



A Report on

MSME's Challenges in India

Insights from Andhra Pradesh

Research Team:

Prof. Chandan Chowdhury, Principal Investigator

Prof. Pratap Sundar, Academic Director

Col. Rajiv Bhargava, Associate Director, Project Management

Saikat Ghosh, Research Associate

Anurag Sobti, Research Associate

www.isb.edu

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- Mr JSRK Prasad (Past Chairman, CII Andhra Pradesh, Chief Executive Officer, Better Castings)
- Mr Neeraj Sarda (Vice Chairman, CII Andhra Pradesh & Deputy Managing Director, Sarda Metals & Alloys Ltd)
- Mr S Narendra Kumar (Chairman, CII Vijayawada Zone & Executive Director, Apex Solutions Ltd)
- Mr P L Bheemesh (Co-Convenor, CII Andhra Pradesh Manufacturing & Industry
 4.0 Panel & Managing Director, Genius Filters & Systems Pvt Ltd)
- Mr T Chandra Shekhara Rao, Past Chairman, CII Vijayawada Zone & Executive Director, Seshasayee Knittings (P) Ltd)
- Mr Y V Krishna Mohan (Past Chairman, CII Vijayawada Zone & CEO, Surya Engineering Works)
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Confederation of Indian Industry
Andhra Pradesh State office & Vijayawada
Zonal Office, Ground Floor, Door no.4015/2-19/5, Brindavan Colony, Labbipet,
Vijayawada-520 010
Tol/Fax: 191 866 2495967

Tel/Fax: +91-866- 2495967

Email: cii.andhrapradesh@cii.in,

cii.vijayawada@cii.in

Visakhapatnam Zonal Office

cii.vizaq@cii.in

Ground Floor, Door no. 8-4-56, Plot No. 23, Prasanthi Nagar, Peda Waltair, Visakhapatnam – 530017 Tel / Fax: +91-891-2555535, Email:



Shri Amitabh Kant CEO, NITI Aayog

Message

MSMEs will play a significant role in reviving India's economic growth and achieving its vision of becoming more self-reliant. COVID-19 has been extensively disruptive in terms of economic activity and loss of human lives across the globe. At the same time, this crisis has given us a unique opportunity to introspect and appreciate the power of innovation and digital transformation for business continuity and global competitiveness. India can use this opportunity to undertake bold and ambitious structural reforms and leverage them to put the country on a high growth trajectory.

There is a need for the Indian MSMEs to enhance their capabilities to supply/ quality products at a competitive price; embracing technological solutions across the supply chain is imperative in addressing quality concerns and improving cost competitiveness. It will be possible by a strong focus on innovation and entrepreneurship. By serving global markets through quality and cost-competitive products, MSMEs can drive the export-led growth in India.

The Government is committed to creating an enabling environment for the MSMEs and private sector' to thrive. The private sector and OEMs will also need to help the MSMEs adopt the latest technologies and new business processes. With the world rapidly changing, the emergence of new technologies, and changes in consumer preferences, we should guide and upskill our MSME sector to take advantage of the new global environment.

I am happy to note that CII Andhra Pradesh and the Indian School of Business have come together to do an insightful study of the problems faced by MSMEs in Andhra Pradesh. Such initiatives go a long way in enabling informed policymaking by the Government and the private sector to identify areas to assist MSMEs.

hope such industry-academia collaboration will gather steam, and we will have similar inclusive studies for MSMEs in other states in India.



Shri Sunil Kant Munjal Chairman, Hero Enterprise

Message

The growth of our MSMEs will be vital to India's strategy of becoming a five trillion-dollar economy by 2025. India's working-age population is likely to increase from approximately 61% in 2011 to 65% in 2036. We need to create jobs to involve our youth in the economic activities of the country. MSMEs play an important role in employment generation, second only to the agricultural sector.

Despite our aggressive growth plan, MSMEs' contribution to GDP has remained largely unchanged during the last ten years, at approximately 30%. Data-driven insights to understand the challenges and opportunities of MSMEs are essential for developing policies and strategies that can help enhance MSMEs' contribution to the economy, including export.

The research study conducted by the Munjal Institute for Global Manufacturing at ISB is very insightful since it diagnoses the challenges faced by MSMEs in Andhra Pradesh both before and during the pandemic. The study covers a range of issues like innovation strategies and digital footprints of MSMEs and their barriers to expanding to the global market. The study also captures feedback on the revised definition of MSMEs and awareness of various government schemes and platforms among the MSMEs.

This report presents many insights that will help MSMEs and the Government alleviate the problems faced by the MSMEs. A similar study may be conducted at the pan-India level.

The focus of the MSMEs should be to accelerate the process of innovation, improve quality and reduce cost, enhance productivity and adopt digital technologies. The chapter on major findings and recommendations will be helpful both for the MSMEs and policymakers.

I appreciate the collaboration between ISB and CII in studying the problems of MSMEs of Andhra Pradesh.



Message

Prof. Pillutla, Madan Dean, Indian School of Business

I see immense opportunities for leading business schools to become essential contributors to the India growth story. It is not just about training managers for the Indian and global companies but also about engaging in applied research to solve India's complex problems. It is also about identifying how creative management ideas and principles can help solve real-world problems. The urgent requirement in today's competitive milieu is rigorous research aimed at solutions in an environment where technology can facilitate scalability. I am pleased to state that this report exemplifies how business schools can bring in research-based solutions to complex problems faced by Indian businesses.

Micro, Small, and Medium Enterprises (MSMEs) constitute the backbone of the Indian economy and have demonstrated considerable resilience in employment generation in the past. However, despite the government's encouragement and supportive policies, MSMEs continue to face many challenges in scaling up.

The Indian School of Business (ISB) is conscious of the need for MSMEs to adopt new technologies. It has entered numerous collaborations to nurture technology-based start-ups in the social space, focusing on ventures working in areas relevant to national priorities.

The current initiative of ISB and CII Andhra Pradesh aims to understand the challenges faced by MSMEs of Andhra Pradesh. I congratulate the research team on coming out with a report that will contribute towards the building up of an 'Atma nirbhar Bharat.'



D Tirupathi Raju Chairman CII Andhra Pradesh



Prof. Chandan Chowdhury Senior Associate Dean Indian School of Business

Foreword

The industry is trying to navigate the challenging and unprecedented times due to the COVID-19 pandemic. COVID-19 has disrupted businesses across the world, and India's MSMEs have witnessed extraordinary challenges. The imposition of nationwide lockdown impacted products and services offered by MSMEs, a sector that is not prepared to operate in a contactless world. It is complex to plan business decisions, particularly for Micro, Small and Medium Enterprises (MSMEs).

Over the years, the MSMEs have become vital to the Indian economy, contributing 30% to the country's GDP, 45% to the manufacturing output, and 48% to the exports. MSMEs provide the largest share of employment after agriculture, and hence, the development of the MSME sector can contribute enormously to the country's socio-economic development. The Government of India has an ambitious plan to accelerate the growth of MSMEs to enhance their contribution to GDP from the current 30% to 40%. During the years 2011-12 to 2018-19, the MSME's contribution to GDP has remained largely unchanged, ranging from 29.25% to 30.4%. There is a need to introspect and derive data-driven insights and strategies to accelerate the growth of MSMEs.

The MSME sector in Andhra Pradesh manufactures various products with a high concentration of Micro and Small units belonging to food, mineral and building materials, drugs and pharmaceuticals, fabricated materials, trading, and service sectors. Andhra Pradesh has identified the development of MSMEs as a catalyst for job creation and balanced regional development.

Indian School of Business and CII Andhra Pradesh embarked on this study to assess the current state of MSMEs in Andhra Pradesh. The unique aspect of this study is that it explored the challenges faced by the MSMEs before and after the COVID-19 outbreak. In addition to understanding the effectiveness of various initiatives launched by the government to support MSMEs, we have also studied the innovation strategies adopted by MSMEs. During COVID-19, we have experienced the importance of digital innovation to ensure business continuity and market access. In this study, we have analysed the current level of deployment of digital technologies in MSMEs. We have derived insights to understand the barriers to MSMEs' growth and the support that MSMEs need to expand into the international market. We have made recommendations to the government and industry to enhance the MSME's contribution to GDP. A concerted effort by the government and the industry will promote the emergence of an inclusive ecosystem to develop a vibrant MSME sector.

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1. Background

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in India's economy, contributing approximately 30% to the GDP. The government's vision is to enhance this contribution to 40%. MSMEs currently contribute 48% to India's exports and employ 111 million. The government intends to enhance this export contribution to 60% and generate an additional 50 million jobs. This will increase the employment generation by MSMEs from the current 111 million to 161 million by 2025.

Despite the government's vision, MSMEs have suffered from their inability to scale up, with limited market access and low productivity. Prime Minister of India, Shri Narendra Modi, in 2019, envisioned making India a USD 5 trillion economy by 2024-25. Though COVID-19 acted as a significant speed breaker to this vision, in February 2021, the government has announced its plan to stick to the ambition of becoming a 5 trillion dollar economy by 2024-25. For this to happen, MSMEs' contribution to our economy needs to increase significantly.

Against this backdrop, we have undertaken a study of MSMEs in Andhra Pradesh. MSMEs play a crucial role in the economic growth of Andhra Pradesh, with 3.39 million MSMEs employing over 5.59 million people. There have been several initiatives both at the central and state level to enhance MSMEs' growth. We have observed that there is a wide gap between MSMEs' actual growth and the government's aspirations.

The objective of our study was to collect primary data to identify challenges and intervention strategies. In collaboration with CII's Andhra Pradesh Chapter, we have studied the MSMEs' challenges in Andhra Pradesh.

We studied the current state of MSMEs in Andhra Pradesh by analysing the following aspects of the working of MSMEs:

- Challenges faced by MSMEs before COVID-19
- Impact of COVID-19 on MSMEs
- Government support to MSMEs

^{1.} https://www.youtube.com/watch?v=sqxwHyb-pXE

^{2.} https://economictimes.indiatimes.com/news/economy/policy/govt-sticks-to-usd-5-trillion-economy-target-emphasis-on-infra-aimed-at-achieving-goal-dea-secretary/articleshow/80686511.cms?from=mdr

^{3.} Government of India, Ministry of Micro, Small and Medium Enterprises, Annual Report 2020-21 at https://msme.gov.in/sites/default/files/MSME-ANNUAL-REPORT-ENGLISH%202020-21.pdf

- Innovation strategies adopted by MSMEs
- Current status of digital footprint in MSMEs
- Digital literacy and productivity
- Trends in the deployment of technology
- Support needed by MSMEs to scale up
- Readiness for future

In this study, we have covered the challenges faced by MSMEs before and during COVID-19.



2. Methodology

We conducted a series of interactive online polls involving MSMEs to understand their business challenges. The results helped us design a questionnaire that covered a range of issues and, in collaboration with CII, administered the questionnaire to the MSMEs. We classified the questionnaire into the following groups:

- General information about the respondents like industry, market reach (domestic, export, both domestic and export), the share of export, employee strength, annual turnover, business challenges faced before the pandemic, and barriers to selling globally
- Impact of COVID-19 on logistics, customer orders, cash flow, profit, and workforce, reasons for the slowdown of business and work from home infrastructure. The status of adoption of digital technologies within the organization like market access, backend business applications, use of digital platforms, and applications/schemes offered by the government
- Impact of lockdown on the strategy for reviewing product or services post-pandemic, capacity utilization, the effect of migrant labourers, etc.
- Feedback on the government's new policy related to MSMEs
- Prevailing innovation culture in the MSMEs

A total of 126 organizations responded to our questionnaire. There were 32 incomplete, 6 anonymous, and 5 duplicate responses that were not considered in our analysis. We had finally considered 83 organisations' responses in our study.

After analysing the data, we conducted a detailed interaction with the CII leadership team and entrepreneurs in Andhra Pradesh, shared our insights, and received feedback. We carried out further analysis and shared our findings with the same leadership team through another level of an interactive brainstorming session.

2.1 Details of companies surveyed

Table 1 summarises the sector-wise break up of 83 responses considered in our study; 41 companies represent the 'services' sector, and 42 represent the 'manufacturing' sector.

Table 1: Sector-wise break-up of responses

Row Labels	Number of responses	Services	Manufacturing
Others	24	10	14
Services	18	17	1
Food Processing	10	1	9
Textile	10	1	9
IT & ITES	6	6	0
Pharma	5	2	3
Chemical	4	1	3
Automotive	3	1	2
Consumer Durables	1	0	1
Education	1	1	0
Not specified	1	1	0
Grand Total	83	41	42

24 companies in our study that fall in the 'Others' category belong to logistics, fertilisers, wood-based industry, brick industry, industrial automation, entertainment, NGO (Non-Governmental Organisation), construction, healthcare, and engineering sectors. We had 18 respondents that had selected 'Services' (designing, infrastructure, insurance, exports, logistics, consulting, CA practitioners, marketing, road transport service provider, port cargo handling services, etc.) as a category. One of these companies is into manufacturing, and we have grouped this under 'Manufacturing'.

In the next chapter, you will read about the reality check of MSMEs' growth based on their performance during the last few decades.



3. MSME's growth trends: Reality check and aspirations

In this section, we review the statistics related to MSME's growth and contribution and, in particular, capture:

- MSME's contribution to GDP since 2011-12
- Employment generation in the rural and urban areas for male and female
- Export in value and percentage during the period 1991-92 to 2017-18
- MSME's growth in the number of units, production volume, and employment generation during the period 1991-92 to 2015-16
- Number of employees per unit during the period 1991-92 to 2015-16

3.1 MSME's contribution to Indian GDP

Figure 1 shows MSME's contribution to GDP during the period 2011-12 to 2018-19.

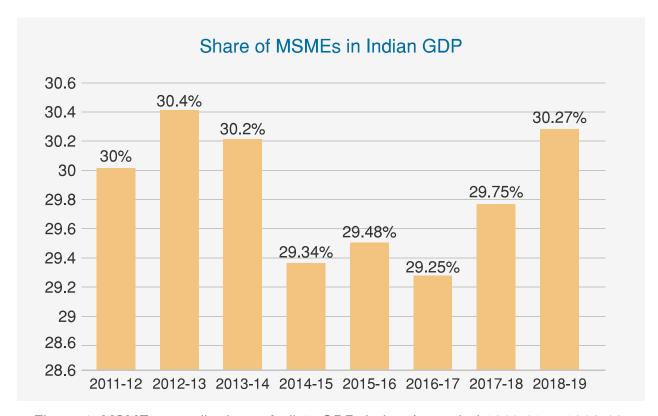


Figure 1: MSME's contribution to India's GDP during the period 2011-12 to 2018-19

The data represented through Figure 1 is based on the Government of India, Ministry of Micro, Small and Medium Enterprises, Annual Report 2017-18 (for the years 2011-12 to 2013-14), and Annual Report 2020-21 (for the years 2014-15 to 2018-19)⁵.

We can see from Table 2 that MSMEs' contribution to GDP fluctuated in the range of 29.25% to 30.4% during the period 2011-12 to 2018-19. As mentioned earlier, in the inaugural ceremony of 'Vedanta MSME Programme in support of Aatmanirbhar Mission' on 20th April 2021, Shri Nitin Gadkari, Minister for Road Transport & Highways and the Minister of Micro, Small and Medium Enterprises in India, mentioned that MSMEs' contribute 30% to GDP and 48% to the country's export⁶.

3.2. Employment details in MSMEs

Table 2 shows that MSMEs employ a total of 1109.89 lakhs (approximately 111 million). We can also see the distribution of employees in the rural and urban areas for both males and females⁷. The same information is also graphically presented in Figure 2.

Table 2: Distribution of employees by gender in the rural and urban areas in MSMEs

Sector	Female	Male	Total	Share (%)
Rural	137.50	360.15	497.78	45
Urban	127.42	484.54	612.10	55
Total	264.92	844.68	1109.89	100
Share (%)	24	76	100	

^{4.} Annual Report 2017-18 (for the years 2011-12 to 2013-14) at https://msme.gov.in/sites/default/files/MSME-AR-2017-18-Eng.pdf

^{5.} Government of India, Ministry of Micro, Small and Medium Enterprises, Annual Report 2020-21 (for the years 2014-15 to 2018-19) at https://msme.gov.in/sites/default/files/MSME-ANNUAL-REPORT-ENGLISH%202020-21.pdf

^{6.} https://www.youtube.com/watch?v=sqxwHyb-pXE

^{7.} Government of India, Ministry of Micro, Small and Medium Enterprises, Annual Report 2020-21

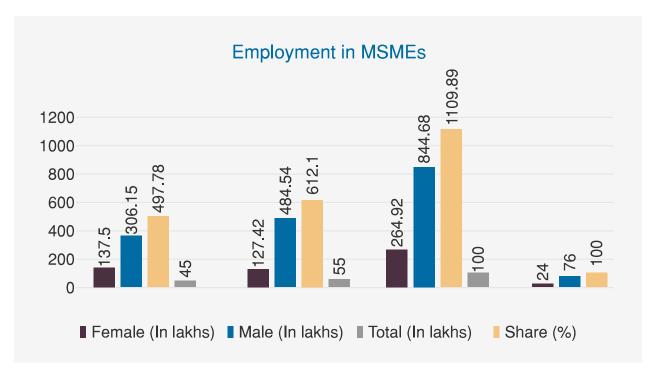


Figure 2: Distribution of employees by gender in the rural and urban areas in MSMEs

3.3 MSME's contribution to export from 1991-92 to 2017-18

MSMEs' contribution to export during 1991-92 to 2017-18 is shown in Table 3. The details on MSMEs' contribution to export are graphically represented in Figure 3.

