

India's Technological Roadmap for MSMEs Governance

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Abstract

MSMEs are growth engines globally as well as in India. MSMEs contribution to Indian economy in terms of contribution to GDP is about 30% in 2022 and will grow further. MSMEs are the second largest employer after the agriculture sector, giving employment to about 11 crore people with low capital and technology requirements. MSMEs contribute to 50% of India's exports. The Covid pandemic has delayed India's dream of becoming US \$ 5 trillion economy from 2025 to 2030. The Ministry of MSME has set a target to increase contribution of MSMEs to 50% of India's GDP to achieve goal of US \$ 5 trillion economy. MSMEs contribute to inclusive and sustainable economic development of the country to meet MDGs set by United Nations Millennium Declaration signed in 2000 by leaders of all countries in the World. The Central/State Governments and RBI have taken proactive reforms with their policy measures to support MSMEs in India.

This paper examines technology and innovation measures of state and private players to help MSMEs to contribute to their pivotal role in nation's development. This paper brings out issues, challenges and opportunities in the process of technology absorption and disruption by MSMEs in India. It suggests policy initiatives to augment technology absorption process for MSMEs in India.

Keywords: MSMEs (Micro, Small and Medium Scale Enterprises), GDP (Gross Domestic Product), CG (Corporate Governance), MDGs (Millennium Development Goals), RBI (Reserve Bank of India), SIDBI (Small Industries Development Bank of India), SEBI (Security Exchange Board of India).

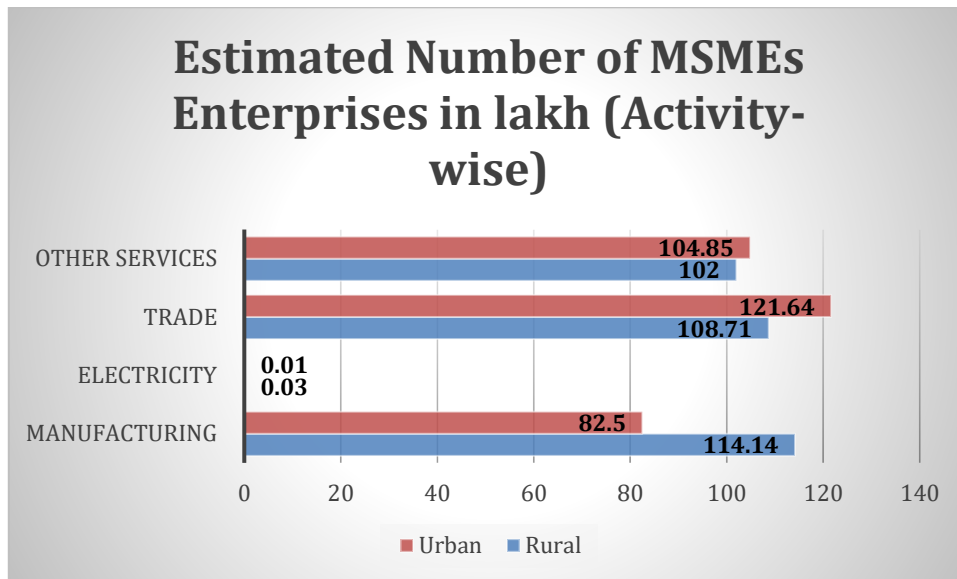
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Introduction:

Key results of NSS 73rd Round Survey (2015-2016) on Micro, Small and Medium Enterprises bring out contribution of MSMEs in inclusive and sustainable development of Indian economy as depicted in tables given below:

Table: 1
Estimated Number of MSMEs Enterprises in lakh (Activity-wise)

Activity(Category)	Rural	Urban	Total	Share (%)
Manufacturing	114.14	82.50	196.64	31
Electricity	0.03	0.01	0.4	0
Trade	108.71	121.64	230.35	36
Other Services	102.00	104.85	206.85	33
All	324.88	309.00	633.88	100



Source: <https://msme.gov.in/sites/default/files/MSMEENGLISHANNUALREPORT2021-22.pdf>

Table: 2

Percentage Distribution of Enterprises in rural and urban areas (Male/Female) Ownership

Sector	Male	Female	Total
Rural	77.76	22.24	100.00
Urban	81.58	18.42	100.00
Total	79.63	20.37	100.00

Source: <https://msme.gov.in/sites/default/files/MSMEENGLISHANNUALREPORT2021-22.pdf>

