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# DIGITALIZATION OF THE MSME SECTOR IN GUJARAT

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## ABSTRACT

The study's purpose is to assess how the Digital Transformation of MSME is conducted in Gujarat. This study deepens understanding of Digital India with the final objective to know why despite huge government investment in digitalization the in the MSME sector the number of MSMEs in the digital platforms remains low. The study also identifies fragilities in digital transformation policy for SMEs and suggests policy recommendations to move forward. The study is intended to employ secondary sources of data. Desk review was employed for documentary review on reports, research papers, policy papers and articles.

The paper has identified problems related to MSMEs in Gujarat such as a lack of technical skills, financial limitations, and lack of vision required for the adoption of digital transformation by MSMEs. This result has been at a slower pace, in 2018 only 6% of MSMEs adopted digitalization. The lower level of awareness, unavailability of talented human resources, absence of an understanding of the benefits that could reap through of digital technology, and cost of adoption are some of the impeding factors of digitalization. The study recommends some improvements in the MSME Draft Policy and the adoption of MSME Guidelines for Digital Transformation.

## KEYWORDS: Digital, Transformation, Gujarat, MSME.

## 1. INTRODUCTION

MSME industries in Gujarat are at a crucial juncture today, with several large investments being undertaken by the public and private sector players, and developments promising a significant transformation of the sector. The sector is witnessing a fundamental shift that is opening up new business opportunities for the industry. At the same time, the competition for scarce resources is expected to intensify and support enablers in terms of infrastructure. PWHC (2010)

Digital transformation is a worldwide topic issue of major importance in all sectors as it changes customer relationships, internal processes, and value creation. The main concern of the stakeholders in this transformation is defining a vision and roadmap that determine the way forward. Zaoui & Sovissi (2020)

The study's purpose is to assess how the Digital Transformation of MSME is conducted in Gujarat to understand why despite huge government investment in digitalization the in the MSME sector the number of MSMEs in the digital platforms remains low. The study also identifies the challenges and opportunities in the digital transformation process for SMEs in Gujarat.

## **1.1 BACKGROUND**

Micro, small, and medium-sized enterprises (MSMEs) have been key contributors to inclusive growth and the generation of sustainable employment opportunities in semiurban and rural India. In 2015/16, the 63.4 million MSMEs in the country employed 111 million workers, the sector being the second-largest employer after agriculture. Though 99% of MSMEs are micro, and only about 17% are registered, they contributed ~30% to the country's gross domestic product (GDP), and about 40% to exports in 2018/19.4. Notably, 53.4 million (84%) MSMEs are own-account enterprises, i.e., firms that operate without employing any worker on a regular basis. They employ 69 million workers (62%) and contribute 44% of MSME output. India's GDP was projected to contract by 7.3% in 2020/21, as a result of the pandemic impact on global value chains. India's MSMEs experienced severe disruptions to their production and logistics supply chains during the nationwide lockdown between April and June 2020. Unsold inventory, order cancellations, and lost sales opportunities rose; about 73% of MSMEs reported a drop in orders, 40% attempted to borrow for survival. Liquidity constraints grew owing to delays in payments and continued outflows on wages, rents, and other fixed costs. MITRA et al. (2021), KARTHINK (2022) and PHD-MAZARS (2016)

The Government of India announced the AtmNirbhar Bharat Abhiyan (ABA) as a special economic relief package worth `20,000 billion (approximately \$271 billion) in May 2020. As part of this package, the government introduced a slew of measures to provide financial assistance to MSMEs, including a `3,000 billion (about \$40.6 billion) Emergency Credit Line Guarantee Scheme (ECLGS) to provide collateral-free automatic loans to 4.5 million MSMEs, `500 billion (about \$6.8 billion) toward a fund of funds which will provide equity funding to MSMEs, and `200 billion (about \$2.7 billion) to support distressed MSMEs through subordinate debt and equity infusion. In October and November 2020, additional stimulus measures were announced under the ABA to boost job creation and consumer spending and incentivize selected sectors. Ibid