The export data for 1991-92 to 2011-12 is obtained from Ahmed, Israr & Haseen D⁸ and for the period from 2012-13 to 2017-18 from the report by an expert committee on MSMEs ⁹.

MSMEs' contribution to export steadily came down from 36.37% in 1993-94 to 19.36% in 2011-12. The next year, in 2012-13, the export contribution more than doubled to 40.06%. The rise in the contribution by MSMEs to India's exports in 2012 was possibly due to an increase in production due to technological up-gradation, said an industry chamber survey¹⁰.

https://www.researchgate.net/profile/Israr-Ahmed-

^{8.} Ahmed, Israr & Haseen, D. (2017). GROWTH OF MSME SECTOR AND ITS CONTRIBUTION TO EXPORTS OF INDIA IN POST REFORM PERIOD(1991-92 to 2011-12) available at

^{17/}publication/330468433_GROWTH_OF_MSME_SECTOR_AND_ITS_CONTRIBUTION_TO_EXPORTS_OF_I NDIA_IN_POST_REFORM_PERIOD/links/5fa8e64b299bf10f73300c91/GROWTH-OF-MSME-SECTOR-AND-ITS-CONTRIBUTION-TO-EXPORTS-OF-INDIA-IN-POST-REFORM-PERIOD.pdf?origin=publication_detail

^{9.} Report of the Expert Committee on Micro, Small and Medium Enterprises, 25 Jun 2019 for the (Years 2012-13 to 2017-18), available at

https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=924#

^{10.} https://www.youtube.com/watch?v=sqxwHyb-pXE

Also, the 11th five-year plan ended in March 2012 and transited to the 12th five-year plan. Statistically, it may have impacted how the export figures were calculated. The export contribution peaked at 49.86% in 2015-16 and after that steadily declined to 48.6% till 2017-18. The latest figure, as reported in April 2021, is 48%¹¹.

Table 3: MSME's contribution to export during the period 1991-92 to 2017-18

Year	India's total exports (in crores)	Export by MSME (in crores)	MSME exports in %	Year	India's total exports (in crores)	Export by MSME (in crores)	MSME exports in %
1991-92	44042	13883	31.52	2005-06	456418	150242	32.91
1992-93	53688	17784	33.12	2006-07	571779	182538	31.92
1993-94	69571	25307	36.37	2007-08	655864	202017	30.80
1994-95	82674	29068	35.15	2008-09	840755	214387	25.49
1995-96	106353	36470	34.29	2009-10	885534	238752	26.96
1996-97	118817	39248	33.03	2010-11	1142922	256834	22.47
1997-98	130101	44442	34.15	2011-12	1465959	283847	19.36
1998-99	139753	48979	35.04	2012-13	1634318	654750	40.06
1999-00	159561	54200	33.96	2013-14	1905011	808200	42.42
2000-01	203571	69797	34.28	2014-15	1896348	848900	44.76
2001-02	209018	71244	34.08	2015-16	1716378	855874	49.86
2002-03	255137	86013	33.71	2016-17	275852	137068	49.7
2003-04	293367	97644	33.28	2017-18	303376	147390	48.6
2004-05	375340	124417	33.14				

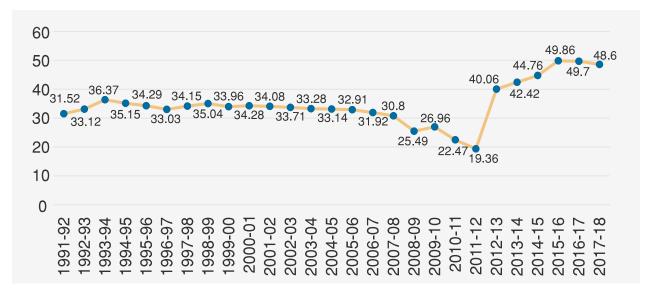


Figure 3: MSME's contribution to export during the period 1991-92 to 2017-18

^{11.} https://www.youtube.com/watch?v=sqxwHyb-pXE

3.4.MSMEs: Number of units, production volume, and employment

In this section, we discuss the trends in the number of units, production value, and employment during 1991-92 to 2015-16. We will also discuss the trends in the average number of employees per unit during the same period.

Table 4 shows the trends in the number of units (in lakhs), production (in INR crores), and employment (in lakhs) in MSMEs during 1991-92 to 2015-16. We have used the data for the period 1991-92 to 2014-15 from Ahmed, Israr & Haseen, D¹². For the period 2015-16, we have referred to the MSME annual report 2019-20¹³.

Table 4: Trends in the number of units, production, and employment in MSMEs

Year	No. of Units (in Lakhs)	Production (in Crores)	Employment (in Lakhs)
1991-92	70.63	73072.00	165.99
1992-93	73.51	85581.00	174.84
1993-94	76.49	98804.00	182.64
1994-95	79.06	122210.00	191.4
1995-96	82.84	148290.00	197.93
1996-97	86.21	168413.00	205.86
1997-98	89.71	189178.00	213.16
1998-99	93.36	212901.00	220.55
1999-00	97.15	234255.00	229.1
2000-01	101.1	261289.00	239.09
2001-02	105.21	282270.00	249.09
2002-03	109.49	311993.00	260.13

^{12.} Ahmed, Israr & Haseen, D. (2017). GROWTH OF MSME SECTOR AND ITS CONTRIBUTION TO EXPORTS OF INDIA IN POST REFORM PERIOD. (for the years 1991-92 to 2014-15) available at https://www.researchgate.net/profile/Israr-Ahmed-

^{17/}publication/330468433_GROWTH_OF_MSME_SECTOR_AND_ITS_CONTRIBUTION_TO_EXPORT S_OF_INDIA_IN_POST_REFORM_PERIOD/links/5fa8e64b299bf10f73300c91/GROWTH-OF-MSME-SECTOR-AND-ITS-CONTRIBUTION-TO-EXPORTS-OF-INDIA-IN-POST-REFORM-PERIOD.pdf?origin=publication_detail

^{13.} Annual Report 2019-20 available at

https://msme.gov.in/sites/default/files/FINAL_MSME_ENGLISH_AR_2019-20.pdf (for the year 2015-16)

Year	No. of Units (in Lakhs)	Production (in Crores)	Employment (in Lakhs)
2003-04	113.95	364547.00	271.42
2004-05	118.59	429796.00	282.57
2005-06	123.42	497842.00	294.91
2006-07	361.76	1351383.45	805.23
2007-08	377.37	1435179.26	842
2008-09	393.70	1524234.83	880.84
2009-10	410.82	1619355.53	921.79
2010-11	428.73	1721553.42	965.15
2011-12	447.64	1834332.05	1011.69
2012-13	467.54	N/A	1061.40
2013-14	488.46	N/A	1114.29
2014-15	510.57	N/A	1171.32
2015-16	633.88	N/A	1109.89





Figure 4 shows the trends in the number of units and employment in MSMEs (in lakhs). We can observe that both the number of units and employment generation have increased in MSMEs. There has been a significant rise in the number of MSME units and employment since 2006-07.

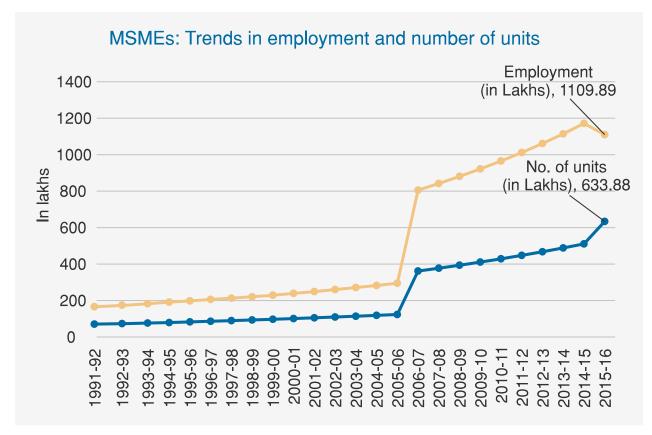


Figure 4: Trends in the number of units and employment in MSMEs (in lakhs)

Figure 5 shows trends in production per unit and production per employee in MSMEs (in thousands INR) from 1991-92 to 2011-12. We observe that both the production per unit and production per employee have steadily increased. The rise in the number of units from 123.42 Lakh in 2005-06 to 361.76 lakh in 2006-07 was likely due to the MSMED Act 2006. The act redefined the classification of Micro, Small and Medium and brought reforms in the sector that enhance productivity, employment, and exports¹⁴.

^{14.} https://www.researchgate.net/profile/israr-ahmed-

^{17/}publication/330468433_growth_of_msme_sector_and_its_contribution_to_exports_of_india_in_post_re form_period/links/5fa8e64b299bf10f73300c91/growth-of-msme-sector-and-its-contribution-to-exports-of-india-in-post-reform-period.pdf?origin=publication_detail

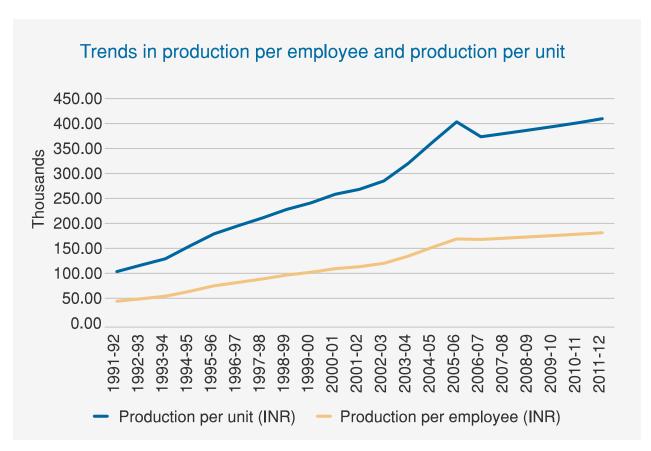


Figure 5: Trends in production per unit and production per employee in MSMEs (in thousands INR)

Figure 6 shows the trends in the average number of employees per unit in MSMEs, employed during 1991-92 to 2015-16. We can see from Figure 6 that MSMEs have been unable to scale up.



Figure 6: Trends in the average number of employees per unit in MSMEs

It is evident from this chapter that MSMEs play a significant role in employment generation, but their contribution to GDP and export has stagnated. MSMEs have also not been able to scale up. Against this backdrop, our study gains importance since we have collected primary data from MSMEs in Andhra Pradesh to understand their business challenges and barriers to growth. Our analysis covers both the manufacturing and services sectors.



4. Insights from our study

In this section, we report our key insights from the inputs received from the MSMEs of Andhra Pradesh.

4.1 Business challenges faced by MSMEs before COVID-19

We wanted to understand business challenges faced by MSMEs before COVID-19. Figure 7 shows our results for the services sector. 40 out of 41 companies responded to our question regarding business challenges before COVID-19.

41% of the respondents stated that the lack of access to finance was the most hindering factor in running their businesses. 22% of the respondents said that their inability to scale up was a constraint. 20% of the respondents stated that the third challenge to growth was the lack of a skilled workforce.

In contrast, 36% of the respondents from the manufacturing sector stated that the lack of a skilled workforce is the biggest challenge in running their businesses. 31% of the respondents view their inability to scale up as a constraint. 41 out of 42 manufacturing companies responded to our question regarding business challenges before COVID-19.

Figure 8 shows the challenges faced by the manufacturing sector before the COVID-19 pandemic.

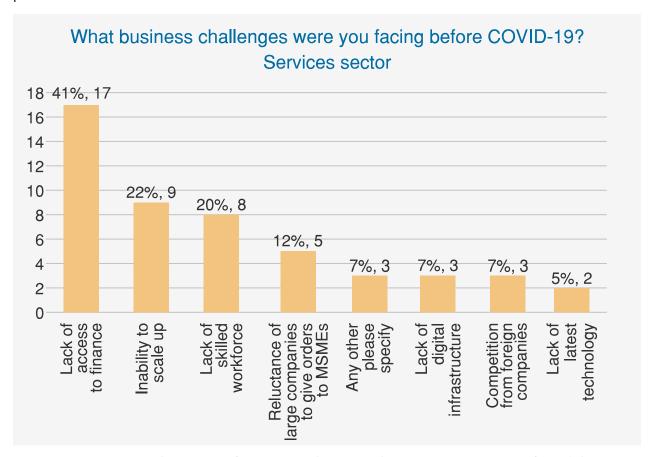


Figure 7: Business challenges faced by MSMEs in the services sector before COVID-19

Key insights for the services sector



- The top three business challenges before COVID-19 are the same for both the services and manufacturing sectors.
- For the services sector, 41% of the respondents stated that the lack of access to finance was the biggest business challenge in running their businesses. We had conducted a brainstorming session with the leadership team of CII and entrepreneurs driving MSMEs. It was mentioned that the companies in the services sector are generally asset-light and find it challenging to mobilize funds from the banks and other financial institutions.
- In comparison, 22% of the respondents said that their inability to scale up was a constraint.

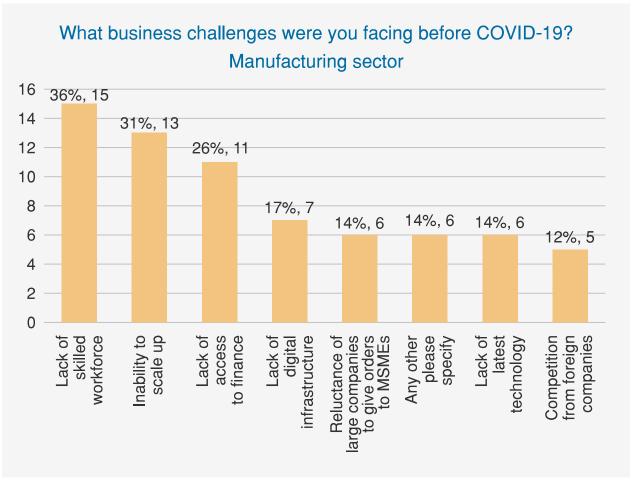


Figure 8: Business challenges faced by MSMEs in the manufacturing sector before COVID-19

Key insights for the manufacturing sector



- 36% of the respondents from the manufacturing sector stated that the lack of a skilled workforce is a big challenge in running their business. We need to scale up our skilling movement to help the manufacturing sector support growth aspirations.
- 31% of the respondents view their inability to scale up as a significant business challenge.
- 26% of the respondents stated that lack of finance was a challenge in running their business.
- 17% of the respondents cited the lack of digital infrastructure as a challenge.

4.1.1 Market access

71.6% of the MSMEs surveyed in our study focus only on domestic markets, while 25.9% do business in domestic and international markets. Figure 9 shows MSMEs' geographical spread (domestic, international, and both domestic and international).

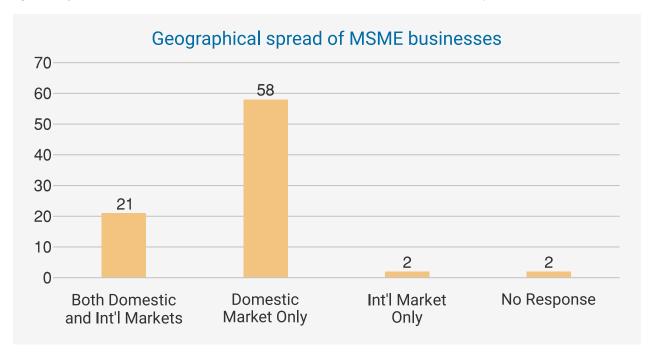


Figure 9: Geographical spread of MSME businesses

Key insights on MSME's market access



- At the national level, MSMEs contribute just about 48% to the export, and the government has the vision to raise it to 60%. However, our study of MSMEs in Andhra Pradesh shows that 71.6% of the companies focus only on the domestic market.
- 25.9% of the companies do their business in both domestic and international markets.

4.1.2 Barriers to sell globally

The main hindrance in accessing global markets was different for the services and the manufacturing sectors. We received 40 responses from the manufacturing sector.

38% of the manufacturing companies stated that 'the lack of government support' is their primary barrier to selling globally, while 31% of the manufacturing companies find 'access to finance' as a barrier to expanding globally.

We received 30 responses from the services sector. 27% of the respondents from the services sector mentioned that 'access to finance' as the number one barrier followed by 'government regulations' (24% of the respondents) to be the constraints in expanding to the global market.

The textile sector is most affected by the lack of government support (8 of 10 respondents citing this as a reason) in global selling.

Figure 10 shows the barriers faced by the services sector to selling globally. We can see from Figure 11 the obstacles faced by the manufacturing sector to selling globally.





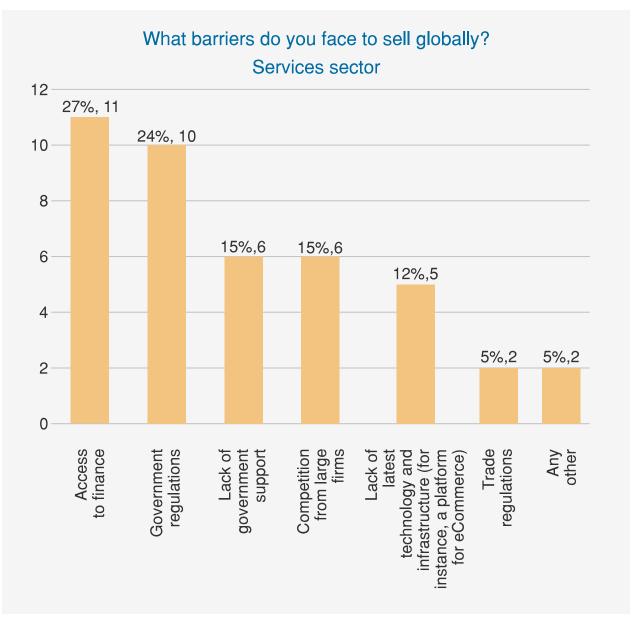


Figure 10: Barriers to selling globally – services sector

Key insights: Barriers to sell globally in the services sector



- 26.8% of the respondents from the services sector rated 'access to finance' as the number one barrier followed by government regulations (24.4% of the respondents) to be the constraints for expanding to the global market.
- Government regulations and lack of government support are among the top three barriers to selling globally.

