DIGITAL TRANSFORMATION OF MSMES: STRATEGY AND CHALLENGES

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ABSTRACT

Micro, Small and Medium Enterprise (MSME) sector is a very prominent sector of the Indian economy, contributing significantly, to Gross Domestic Product (GDP), merchandise exports and inclusive growth of the country. It is second largest source of providing employment after agriculture. It is also a major socio-economic contributor of our country. However, this sector has faced few challenges over the past few years like lack of technological knowhow, insufficient supply chain, capital crunch that have worsen the condition. It is considered that technology is playing wider role in economic growth. Digital technology has brought a drastic change in way of doing business, it automates the process and product, so it improves the production and quality of product. Throughout the period, the government also has undertaken several policy measures related to finance, infrastructure, risk mitigation etc. to trigger growth of MSMEs. With the government initiatives, such as, digital India that led the boom in digital payment and the overall technological adoption, in doing business, has improved in the country. This paper outlines the potential of digital transformation which could manacle its growth prospects and the possible challenges to transform the MSME. This paper provides a comprehensive view of the factors affecting digital transformation process.

Keywords: Digital Transformation, MSME.

Introduction

MSMEs are the major contributor to India's rapid growth and development. This sector is backbone of Indian economy and one of the key drivers of employment. It provides employment around 110 million (ministry of MSME, annual report of 2020-21) and it also contribute to 30% of GDP. In last couple of years, Indian MSME sector is facing many challenges like high cost of technological upgradation, capital crunch, lack of awareness of suitable technology and many other, apart from these traditional problem Indian MSMEs also facing international competition in this globalized era. Over the last few decades ICT (internet and communication technology) have significant role in business activity.

IT has become a key enabler for better quality of service. Digital marketing has shifted the way significantly for reaching the customers as it was done earlier. Now building strong emotional relation with customers is more vital than selling. This digital revolution has altered the entire definition of market selection and creating a border free environment. Social media and mobile devices are playing a vital role. Now customers need not to go physically to a market in search of substitutes or are not depended on traditional media channel like TV, Newspaper, and Radio etc. Now everything is in their reach and convenience with the new age of digitalisation now it provides interactive experience between the consumer and the business. It has provided competitiveness with lower processing cost. It facilitates business activities in many ways. Digitalisation has shifted the orientation of doing business. It has also supported the management information system. (Carlsson, B. 2004) also found in his study that impact of digitalisation can be seen to some extent on productivity & efficiency but not an easy to measure the long-term benefit. But still digitalisation can surge the scope and scale of production by changing pattern of supply chain management & integrated marketing communication.

Therefore, MSMEs in India need to improve their competitiveness by taking a slew of measures. The use of ICT is one of the important measures. It is a high time for SMEs to deal with this new technology and ripe the advantages. Right choice of technology and right investment is the key to their success.

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Literature Review

Stockdale and standing, (2004) analysed the benefits and obstacles in adoption of electronic technology by MSMEs and declared that access to a wider range of markets is an important factor in adoption of Internet technology. They also concluded that the changing needs of customers as well as suppliers also shape the adoption of IT technology by small firms.

Regan, S.A. (2005) examined the adoption of E-commerce by Small and Medium Businesses would be increase in forthcoming years.

Desai, (2006) observed the rapid changes are taking place over the past few years due to global events and upgradations in technologies and he also suggested the required structural changes into the small-scale industries.

Patrick Y. K. Chau (2009) concluded the adoption of electronic data Interchange (EDI) by business firms depends upon multiple factors including readiness of organizational entities and external environment.

Rosli Mohamad, (2009) presented a conceptual study on adoption and usage of e-commerce by small firms, based on intensive review of past research works across different countries.

Deepali Saluja (2012) analysed the significant role of MSMEs in Indian economic development and noted that the contribution of MSME firms is surging in upward direction and it is going to reshape of country's economy.

Mohanta et.al. (2017) examined the prospects of Digital India campaign and suggested that MSMEs are the foundation for the India's growth and development and growth of MSMEs is surely depend upon the increased practice of digital technology.

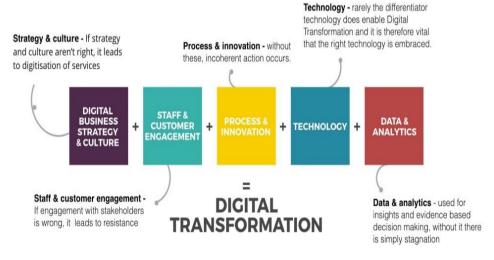
Cenamor et al. (2019) addressed the performance of MSMEs and their financial outcomes, using digital platforms and also describe the network capabilities of these digital platforms.

Sariwulan et al. (2020) analysed the impact of digital literacy, economic literacy and entrepreneurial skill, qualification and management in garment clusters concluded human resource management, qualifications and skills are vital for SME productivity and growth. The study finds the positive correlations observed between the Digital literacy and entrepreneurial skill. Digital literacy helps in business development through networks capabilities.