The MSME industry is more susceptible to negative impacts on its supply chain, labor supply, and market demand for goods and services than bigger firms. This is because MSMEs in comparison with large industries, do not have adequate resources, particularly monetary and administrative and are not prepared for such long-term disturbances. According to rough estimates, the COVID-19 pandemic impacted MSME incomes by 30 to 50%. Many businesses in this sector have run out of both cash and capital, while others are on the edge of collapse. Information and Communication Technology (ICT) can cause gigantic growth in the socio-economic advancement of the Indian economy by helping the MSME sector to reinvest and digitalize for better productivity and high profit. GUPTA (2022)

## **1.3 RESEARCH OBJECTIVES**

## 1.1.1 GENERAL OBJECTIVE: Assess how the Digital Transformation of MSME is conducted in Gujarat

## **1.1.2 SPECIFIC OBJECTIVES:**

- Deepen understanding of Digital Transformation in India
- Assess how the MSME Policy in Gujarat supports digital transformation
- Analyze the challenges posed by the digitalization process
- Analyze the opportunities offered by the digitalization process
- The way forward

## **1.2 RESEARCH QUESTIONS:**

- Why Digital Transformation in India?
- How government support and foster digital transformation in the MSME sector?
- What are the challenges posed by Digital Transformation to MSME In Gujarat?
- What are the opportunities created by Digital Transformation for MSME in Gujarat?
- How MSME can best shift strategically to the Digital Transformation process?

## **1.3 RESEARCH PROBLEM**

Over the past few years, the adoption of digital technology has changed the entire business scenario across different economic sectors. However, when it comes to the Medium, Small and Micro Enterprise firms, the adoption of digital technology has been at a slower pace. Though the compelling economic factors as well as enforcement from the government in form of various schemes and programs has led to greater adoption of digital technology by these firms. In our country, there are approximately 6 crore MSME firms and traditionally these were exposed to an informal credit system due to a lack of access to the formal credit system. However, the adoption of digitalization by the MSMEs across other dimensions of business, like, sales, payments, logistics, advertisements etc. is still in the nascent stage and is yet to grow, because at the end of 2018, only 6% of MSMEs have adopted the digitalization, as per the report of Red Seer Consulting. As of now, low level of awareness, unavailability of talented human resources and cost of adoption etc, are the impeding factors in the process of digitalization. Apart from it, the absence of an understanding about the benefits that could be reaped through the use of technology, lack of guiding forces towards integration of technology and its institutionalization into the business, and inhibitions towards upfront investment-oriented costs have also been the causes that led to low adoption of digitalization among MSMEs. With changing times and the emergence of favorable economic factors, like the production of low-cost communication technologies, easy accessibility to high-speed 3G/4G networks and advancements in computing technology, and the government's promotional initiatives for SMEs have turn the tide towards the adoption of digital technology by MSMEs in today's times. MISHRA (2019)

## 1.4 RESEARCH METHODOLOGY

The study assumes a form of an exploratory to gain familiarity with the topic and an explanatory study to explain why things happen in such a way. Desk review was conducted based on a documentary review Desk review was employed for documentary review over reports, research papers, policy papers and articles.

## **1.5 SIGNIFICANCE OF THE RESEARCH**

This research study aims to assess the digitalization process in Gujarat to explore these limitations of the digitalization process and recommend the most appropriate government response. The major recipients of this research are policymakers, digital transformation consultants, MSMEs, consultants, and academy.

## 2. LITERATURE REVIEW

## 2.1. DIGITAL TRANSFORMATION CONCEPT

Digital Transformation is about adapting disruptive technologies to increase productivity, value creation and social welfare. Many national governments, multilateral organizations and industry associations have produced strategic fore insight studies to ground their long-term policies. By proposing the implementation of public policy regarding DX . EBERT &DUARTE ()

Digital transformation is a worldwide topic issue, of major importance in all sectors, as it changes customers relationships, internal processes and value creation. The main concern of stakeholders in this transformation is defining a vision and roadmap that determine the way forward. Zaoui & Sovissi (2020)

Many empirical studies have examined the MSME in regard of digitalization and challenges in India examining general problems of the digitalization and related challenges. KUMAR (2020)