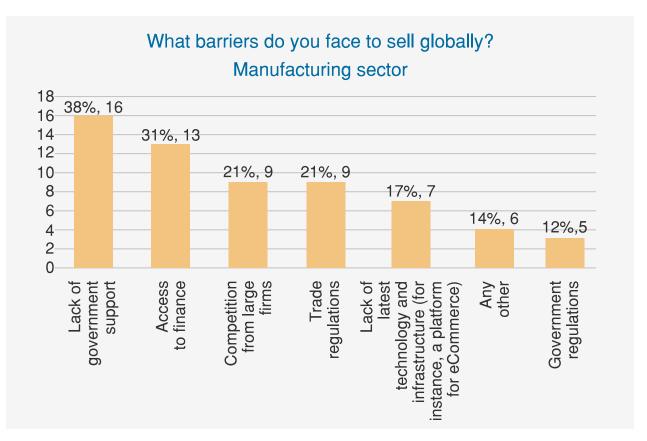


Figure 11: Barriers to selling globally – manufacturing sector

Key insights: Barriers to sell globally in the manufacturing sector



- 38% of the respondents from the manufacturing sector stated that the lack of government support was their primary barrier to selling globally. Sectors like textile cited the absence of the Free Trade Agreement (FTA) as a barrier to selling globally and a competitive disadvantage compared to other emerging economies.
- 31% of the manufacturing companies find 'access to finance' as a barrier to expanding globally. 21% of the respondents stated that 'trade regulations' are the barriers to selling globally. A similar percentage of companies opined that competition from large companies is a challenge to selling globally.

4.2 Impact of COVID-19 on business

We framed a question to understand the impact of COVID-19 on various aspects of MSMEs' businesses. We asked our respondents to specify the challenges they are facing from the following options:

- Unavailability of raw materials
- Delay in the supply of raw materials
- Shortage of workforce
- Cancellation of customer orders/projects
- Delay in fulfillment of customer orders/projects
- Lack of new orders
- Lack of demand for products
- Problems with cash flow

Our survey shows that COVID-19 had a sizeable impact on the business of MSMEs.

- 55% of the companies faced a substantial reduction in their cash flow. This response was to a specific question on the degree of impact on the cash flow (substantial, mild, no impact, and positive impact).
- 53% of the companies had a significant reduction in new customer orders.
- 41% of the companies faced difficulties in procuring raw material.
- 40% of the companies had a significant negative impact on the bottom line (profit).
- 34% of the companies faced a considerable decline in their employee productivity.
- 29% of the companies reduced employees' salaries while 14% had to lay off workers.

4.2.1 Impact of COVID-19 on the supply chain and operations

Reasons for the slowdown of business during COVID-19

We had asked the companies the reasons for the slowdown of their business during COVID-19. We received 81 responses, of which 40 were from services and 41 from manufacturing sectors.

Table 5: Reasons for the slowdown of business in the COVID-19 era

Reason for slowdown of business in the COVID-19 era	Company Count
Lack of new orders	27
Large-scale reliance on manual labour	26
Lack of digital infrastructure to carry out operations	10
Any other, please specify	8
Nature of products	7
Lack of digital knowledge among employees	3
Total	81

In both the services and manufacturing sectors, the top two reasons for the slowdown of business during COVID-19 were 'lack of new orders' and 'large scale reliance on manual labour.' More services companies cited a lack of digital infrastructure as a reason for the slowdown of business during a pandemic.

A few companies in the manufacturing sector cited an increase in the cost of raw materials as another reason for the slowdown. In addition to the reasons mentioned in Table 5, companies in the services sector cited a lack of support from the bank and discontinuity in service contracts as reasons for the slowdown.

In our study, we wanted to understand the kind of supply chain disruptions that companies faced due to COVID-19. 81 companies (41 services and 40 manufacturing) responded to our question regarding supply chain disruption during COVID-19.

The top three reasons for slowing down businesses are common for both the services and manufacturing sectors. At an aggregate level, the top three challenges in MSMEs are:

- A shortage of workforce (42.1% respondents cited the shortage of workforce as a problem)
- Problems with cash flow (37.3% of respondents cited cash flow as a problem)
- Lack of new orders (34.9% of respondents had a challenge in securing new customer orders)

We then did a deep dive to understand the challenges separately for the services and manufacturing sectors.

Figures 12 and 13 capture the challenges faced by the services and manufacturing sectors, respectively.

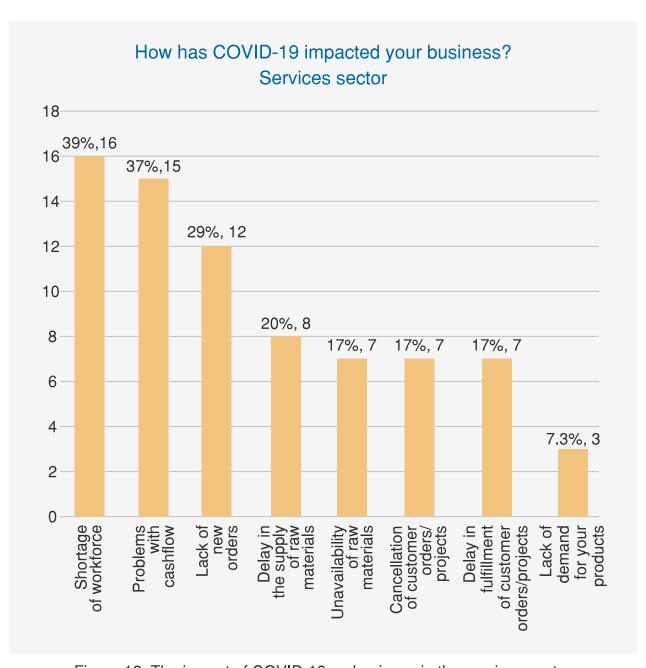


Figure 12: The impact of COVID-19 on business in the services sector

Key insights: Impact of COVID-19 on businesses in the service sector



- COVID-19 disrupted the business both in the manufacturing and the services sectors.
- In the services sector, the biggest disruption was caused by the 'shortage of workforce' (39%), followed by problems with 'cash flow' (37%) and 'lack of new customer orders' (29%).

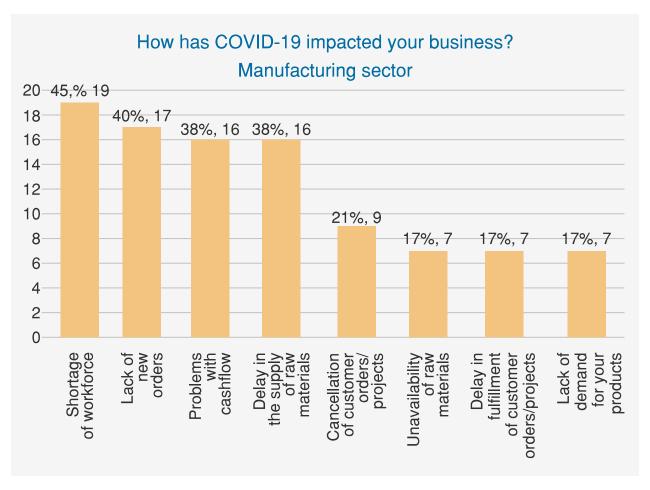


Figure 13: The impact of COVID-19 on business in the manufacturing sector

Key insights: Impact of COVID-19 on businesses on the manufacturing sector



- COVID-19 had a very adverse impact on the manufacturing sector. 'Shortage of workforce'(45%), 'lack of new order'(40%), 'problems with cashflow'(38%) are the top three reasons for slowing down business in the manufacturing sector.
- The magnitude of disruptions due to shortage of workforce and lack of new orders were higher in the manufacturing sector than in the service sector.
- Both the service and manufacturing sectors had business challenges due to cash flow.
- According to 38% of the respondents in the manufacturing sector, delay in the supply of raw materials was also a big challenge.

We asked four specific questions to understand supply chain challenges (raw material procurement, logistics, machinery maintenance and availability of spare parts, and workforce) that companies faced 'post-lockdown.' Figures 14 to 17 capture companies' responses to the disruptions faced in their supply chain post-lockdown.

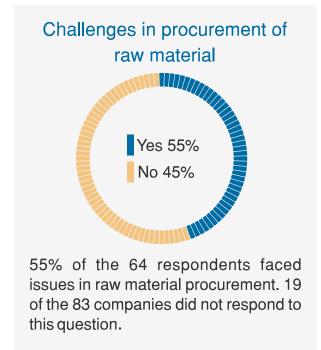
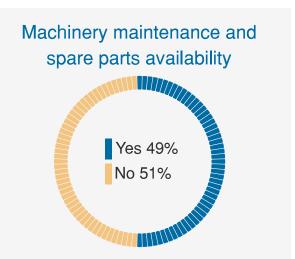


Figure 14: The post-lockdown impact of COVID-19 on the supply of raw materials



Figure 16: The post-lockdown impact of COVID-19 on logistics



49% of the 63 respondents faced issues in machinery maintenance and spare parts availability. 20 of the 83 companies did not respond to this question.

Figure 15: The post-lockdown impact of COVID-19 on the machinery maintenance and spare parts availability

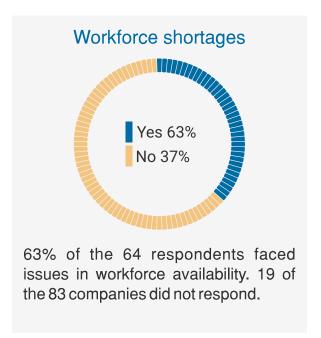


Figure 17: The post-lockdown impact of COVID-19 on workforce shortages

Key insights: Disruptions on supply chain post-lockdown



We had asked four specific questions (raw material procurement, logistics, machinery maintenance and availability of spare parts, and workforce) to understand what supply chain challenges (hindrance to daily operations) companies faced post-lockdown.

- 63% of the 64 respondents stated that they faced workforce challenges.
- 61% of the 64 respondents faced logistics challenges.
- 55% of the 64 respondents faced raw material procurement challenges.
- 49% of the 63 respondents faced problems with machinery maintenance and spare parts availability.

4.2.2 Post-lockdown impact on demands in products and services

Post-lockdown, many companies worldwide have felt the need to review their products and services due to customers' changing needs. For instance, automotive companies are expanding to manufacture ventilators, textile companies are diversifying into manufacturing PPE kits, chemical companies are introducing sanitisers, and services companies are starting new apps. We wanted to study the MSMEs' plans to review their product and services due to the pandemic. We observed that 76% of the companies had no plan to review their product and services. Figure 18 captures companies' responses in this regard.

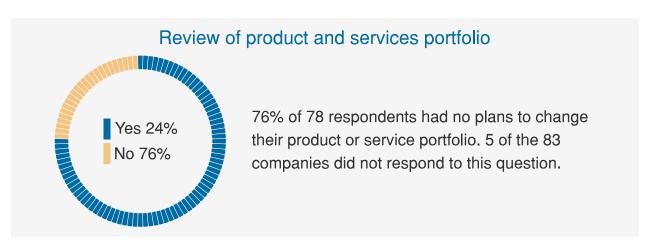


Figure 18: Companies' plan for changing their product and services due to changes in customer needs

Key insight: Review of product and services portfolio



 76% of 78 respondents in our study of MSMEs had no plans to change their products or services portfolio. This may impose risk on MSMEs' future business.

Risk mitigation plan for companies combating COVID-19

We anticipated that COVID-19 might last longer with further restrictions and a potential return to lockdown. The uncertainty may create a high degree of risk in all aspects of the business. Therefore, we wanted to understand if companies have a risk mitigation plan in place. We received 79 responses, of which 39 were from the services and 40 from the manufacturing sectors.

36.7% of the respondents had a risk mitigation plan in place. Some strategies planned by the services companies for their business risk mitigation plan were as follows:

- Improving systems and bringing all services to a digital platform
- Create Work from Home (WFH) infrastructure for employees
- Looking for new clients and business orders
- Focus on sectors which COVID-19 positively impacts
- Reduction in operational and administration costs

Strategies planned by the manufacturing sector are as below:

- Skilling existing workforce
- Better communication with all clients
- Create a plan to design products using locally available raw materials
- WFH (Work from Home) infrastructure through remote working platforms
- Adoption of automation and redesigning of processes
- Adopt digital marketing initiatives to reach a larger market.
- Reducing financial debt and costs; tighter control over expenses and improving cash flow

Reduction in inventory and up-gradation of technology

The market is anticipated to be very tight and extremely cash-constrained. MSMEs are faced with a situation where revenue has significantly declined, but many cost elements (labour, energy, rent, and other business inputs) remain unchanged. We wanted to understand companies' plans to overcome financial problems.

30 companies responded to our question, of which 12 were from services and 18 were from the manufacturing sectors. Strategies employed by services companies to overcome the financial challenges were as follows:

- Reduce expenses operational and administrative costs, cost of funds, get a rental waiver
- Liquidate assets that are luxury and burden to the company
- Reduce workforce
- Shift office to a smaller place
- Halt new expansion plans
- Request government support for working capital
- Reorganise department for maximum utilisation of labour
- Reduce cost by digitalisation

Strategies employed by manufacturing companies to overcome the financial challenges were as follows:

- Reducing expenses rent, workforce, travel, allowances, energy consumption, avoid purchases wherever possible, reducing the cost of debt
- No investments in new machines
- Reducing cycle time and inventory
- Seeking new buyers and exploring new markets for products
- Expect government support in reducing tax structure and liability, better regulations
- Work from home for administrative staff
- Employ labour from nearby localities
- Effective usage of ERP systems
- Seek clients ready to pay advance

- Identify local ancillaries to support production
- Product diversification
- Merging of companies, new financial partners
- Shifting to services from manufacturing
- Prudential use of power and optimum utilisation of running machines

4.2.3 Impact of 'work from home (WHF)' policy of organisations

The pandemic has created a world that has increasingly become contactless. Many organisations during COVID-19 have realised the need for 'work from home' infrastructure. Our study shows that the level of sophistication is low, and as a result, MSMEs do not see the importance of having a proper 'work from home' infrastructure.

In our survey, we had asked the MSMEs if they have the infrastructure to support 'work from home'. We gave the following options to the respondents:

- They do not need to work from home for their business.
- 'Work from Home' infrastructure is required but not available.
- 'Work from Home' infrastructure is available for some employees and operations.
- 'Work from Home' infrastructure is available for all employees and operations.

54.3% of the respondents covering both services and manufacturing sectors said they do not have to 'work from home' for their business.

44% of the services sector companies said they do not need 'work from home' for their business. The corresponding figure for the manufacturing sector was 65%. Figures 19 and 20 capture the responses on 'work from home' infrastructure from the services and manufacturing sectors, respectively.

We had a brainstorming session with the leadership team of MSMEs. The automation level in the manufacturing industry in MSMEs is not suitable for 'work from home' operations. Moreover, low bandwidth and unstable power supply are reasons why 'work from home' is challenging to implement.

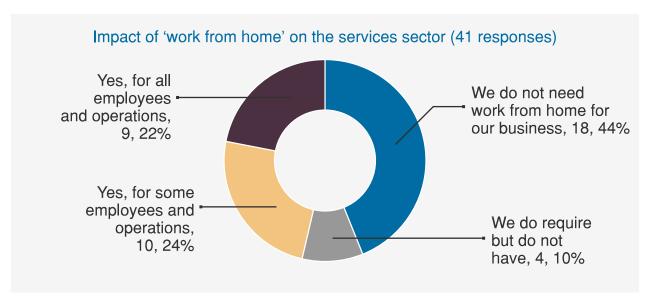


Figure 19: 'Work from home' infrastructure in the services sector

Key insights on 'work from home' infrastructure in the services sector



- 44% of the 18 respondents from the services sector stated that they do not need 'work from home' infrastructure.
- We did further analysis to understand these companies. The majority (16 out of 18) are in the 'Micro' category with limited employee strength. 50% of these respondents had less than INR 10 million annual turnover. 33.3% of the companies had less than 10 employees.
- 22% of the respondents said that they have the 'work from home' infrastructure.

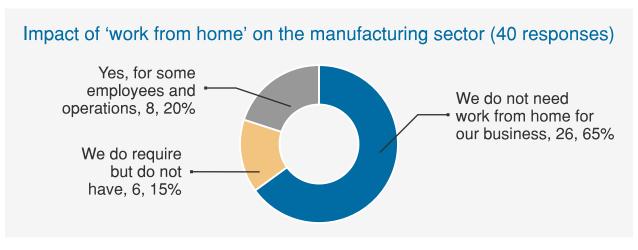


Figure 20: 'Work from home' infrastructure in the manufacturing sector

Key insights on 'work from home' infrastructure in the manufacturing sector



- 65% of the manufacturing companies stated that they do not need 'work from home' infrastructure.
- Factories in MSMEs are not 'connected factories' and are mostly not automated. Therefore, they are not suitable for remote operations.
- 15% of the companies stated that they need but do not have 'work from home' infrastructure.

4.3 MSME's digital footprint

During COVID-19, businesses have realised that value can be created through digital transformation. In our questionnaire, we had dedicated a complete section to capture data on the digital footprint of MSMEs in Andhra Pradesh. We collected data on a range of aspects like:

- Market access (for instance, offline, online, or both online and offline)
- Digital literacy (we have defined digital literacy as basic knowledge on e-commerce, Enterprise Resource Planning (ERP) software, digital technologies, etc.,)
- Trends in the deployment of technology
- Use of digital platforms and applications developed by the government for MSMEs
- Digital payment
- Use of SaaS (Software as a Service)

4.3.1 Market access

It is reported in Forbes.com that by the end of 2021, global e-commerce sales will hit \$ 4.2 Trillion¹⁵. Furthermore, by 2040, it is expected that 95% of all purchases will be made online¹⁶.

