth as well as examine the digital transformation landscape of Indian MSMEs with a focus on significant technologies including digital payments, cloud computing, data analytics, artificial intelligence and the Internet of Things.

They conclude that while MSMEs can gain from these technologies in terms of increased productivity, market expansion, and global integration, obstacles such as lack of institutional support, resource shortages, and data security concerns are impeding their digital adoption.

Himanshi Rajput (2024) looks at how digital transformation is going in India's Micro, Small, and Medium-Sized enterprises and analyses the challenges and opportunities associated with this revolutionary road. Against the backdrop of India's ongoing digital revolution, she notes that MSMEs are becoming major players in the country's economy. As such, understanding every facet of their digital evolution is essential for sustainable development.

The reviews identify that most of the SMEs have started transforming their operations into digital. At the same time, the studies prove that the focus of Indian SMEs is regarding the digital revolution nowadays because of its opportunities and also they need to face some challenges regarding the same, but still because of its huge benefits the SMEs need to completely transform their operations.

Research Problem and Significance of the Study

SMEs digitalization in India is the order of the day, because of huge competition SMEs are facing challenges like recruitment of an effective workforce, marketing-related issues, financial management, and other operations management, henceforth many studies prove that digitalization may reduce the cost and also effectively boosting the success of SMEs. However, many SMEs have not been completely digitalized and even digitalized only in payment systems, some HR issues, and Marketing too.

Therefore this study is focussed on identifying the value addition to SMEs through digitalization.

3. Objective of the Study

The study intends to analyze the digital transformation and value addition to entrepreneurs in the Haveri district.

Hypothesis of the Study

H₀: The value derived through Digitalization by SMEs is insignificant

H₁: The value derived through Digitalization by SMEs is significant

4. Research Methodology

Scope of the Study and Limitations:

The study considers selected SMEs in Haveri district, Karnataka State engaged in manufacturing and service sectors. SMEs with different types of ownership, turnover, and nature of business are covered for the study purpose.

The study is confined to a small sample of 50 SMEs of Haveri district and the findings cannot be generalized to other geographical areas.

Type of Research

The present study is descriptive and analytical in nature.

Sources of Data Collection

Primary data is collected through the schedules distributed to sample entrepreneurs of SMEs in Haveri District and Secondary data through Books, Journals, and e-sources.

Sampling Design

According to the Directorate of Industries and Commerce, the functional SMEs in the Haveri district are 512 as of April 2024, out of which a Simple random sampling method is used to collect the primary data from 50 entrepreneurs based on nature, turnover, and ownership. The primary data is collected in the month of October and November 2024.

Statistical Tools Used

Descriptive statistics is used for analysis using simple percentages and a set hypothesis is tested using Factor analysis and Chi-square test.

5. Results and Discussion

This part of the study exhibits the opinion of sample entrepreneurs running SMEs in the study area, regarding the benefits and value derived by them in the process of digitalization.

Table 1: Demographic Profile of the Respondents

| Gender | | |
|--------------------------------|----------|----------|
| | Response | Per cent |
| Male | 34 | 68 |
| Female | 16 | 32 |
| Total | 50 | 100 |
| Age | | |
| | Response | Per cent |
| 31-40 | 20 | 40 |
| 41-50 | 9 | 18 |
| 51 to 60 | 16 | 32 |
| Above 61 | 5 | 10 |
| Total | 50 | 100 |
| Education Qualification | | |
| | Response | Per cent |
| Below SSLC | 5 | 10 |
| PUC | 5 | 10 |
| Degree | 20 | 40 |
| Post Graduation | 5 | 10 |
| Technical Courses | 15 | 30 |
| Total | 50 | 100 |
| Nature of Business | | |
| | Response | Per cent |
| Manufacturing | 25 | 50 |
| Service | 25 | 50 |
| Total | 50 | 100 |
| Age of the Firm (Years) | | |
| | Response | Per cent |
| Less than a Year | 7 | 14 |
| 1 to 5 | 10 | 20 |
| 5 to 10 | 20 | 40 |

| | | |
|--------------------------------------|----------|----------|
| 10 to 15 | 13 | 26 |
| Total | 50 | 100 |
| Monthly Turnover of Firm (Rs) | | |
| | Response | Per cent |
| 25,000-50,000 | 28 | 56 |
| 50,000-75,000 | 22 | 44 |
| Total | 50 | 100 |

Source: Primary Data

As per observation, more than 65% of respondents are Male, 40% belong to the age group of 31-40, 40% are graduates, 50% each are from manufacturing and Service

sectors, 40% are in their business from 5 to 10 Years and more than 55% respondents have a monthly turnover of Rs.25,000-50,000.

Factor Analysis:

To study the value addition through digitalization to SMEs in the study area various factors have been used out of those factors to find out major factors that depict the value addition through digitalization to SMEs in their operation. The factor analysis

is a statistical technique that is used to reduce a large number of attributes into similar groups based on the responses received from the respondents. To check out the data reliability for factor analysis Cronbach's Alpha test has been used as shown below

Table:2 Reliability Statistic

| Reliability Statistics | |
|-------------------------------|-----------|
| Cronbach's Alpha | N of Item |
| .826 | 17 |

Data Reliability check was done using Cronbach's Alpha co-efficient measure to know the reliability and consistency of the collected data. It shows that data obtained is reliable and consistent as the alpha value

lies in between 0 and 1 ,higher the value within this category more internal consistency, here the alpha value is 0.8 and the data is reliable and consistent