Table: 3

Percentage Distribution of enterprises by social group of owner in rural and urban areas

Sector	SC	ST	OBC	Others	Not Known	Total
Rural	15.37	6.70	51.59	25.62	0.72	100.00
Urban	9.45	1.43	47.80	40.46	0.86	100.00
Total	12.45	4.10	49.72	32.95	0.79	100.00

Source: <https://msme.gov.in/sites/default/files/MSMEENGLISHANNUALREPORT2021-22.pdf>

Table: 4

Estimated Employment in the MSME Sector in lakh (Activity-wise)

Broad Activity	Rural	Urban	Total	Share
Manufacturing	186.56	173.86	360.41	32
Electricity	0.05	0.02	0.07	0

Trade	160.64	226.54	387.18	35
Other Services	150.53	211.69	362.22	33
Total	497.78	612.10	1109.89	100

Source:<https://msme.gov.in/sites/default/files/MSMEENGLISHANNUALREPORT2021-22.pdf>

Table: 5

Distribution of employment by type of Enterprises in Rural and Urban Areas (numbers in lakh)

Sector	Micro	Small	Medium	Total	Share (%)
Urban	489.30	7.88	0.60	497.78	45
Rural	586.88	24.06	1.16	612.10	55
All	1076.19	31.95	1.75	1109.89	100

Source:<https://msme.gov.in/sites/default/files/MSMEENGLISHANNUALREPORT2021-22.pdf>

Table: 6

Distribution of workers by gender in rural and urban areas (numbers in lakh)

Sector	Female	Male	Total	Share (%)
Rural	137.50	360.15	497.65	45
Urban	127.42	484.68	612.10	55
Total	264.92	844.83	1109.75	100
Share (%)	24	76	100	

Source:<https://msme.gov.in/sites/default/files/MSMEENGLISHANNUALREPORT2021-22.pdf>

1.2: The MSMEs contribution to GDP and exports is also substantial as shown below:

Table: 7

MSMEs Contribution to GDP in percentage

Year	GDP Share (%)
2018-2019	30.5
2019-2020	30.0
2020-2021	27.0

Source: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1744032>

Table: 8

MSMEs Contribution to Exports in percentage

Year	Share in Exports (%)
2018-2019	48.1
2019-2020	49.8
2020-2021	49.5

Source:<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1744032>

Literature Review:

Sharon Buteau (2021) brings out digital technology's role to foster India's MSMEs ecosystem. The author has also cited challenges and opportunities in the implementation of digital technology for MSMEs in India.

Vidit Mohan (2019) studied major challenges and barriers faced by Indian MSMEs over the adoption of internet marketing and e-commerce of their businesses and made suggestions to policy makers to integrate their business with the modern business practices.

Vipinkumar (2020) stressed Government support in promoting MSMEs governance with policy measures under the banners of digital India, make in India, Atmanirbharbharat etc. The author brings out importance of technology adoption and absorption for MSMEs. The key issues and challenges faced by MSMEs are also highlighted.

Pachouri, A., and S. Sharma (2016) studied present and current state of innovation in small and medium size enterprises (SMEs) in India. The authors examined barriers SMEs in India face in the innovation process such as public policy, funding constraints, and shortage of skilled and R&D workforce and weak linkage between institutions and the firms. Authors suggested measures to mitigate issues impeding innovation process for SMEs in India

K.C.Chakrabarty (2012) in his speech reported in RBI Monthly Bulletin on Empowering MSMEs for Financial Inclusion and Growth – Role of Banks and Industry Associations mentioned following SMEs problems viz. Absence of adequate and timely banking finance, limited capital and knowledge, non-availability of suitable technology, low production capacity, ineffective marketing strategy, identification of new markets, constraints on modernisation and expansion, non-availability of highly skilled labour at affordable cost, follow up with various government agencies to resolve problems etc. Global recession, inflation and depreciation of rupee were cited as external factors impacting MSMEs performance. Important measures taken by Government and RBI were also highlighted.

Amit Saini (2014) in his MQP Major Project on Problems and Prospects of MSMEs in India at Coventry University, U.K. conducted primary study of MSMEs respondents through structured questionnaire and interview to illicit their response on government policy influence on availability of short term and long term finance to MSMEs from banks in India. The study concluded that government policy on MSMEs has no significant impact on availability of short term and long term finance to MSMEs in India.

Mohammad Swalehin (2017) brings out that The Indian Government 'digital India' project would be a reality if it includes neglected section of the society. MSMEs inclusive participation in digital India project is therefore a major challenge for policy maker.