¹⁵ Retrieved from https://www.forbes.com/sites/joanverdon/2021/04/27/global-ecommerce-sales-to-hit-

⁴²⁻trillion-as-online-surge-continues-adobe-reports/?sh=452efab750fd

¹⁶ Retrieved from https://fortunly.com/statistics/ecommerce-statistics/#gref

We wanted to study MSMEs' digital presence on online platforms and analyse the following:

- If there is a difference between manufacturing and service companies regarding their use of online market presence.
- Impact of COVID-19 on sales for two scenarios viz., (a) companies with both an offline and online presence and (b) offline only.

MSMEs reach out to the markets through three channels: Offline, own e-commerce platform, and third-party e-commerce platforms (such as Amazon, Flipkart). A majority (65.3%) of the MSMEs reach out to their customers only through offline sales, while 6.7% leverage online only.

28% of MSMEs leverage both online and offline channels for accessing their market. Table 6 shows how MSMEs reach out to the market.



Table 6: Access to markets

	Offline Only	Online Only	Both
Number of responses	49	5	21
How do you reach out to the market? (75 companies responded to the question)	65.3%	6.7%	28.0%

In Table 7, we considered the impact of COVID-19 on the online and offline customer orders of MSMEs. We can see that:

- COVID-19 more significantly impacted the customer orders in the manufacturing sector than the services sector.
- Within the services sector, risk on customer order was significantly reduced in companies having online market access (29% of the companies) versus offline market access (43% of the companies).

Table 7: Impact of COVID-19 on customer orders

	Services	Manufacturing	
Total valid responses	35	40	
Offline only	21	28	
Online only	5	0	
Both offline and online	9	12	
Online and offline presence vs. significant decrease in orders due to COVID-19			
Significant decrease in orders (both online and offline presence)	4 out of 14	7 out of 12	
Offline only	29%	58%	
Online only	9 out of 21	16 out of 28	
Significant decrease in orders (offline only)	43%	57%	

Key insights: Impact of COVID-19 on MSMEs with online and offline market access



- MSMEs in the manufacturing sector, both with online and offline presence, experienced significant decrease in their orders due to COVID-19.
- Online presence has an immense benefit for the services sector in reducing risk on their new customer orders.

4.3.2 Digital strategy for MSMEs

We asked respondents to select which digital strategy can best help MSMEs innovate/disrupt their supply chains, among various options like 3D Design, 3D Printing, Internet of Things (IoT), Artificial Intelligence, and Machine Learning (AI/ML), virtual reality-based design. We received 67 responses, of which 33 were from the services and 34 were from the manufacturing sectors.

43.3% of the responses indicated that 'Internet of Things (IoT)' is the best digital strategy to help them disrupt their supply chains. 'Artificial Intelligence' and 'Machine Learning' were a distant second at 29.9%, while virtual reality-based design came in third at 25.4%. This is shown in Figure 21.

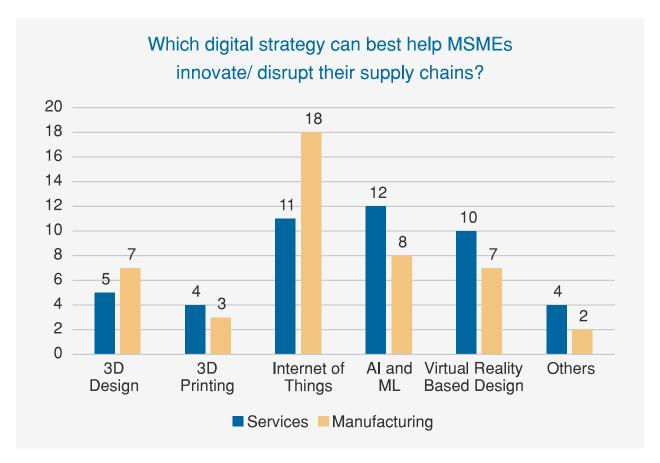


Figure 21: Best digital strategies For MSMEs

Key insight: Best digital strategy to innovate and disrupt supply chain



43.3% of the respondents indicated that Internet of Things (IoT) is the best digital strategy to help them disrupt their supply chains. 'Artificial Intelligence' and 'Machine Learning' was the second preferred option at 29.9%.

4.3.3 Digital literacy in MSMEs

In our study, we have defined a digitally literate employee as a person with basic knowledge of e-commerce, ERP systems, digital technologies, etc. We received 79 responses of which 39 were from services and 40 were from the manufacturing sectors.

Our research shows that the lack of digital literacy is a major issue for MSMEs. 68% of respondents estimated that less than 25% of their employees were digitally literate, and 34% of the respondents felt that fewer than 10% of their employees were digitally literate. Refer to Figure 22 that provides information on the level of digital literacy in MSMEs.

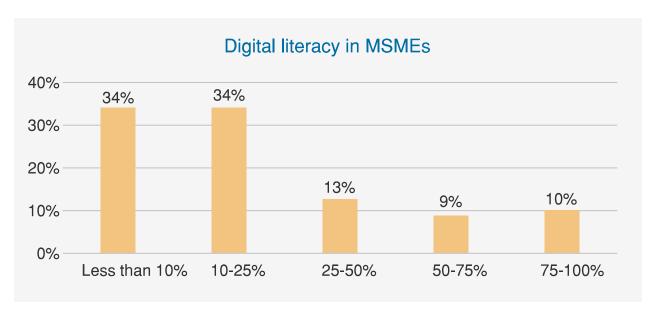


Figure 22: Digital literacy in MSMEs

Key insights: Digital strategy and digital literacy



- During COVID-19, organizations across the world have realized the value of digital literacy and technology. In a world that is becoming increasingly contactless, 'digital literacy' will become an important lever for MSMEs both for business continuity and competitive edge.
- 34% of the MSMEs have less than 10% digitally literate staff. This is alarmingly low.
- Another 34% of MSMEs have 10 to 25% digitally literate staff.

We observed that 'digital literacy' is lower in the manufacturing sector (at 62.9% organisations with 'less than 10%' digital literacy rate) compared to the services sector at 37%.

4.3.4 Trends in deployment of technology

We had the following set of questions administered among our respondents to understand their status of deployment of various technologies:

- How do companies track their business flow?
- Do companies use any new age/technology-driven marketing tools?
- Which MSMEs leverage digital platforms/ services created by the government?

- Do companies use digital payment systems (mobile banking, digital banking, etc.)?
- Do companies use SaaS (Software as a Service) and business analytics in their organisation?

46% of the 78 respondents use internally developed software for tracking their business flows (backend transaction system). 86% of the respondents do not use any new-age technology-driven marketing tools. Figure 23 shows the responses of companies regarding the use of software for tracking their business flow.

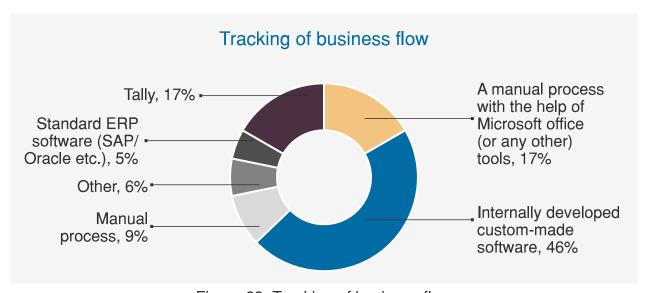


Figure 23: Tracking of business flow

Key insights: Tracking of business flows



- It is important to have robust business transaction systems like ERPs for tracking business flows.
- 46% of the respondents use internally developed software for tracking their business flows.
- 17% of MSMEs use software like Tally or a manual process with the help of tools like Microsoft Office.
- 9% of the respondents still use manual processes.
- 5% of the MSMEs use packaged software like SAP, Oracle, etc.
- We need to explore if an infrastructure on the cloud can be created for the MSMEs to track their business flows.

Figure 24 shows if companies use new-age technology for driving their marketing function.

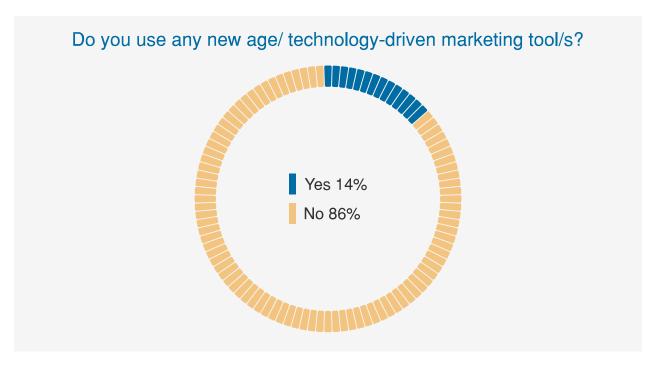


Figure 24: Usage of new-age marketing tools

Key insight: Use of new-age marketing tools



86% of the respondents do not use any new-age technology-driven marketing tools.

4.3.5: Use of digital platforms and applications developed by the government for MSMEs

Seventy-one companies responded to our question on the usage of government-owned digital platforms. We find that only 43% of the respondents leveraged the government's Udyog Aadhar online registration platform. Initiatives such as MSME Global Mart and Zero Defect Zero Effect (ZED) have received minimal attention from the MSMEs. 12.8% of the respondents have mentioned that they use MyMSME App. We have also observed that 14.4% of the respondents do not use any digital platforms/services created by the government for MSMEs. Figure 25 shows the usage of government-owned digital platforms by the MSMEs in Andhra Pradesh.

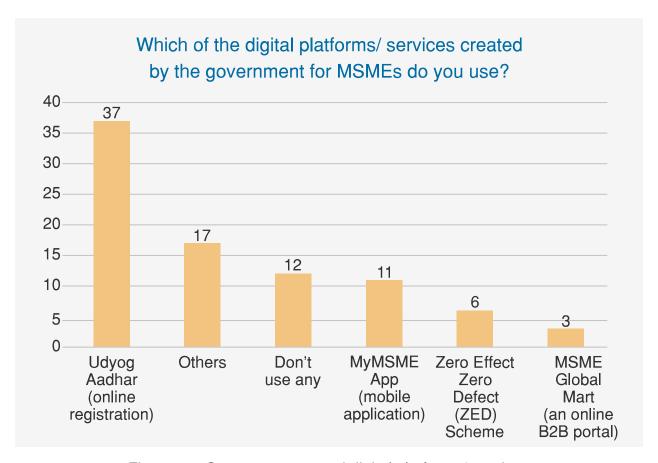


Figure 25: Government-owned digital platforms/ services

Key insights: Usage of government-owned digital platforms



- The government has created certain digital platforms/services for supporting MSMEs.
- MSMEs do not leverage most of the applications developed by the government.
- 16.9% of the MSMEs do not use any of the applications developed by the government.
- An insignificant number of MSMEs use schemes like Zero Defect Zero Effect (ZED).
- While online business is important for enhancing market access, only 4.2% of the MSMEs leverage B2B online portal like MSME Global Mart.

4.3.6: Digital payments

Digital payment systems are popular among MSMEs. 55% of the respondents used digital payment systems (mobile banking, digital banking, etc.) regularly, while 40% used them for some transactions. Only 5% of the MSMEs did not use any digital payment tools. Figure 26 shows the use of digital payments by MSMEs.

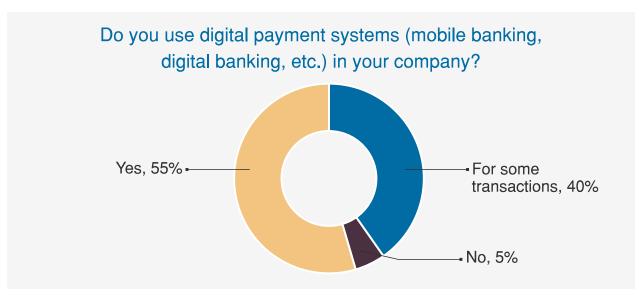


Figure 26: Technology for business process for digital payment

Key insight: Use of digital payments by MSMEs



• 55% of the respondents use digital payment systems (mobile banking, digital banking, etc.) regularly, while 40% use them for some transactions.

4.3.7: Use of Software as a Service (SaaS)

Gartner forecasts that Software as a Service (SaaS) remains the largest market segment on public cloud services and will grow to \$145.4 billion in 2022¹⁷. We queried companies on the use of SaaS, which provides opportunities for managing businesses at economical costs. Our study shows that 66% of MSMEs do not use SaaS and business analytics. Figure 27 shows the use of SaaS and business analytics in MSMEs.

¹⁷ Retrieved from https://venturebeat.com/2021/04/21/gartner-predicts-public-cloud-spending-to-reach-332b-in-2021/

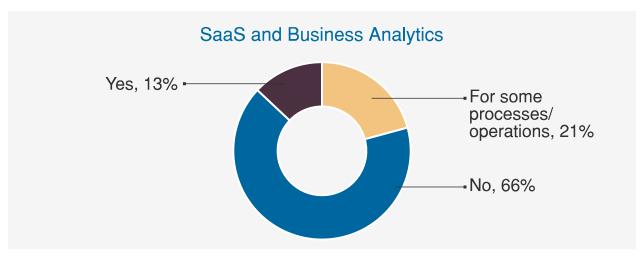


Figure 27: Popularity of SaaS

Key insights: Use of SaaS and business analytics



- Business analytics and Software as a Service (SaaS) have become an important lever for organizations to derive a competitive edge.
- Study shows that 66% of MSMEs do not use SaaS and business analytics.

4.4 Government's support to MSMEs

We have studied the following aspects to understand some recent initiatives of the government to support MSMEs:

- Revised definition of MSMEs
- Perception of MSMEs about the impact of government's reform on the indigenisation initiatives in our country
- If reforms by the government shift customer behaviour into buying more domestic products
- If MSMEs have availed loan offers announced by the government
- Views of MSMEs on the Government of Andhra Pradesh's special Re-START package
- Views of MSMEs on the effectiveness of various government initiatives
- New initiatives that the government should take to ensure growth in the MSMEs

4.4.1 Acceptability of the revised definition of MSMEs

The Indian Government has recently revised the definition of MSMEs. Table 8 shows the old and revised definition of MSME for both the manufacturing and service sector.

Table 8: Definition of MSMEs

Earlier MSME Classification Criteria: Investment in plant or equipments				
Classification	Micro	Small	Medium	
Manufacturing	Investment < INR 25 lacs	Investment < INR 5 crores	Investment > INR 10 crores	
Services	Investment < INR 10 lacs	Investment < INR 2 crores	Investment > INR 5 crores	



Revised MSME Classification Criteria: Investment and Annual Turnover

Classification	Micro	Small	Medium
Manufacturing and service	Investment < INR 1 crore and turnover <inr 5="" crores<="" th=""><th>Investment < INR 10 crores and turnover <inr 50="" crores<="" th=""><th>Investment < INR 50 crores and turnover <inr 250="" crores<="" th=""></inr></th></inr></th></inr>	Investment < INR 10 crores and turnover <inr 50="" crores<="" th=""><th>Investment < INR 50 crores and turnover <inr 250="" crores<="" th=""></inr></th></inr>	Investment < INR 50 crores and turnover <inr 250="" crores<="" th=""></inr>

As per new definition 66. 26% companies are in the 'Micro' category in our sample

Source: https://msme.gov.in/know-about-msme

We wanted to understand if the new definition of MSME is useful for the sector. 79 out of 83 companies responded to our question. In our study, 39.2% (31 out of 79) of the respondents said that the new definition of MSME is useful. Another 46.8% (37 out of 79) of the respondents find the revised definition to be 'somewhat useful'. 13.9% (11 out of 79) of the MSMEs do not find the new definition useful.

We also analysed the responses from the services and manufacturing sectors. 57.9% (22 out of 38) of the services sector companies find the revised definition of MSME 'useful'. On the other hand, only 22% (9 out of 41) of the manufacturing companies find the new MSME definition 'useful.'

31.6% (12 out of 38) of our respondents from the services sector find the new definition of MSME 'somewhat useful.' 61% (25 out of 41) of the companies from the manufacturing sector find the new definition of MSME 'somewhat useful.'

It is to be noted that 10.5% (4 out of 38) of the respondents from the services sector do not find the new definition of MSME 'useful'. The corresponding figure for the manufacturing sector is 17.1% (7 out of 41 respondents).

Figure 28 details the responses of the services and manufacturing sectors about their views on the new definition of MSMEs.

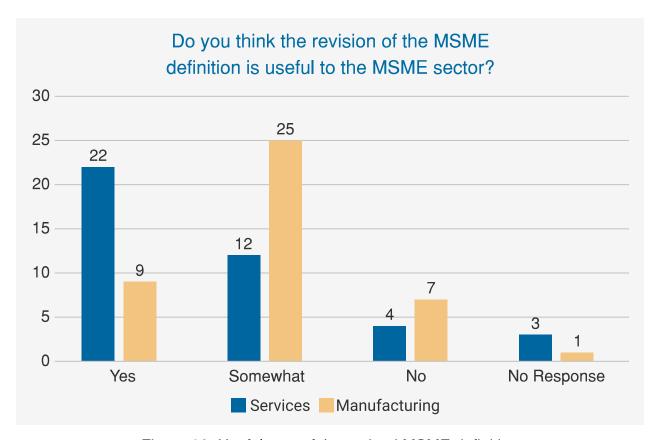


Figure 28: Usefulness of the revised MSME definition

When we interacted with the leadership team of MSMEs, we concluded that while the turnover criterion in the new MSME definition is good, the investment threshold should have been higher to account for inflation.