This paper highlights striking differences of opinion among researchers on how digital transformation should be best supported. On one hand there are those who advocate for limiting such support to providing strategic directives and on the other those share extensive tasks and operational guidelines for achieving this transformation. Hence the question arising is what is the appropriate level of detail needed for the successful delivery of digital transformation? These authors concluded that the main phases of digital transformation are: (a) evaluation assessment, problem identification aimed to provide digital maturity assessment; (2) strategic vision (defining guidelines or direction for the company's digital transformation; (3) roadmap defining the implementation strategy and milestones for the company digital transformation; (4) customers experience manage customers experience in digital transformation; (5) operations, operational transformation adopt operational digital transformation; (6)processes and procedures design digital transformation business procedures; (7) Implement/ transform means on field implementation of digital transformation; (8) Skills and Finance means to build skills and get financial support. Rigorously these are not phases of digital transformation but key elements required for the implementation of digital transformation.

The Indian Government released the Draft Policy for Micro, Small and Medium Enterprises in India, on 22 March 2022, by the Ministry of Micro, Small and Medium Enterprises, asking for comments and suggestions from all stakeholders and the general public. In regard to MSME, the Government recognizes the role of the MSME sector as a vibrant and dynamic sector of India's economy has a share of 28% of the GDP and 40% of exports. The Ministry constituted several committees to review the status of MSME for sustainable correction. The results indicated the need for improvement in: access to finance, global and domestic markets, improving R&D and adopting modern and affordable technologies, lack of marketing platforms and distribution networks, affordable skilled labor, and revision of labor law. Interconnectivity initiative covered productivity in its various forms including ease of access to financial services, competitive MSME Policy, digitalization support for MSME, skills development to improve competencies and protection of startup and scale-up. MINISTRY OF MSME (2022)

From the researcher's perspective, the Draft MSME Policy almost dedicated 80% of its efforts to promoting access to finance and upgrading of technology for improved productivity while digital transformation is only mentioned among good practices.

However, it is not clear at all which good practices government intends to adopt in regard to digital transformation. Additionally, no definition of how the Ministry of MSME will support the digitalization of the MSME sector. Consciously or unconsciously, this is an indication of the hierarchy of priorities taking in consideration that the government at this stage is more concerned with the improvement of the productivity and quality of goods and services. The best approach is to adopt a balanced approach which brings together all the government priorities already mentioned tied to digitalization. The research aims to mitigate these gaps already identified by setting some strategic recommendations.

The Government of India has also stepped up the game to encourage eCommerce adoption for MSME. The MSME are being encouraged to market their products on the e-commerce site especially through government e-marketing undertaking (GeM), owned and run by the Indian Government, where from Ministry and Public Sector Undertaking (PSU) source their procurement. The platform has recorded worth INR 55,048 crore (\$75 billion) as September 2020. KARTHIK (2022)

#### 2.2.1 HOW POLICIES IN PLACE SUPPORT MSME TRANSITION TO DIGITALIZATION GUJARAT

#### Table 1: Policy Considerations

(a) **legal framework**: The government is continuously implementing reforms to further improve its "Ease of Doing Business" quotient. Key recent reforms include the Gujarat Single Window Clearance Act 2017 and Gujarat MSME Act 2019. GUJARAT GOV (2022)

(b) **market conditions**: The government of India has newly launched the "Digital Saksham" Initiative in partnership with Master Card to enhance the ability to MSME to market their products greater through better know-how and virtual payment acknowledgment. The scheme also facilitates ICT in MSME in adopting ICT tools and applications in the production and industry procedures, bolster developments and e-platforms, building literacy, training and nurturing digital market in the sector; GUPTA (2022). With the internet usage boom in India the MSME gained muscles like never before; KARTHIK (2022);

(c) **infrastructures**: In term of startups, Gujarat has emerged as an important hub at national level. Best performer state in state startup ranking DPIIT in 2018. Gujarat is India's most industrialized and urbanite state. GUJARAT GOV (2020b).