Patnaik Chandramohan B, SatpathyIpseeta and Rachayeeta Priti (2016) examined issues faced by MSMEs in India.

Davinder Singh (2019) examined technology innovation implementation (TII) dimensions in the selected firms in Northern Region in India. The study findings suggest that TII can contribute to enhance manufacturing performance in MSMEs in India.

S. Manikandan (2016) in his study mentioned scheme of Government to promote MSMEs viz. Micro and Small Enterprises- Cluster Development Programme-MSE-CDP. According to him, the reluctance of banks to finance MSMEs hinders growth of these enterprises.

Shyamla Devi Bhoganadam, NaneSrinivasha Rao and DasarajuSrinivashaRao (2017) in their study bring out a comprehensive literature review on issues and challenges faced by SMEs in India.

Research Objectives:

- To examine technology absorption measures of Government and private players to promote governance process of MSMEs in India.
- To evaluate issues, challenges and opportunities for MSMEs in India in the process of technology absorption.
- To examine policy initiatives to augment technology absorption by MSMEs in India.
- To suggest measures to overcome impediment in process of implementation of policy initiatives for the MSMEs in India.

Research Methodology:

The article is a descriptive research based on inputs from secondary sources drawn from literature review of the topic with set objectives.

Technology absorption measures of Government and private players to promote governance process of MSMEs in India

Government intervention in the MSME landscape is generally limited to dealing with the financing issues of MSMEs. The new-age start-ups have stepped in. Emerging tech-based platforms are now helping MSMEs upscale and integrate their operational capabilities. The tech-based platforms specialise in various domains, helping them cater to various facets of MSME operations such as planning supply chain & logistics, channelizing workflow among interlinked departments and monitoring product quality.

Source: <https://www.ibef.org/blogs/tech-based-solutions-to-empower-the-indian-msme-landscape>

The prominent tech enablers empowering MSMEs in financial services are listed below.

- LendenClub – Founded in 2015, LenDenClub is a peer-to-peer platform that connects lenders and verified borrowers. It facilitates small-ticket loans through its platform Instamoney to MSMEs that have limited financial support from banks. The company serviced 2 million clients and disbursed >Rs. 10 billion so far.
- Brego – Established in 2019, Mumbai-based Brego is helping MSMEs get real time insights from their financial data through a mobile-based SaaS application. The app provides easy access (via mobile phones and even web browsers) to key financial parameters such as sales, receivables, profit & loss and cash flow to stakeholders, providing visibility of their financial operations. The app also enables business owners to share real-time reports with team members, clients and vendors through Whatsapp or email.
- PayNearBy– Launched in April 2016, PayNearBy provides a variety of financial and non-financial digital services to local retailers. The firm currently serves 15 lakh+ retailers and plans to expand this base to 5 million stores across Tier I & II cities and rural towns in the near future. Retailers can avail various facilities such as cash deposit & withdrawal, money transfer, savings, insurance, travel, digital payments and government benefits.
- Numerous other players such as MSwipe, RazorpayX, RXIL, Algo360, Cashinvoice and Happy Loans are empowering the MSME sector with their fintech offerings.

Source: <https://www.ibef.org/blogs/tech-based-solutions-to-empower-the-indian-msme-landscape>

The prominent tech enablers empowering MSMEs in operational services are listed below.