We also asked the companies if the new definition of MSME is useful to their own company. Only 31 (37.3%) out of 83 companies responded to this question. 35.5% (11 out of 31) of the companies find the revised definition of MSME useful. 41.9% (13 out of 31) companies do not find the new definition 'useful' for their company. 9 out of 13 (69.2%) respondents who did not find the revised definition useful were from the manufacturing sector.

Manufacturing companies that find the new definition of MSME useful exclaimed the following:

- "It's useful as it will help a lot of companies to come under the ambit of MSME and can take advantage of various government schemes." It is a company with a turnover of more than 100 crores and an employee base of 100 to 200. According to the old MSME definition, the company had to restrict its total investment in plant and machinery below 10 crores to qualify as an MSME. Under the revised definition, the company can draw an expansion plan, and the investment in their 'plant and machinery' can go up to 50 crores, as long as the turnover remains below 250 crores.
- "Definition encourages to expand and improve productivity and seamlessly graduate to the next level." It is a 'Micro enterprise' with a turnover of 1 to 5 crore with an employee base of 10 to 50. Under the old definition, the company had to restrict its investment in plant and machinery to less than 25 lakhs. According to the new definition, they can raise their investment up to one crore, as long as their turnover remains below 5 crores.
- "Our company comes under MSME and can utilise the benefits." It is a textile company with a 10 to 25 crores turnover with an employee base of 50 to 100.
- "Yes, the revised definition is useful. According to changes in the MSME definition guidelines, only the eligible companies will continue as MSME." It is a pharma company with a turnover of 50 to 100 crores with an employee strength in the range of 100 to 200. The company will be classified as MSME if the turnover remains below 250 crores and investment in plant and machinery is encouraged to increase up to 50 crores.
- "Yes, the revised definition is useful. It will help us in reducing the interest rate on loans." It is a textile company with more than 100 crores turnover and an employee base greater than 200. The old definition would have restricted the company's investment in the 'plant and machinery' below 10 crores, while the revised definition allows the company to invest up to 50 crores.
- "Yes, the revised definition is useful. We can set a new goal to reach." It is an engineering company with a turnover of 10 to 25 crores and an employee strength of 10 to 50. The revised definition will encourage the company to expand its capacity and achieve a turnover of up to 250 crores.

Services companies that find the new definition of MSME useful exclaimed the following:

- "We are eligible for a higher amount of loan, which will help us meet our working capital requirement." It is a company with a turnover of 1 to 5 crores and employee strength of 50 to 100.
- "Yes, the revised definition is useful, as we now surely fall under MSME." It is an IT company.
- "Yes, the revised definition is useful, but we are not given MSME loans though it is sanctioned because we do not have collateral security. I desperately tried and reached many banks though my government (PMEGP-Prime Minister's Employment Generation Programme) loan was sanctioned, banks refused to give me a loan. I requested only an infrastructure loan. These MSME loans are given to people who have influence; talent and innovation are not given any preference. I had an international project and approached the government, but my application was rejected since my project was software related. According to RBI guidelines, banks are mandated not to accept collateral security in the case of loans up to INR 10 lakh, but banks refuse to give loans without collateral." It is a software company in the 'Micro' enterprise category with a turnover of less than one crore with an employee strength of less than 10.

Key insights: Revised definition of MSME



- 39.2% of our respondents find the revised definition of MSME 'useful'
- 46.8% of respondents find the revised definition of MSME 'somewhat useful'
- 13.9% of the MSMEs do not find the new definition 'useful'
- MSMEs from the service sector (57.9%) find the definition 'more useful' than the manufacturing sector (22%)
- The investment threshold in the revised definition of MSME should be reviewed.
- The government should take industry feedback to do further innovation in the definition of MSME.
- The revised MSME definition is useful since it will help many companies come under the ambit of MSME and take advantage of various government schemes.

- The revised definition of MSME would encourage many companies to invest in their plant and machinery or equipment to support expansion strategy.
- The services companies would find the revised MSME definition helpful in applying for a higher working capital loan.
- According to RBI guidelines, banks are mandated to disburse loans up to INR 10 lakh for the 'Micro' enterprises without collateral; many banks are not supporting this at a ground level.

4.4.2 Government's reform push for indigenisation

The government has made 'Make in India' a cornerstone of its manufacturing policy. Our study shows that MSMEs feel that the government's reforms would help indigenisation. 76% felt that some or many companies would switch to indigenous suppliers due to the government's positive reform push. Eight out of 83 companies did not respond to the question. Figure 29 shows the impact of government reforms on indigenisation.

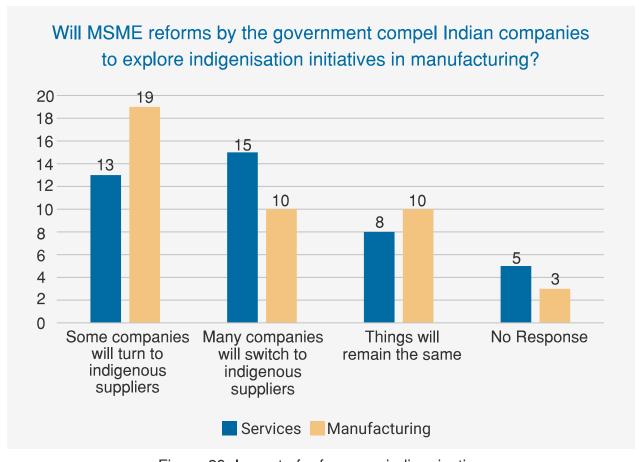


Figure 29: Impact of reforms on indigenisation

Key Insight: Government's reform push for indigenisation



76% of the respondents felt that MSME reforms by the government would help 'some' or 'many' companies in switching to indigenous suppliers.

We wanted to understand if MSME reforms by the government shift customer behaviour into buying more domestic products. 76 out of 83 companies gave their response. From Figure 30, we can infer that 38.2 % (29 out of 76 respondents) believed that the government reforms 'would help shift customer behaviour' into buying more domestic products. 47.4% (36 out of 76 respondents) believe that government reforms 'may help shift customer behaviour' into buying more domestic products.

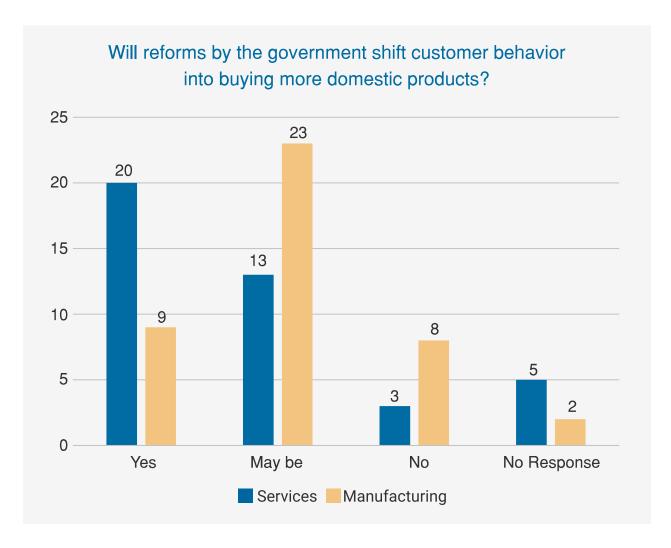


Figure 30: Impact of reforms on purchase of domestic products



Key Insight: If MSME reforms by the government shift customer behaviour into buying more domestic products

38.2 % of the respondents believed that the government reforms 'would help shift customer behaviour' into buying more domestic products.

4.4.3 Effectiveness of various government initiatives to support MSMEs

The government has come out with many initiatives to support the MSMEs reeling under the impact of COVID-19. We were interested in getting feedback from MSMEs on their views regarding the usefulness of different initiatives. We asked our respondents to select the government initiatives they find useful from the following options:

- Change of MSME definition
- Emergency working capital facility
- Equity support through Rs. 10000 crores (approximately USD 1.33 billion) 'Funds of Fund'
- Subordinate debts for NPAs
- Payment of MSME dues by CPSE (Central Public Sector Enterprises) in 45 days
- Restriction on global tenders up to Rs. 200 crores (USD 26.66 million)
- Establishment of e-Marketplace
- Interest subvention for MUDRA -Shishu Loans (Micro Units Development and Refinance Agency)
- Reduction of EPF contribution.

79 out of 83 companies responded to our question regarding the usefulness of various government initiatives to support MSMEs. Figure 31 showcases the response to the various government initiatives.

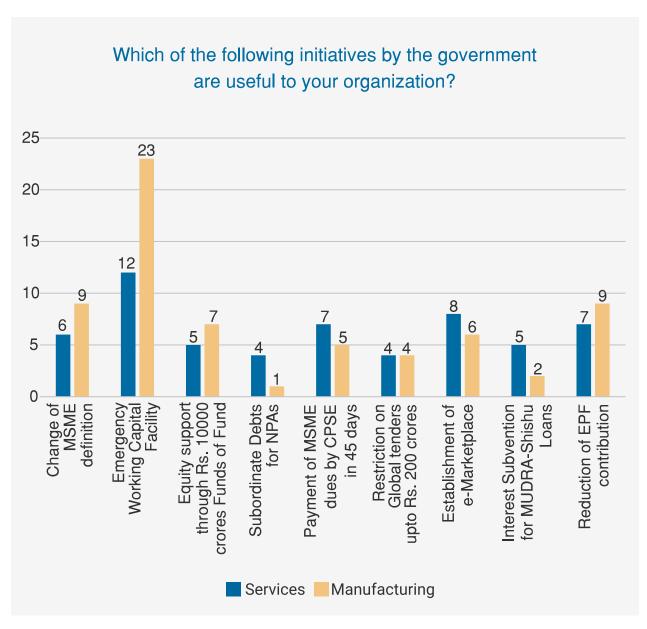


Figure 31: Effectiveness of various government initiatives

MSMEs ranked the government's following initiatives as the most useful to their organizations:

- Emergency working capital facility (44.3% 35 out of 79 responses)
- Reduction in EPF contribution (20.2% 16 out of 79 responses)
- Change of MSME definition (19% 15 out of 79 responses)
- Establishment of e-Marketplace (17.7% 14 out of 79 responses)

Key Insight: Effectiveness of various government initiatives to support MSMEs



44.3% (35 out of 79 respondents) found the 'emergency working capital facility' to be the most useful among the government's nine initiatives to support MSMEs.

We wanted to know what measures MSMEs believe that government should take to ensure growth. 33 (19 manufacturing and 14 services) out of 83 companies gave their suggestions.

Some of the suggestions from the micro-manufacturing and services enterprises are as below:

- Government should waive off the interest on the loan for the period that MSMEs are impacted by COVID-19
- The government and public sector organisations should release the payments ontime to the MSMEs offering their products and services
- GST burden on software development and technology training should be reduced
- Banks should implement collateral-free loans as per the government guidelines; in practice, this is not happening
- The interest rate of bank loans should be reduced.
- Government should provide financial support to MSMEs wanting to develop new products or enter into the new markets
- Mapping capabilities of existing MSMEs and equipping them with technology and skills to cater to import substitution efforts of the government
- Many MSMEs feel a reverse auction may lead to compromising in quality and viability of the business

- The government needs to take the initiative to build an online platform to support MSMEs in market access
- The Credit Linked Capital Subsidy Scheme introduced by the ministry of MSME should be extended to support the growth and development of the MSME sector

Small enterprises?

In addition to timely disbursement of loans and lower interest rates on loans, MSMEs in the small enterprise category expect the government to support the skilling program in different sectors to create a skilled and responsible workforce to enhance MSMEs global competitiveness.

MSMEs in the medium enterprise category would expect the government's support in increasing the emergency credit line schemes to 100 crores.

On a separate note, companies in the small enterprise category had mentioned that it is very difficult to implement the Andhra Pradesh Government's policy of deploying a 75% local workforce.

Key Insights: Effectiveness of various government initiatives to support MSMEs



- Government should waive off the interest on the loan for the period that MSMEs are impacted by COVID-19
- The government and public sector organisations should release the payments on-time
- Banks should implement collateral-free loans as per the government guidelines; in practice, this is not happening
- Government should provide financial support to MSMEs wanting to develop new products or enter into the new markets
- The government needs to take the initiative to build an online platform to support MSMEs in market access

4.4.4 Effectiveness of the loan offers by the Government of India

We had asked companies if they had availed of any loan offers by the government. 76 companies responded to our question, 40 representing manufacturing and 36 services sectors. Seven companies did not respond to our question. Out of 76 respondents, 53 (69.7%), 15 (19.7%), and 8 (10.5%) were micro, small, and medium enterprises, respectively. 52.6% of the respondents have availed of the loan offers announced by the government. Figure 32 provides the details of the loans availed by MSMEs.

60% of those availing loans were from the manufacturing sector.

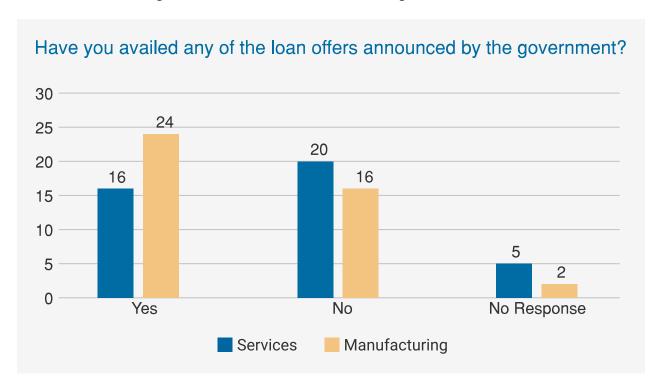


Figure 32: Taking up of loan offers by MSMEs

Our analysis shows that 67.5% of those who availed of the government's loan offer were micro-enterprises.

We wanted to understand why many companies did not avail of the government's loan offer scheme. Out of 36 such companies, 24 cited their reasons for not leveraging the loan offer scheme. The reasons for micro-enterprises not availing of loan offers are as follows:

Manufacturing - Micro enterprise

- Banks are not willing to give loans without collateral
- Low credit score/bad credit history

Services - Micro enterprise

- Banks are not willing to provide loans without collateral
- Poor support from banks
- Banks are not supportive of new businesses

We have also analysed reasons for small enterprises not availing of the government's loan offer. The primary reasons cited by the manufacturing and services companies are as follows:

Manufacturing - Small enterprise

- Poor support from banks
- Not aware of the loan offer scheme
- Companies expect a lower rate of interest on loans

Services - Small enterprise

Companies expect a lower rate of interest on loans

Similarly, the reasons for medium enterprises not availing loan offers are as below:

Manufacturing-Medium enterprise

Unable to use emergency credit line scheme due to high outstanding loan

Services - Medium enterprise

Poor support from banks

Key Insights: Loan offers announced by the government



- 52.6% of the respondents have availed the loan offers announced by the government
- 60% of those availing loans were from the manufacturing sector

- Our analysis shows that 67.5% of those who availed the government's loan offer were micro-enterprises
- Many micro-enterprises could not avail the government's loan offer scheme due to poor support from the bank and bank's refusal to disburse loans without collateral
- Small enterprises expect a lower interest rate on loans

4.4.5 Response to special packages (ReSTART) by the Andhra Pradesh government

The Government of Andhra Pradesh had introduced a special package for MSMEs to support Industrial sectors in the wake of COVID-19 and enable them to restart their operations. We asked the companies if they were aware of the special package and applied for it. 77 out of 83 companies responded - 37 from the services sector and 40 from the manufacturing sector.

Only 24.7% of the respondents (19 out of 77) applied for the government's special package. 35% of the manufacturing companies (14 out of 40 respondents) applied for the government's special package; the corresponding figure for the services sector was 13% (5 out of 37 respondents).

25.9% (20 out of 77 respondents) of the MSMEs were not eligible for applying for the special packages to restart their operations. 24.3% (9 out of 37 respondents) of services and 27.5% (11 out of 40 respondents) of manufacturing sector MSMEs were not eligible for applying for the special package.

18.2% of the respondents (14 out of 77) were unaware of the schemes introduced by the Government of Andhra Pradesh.

Figure 33 shows the responses of MSMEs regarding their views on the special package from the government.

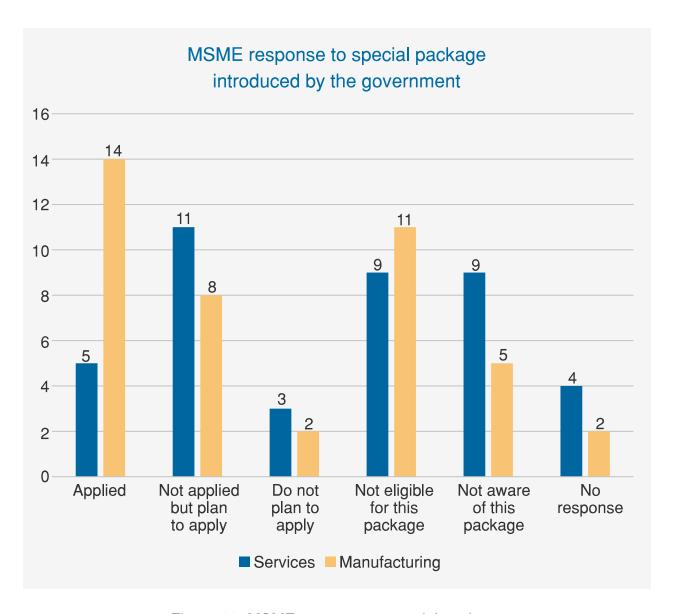


Figure 33: MSME response to special package

Key insights: MSME's feedback on special packages initiated by the Government of Andhra Pradesh



- 24.7% of the MSMEs have applied for special package introduced by the government
- 18.2% of the MSMEs were unaware of the government's special package
- 25.9% of the respondents were not eligible to apply for the special package

4.4.6 Government support for restarting operations

The Government of Andhra Pradesh had initiated various packages that support MSMEs in recommencing their operations. We wanted to find out which of the AP Government's ReSTART package was most useful for the MSMEs. 67 companies responded to our question. The two most useful initiatives as viewed by the MSMEs are as below:

- The 'waiver of fixed/ demand charges' policy was the most popular (35.8%, 24 out of 67 respondents) initiative.
- Working capital loans of two to ten lakhs at a 6 to 8% interest rate was the second most useful initiative (31.3%, 21 out of 67 respondents)

Figure 34 shows the views of MSMEs on the benefits of various government measures to restart operations.