(d) **access to finance**: Financial assistance up to 15 lakh per idea and up to Rs 1.00 crore for relevant plant and machine will be provided; GUJARAT GOV (2020a)

(e) access to innovation: The Government of India, along with Ed Tech startups and many other companies have come together to help out MSME in developing their business online; GUPTA (2022); The Government of India has also stepped up the game to encourage ecommerce adoption for MSME. MSME are encouraged to market their products on the ecommerce site especially through government e-market place; KARTHIK (2022). In Gujarat MSME innovation is a new concept for MSME with combination of innovation in incubation, design intervention and by protecting IPR in a single approach to create awareness and motivate them to become MSME champions; GUJARAT GOV (2020)

Source: Created by the authors based of documentary review

## 2.2.2 MSME PERFORMANCE IN DIGITAL TRANSFORMATION ENVIRONMENT IN GUJARAT STATE

## Table 2: MSME PERFORMANCE IN GUJARAT

**Technology Improvement:** MSME that use the internet reduce their cost by about 22% to get raw materials, manage inventory and gain increased productivity; The lockdown has given a big boost to e-commerce and online shopping with the years 2020 and 2012 witnessing more than 75% new customer base to these portals. GUPTA (2022);

**e-commerce**: e-commerce has also made possible for MSMEs to attend rural and remote customers, enlarging their customer base; GUPTA (2022); E-commerce also extends easy access to the international markets for women and owned ventures; GUPTA (2022); the survey found that in 2020-21 online sales accounted for 27% of total sales compared to barely 12% in 2018-19; GOYAL (2022); Only 43% of MSME participating in the e-commerce space MSME India may or may not have an online presence but participate in online sales; KARTHIK (2022)

**customers management**: customer credit management is another feature that gets ease with digitalization as MSME can trace customer credit and also set limits of credit for consumers; GUPTA (2022);

**volume of sales and profit**: Despite the COVID-19 shock, MSME that integrated with ecommerce platforms experienced an increase in sales, turnover and profits. About 70% of the 476 firms surveyed that integrated with e-commerce platforms during the COVID situation experienced an increase in sales volume; GOYAL (2022); **COVID Impact**: digitalization turned out to be coping mechanism during the pandemic. Most MSME are dependent on third party platforms. Only 12% of 1537 MSME surveyed have they own e-store trace were largely medium enterprises while micro and small enterprises were dependent on third part platforms; GOYAL (2022);

**Digital transformation costs**: GOYAL (2022) found that for smaller units it is not financially feasible to invest in paid marketing of their products to make the most of their integration with such platforms. And recommends that platforms create financially feasible marketing models that ensure that MSME can maximize the benefits of a platform as larger enterprises and brands;

**Incubation of MSME**: In Gujarat innovation is combined with incubation, design intervention and protection of IPR in single mode approach to create awareness amongst MSME and motivate them to become MSME champions; GUJARAT GOV. (2020a)

**Technical and financial barriers**: MSME in comparison with large industries, do not have adequate resources, particularly monetary and administrative and are not prepared for such long-term disturbances;

Volume of sales/revenue: According to rough estimates the COVID-19 pandemic impacted MSME incomes by 30 to 50%. Many businesses in this sector have run out of both cash and capital, while many others on the edge of collapse;

Source: Created by the author based on documentary review

## 2.3 WHY DIGITALIZATION OF MSME IN GUJARAT?

To large extent the question of whether the MSME sector needs to jump onto digitalization bandwagon is an old story now. Digitalization is not a really choice but rather a necessity, which will bring about stability to their business performance and broaden their reach. In survey conducted by MSC in India, Indonesia, Kenya and Philippines, it is unfortunate that only 35% of respondents have revealed that they either increased the use of digital payments or started using digital methods of payment for their deals and transactions. GUPTA (2022)

## 2.4 WHAT ARE THE CHALLENGES FOR MSME IN G<mark>UJARAT?</mark>

Technology plays a pivotal role for MSME to help them grow and stand up to the stiff competition from large enterprise and imports. While big industries have enough resources for continuously technology and quality upgrading, MSME, on the other hand have sources constraints related to technical knowledge, R & D expertise and skills. It is difficult for MSME to upgrade themselves. Ministry of MSME (2022).