- Meesho– Founded in 2015 and headquartered in Bengaluru, Meesho enables small businesses and individuals to sell products online through social media channels such as Whatsapp, Face book and Instagram. In August 2020, Meeshoalso partnered with fintech start-up Klub to provide financing solutions for MSMEs. Meesho recorded 750% growth in user base last year during its flagship festive sale event alone, with 60% demand driven by tier 4+ markets including remote locations in the country.
- Alignbooks – Established in September 2016, Alignbooks is cloud-based accounting software designed to help MSMEs automate their invoicing system. So far, the firm has serviced over 30,000 MSMEs in India and processed over 15 lakh invoicesfor customers. Alignbooks has also released an offline version of its software to cater to the population with limited internet in rural areas.
- Tradeindia– Set up in 1996, with a mission to help SMEs go digital, Tradeindiais India’s largest online B2B platform that connects buyers and suppliers. The company also provides payment protection plans (TI Pay), Collateral Free Loans (TI Lending) and Logistics (TI Logistics) and is the first company in the country to provide e-commerce and solutions for booking domains, SSL, Adword, SMO and FB Promotion to SMEs.
- Locus – Founded in 2015, Locus uses machine learning & proprietary algorithms to automate complex supply chain decisions. In April 2020, the firm launched a free tool ‘QuickStart,’ which is a self-serve lite version of the product suite designed to help MSMEs improve their supply chain during the pandemic.
- Tech giants such as Amazon and Flipkart are also empowering MSMEs with their tech offerings. For example, Flipkart has launched several initiatives to support MSMEs.Flipkart launched Samarth Programme for on boarding Indian artisans, weavers and handicraft producers in e-commerce platform. Flipkart in partnership with FICCI launched a series of workshops for MSMEs. In July 2021, Amazon launched ‘Digital Kendras’ to boost MSME business owners and educate them on the benefits of digitising their operations. As of April 2021, Amazon has digitised 2.5 million SMEs in India.
- Tech giant Dell frequently addresses MSME challenges and supports the sector through its technology advisors. The company has been organising ‘MSMEs Day’ on its platform every year since 2019. Other giants such Walmart and Google have also joined the initiative of empowering the MSME community.
- A survey conducted in 2020 by Endurance International Group, an IT services company, revealed that 30% MSMEs have launched their business websites or tied upwith e-commerce platforms and more than50% MSMEs have adopted video conferencing
- tools to ensure business continuity since the pandemic-induced disruptions.

Source: <https://www.ibef.org/blogs/tech-based-solutions-to-empower-the-indian-msme-landscape>

Tally, Microsoft, Google, SAP, Dell, Intel, Amazon, Jio, offered allure to MSMEs to adopt technology for basic transaction processing, connectivity, needs. Players likeAWS and GoDaddy help MSMEs to learn use of technology with a digital look and persona. Players like Zoho are focusing entirely on SMEs. Players like Zinnov, D&B, Big 4, and some other boutique consulting firms are making users aware, connected, enabled, engaged and educated on using technology and harnessing the power of information for and to MSMEs.

GST, Aadhar, UPI projects helped MSMEs to learn transparent transactions within legal frame. Government portals for procurement helped MSMEs to transact digitally with it.

B2B and B2C platforms such as Alibaba, Trade India, GlobalLinker, Power2SME. HDFC bank’s Smart Buy, SBI’s YONO, Government’s Bharat, Opportunity network and many others encouraged MSMEs to go digital for market access.

Several gig and advisory platforms such as Flexingit and many others helped MSMEs to seek advice using digital platform.

The young workforce trained in technology and necessity to adapt to Covid Pandemic challenges was also contributing factors in MSMEs journey to use technology in their operations.

Source:<https://www.outlookindia.com/website/story/opinion-msmes-tryst-with-technology/387205>

Issues, Challenges and Opportunities for MSMEs in India in the process of technology absorption.

The issues and challenges of MSMEs in India are classified in two main categories viz. external issues and challenges and internal issues and challenges.

The external issues and challenges of MSMEs in India are depicted in the table as follows:

Table: 9

External issues and challenges of MSMEs in India

External issues and challenges	Due to lack of market information
	Due to lack of customer related information
	Lack of electricity power
	Poor access to justice
	Competition with domestic products
	Competition with imported products
	Environmental issues and challenges
	Global Legal framework
	Global political scenario
	Sustainability of the market for the products
	Global Regulatory forums
Socio cultural issues and challenges	Religious factors impacting demand and supply of the products and services
	Cast factors impacting demand and supply of the product and services

	Education level impacting demand and supply of the products
	Family structure impacting demand and supply of products and services
	Social network impacting demand and supply
	of the products and services

Source: Research Journal SRNMC-Vol-1 March 2017 ISSN 2395-7085 The internal issues and challenges of MSMES in India are depicted in the table as follows:

Table: 10
Internal issues and challenges of MSMES in India

Production issues and challenges	Lack of education and training
	Lack of raw-materials and electric power
	Lack of machinery/equipment and poor quality control and testing facilities
	Poor project planning
	Lack of R&D facilities
	Lack of demand
Marketing issues and challenges	Unorganized market and distribution channels
	Poor knowledge of market conditions and nature of operations
	Lack of networks of associates and consultants
	Identification of new markets and low returns
	Failure to adhere to delivery time and meeting customers' expectations
Financial issues and challenges	Lack of credit from banks for long term, medium term and working capital needs
	Promoters capital inadequacy