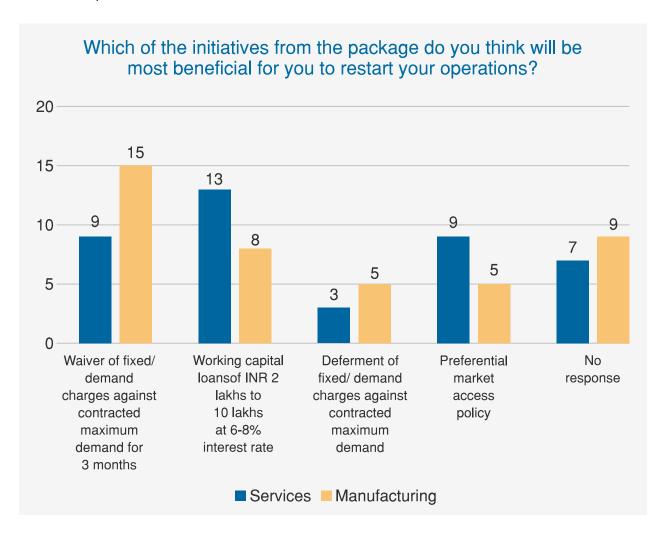


Figure 34: Government support for restarting operations

Key Insight: Government support for restarting operations



 On a relative basis, MSMEs found the policy of 'waiver of fixed/ demand charges against contracted maximum demand for three months' most useful for restarting their operations.

4.5 Innovation strategies for MSMEs

India has always seen abundant localised creativity or jugaad. This literally means working around a lack of resources by making the best use of available resources and coming up with a quick-fix solution. The problem, however, has always been the institutionalisation of this innovation¹⁸.

If India's MSMEs need to go to the next level of growth, the institutionalisation of innovation culture will be vital. We wanted to find out the prevailing practices in the MSMEs concerning an innovation culture. We administered a survey to gather primary data from MSMEs on some of the following aspects:

- New product development
- Filing of patents
- Collaboration with start-ups
- Leveraging tool rooms for low-cost innovation
- Impact of social distancing on the cost of operations
- Encouraging an innovation culture

4.5.1 New product development

MSMEs can significantly contribute to the 'AtmaNirbhar Bharat' (self-reliant India) campaign by creating new products and services in line with customers' changing needs and demands.

¹⁸ Innovation: Changing the MSME landscape, 2011 Advisory, Tax & Regulatory Services in India | PwC India. https://www.pwc.in/assets/pdfs/publications-2011/innovation-msme-2011.pdf

We wanted to know if MSMEs have developed new products since their inception. 73 out of companies responded to our survey. 68.5% of the companies responded by stating that they have developed new products. Figure 35 shows new product development initiatives at MSMEs.

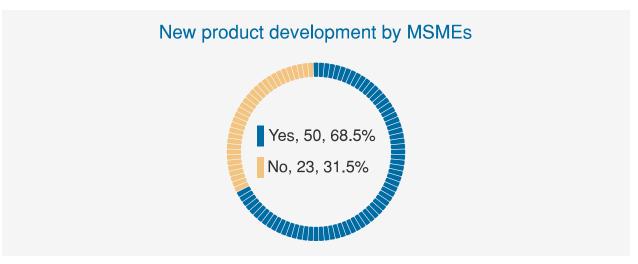


Figure 35: New product development by MSMEs

Key Insights: New product development by MSMEs



- MSMEs' new product development culture will be extremely important to India's 'AtmaNirbhar Bharat' (self-reliant India) campaign.
- Analysis shows that 68.5% of the respondents developed new products since they were established.

4.5.2 Filing of patents

A measure of innovation in companies is the number of patents filed by them. We wanted to understand if companies have filed for patents. 73 out of 83 companies responded to our question on the patent. Our study shows that 34.2% of the companies have filed for patents.

We also obtained data on whether MSMEs have recently improved the quality of their processes/ products through innovation. 74 out of 83 companies responded to this question. Our analysis shows that 78.4% (58 out of 74 respondents) have recently improved the quality of their processes/products through innovation. Figures 36 and 37 show the status of patent filing and quality improvement through innovation by MSMEs.

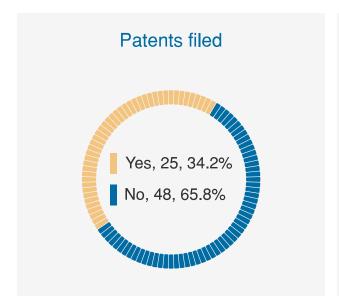


Figure 36: Patents filed by MSMEs



Figure 37: Quality improvement through innovations

Key Insights: Patent filing by MSMEs and use of tool room infrastructure



- 34.2% of the respondents filed for patents.
- 78.4% of the respondents have recently improved their processes/products through innovation

It is interesting to note that, of the 50 companies which have developed new products, 23 have also filed for patents. All these 23 companies stated that they have recently improved their quality of the process or product through innovation.

4.5.3 Collaboration with start-ups

MSMEs need to do innovation not only in their products and processes but also in business models. 73 out of 83 companies responded to our question on the potential of collaboration with start-ups for business model innovation.

Many MSMEs (78.1%, 57 out of 73 respondents) have shown interest in collaborating with start-ups to innovate their business models to combat challenges resulting from the Coronavirus outbreak. Figure 38 shows MSMEs' views on the possibilities of collaboration with start-ups to innovate their business models.

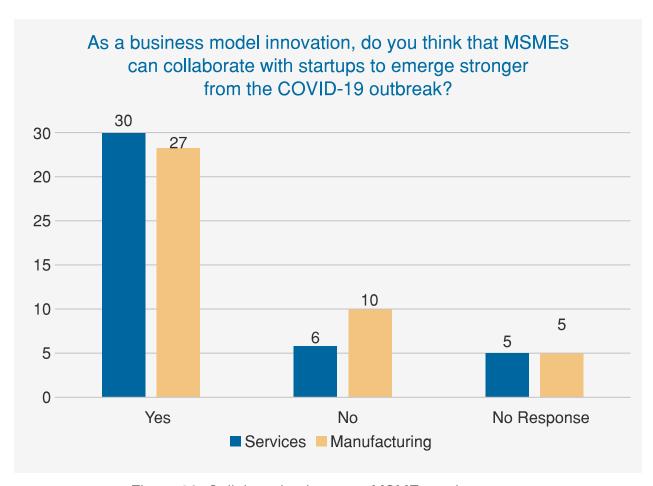


Figure 38: Collaboration between MSMEs and start-ups

Key Insight: Collaboration between MSMEs and start-ups



 78.1% of the respondents see potential to collaborate with start-ups to innovate their business models and emerge stronger, post COVID-19.

4.5.4 Leveraging tool rooms for low-cost innovation

MSME clusters provide common tool rooms to bring down the cost of innovation for MSMEs. We wanted to understand if MSME tool rooms will be helpful in carrying out low-cost innovation. 71 out of 83 companies responded to this question. 69% of the respondents supported the role of tool rooms in enabling low-cost inventions in MSMEs. Figure 39 shows the response of the MSMEs on the role of tool rooms in enabling low-cost innovations.

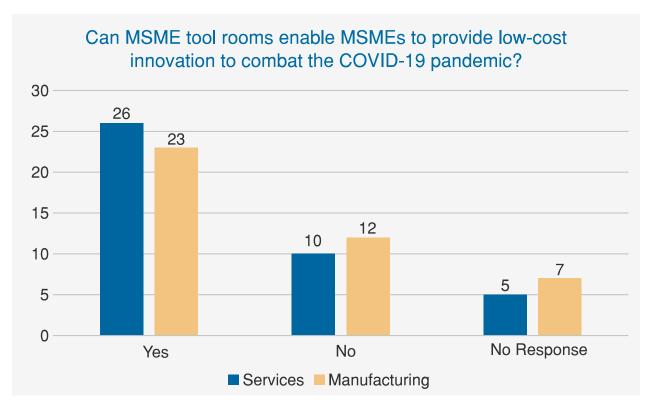


Figure 39: Benefits of tool rooms

Key Insight: Benefits of tool rooms to MSMEs in carrying out low-cost innovations



 69% of the respondents stated that they could leverage MSME tool rooms for low-cost innovations to combat the pandemic.

4.5.5 Encouraging an innovation culture

Innovation culture is an important aspect that helps companies to generate new ideas and implement new solutions. To understand how companies encourage their staff to generate ideas and innovate, we provided them the following options asking them to select as many as applicable:

- Have a suggestion box (34.6%, 26 out of 75 companies)
- Reward staff for the suggestion (37.3%, 28 out of 75 companies)
- Get out of the office and talk to staff (22.6%, 17 out of 75 companies)
- Conduct creativity/innovation workshop for staff (20%, 15 out of 75 companies)
- No measure in place (10.6%, 8 out of 75 companies)

 Any other (3 responses, one of them suggested that companies should give enhanced remuneration to encourage staff to generate new ideas and innovate; another suggestion was to organise regular internal presentations and meetings; and third was a proposal to conduct brainstorming sessions).

In response to how companies encourage their staff to generate new ideas and innovate, 'rewarding staff for suggestions' was the most popular answer, with 37.3 % of respondents endorsing it. Figure 40 shows the measures taken by MSMEs to generate ideas and innovate.

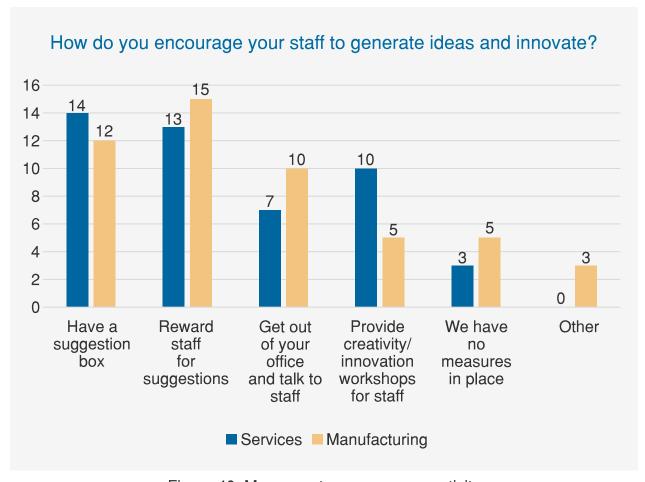


Figure 40: Measures to encourage creativity

Key Insight: Measures to encourage creativity



 'Rewarding staff for suggestions' was the most popular answer, with 37.3% of the respondents endorsing it as the best measure to generate new ideas.

4.5.6 Impact of social distancing on the cost of operations

Social distancing has been a prominent measure for fighting COVID-19. We wanted to understand if the 'social distancing' protocol is increasing companies' cost of operations. In our survey, 74 out of 83 companies responded to the question related to the impact of social distancing on operation costs. 58.1% of the respondents stated that the 'social distancing' protocol had increased their cost of operations. Figure 41 captures insights on if 'social distancing' norms would increase the cost of MSMEs' operations.

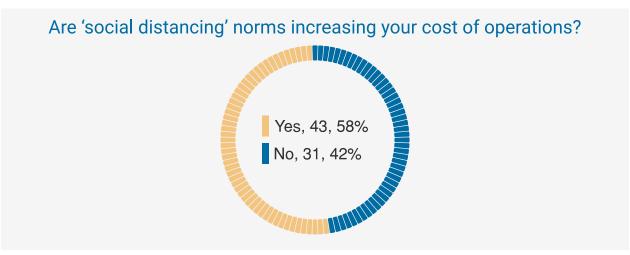


Figure 41: Impact of 'social distancing' on the cost of operations

Key Insights: Innovation strategies for MSMEs



- 34.2% of the respondents filed for patents.
- It was interesting to note that 72% of these companies which filed for patents said that they:
 - developed new products since they were established
 - recently improved their process/ product through innovation
 - welcome the opportunity to collaborate with start-ups to innovate their business models and come out stronger by combating the COVID-19 outbreak.
- We need to create awareness about our tool room infrastructure. Only 13 out of 18 companies that filed for patents leverage tool room.

It is important to inculcate innovation culture through a structured workshop on creativity and innovation. Only 4 out of these 18 companies that filed for patents provide opportunities for their staff to attend workshops on creativity and innovation.

4.6 Support needed by MSMEs

The Government of India has the vision to enhance MSMEs' contribution to GDP from about 30% to 40%, and export contribution from 48% to 60% of GDP, potentially generating an additional 50 million jobs by 2025.

However, MSMEs in our country have the challenge of scaling up, and it is essential to understand the kind of support they need to accelerate their business growth.

We wanted to study the management intervention required to take MSMEs to the next level of growth and asked our respondents to select various interventions needed to support them. We listed out the areas for management intervention where MSMEs may need help and asked them to select the relevant strategies as listed below:

- Business innovation and design
- Business strategy development
- Brand development
- Enhancing quality and standards
- Financial management
- Human capital development
- Intellectual property and franchising
- Productivity improvement
- Service excellence
- Technology innovation

74 out of 83 companies responded to our question regarding support needed for management intervention. We received responses from 51 micro, 15 small, and 8 medium enterprises.

The micro-enterprises (31%, 16 out of 51 respondents) stated that 'service excellence' is the most important management intervention required for supporting their business, followed by 'business strategy development' (29%, 15 out of 51 respondents) and 'brand development' (25%, 13 out of 51 respondents).

A study conducted by the Asian Development Bank (ADB)¹⁹ reported that the labour productivity (ratio of value-added to the number of workers) in India's micro and small enterprises is significantly less than in Thailand, the Philippines, and Indonesia. Furthermore, the study showed that labour productivity in India's micro enterprises is on average around 33% of small enterprises. India's micro enterprises need to enhance their labour productivity significantly. However, our study shows that micro-enterprises do not rank 'productivity improvement' as one of the top priorities; only 17.6%, 9 out of 51 respondents consider it an area that needs management intervention. We need to create awareness among India's micro-enterprises that 'productivity improvement' needs attention. Figure 42 reflects the views of the micro-enterprises when it comes to choosing the areas of management intervention.

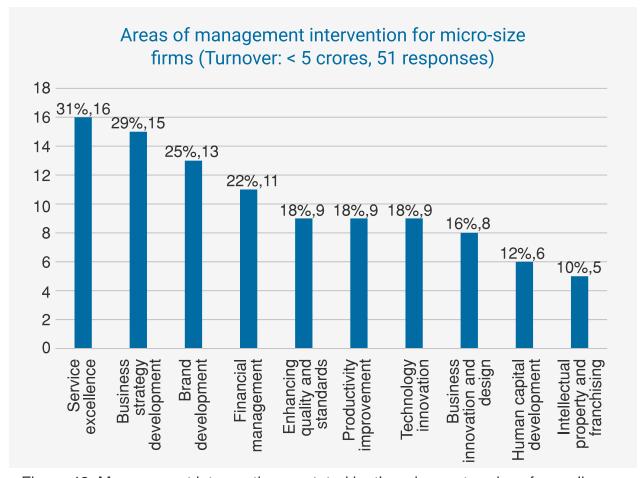


Figure 42: Management intervention as stated by the micro-enterprises for scaling up

¹⁹ Key Indicators for Asia and the Pacific, 2009, 40th Edition, Special Chapter, Enterprises in Asia: Fostering Dynamism in SMEs, Asian Development Bank

The small enterprises stated that 'business strategy development' (40%, 6 out of 15 respondents) is the most important management intervention required for supporting their business, followed by 'brand development', 'financial management' and 'productivity improvement' at 33% (5 out of 15 respondents) each. Figure 43 shows the management intervention needed by small enterprises for taking their business to the next level.

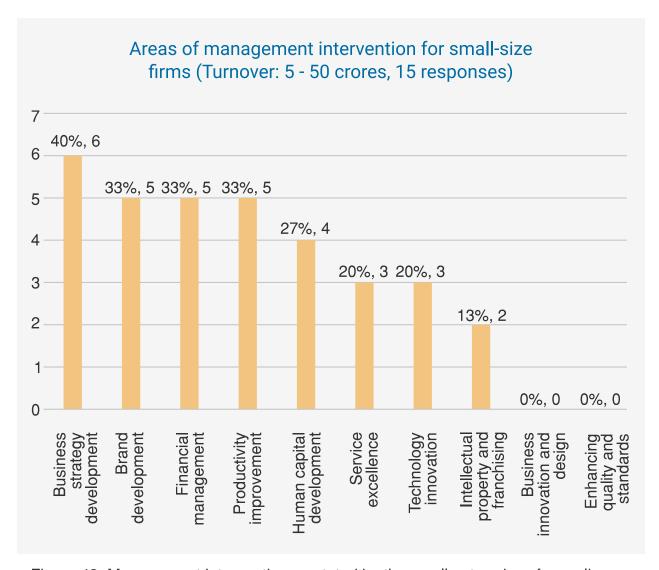


Figure 43: Management intervention as stated by the small enterprises for scaling up

The medium enterprises stated that 'business strategy development' (75%, 6 out of 8 respondents) is the most important management intervention required for supporting their business, followed by 'brand development' (63%, 5 out of 8 respondents), 'enhancing quality standards' and 'technology innovation' both at 50% (4 out of 8 respondents). Figure 44 shows the management intervention needed by medium enterprises for taking their business to the next level.