Developing countries face three main challenges in promoting equal access to the benefits of frontier technologies: (1) income poverty – many people in developing countries cannot afford new goods and services technologies, particularly those in rural areas. In this case the barriers are not technological but economic and social. (2) Data divide – many frontiers technology rely stead high-speed fixed internet connections, but almost of half world's population remains offline. Many developing countries lack adequate digital infrastructure and for the rest of their people interest costs are prohibitive; (3) Shortage of skills – in developing countries the basic and standards skills an average 10 to 20% points lower than in developed countries. Many technologies require at least literacy and numerous skills. Others technologies require digital skills including the ability to understand digital media to final information and to use those tools to communicate with others. UNCTAD (2020)

## 2.5 WHAT ARE THE OPPORTUNITIES FOR MSME IN GUJARAT?

During COVID most of the surveyed enterprises reported an increase on their sales. Naturally, since there were restrictions on physical movements, MSMEs that were integrated with e-commerce platforms had an advantage over those that do not have an online presence. Online channels of sales helped MSMEs sustain their business. The survey found that in 2020-21 online sales accounted for 27% of total sales compared to barely 12% in 2018-

2019. Moreover, there was 80 to 90% increase in seller registration with some large e-commerce companies in the second half of 2020, almost all of which were MSMEs belonging to small cities and remote areas. GOYAL (2022)

## 2.6 HOW MSME SHOULD SUCCEED IN THE DIGITALIZATION PROCESS IN GUJARAT

The reduced number of MSMEs that embarked to digital transformation may be a symptom of weakness in the MSME digitalization policy or strategy. This is especially important for MSME which are less equipped to face administrative burdens due to greater resource constraints. In MENA region this becomes more relevant because governments still play a large role in the economy. OECD (2009).

The competitiveness of MSME is rather limited, constrained by inhibitions than regulations imposed on them. There are five areas of work to cutting read tape, namely:

- (a) Building a constituency that means without support from a network of partners at a high level, but also at the technical level reforms might not attain expected goals.
- (b) Effective and efficient use of capacities and resources available this means that the resources available should be employed effectively and efficiently to respond all the government priorities;
- (c) Managing institutional and organizational needs digitalization of MSME is not exclusive role of Ministry of MSME. It needs to be coordinated with all government institutions that keep up the path for reforms;
- (d) Involve all stakeholders fairly in the digital transformation- all the relevant and affected parties should be able to be involved in the process of the reforms;
- (e) Development of measurement and evaluation mechanism that means policies and strategies already in place need to be evaluated to ensure that their objectives are met and its impact on the economy;

The digital transformation policy formulation should follow the steps: consultation, design, implementation, and monitoring and evaluation. OECD (2009). In this regard indicates that:

(a) Consultation it is necessary to consult with stakeholders to gain political support. This phase of the project is essential to create constituencies for the strategies to be implemented. Digital transformation relevant stakeholders comprise startups, MSME, the Ministry of Technology, consultants, academia, policymakers, banks, and financial institutions;

(b) Design – in this phase objectives, timing and resource allocation are established. This phase should include variable that can be measured over time in relation to concrete outcomes;

(c) Implementation – The tools of digital transformation are put into practice. Activities such as training, communications and guidelines are disseminated among key stakeholders and;

(d) Monitoring and Evaluation – it is crucial to monitor and evaluate the implementation of digital transformation policy and strategies so that necessary corrections and adjustments be taken in consideration. To make this happen key performance should be established.

## 3. RESEARCH DESIGN AND METHODOLOGY

This research is exploratory research (aimed to gain familiarity with an under-researched topic), Descriptive (Describe the Inter-agency cooperation environment), and Explanatory to explain why things occur in such a way. LEAVY (2017), Walliman (2011), KHOTHARI (2004)

Secondary data was collected from the Ministry of MSME website such as the MSME Draft Policy for MSME, Digital India Report and MSME Report on MSME, articles, annual reports, OECD publications and UNCTAD reports.