Chinakidzwa and Phiri (2020) report that execution capability with digital strategy development are the main reasons for final outcomes of sales growth, market share and profitability in SMEs.

Digital Transformation

Over past few years the adoption of digital technology has changed the entire business scenario across different economic sectors. digital transformation means the use of digital technology that significantly impact all the aspect of business people process, metrics, and technology. The development of digital transformation is a period in which, academies, entities, community, and employees are transformed, and new business practices and business prototypes are formed. Digital transformation is an efficient use of web technology in strategy, marketing, manufacturing, selling, promotion. digital transformation is data-oriented management model. Hence, capabilities of firms are improved, and their processes are enhanced.



Digital transformation includes the intense use of technologies like smartphones, cloud computing, big data, artificial intelligence, robotics systems, internet of things, 3D printing, virtualization, cyber security, sensor technologies, advanced robotics systems, automation etc. in many fields of economic and social life.

As MSMEs have emerged as a highly vibrant and dynamic sector of the Indian economy that consist of 8% of the country's GDP, around 45% of the manufacturing output, and approximately 40% of the country's exports. They should transform their organizational structures and business making cultures starting from manufacturing technologies to management perception as to get a productive digital transformation process. The fact that SME's being able to perform cost-benefit analysis of digital technologies and being aware of that technology is much more significant.

According to McKinsey, digital transformation is rearrangement of technology, business models and processes as to ensure new values for customers and employees in constantly changing and developing digital economy.

Digital transformation is "a change in all job and income creation strategies, application of a flexible management model standing against competition, quickly meeting changing demands, a process of reinventing a business to digitise operations and formulate extended supply chain relationships; functional use of internet in design, manufacturing, marketing, selling, presenting and is data-based management model"

Driving Factors of Digital Transformation of MSMEs

MSME sector of India is rightly considered as driving factors for development and have significant potential to boost the economic activity. However, the pandemic has reduced the performance of the sector but still some programmes and software are mentioned in followed table which can be useful for digital transformation.

Table 1: Programmes and Software which can be useful for Digital Transformation of SMEs

Functions of Operations	Programmes and Softwares used in Digital Transformation
New Product Development and	Use of 3D printers Design preferences of customers can be detected by
Design	competitions and surveys.
	PLM (Product Lifecyle Management) programme,
	Computer Aided Design (CAD)
Demand Forecasting	Big data and advanced data analytic can be used. Personalised product orders
	can be taken.
	Fair support software
Supply and Logistics	Using of integrated systems ensuring reciprocal data sharing with suppliers,
	spontaneous stock follow-up of storage, providing packaging with automatic
	machines.
	Software of Purchasing and payment systems PLC (programmable logic
	controller), ERP (Enterprise resource planning) Membership to B2B sites
	Use of big data and analytic systems
Manufacturing	Benefitting from industrial robots Automatically quality controlling Automation
	Total quality management (TQM), Just in Time (JIT)
	manufacturing Lean Manufacturing (LM)
	Trainings of IT, increasing talent, adapt to changing work practices, digital skills
	of new employees, ongoing education, training, culture of collaboration.
	Use of robots in manufacturing
Human Resources	New and flexible working patterns, mobile working, home working.
	Online voice and video calling platforms in communication, such as Skype and
	blog sites, videos and social media platforms such as Facebook. Use of CRM
	(Customer Relationship Management) programmes
Payment	Offering payment alternatives, such as paying with credit card in website in
	store payment apps (a mobile device into a smartphone credit card reader),
	banking cards, mobile wallets, internet banking, digital currencies (such as
	Bitcoin), money transfer, virtual card, paying at the door.

Digital Transformation Strategy

The four waves of Industrial Revolution is highlighting on cultural, technological, and organizational development. In transforming economic era, industries are experiencing different changes. Information and data have become the main sources of revenue, business assets in this information age. To benefit from these new digital technologies, companies need to develop a steady digital transformation strategy related to, information, data, technology processes, human aspects, and

lots more. A Digital Transformation Strategy is a framework of the steps for business will take to best use of emerging technologies. It could include alterations with business models, innovations to products and services, and the development of new value chains to meet the changing demands of customers. (Dieffenbacher. Stefan). It is a brief plan for a company to address key challenges through the convergence of the physical and digital worlds, with human resources. It is all about to build a roadmap for short- and long-term digital transformation, underlining the business outcomes.

"According to an online survey by Wipro Digital, on the business leaders in the US, more than half of the executives state that the lack of a clear digital business transformation strategy is the major limiting factor to achieving the full potential of a business."

Here are three case studies that states the success of digitalised firm those who follow their own strategy:

Case Study 1: (Sharma, 2015)

Da Milano: according to Managing Director of Da Milano, being a retailer, marketing is a very important exercise for them, by digital marketing, the direct customer engagement program, brand recalling, and most importantly, brand awareness became very high for them. With digital marketing, the direct approach with customers on various social platforms like what's app, Twitter, Instagram Facebook, and Pinterest has become way easier.