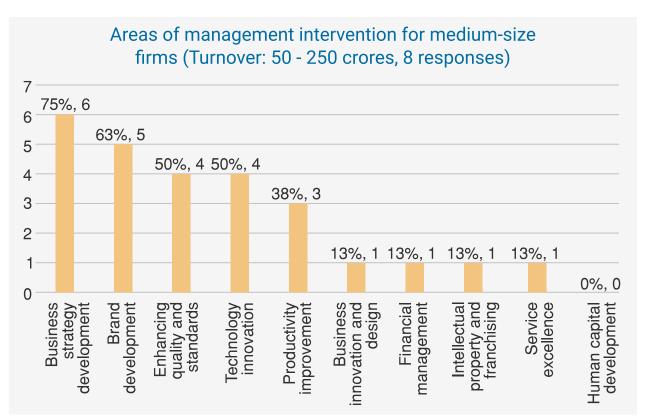


Figure 44: Management intervention as stated by the medium enterprises for scaling up Table 9 shows different areas that need management interventions to scale up, as viewed by MSMEs.

Table 9: Areas that need management interventions for scaling up as viewed by MSMEs

Area of management intervention	Micro	Small	Medium
Brand development	25%	33%	63%
Business innovation and design	16%	0%	13%
Business strategy development	29%	40%	75%
Enhancing quality and standards	18%	0%	50%
Financial management	22%	33%	13%
Human capital development	12%	27%	0%
Intellectual property and franchising	10%	13%	13%
Productivity improvement	18%	33%	38%
Service excellence	31%	20%	13%
Technology innovation	18%	20%	50%

If MSMEs have to become globally competitive, all the areas mentioned in Table 9, would need management intervention.

MSMEs in the 'small enterprises' category do not consider 'business innovation and design' and 'enhancing quality and standards' as areas that need management intervention. But in order to create a self-reliant India, MSMEs need to focus on these areas.

MSMEs in the 'medium enterprises' category do not view 'human capital development' as an area that needs management attention.

Key insights: Support needed by MSMEs



- Micro enterprises state that 'service excellence', 'business strategy development', and 'brand development' are their top three requirements for management intervention to take their businesses to the next level of growth. India's micro-enterprises have very low labour productivity; these enterprises must adopt tools and techniques for 'productivity improvement'.
- Small enterprises state that 'business strategy development', 'brand development' and 'financial management' are their top three requirements for management intervention to take their businesses to the next level of growth.
- Medium enterprises state that 'business strategy development', 'brand development' and 'enhancing quality and standards' are their top three requirements for management intervention to scale up to the next level.

4.7 Employment figures for companies in service and manufacturing sectors

According to an Asian Development Bank (ADB) study conducted in 2009²⁰, 84 percent of India's manufacturers employed fewer than 50 workers, compared with 70 percent in the Philippines, 65 percent in Indonesia, and 25 percent in China.

20 Key Indicators for Asia and the Pacific, 2009, 40th Edition, Special Chapter, Enterprises in Asia: Fostering Dynamism in SMEs, Asian Development Bank

We had also conducted an interactive webinar during the pandemic in 2020 for MSMEs to understand their problems and share our views on how they can combat business challenges. 195 participants attended the webinar. During this event, we conducted a quick survey to understand the employee strength of the participating organizations. Our survey showed the following:

- 38.9% of companies have less than 10 employees
- 43% of companies have 10 to 50 employees
- 82% of companies have less than 50 employees

Figure 45 shows the distribution of MSMEs in terms of employee strength.

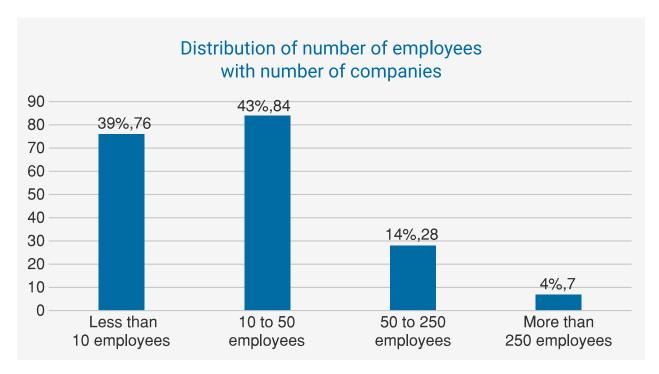


Figure 45: Employee strength in MSMEs based on a survey

While the ADB study from 2009 reported that 84% of MSMEs employed less than 50 employees, our 2020 survey shows that 82% of MSMEs employ less than 50 employees. ADB's study also reported that India's smallest enterprises are only 25 to 65% as productive as their small-scale peers elsewhere.

We collected primary data from 83 MSMEs in Andhra Pradesh to understand MSMEs' scale of operations in terms of employee strength and turnover. Our study shows that in Andhra Pradesh, both MSMEs in the manufacturing and services sectors find it challenging to scale up. 82 companies provided details regarding their employee strength and turnover. The distribution of employee strength of these 82 companies are given below:

- 21.9% of companies have less than 10 employees
- 42.1% of companies have 10-50 employees
- 64% of companies have less than or equal to 50 employees

35% of MSMEs in the services sector employed less than 10 employees, and the corresponding figure for the manufacturing sector is 9.5%. 27.5% of the MSMEs in the services sector employed between 10 to 50 employees. The corresponding figure for the manufacturing sector is 57.1%.

Table 10 cross-references the number of employees with the turnover of the companies.

Table 10: Cross-tabulation of employee strength and turnover of MSMEs in Andhra Pradesh

No. of employees	< than	10 to	50 to	100 to	> than	No	Total
Turnover	10	50	100	200	200	Resp -onse	Total
< 1 crore	17	18	1	0	0	0	36
1-5 crore	1	13	4	1	0	0	19
5-10 crore	0	1	2	1	1	0	5
10-25 crore	0	3	2	2	1	0	8
25-50 crore	0	0	2	2	2	0	6
50-100 crore	0	0	1	1	2	0	4
>100 crore	0	0	0	1	3	0	4
No Response	0	0	0	0	0	1	1
Total	18	35	12	8	9	1	83

Our study shows that 20.7% (17 out of 82 companies) of the MSMEs have employee strength of less than 10 and a turnover of less than INR 1 crore. We have also observed that per-employee revenue as MSMEs scale-up does not increase proportionately. This is likely due to a low level of productivity. 21.9% (18 out of 82 companies) of the MSMEs with an employee strength between 10 to 50 registered the same revenue (less than INR 1 crore) as in the 'less than 10 employees' category. Only 20.9% of the companies with 10 to 50 employees strength could cross the annual turnover of INR 1 crore.

MSMEs in Andhra Pradesh have the dual problems of scale (employee strength) and productivity (per employee revenue).

Key insights: Employment by MSMEs



- One of our recent pan-India surveys conducted in 2020 shows that 82% of India's MSMEs have less than 50 employees.
- While our study of MSMEs in Andhra Pradesh shows that 21.9% of companies have less than 10 employees, and 42.1% of companies have 10-50 employees
- In Andhra Pradesh, 20.7% of the MSMEs have employee strength of less than 10 and turnover of less than INR 1 crore. Per employee revenue as MSMEs scale up does not increase proportionately
- Only 20.9% of the companies with 10 to 50 employees strength could cross the annual turnover mark of INR 1 crore
- MSMEs in Andhra Pradesh have the dual problems of scale (employee strength) and productivity (per employee revenue)



5. Major findings

The Government of India has the vision to enhance MSMEs' contribution to the GDP from the current 30% level to 40%, and export contribution from 48% to 60% by 2025. We have studied the challenges and opportunities of MSMEs in Andhra Pradesh. Based on the following findings of this study, processes and systems prevailing at MSMEs need substantial improvement:

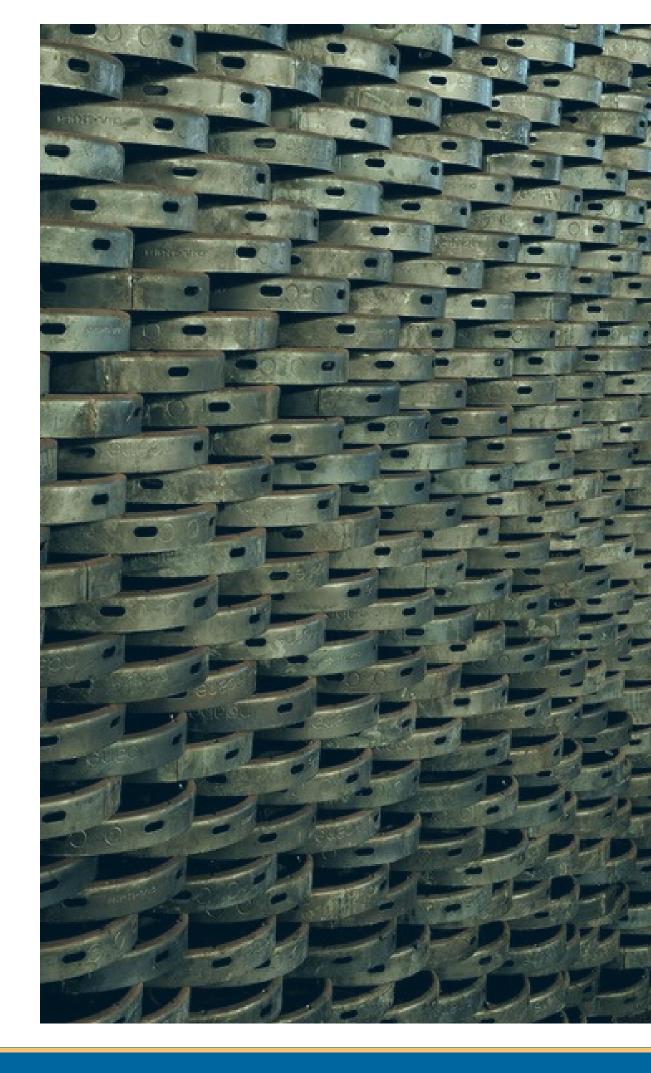
- Top 3 business challenges faced before COVID-19 were the same for MSMEs in both the services and the manufacturing sectors. Those were 'lack of access to finance', 'inability to scale up' and 'lack of skilled workforce'. While 'lack of access to finance' was the topmost business challenge for MSMEs in the services sector, 'lack of skilled workforce' was the biggest business challenge for MSMEs in the manufacturing sector.
- Our study of MSMEs in Andhra Pradesh shows that 71.6% of the MSMEs focus only on the domestic market. The services sector rated 'lack of access to finance' as the number one barrier to selling globally followed by 'government regulations'. The manufacturing sector rated lack of government support as the number one barrier to selling globally. For instance, the textile sector companies cited the absence of free trade agreement as a competitive disadvantage.
- COVID-19 disrupted the MSMEs' business. Both the services and manufacturing sectors reported that the disruption was mainly due to a shortage of workforce, problems with cash flow, and a lack of new customer orders. In addition, businesses in the manufacturing sector were adversely impacted due to the supply chain disruption.
- During COVID-19, manufacturing companies realised the importance of remote operations in a contactless world. MSMEs in the manufacturing sector are not 'smart and connected', have limited automation, and are not suitable for remote operations.
- Post-lockdown, many companies worldwide felt the need to review their products and services portfolios due to the changed customer demands. However, our study of MSMEs in Andhra Pradesh shows that 76% of the MSMEs had no plan to review their products and services portfolios. This may impose risk on MSMEs' future business.
- MSMEs feel that 'Internet of Things (IoT)' is the best digital strategy to help them

disrupt their supply chains, followed by 'Artificial Intelligence' and 'Machine Learning' technologies.

- Digital literacy will become an important lever for MSMEs both for business continuity and competitive edge. Our study shows that 34% of the MSMEs in Andhra Pradesh have less than 10% digitally literate staff. Another 34% of MSMEs reported that 10-25% of their staff is digitally literate. 86% of the MSMEs do not use any newage technology-driven marketing tools (for instance, big data for customer sentiment analysis). MSMEs need to develop a digital strategy for transforming their businesses.
- 39.2% of the MSMEs find the revised definition of MSME 'useful'. MSMEs from the service sector (57.9%) find the definition'more useful' than the manufacturing sector (22%). 13.9% of the MSMEs do not find the new definition 'useful'. The investment threshold in the revised definition of MSME should be reviewed. The government should take industry feedback to do further innovation in the definition of MSME.
- 38.2 % of the respondents believed that the government reforms 'would help shift customer behaviour' into buying more domestic products.
- 44.3% found the 'emergency working capital facility' to be the most useful among the government's nine initiatives to support MSMEs.
- Our analysis shows that 67.5% of those who availed of the government's loan offer were micro-enterprises, 60% of those availing loans were from the manufacturing sector.
- Many micro-enterprises could not avail of the government's loan offer scheme due to poor support from the bank and their refusal to disburse loans without collateral.
- 24.7% of the MSMEs had applied for a special package introduced by the Government of Andhra Pradesh. 18.2% of the MSMEs were unaware of the government's special package. 25.9% of the respondents were not eligible to apply for the special package. On a relative basis, MSMEs found the policy of 'waiver of fixed/demand charges against contracted maximum demand for three months' most useful for restarting their operations.
- The government has created digital platforms like Udyog Aadhar / Udyam (online registration), MyMSMEApp (mobile application), Zero Effect Zero Defect (ZED)

scheme, MSME Global Mart (an online B2B portal). Our study shows that MSMEs do not leverage most of the applications developed by the government. While online business is important for enhancing market access, only 4.2% of the MSMEs leverage B2B online portals like MSME Global Mart.

- MSME's new product development culture will be extremely important to India's 'AtmaNirbhar Bharat' (self-reliant India) campaign. 34.2% of the respondents filed for patents. Analysis shows that 68 % of the respondents developed new products since they were established.
- 69% of the respondents stated that they could leverage MSME tool rooms for low-cost innovations to combat the pandemic.
- Micro enterprises state that 'service excellence', 'business strategy development', and 'brand development' are their top three requirements for management intervention to take their businesses to the next level of growth. India's microenterprises have very low labour productivity; these enterprises must adopt tools and techniques for 'productivity improvement'.
- Our study of MSMEs in Andhra Pradesh shows that 21.9% of companies have less than 10 employees, and 42.1% of companies have 10-50 employees. 20.7% of the MSMEs have employee strength of less than 10 and turnover of less than INR 1 crore. Per-employee revenue as MSMEs scale-up does not increase proportionately. MSMEs in Andhra Pradesh have the dual problems of scale (employee strength) and productivity (per employee revenue).



6. Recommendations

Government has a plan to make India a five trillion-dollar economy by 2025. For this to happen, MSMEs' contribution to our GDP needs to increase from the current 30% to 40%. This would involve strong collaboration between the government and the MSMEs.

In our research, we have analysed MSMEs' challenges and opportunities in Andhra Pradesh and have come up with a set of recommendations for the government and MSMEs.

6.1 Recommendations to the government

To enhance MSME's contribution to GDP, the government has an important role to play. Our recommendations are as below:

Addressing current business challenges: 'Lack of access to finance', 'inability to scale up', and 'lack of skilled workforce' are the top challenges for MSMEs' growth. The government has introduced various schemes to support MSMEs. To address the lack of access to finance RBI guidelines mandated the banks to disburse loans up to INR 10 lakh for the 'Micro' enterprises without collateral; many banks are not supporting this at a ground level. The government needs to ensure that banks implement RBI guidelines to support MSMEs with collateral-free loans.

In our study, both services and manufacturing sector companies have stated that government regulations and lack of trade agreements are barriers to selling globally. Government bodies and policy-makers may do a deep dive to understand the bottlenecks for growth.

The availability of a skilled workforce is a problem for MSMEs in both the services and manufacturing sectors. We need to scale up PMKVY program to develop skilled professionals based on the demand (for a specific skill and location/cluster) for MSMEs in various sectors.

Awareness creation on MSME schemes: The awareness among the MSMEs about various digital platforms created by the government is limited. There is a need to promote various schemes and platforms created by the government to enhance MSMEs' growth. The social media platforms can be extensively leveraged for this purpose.

Use of digital platforms and applications: Our study shows that MSMEs do not leverage most of the applications developed by the government, with only 4.2% of the MSMEs leveraging B2B online portals like MSME Global Mart. 16.9% of the MSMEs do not use any of the applications developed by the government. The government needs to create awareness about the benefits of using digital applications available for MSMEs. An extensive online campaign and training may be conducted for the MSMEs on the use of digital applications.

Market access: Market access (both domestic and international) is a big challenge for MSMEs. By 2040, 95% of all purchases are expected to be online. MSMEs reach out to the markets through three channels: Offline, own e-commerce platform, and third-party e-commerce platforms (such as Amazon, Flipkart). A majority (65.3%) of the MSMEs in Andhra Pradesh reach out to their customers only through offline sales, while 6.7% leverage an 'only online' channel. Another 28% of companies leverage both online and offline channels.

Universal eCommerce access to all sellers (MSMEs) and buyers will be fundamental to MSMEs' growth. We need to consider feasibility, desirability, and viability while developing such a platform. Many third-party eCommerce platforms retain high margins (could be in the range of 12 to 35%), smaller MSMEs are likely to pay higher margins. The government eCommerce platform's commission should be reasonable and transparent. Buyers want many sellers with variety and some degree of competition, hassle-free delivery with refunds, and a mechanism for dispute resolution. The government needs to build an ecommerce platform to provide MSMEs with better market access through a PPP model.