## 4. DATA PRESENTATION AND RESULTS ANALYSIS

Currently, they are approximately 63.3 million MSMEs operating in India and employ almost 40% of the country's workforce (approximately 111 million workers). According to Karthik, the State of Uttar Pradesh had the largest number of estimated MSMEs with a share of 14.20% in 2020. The top 10 performers are as indicated in the table below.

order	State	Percentage of
		MSME
1	UTTER PRADESH	14%
2	WEST BENGAL	14%
3	TAMIL NADU	8%
4	MAHARASHTVA	8%
5	KARTNATAKA	6%
6	BIHAR	5%
7	ANDRA PRADESH 🛌	5%
8	GUJARAT	5%
9	RAJASTHAN	4%
10	MADHYA PRADESH	4%
Source		

Table : Top 10 in MSME operating per state

Source:

Out of the 633.88 estimated number of MSMEs, 324.88 lakh (51,25%) are in a rural area and 309 lahks (48,75%) are based in urban areas. The number of MSMEs is expected to go up as the government is trying to promote entrepreneurship at rural levels. Only 43% of MSMEs participate in the e-commerce space. MSMEs in India may or may not have an online presence but 43% of them participate in online sales. By adopting e-commerce MSME can gain significant advantages such as: (1) improved market reach; (2) Access to new markets; (3) costs savings in marketing and customers acquisition; (4) Improve Customer Experience: and (5) Increased revenue and margins. KARTHIK (2022)

The adoption of digital technology by MSME has been at slower pace. However, the adoption of digitalization by MSME across dimensions like sales, payments, logistics, and advertising still nascent stage because at end of 2018 only 6% of MSME have adopted digitalization. MISHRA (2019). The impediments to digitalization include the low level of awareness, unavailability of talented human resources and cost of adoption, and absence of an understanding of the benefits that could be reaped through digital technology.

## 5. SUMMARY OF KEY FINDINGS AND THE WAY FORWARD

- The Digital Transformation in the MSME sector is currently in the earlier stage; but the objectives, scope, • and implementation measures are not clearly formulated;
- The adoption of digital technology by MSMEs has been at a slower pace. However, it is visible across • dimensions like sales, payments, logistics, and advertising where still in the nascent stage;
- The absence of an understanding of the benefits that could be reaped through of digital technology, low ٠ level of awareness, and cost of adoption.
- Lack of technical knowledge, R&D, expertise, and skills are among others limits to digitalization. ٠
- MSMEs in comparison with large industries do not have adequate resources, particularly monetary and ٠ administrative, and are not prepared for such long-term disturbances;
- MSMEs are being encouraged to market their products on the e-commerce site, especially through the government e-marketplace;

- Almost 43% of MSME participating in the e-commerce space in India may or may not have but participated in online sales;
- MSME can not upgrade themselves to digitalization.

## **5.2 THE WAY FORWARD**

The research findings are supported by evidence-based. However, necessary improvement of the MSME Policy is strongly recommended as follows:

- (1) Based on existing extensive research papers the MSME should identify the strengths and weakness of the Digital Transformation of MSME, to support the Draft Policy of MSME in the definition of the key objectives, priorities and action plan required to gradually implement the program;
- (2) Digital Transformation Policy for MSME need a particular emphasis in the concept, vision, purpose and benefits be highlighted in the awareness program including the guidelines;
- (3) Digital Transformation should include SMART objectives that can timely subject to monitoring and evaluation process;
- (4) MSME cannot alone embark in digital transformation they need government support in different aspects such as financial and non-financial that provide ICT skills, knowledge and capacity to implement digital transformation plan in the firms, such can be provided through training and education programs;
- (5) Incubation of MSME Ministerial Department should adjust its competencies to add Digital Transformation implementation in collaboration startups in order to achieve costs affordable;
- (6) Financial and technical support funded by Government toward digital transformation is also required in partnership with private sectors stakeholders;

## ADOPTION OF MSME GUIDELINES FOR DIGITAL TRANSFORMATION

The MSME Policy in Indian should be supplemented by the MSME Guidelines for Digital Transformation that cover:

(1) evaluation assessment, problem identification aimed to provide digital maturity assessment; (2) strategic vision (defining guidelines or direction for the company digital transformation; (3) roadmap defining the implementation strategy and milestones for the company digital transformation; (4) customers experience manage customers experience in digital transformation; (5) operations, operational transformation adopt operational digital transformation; (6)processes and procedures design digital transformation business procedures; (7) Implement/ transform means on field implementation of digital transformation; (8) Skills and Finance means build skills and get financial support. Rigorously these are not phase of digital transformation but key elements required for the implementation of digital transformation.

Therefore, Digital Transformation is part of corporate strategy.

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