DIGITAL TRANSFORMATION STRATEGY

7 Essential Steps to Drive DX Success in the Enterprise



These digital platforms are amazing way to share brand information with their customers and simultaneously taking feedback from them. they are extensively using social media platforms for customer engagement campaigns. Example: On Diwali campaign, which they was designed as a one liner contest, 'You are my BAG full of happiness, because...' to be creatively completed by fans was a huge hit. From this way Digital presence has helped to increase their sales.

Case Study 2:(Sharma,2015)

This case study is related to (Kairali Ayurvedic Group) Ayurvedic firm who have their own ERP (Enterprise resource planning) and database management system, whereas in terms of sales and marketing, unlike hoteliers, we have our own PMS (Performance management system) sales and lead management that is customized to their industry. This is in line with their online and social media strategies.

So, in terms of lead conversion they have grown by 30%, which represents considerable growth. After adopting digitalization, the firm is handling all CVs coming from various cities that helps them to manage resumes across various roles—from therapist to senior management— at a substantially low cost to the company. Furthermore, this diverse strategy helps them to reach out to their core and targeted audience.

Case Study 3(Sharma,2015)

This case study is related to a food company. Haldiram's is a brand with a lot of legacy. Their digital strategy focuses on strengthening the brand in every possible way. Firm spend on digital initiatives such as opening online store. This initiative has helped them to build their brand presence among the young generation. Now their online store is 10% of a physical store, with a little amount if investment. In their upcoming strategy firm is looking forward to launching apps for Android and iOS in the coming months. With these initiatives, firm is targeting 1,000 orders per day from the online store and apps. In these above case studies firms are digitalised itself, not in a same manner, but they have their own strategy to digitalise itself according to their own business model and got success.

Challenges ahead of Digital Transformation

However Digital transformation provide the opportunity to reimagine the way to run the business through with the use of new digital practices and tools. digitalization has made rapid changes in our economy that have started posing serious challenges for the SME firms, as these are failing to keep pace with the same. For example, lack of adoption of digitalization in business, the trend of doing online shopping has drastically increased among the consumers in past few years at the same time there are only 5 to 6 percent SME firms which have registered their online presence. Such lack of adoption of digitalization in business practices by the SMEs has left them deprived. Although government and various corporations are taking primary and constant efforts to pace with digital transformation for MSMEs. there are still a few barriers on this journey of digital transformation.

- Absence of Adequate Skills and Talent: Lack of proper training for the MSME workforce can hinder small businesses from leveraging the complete benefits and potential of digitization.
- Internal Skill Gap between Workers and Managers: As higher levels of managers are more technical friendly as compared to worker, so this gap prevents identifying digital solutions and find difficulty to adapt new business model and process.
- Infrastructure Gap: Access to a high-speed broadband is primary prerequisite for digital transformation of MSMEs but penetration of high-speed broadband is less in rural/ semi urban area, where establishment of MSMEs are more than the urban area, so many MSMEs are leg behind just because of this infrastructure gap.
- **Financial Gap:** Small MSMEs face difficulties in accessing finance against the investment .it is difficult to use this investment as collateral to secure a loan.
- Lack of Awareness: Due to less knowledge and understanding of the right platform for digital
 marketing, some mid-market business owners are unable to optimist their growth strategies in
 the best possible manner.

Conclusion

Digitalization has become a driving force that affects private life as well as business life. Technology revolution can be compared like - Steam engine revolution. The integration of digital technologies into daily routine and process of making everything Digital can be referred as digitalization. Today Newspapers are available online and music is also streamed to mobile devices, Retailers sale their products online using ecommerce platform even green grocers take their payment digitally. These are just few examples of how digital technology has changed the way of doing business.

These digital technologies are changing the rule and process of doing business. Business is moving digitally to increase their sale, global presence, to make their customer base broad, to increase their efficiency and to minimize their cost and improve the relationship with the customer and satisfaction.

However, when we come to MSME firm, the adoption of digitalization has been at a slower pace, although many MSME firm are trying to adopt digitalization in many fields like sale, advertisement, and payment but still in initial state and yet to be grow. Conclusion of this paper is that digital transformation involved many strategies and this MSME sector must attend it properly to ripe the benefits of digitalization. Case study in this paper shows the digitalization create opportunity, increase the firm's capability, and improve the product service. Strategy related to digital transformation focus on knowledge and process of product manufacturing as well as organizational aspects that affect by digital technologies. Although government has also promoted to adopt the digitalization through various scheme like 'DIGITAL INDIA' to provide them easy and cheap credit, 'MSME SAMBANDH' makes the use of a portal that helps in tracking the procurement, similarly other scheme called 'MSME SAMADHAN' to help keep the track of pending payments. Lastly companies must work hard to integrate the digital technology

to grow their business. It is a never before opportunity that support by the government to embrace the benefit of digitalization. If digital transformation adopted well in time, it would provide big boost to Indian MSME sector in terms of business efficiency as well as significant contribution to countries economy.

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