Revised definition of MSMEs: Industry, in general, has welcomed the revised definition of MSMEs. Our study shows that 39.2% of the MSMEs find the revised definition of MSME 'useful'. The government should take industry feedback to further revise the definition of MSMEs both for the services and manufacturing sector.

6.2 Recommendations to the MSMEs

COVID-19 has disrupted the MSMEs' businesses. The services and manufacturing sectors reported that the disruption was due to a workforce shortage, cash flow problems, and a lack of new customer orders. In addition, the businesses in the manufacturing sector were adversely impacted due to the severe disruption of their supply chains.

Review of product and services portfolio: During the pandemic, many companies worldwide realised a need to review their products and services. Our study of MSMEs in

Andhra Pradesh shows that 76% of the MSMEs had no plan to review their products and services portfolios. This strategy may impose risk on MSMEs' future business.

69% of the MSMEs stated that MSME tool rooms can be leveraged for low-cost innovation. We need to create more awareness about the MSME tool room infrastructure. Only 18.3% of the MSMEs used tool room infrastructure. 72.2% of the companies that filed for patents had leveraged tool rooms. MSMEs should leverage tool rooms.

MSMEs need to adopt a new product development culture to contribute towards the 'AtmaNirbhar Bharat' (self-reliant India) campaign. When MSMEs conceive such new products and services, they need to keep the global standards and quality in mind.

Our study shows that 68 % of the respondents developed new products since they were established. However, only 8.4% take benefits of concepts like ZED, enabling products to be produced with zero defects and zero adverse environmental impact.

Building smart and connected factories through low-cost automation: During COVID-19, manufacturing companies realised the importance of remote operations. MSMEs in the manufacturing sector are not 'smart and connected', with limited automation. MSMEs need to leverage a low-cost automation strategy with support from OEMs.

43.3% of the respondents indicated that 'Internet of Things (IoT)' is the best digital strategy to help them disrupt their supply chains. MSMEs can explore the possibility of leveraging low-cost IoT solutions for understanding product performance, supply chain visibility, and after-sales support.

Digital literacy: Digital literacy is an essential lever for MSMEs, both for business continuity and competitive edge. Our study shows that 34% of the MSMEs in Andhra Pradesh have less than 10% digitally literate staff.

Upskilling of employees needs to become a priority for MSMEs. Government online platforms like DigiVidyapeeth and Bharat Skills can be leveraged for this purpose.

Management intervention for taking MSMEs to the next level of growth: Our study shows that MSMEs need to leverage scientific management concepts to enhance their competitiveness.

Manufacturing value-added as a percentage of GDP has been steadily declining since 2010. Our study shows that MSMEs do not consider intellectual property (IP) development

an area that needs attention, with only 10% of Micro and 13% of small and medium enterprises considering this a priority. Both the manufacturing and services sectors of MSMEs should focus on IP development through their new product and services offering.

'Business innovation and design' can act as a strong enabler for growth; our study shows that MSMEs in Andhra Pradesh do not assign adequate priority to this area of management intervention, with only 16% of our respondents in the micro-enterprises category considering this critical.

India's micro enterprises need to enhance their labour productivity significantly. However, our study shows that micro-enterprises do not rank 'productivity improvement' as one of the top priorities; only 17.6% of our respondents consider it an area that needs management intervention. These enterprises must adopt tools and techniques for 'productivity improvement'.

If MSMEs need to go to the next level of growth, then they need to focus on various aspects of management like:

- Business innovation and design
- Business strategy development
- Brand development
- Enhancing quality and standards
- Financial management
- Human capital development
- Intellectual property and franchising
- Productivity improvement
- Service excellence
- Technology innovation

We believe that if MSMEs implement our recommendations, they will be able to enhance their contribution to GDP and export.

References

- https://www.youtube.com/watch?v=sqxwHyb-pXE
- https://economictimes.indiatimes.com/news/economy/policy/govt-sticks-to-usd-5-trillion-economy-target-emphasis-on-infra-aimed-at-achieving-goal-dea-secretary/articleshow/80686511.cms?from=mdr
- Government of India, Ministry of Micro, Small and Medium Enterprises, Annual Report 2020-21 at https://msme.gov.in/sites/default/files/MSME-ANNUAL-REPORT-ENGLISH%202020-21.pdf
- Annual Report 2017-18 (for the years 2011-12 to 2013-14) at https://msme.gov.in/sites/default/files/MSME-AR-2017-18-Eng.pdf
- Ahmed, Israr & Haseen, D. (2017). GROWTH OF MSME SECTOR AND ITS CONTRIBUTION TO EXPORTS OF INDIA IN POST REFORM PERIOD; available at https://www.researchgate.net/profile/Israr-Ahmed-17/publication/330468433_GROWTH_OF_MSME_SECTOR_AND_ITS_CONTRIBUTION_TO_EXPORTS_OF_INDIA_IN_POST_REFORM_PERIOD/links/5fa8e64b299bf10f73300c91/GROWTH-OF-MSME-SECTOR-AND-ITS-CONTRIBUTION-TO-EXPORTS-OF-INDIA-IN-POST-REFORM-PERIOD.pdf?origin=publication_detail
- Report of the Expert Committee on Micro, Small and Medium Enterprises, 25 Jun 2019 for the (Years 2012-13 to 2017-18), available at https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=924#
- Retrieved from https://www.forbes.com/sites/joanverdon/2021/04/27/globalecommerce-sales-to-hit-42-trillion-as-online-surge-continues-adobereports/?sh=452efab750fd
- Retrieved from https://fortunly.com/statistics/ecommerce-statistics/#gref
- Retrieved from https://venturebeat.com/2021/04/21/gartner-predicts-public-cloudspending-to-reach-332b-in-2021/
- Innovation: Changing the MSME landscape, 2011 Advisory, Tax & Regulatory Services in India | PwC India. https://www.pwc.in/assets/pdfs/publications-2011/innovation-msme-2011.pdf

- Key Indicators for Asia and the Pacific, 2009, 40th Edition, Special Chapter,
 Enterprises in Asia: Fostering Dynamism in SMEs, Asian Development Bank
- 'SMEs' to add 22% to GDP by 2012' | Business Standard News (business-standard.com)

Appendix

Questionnaire to assess the MSME's challenges in Andhra Pradesh

		4.0
General	∣ınt∩rm	nation
General		iauvii

Q1. Name of the responde	ent
Q2. Company	
Q3. Location	
Q4. Product(s) /Service	
Q5. Industry/Sector (tick as	,
 Services 	 Food Processing
IT & ITES	PlasticsLeather
Textile	LeatherA&D
Automotive	Chemical
• Pharma	Education
• FMCG	Others
 Consumer Durables 	

Q6. What is the geographical spread of your business?

- Domestic Market
- International Market
- Both domestic and international Markets

Q7. If you are also into export, what is the share of your export business?

- Below 10%
- **10-25%**
- **25-50%**
- **50-75%**
- **75-100%**

Q8. Do you have direct access to the retail market or cater to other companies as a supplier?

- Direct access to the retail market (B2C)
- Cater to other companies as a supplier partner (B2B)
- Both (both B2C and B2B)

Q9. What is the total number of employees in your company?

- Less than 10
- **10-50**
- **50-100**
- **100-200**
- More than 200

Q10. What is the approximate annual turnover of your company?

- Less than 1 crore
- 1-5 crores
- 5-10 crores
- 10-25 crores
- 25-50 crores

- 50-100 crores
- More than 100 crores

Q11. What business challenges were you facing before COVID-19 (select all that apply)?

- Lack of access to finance
- Inability to scale-up
- Lack of skilled workforce
- Lack of digital infrastructure
- Lack of latest technology
- Competition from foreign companies
- The reluctance of large companies to give orders to MSMEs
- Any other please specify

Q12. What barriers do you face to selling globally (select all the options that apply)?

- Government regulations
- Lack of government support
- Access to finance
- Competition from large firms
- Trade regulations
- Lack of latest technology and infrastructure (for instance, a platform for eCommerce)
- Any other, please specify _____

Impact of COVID-19

Q13. How has COVID-19 impacted your business (select all that apply)?

- Unavailability of raw materials
- Delay in the supply of raw materials
- Shortage of workforce
- Cancellation of customer orders/projects
- Delay in fulfilment of customer orders/projects
- Lack of new orders
- Lack of demand for your products
- Problems with cashflow

Q14. What, according to you, is the biggest reason for the slowdown of business in the COVID-19 era?

- Lack of digital infrastructure to carry out operations
- Large scale reliance on manual labor
- Lack of digital knowledge among employees
- Lack of new orders
- Nature of products (non-essential products like electronics etc.)
- Others, please specify

Q15. To what extent has your supply of raw materials been impacted due to COVID-19?

- Significantly impacted
- Somewhat impacted
- Is unaffected
- Positively impacted

Q16. To what extent has your workforce been impacted due to COVID-19?

- Resulted in large scale layoffs
- Resulted in layoffs
- Is unaffected (no-layoff)
- Resulted in the hiring of more people
- Employee's salary has been reduced

Q17. To what extent has employee productivity been impacted due to COVID-19?

- A significant decline in productivity
- A somewhat (marginal) decline in productivity
- No impact
- Slight rise in productivity
- Significant rise in productivity

Q18. To what extent have your customer orders been impacted due to COVID-19?

- Significant decrease in orders
- A slight (marginal) decline in orders

- Are unaffected
- A slight increase in orders
- Significant increase in orders

Q19. To what extent have your ongoing customer orders been impacted due to COVID-19?

- No orders are fulfilled on-time
- Some of the orders are fulfilled on-time
- Most of the orders are fulfilled on-time
- All orders are fulfilled on-time (on time in full)

Q20. How has COVID-19 impacted your bottom line (profit)?

- Significant negative impact
- Negative impact
- Is unaffected
- Positive impact
- Significant positive impact

Q21. What has been the impact of COVID-19 on your cashflow?

- Substantial reduction
- Mild reduction
- No impact
- Cash flow has increased

Q22. Do you have the infrastructure available to enable work from home?

- Yes, for all employees and operations
- Yes, for some employees and operations
- We do not need work from home for our business
- We do require but do not have

Digital status

Q23. How do you reach out to the market (select all the options that apply)?

		Online	e Sales	
	Offline Sales	Own e-commerce platform	Third party e-commerce platform (like Amazon)	Any other comments
How do you reach out to the market				

Q24. How do you track your business flow?

- Manual process
- A manual process with the help of Microsoft office (or any other) tools
- Internally developed custom-made software
- Tally
- Standard ERP software (SAP/ Oracle etc.)
- Other applications (please name them)

Q25. Do you use any new age/ technology-driven marketing tool/s?

- No
- Yes (Please do mention details)

Q26. How many of your employees are digitally literate (basic knowledge on ecommerce, ERP systems, digital technologies, etc.)?

- Less than 10%
- **10-25%**
- **25-50%**
- **50-75%**
- **75-100%**

Q27. Which of the digital platforms/services created by the Government for MSMEs do you use (select all the options that apply)?

- Udyog Aadhar (online registration)
- MyMSME App (mobile application)
- Zero Effect Zero Defect (ZED) Scheme
- MSME Global Mart (an online B2B portal)
- Others _____

Q28. Do you use digital payment systems (mobile banking, digital banking, etc.) in your company?

- Yes
- For some transactions
- No

Q29. Do you use SaaS (Software as a Service) and business analytics in your organization?

- Yes
- For some processes/operations
- No

Q30. Do you use any free online platforms for MSMEs to learn about the latest technology and understand market changes?

- Yes
- No

Post-lockdown

Q31. If using any free online platforms, please specify

Q32. Have you already restarted your operation?

- Yes, at full capacity
- Yes, at low capacity
- No

Q33. What measures have you taken to reduce the impact of COVID-19 before resuming your operations (select all the options that apply)

- Installation of sanitization tunnels
- Pre-start up fumigation of factory premises
- Rearrangement of workstations
- Rearrangement of workstations are not possible in our setup
- Not applicable

Q34. Are you planning to change your products/services portfolio due to changes in customer needs? (e.g., automobile companies are looking forward to manufacturing ventilators, Textile companies are producing PPE kits, Chemical companies are focusing on sanitiser, developing new software apps).

- Yes
- No

Q35. What is your capacity utilization?

	Capacity Utilization
Before Lockdown	
After Lockdown	

Q36. COVID-19 is likely to be there for a long time. It may lead to further restrictions and a potential return to lockdown. The uncertainty will create a high degree of risk in all aspects of the business. Do you have a plan to mitigate the risk?

- Yes
- No

Q37. If you have a plan to mitigate the risk, what is it?

Q38. The market is expected to be very tight and highly cash constrained. This is mainly
because of the uncertainty regarding demand for MSME's product/services and
consistent low or non-existing business income. At the same time, expenses are being
incurred for labor, energy, rent, and other business inputs. What is your plan to
overcome the situation? (Please provide a detailed response)

Q39. What is your business plan? (select all the options that apply)

	Make to Order	Make to stock	Not applicable	Any other, please specify
Pre-COVID				
During lockdown				
Post lockdown/ Now				
Near future				

Q40. What supply chain disruptions are you facing (hindrance to daily operation): Choose the appropriate option.

	Choose	Comments,		
	Yes	No	if any	
Raw material procurement				
Logistics challenges				
Machinery maintenance and spare parts availability				
Workforce				

Q41. What percentage of your total workforce are migrant laborers?

- None
- Up to 25%
- **25-50%**
- **50-75%**
- More than 75%

Q42. Do you believe you will face a workforce shortage when you plan to run your unit with 100% capacity utilisation?

- Yes
- No

Q43. What percentage of your total workforce is currently working?

- None
- Up to 25%
- **25-50%**
- **50-75%**
- More than 75%

Q44. A considerable number of migrant labourers have returned to their hometown due to uncertainties and loss of income. Are you facing a problem finding the workforce now?

- Yes
- No

Q45. What business model changes are you introducing to be competitive in this trying period?

Policy perspective

Q46. Do you think the revision of the MSME definition is useful to the MSME sector?

- Yes
- Somewhat
- No

47. Do you think the revision of the MSME definition is useful to your company bw; if no, why not?
48. Will MSME reforms by the government compel Indian companies to explo digenisation initiatives in manufacturing?
Many companies will switch to indigenous suppliers
Some companies will turn to indigenous suppliers
Things will remain the same
49. Will reforms by the government shift customer behaviour into buying more omestic products?
Yes
Maybe
No
50. Have you availed of any of the loan offers announced by the government?
Yes
No
51. If no, why have you not availed of any loan offers?
52. Which of the following initiatives by the government are useful to your

organisation? (select all the options that apply)

- Change of MSME definition
- Emergency Working Capital Facility

- Equity support through Rs. 10000 crores Funds of Fund
- Subordinate Debts for NPAs
- Payment of MSME dues by CPSE in 45 days
- Restriction on Global tenders up to Rs. 200 crores
- Establishment of e-Marketplace
- Interest Subvention for MUDRA-Shishu Loans
- Reduction of EPF contribution

Q53. What other measures do you think the government should take to ensure growth in
the MSME sector in the long term? (please be specific)
Q54. The Government of Andhra Pradesh has started a special package for MSMEs in
the state to support Industrial sectors in the wake of COVID-19, and enable them to Re- START their operations. Are you aware of this package and applied for it?
Not aware of this package
Not eligible for this package
 Not applied but plan to apply
Applied
 Do not plan to apply
Q55. If you do not plan to apply for this package, please state why?

Q56. Which of the initiatives from the package do you think will be most beneficial for you to restart your operations?

Waiver of fixed /demand charges against contracted maximum demand for 3 months

- Working capital loans of Rs.2.00 Lakhs to Rs.10.00 Lakhs @ 6-8% interest rate
- Deferment of fixed /demand charges against contracted maximum demand
- Preferential Market access policy

Innovation culture
Q57. Have you developed any new products since your company was established? • Yes • No
Q58. Have you filed for any patents to date? Yes No
Q59. Have you recently improved the quality of your process/product through innovation? Yes No
Q60. For business model innovation, do you think that MSMEs can collaborate with Startups to emerge stronger from the COVID-19 outbreak? Yes No
Q61. Which digital strategy can best help MSMEs innovate/disrupt their supply chains? (select all the options that apply) 3D Design 3D Printing Internet of Things Al and ML Virtual Reality Based Design Others, please specify

Q62. Can MSME tool rooms enable MSMEs to provide low-cost innovation to combat the COVID-19 pandemic? • Yes
- No
Q63. Are "social distancing" norms increasing your cost of operations?
YesNo
Q64. How do you encourage your staff to generate ideas and innovate? (select all the options that apply)
Have a suggestion box
Reward staff for suggestionsGet out of your office and talk to staff
 Provide creativity/innovation workshops for staff
 We have no measures in place
Any other (please specify)
Q65. Do you use any software platform to promote innovation culture in your company (for instance, Microsoft Teams, VEEMA)
Yes
- No
Q66. If using, please name the software being used
Q67. What support do you need to take your business to the next level? (select all the options that apply)
 Business innovation and design

Business strategy development

- Brand development
- Enhancing quality and standards
- Financial management
- Human capital development
- Intellectual property and franchising
- Productivity improvement
- Service excellence
- Technology innovation



Indian School of Business

Registered Offices: Gachibowli, Hyderabad - 500 111, Telangana, India.

Ph: +91 40 2300 7000, Fax: +91 40 2300 7099, www.isb.edu

Mohali Campus: Knowledge City, Sector 81, SAS Nagar, Mohali - 140 306.

Punjab, India. Ph: +91 172 459 0000

Regional Offices:

Bangalore: +91 80 2527 0142 / 0093

Mumbai: +91 22 4004 1682 Delhi: +91 11 4167 6125 / 6126