Table: 3 Rotated Component Matrix^a

| Rotated Component Matrix^a | | | |
|---------------------------------------------|------------------|-------------|----------|
| | Component | | |
| | 1 | 2 | 3 |
| Process effectiveness | .017 | -.114 | -.086 |
| Increased efficiency in automation | .104 | .827 | .048 |
| Innovation | .037 | .715 | -.021 |

| | | | |
|-------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|
| Employee Participation | .006 | .912 | -.032 |
| Internal Operation | .893 | .116 | -.009 |
| External Platform | .024 | .136 | .233 |
| Agility for continuous improvement | .149 | -.112 | .660 |
| Improved customer experience | -.047 | -.133 | .729 |
| Flexibility in workforce | -.038 | -.077 | -.082 |
| Cost reduction | .769 | -.004 | .126 |
| Profitability of the organization | .692 | .039 | -.146 |
| New platform for marketing the products | .604 | -.097 | -.019 |
| Expanded customer base | .893 | .116 | -.009 |
| Reduced cost of advertising | .784 | -.032 | .151 |
| Value added opportunities | .853 | .178 | .058 |
| Transition to online economy | -.114 | .009 | .681 |
| Brand recognition | -.014 | -.130 | -.367 |
| Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization | | | |
| a. Rotation converged in 3 iterations | | | |

Source: SPSS Output

Interpretation:

From the table as observed, factor analysis is used to reduce the factors selected for the study, out of different factors that prove the value additions to SMEs, for all the variables correlation matrix, is more than 0.5 except the variables process effectiveness, external platforms, flexibility in the workforce, brand recognition, etc. because the respondents opine that they are not getting any value

addition in this case, as they are performing well even before digitalization. Hence, those variables are removed and the remaining are used further to test the hypothesis as shown below.

Hypothesis:

H₀: The value derived through Digitalization by SMEs is insignificant

H₁: The value derived through Digitalization by SMEs is significant

Table:4 One Sample T-Test for Value Derived by SMEs

| One-Sample Test | | | | | | |
|-------------------------|----------------|----|-----------------|-----------------|-------------------------------------------|-------|
| Factors | Test Value = 0 | | | | | |
| | T | Df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| Increased efficiency in | 24.470 | 49 | .000 | 1.670 | 1.53 | 1.81 |

| | | | | | | |
|-----------------------------------------|--------|----|------|-------|------|------|
| automation | | | | | | |
| Innovation | 26.161 | 49 | .000 | 1.810 | 1.67 | 1.95 |
| Employee Participation | 22.798 | 49 | .000 | 1.680 | 1.53 | 1.83 |
| Internal Operation | 18.655 | 49 | .000 | 1.720 | 1.54 | 1.90 |
| Agility for continuous improvement | 28.364 | 49 | .000 | 1.820 | 1.69 | 1.95 |
| Improved customer experience | 30.461 | 49 | .000 | 1.870 | 1.75 | 1.99 |
| Cost reduction | 23.014 | 49 | .000 | 1.910 | 1.75 | 2.07 |
| Profitability of the organization | 30.029 | 49 | .000 | 1.740 | 1.63 | 1.85 |
| New platform for marketing the products | 29.087 | 49 | .000 | 1.820 | 1.70 | 1.94 |
| Expanded customer base | 25.354 | 49 | .000 | 1.990 | 1.83 | 2.15 |
| Reduced cost of advertising | 29.661 | 49 | .000 | 1.680 | 1.57 | 1.79 |
| Value added opportunities | 16.649 | 49 | .000 | 1.780 | 1.57 | 1.99 |
| Transition to online economy | 28.266 | 49 | .000 | 1.690 | 1.57 | 1.81 |

Source: SPSS Out put

From the table it is clear that for all the 't' value for the factors - Increased efficiency in automation (24.470), Innovation (26.161), Employee Participation (22.798), Internal Operation (18.655), Agility for continuous improvement (28.364), Improved customer experience (30.461), Cost reduction (23.014), Profitability of the organization (30.029), New platform for market the products (29.087), Expanded customer base (25.354), Reduced cost of advertising(29.661), Value added opportunities (16.649) and Transition to online economy (28.266) the $p < 0.05$ @ 5% significance level, hence it is clear that the null hypothesis is rejected and alternative hypothesis is accepted. So, concluded that there is a value addition through digitalization to SMEs.

6. Major Findings:

- Increased efficiency in automation and cost reduction is possible after the

digitalization in operations, production, and marketing.

- Most of the SMEs have implemented innovative ideas in marketing, advertising, and operation through digitalization.
- Post-digitalization revealed increased employee participation in the areas of training and appraisal as experienced by the sample SMEs.
- Internal Operation is developed and improved by the digitalization process and SMEs are in turn getting agility for continuous improvement
- Most of the SMEs feel that after digitalization customers are experiencing quality products and services as well as the customer base is expanded. Digitalization provided value-added

opportunities to SMEs and a transition to an online economy.

- The profitability of the organization has increased because of digital marketing and digital payment system, getting a new platform for their products, thereby increasing sales and turnover

7. Conclusion

The study findings portray that SMEs are benefited by digitalization in their operations, marketing, and cost reduction, thereby adding value additions to their business. Even though digitalization is the order of the day, most of the SMEs are not completely digitalized. This is because of the nature and size of the organization. The study reveals that digitalized SMEs can add value addition to their operations, hence it is suggested that the SMEs need to completely digitalize their major operations to get a competitive advantage.

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