	Non-supportive Banks lending policies structure
	The procedural delays in raising funds from banks and financial intermediaries.
	Lack of awareness of government schemes to source funds to MSMEs
Human Resource issues and challenges	Insufficient training to employees
	Inadequate employee management skills
	Lack of employees and skilled labour force
	Role clarity issues for employees
	Informal recruiting
Infrastructural issues and challenges	Insufficient water facility for plant operations and employees
	Lack of storage facilities
	Poor Transport facilities
	Inadequate warehousing facilities
	Lack of industrial estate facilities

Source: Research Journal SRNMC-Vol-1 March 2017 ISSN 2395-7085

Policy initiatives to augment technology absorption by MSMEs in India

The policy measures initiated by Ministry of Micro, Small and Medium Enterprises in the following areas to help MSMEs in India to circumvent technology absorption obstacles are summed up below:

- Financial Scheme to support MSMEs in ZED Certification Scheme: The scheme is to inculcate Zero defect and Zero effect practices in manufacturing operations to ensure continuous improvement to support make in India policy initiative of the Government.
- The scheme of Assessment and Rating/Re-rating/Gap analysis/ Hand-holding provides subsidy to MSMEs fulfilling certain assessment criteria.
- A Scheme for promoting innovation, Rural Industry and Entrepreneurship promote opportunities for creation of new jobs and augmentation of competitiveness in MSMEs.
- Credit linked Capital Subsidy for technology upgradation scheme of Government provides subsidy of 15% on additional investment made by MSMEs up to Rs. 1 crore for technology upgradation.
- A scheme of marketing support/assistance to MSMEs provides for reimbursement of registration fees for bar code registration.
- A Lean Manufacturing Competitiveness Scheme promotes manufacturing competitiveness in MSMEs.
- Design Clinic scheme for increasing competitiveness of MEMEs through adoption of design and its learning.

- Technology and Quality Upgradation Support to MSMEs scheme promotes use of energy efficient technologies in MSMEs.
- A Scheme of Entrepreneurial and Managerial Development of SMEs through incubators provide early stage funding to nurture innovative business ideas. 7.1.10: A Scheme for enabling Manufacturing Sector to be competitive through QMS and QTT helps MSMEs to sensitize and understand latest Quality Management Standards and Quality Management tools.
- A scheme of building awareness on Intellectual Propriety Rights is designed with the purpose of creating awareness in MSMEs to safeguard their new ideas from duplication by intruders.

RBI prescribed liberal credit norms for commercial banks offering credit to MSMEs operating in priority sectors of the economy.

SIDBI promotes techno commercial and managerial support and assistance to MSMEs in all states of India.

SEBI has directed all stock exchanges in India to allow listing of securities of small and medium enterprises on their trading platform without making an Initial Public Offer to help these enterprises to tap capital markets for their funding needs.

The concept of OPC and Small Company is introduced in the Companies Act, 2013 The Companies Act 2013 also made certain provisions for small companies to reduce their compliance needs and cost for routine operations and merger deals.

Findings and Discussion

The current trend of measures of policy makers and private players are more focused on financial aspects. The measures need to be focused in all inter disciplinary aspects such as production, marketing, human resource, infrastructure, quality and technology.

The interdisciplinary issues such as production, marketing, human resource, infrastructure, quality and technology need support from MSMEs promoters and management. This is well within their governance domain.

The policy initiatives of Ministry of Micro, Small and Medium Scale Enterprises are more focused on manufacturing industry. Service Sector also needs attention particularly in timely delivery of quality service and after sales service domain. The Service Sector is contributing approximately 54 percent of India's GDP.

RBI, SIDBI and SEBI policy initiatives help MSMEs to remove partially financial issues and challenges .Promoters capital contribution in the initial stage of start-up is major funding source.

The quality of workforce in MSMEs is one issue. The onus to provide skilled manpower is on educational institutes. New Education Policy is in formative stage. Implementation of NEP will help in resolving skill-gaps issue of MSMEs.

The external issues and challenges can be mitigated by giving greater thrust on improving quality of education by the educational institutes.

Conclusions and Suggestions:

The development and governance issues of MSMEs are complex. MSMEs play vitalrole in inclusive development of Indian economy. Technology absorption in all functional areas will resolve internal issues and challenges faced by MSMEs. The proactive role of policy makers, private players, regulators

and enterprises will be needed as catalyst in technology adaption and absorption process of MSMEs to achieve nation's goal of 5 trillion US \$ economy in 2030.

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