

Are Micro, Small and Medium Enterprises The Pillar Behind India's Economic Development: A Critical Analysis

Abstract

The Micro, Small, and Medium Enterprises (MSMEs) aims at expanding their digital footprint in recent years. This paper aims at studying the role Micro, Small, and Medium Enterprises play in the growth and development of India's economy and to study how various economic indicators mentioned in the paper influence the operational efficiency, productivity, market reach, and growth potential of MSMEs. The data used for analysing the role of India's growth were the performance of the Prime Minister Employment Generation Programme (PMEGP) from 2018-19 to 2022-23 and the contribution of MSME in nations GDP, Export, FDI along with the increase in MSMEs and the employment generated were interrelated based on the provided information. The results showed that there was a strong positive correlation between units assisted and both margin money subsidy disbursed and estimated employment generated (coefficient 0.993). A detailed analysis of these factors in this paper is done to showcase economic progress of India. Key themes examined include the impact of MSMEs on employment rates, GDP. The data also showed that the number of units assisted was higher than that of units unattended. The analysis points out the indispensable role of MSMEs in boosting India towards economic development and prosperity.

Keywords: MSME, Growth and Development, Economic Indicators, Employment Generation, Innovation and Entrepreneurship.

I. Introduction

Development as a concept is multidimensional in nature, it not only showcases economic change but also represents social, environmental, physical and demographic aspect leading to a positive change in society. In order to understand a countries growth as well as development some important indicators like gross domestic product, countries capital formation, employment and unemployment rate, technological progress, population growth and various other factors are taken into consideration. In true sense development and growth in India is only possible when income disparity can be reduced, all rural and backward areas get well connected and become self-sustainable with proper infrastructure facility, and there is good supply and demand of indigenous goods and services both at national and international level, thereby leading to better living standard and condition of its citizen. The Micro, Small and Medium Enterprises in India plays a very important role in fulfilling all the above mentioned criteria's. (*Suryavanshi, n.d.*) in his paper mentions that MSME acts as a catalyst for socio economic transformation of the country and promotes the use of indigenous technologies. It meets the national objective by helping reducing poverty, generating employment and discouraging rural-urban migration. according to the (*MSMEANNUALREPORT2022-23ENGLISH_0.Pdf, n.d.*) Out of 633.88 estimated number of MSMEs, 324.88 lakh MSMEs (51.25%) are in rural area and 309 lakh MSMEs (48.75%) are in the urban areas. MSMEs are mainly involved in developing, manufacturing, processing and storage of goods and commodities.

India's MSME sector has been an important driver of the nation's growing economy and inventiveness, it encompasses an extensive variety of industries, including Chemicals, Khadi Products, Packaging Material and Supplies, Agriculture and Farming, Food Processing, Renewables and Environment, Medical and Healthcare Products, and Automobile Parts and Spares. The government has given constant support to the sector though various structural and financial schemes like SFURTI, PMEGP, and ASPIRE, which supports traditional businesses

and promote entrepreneurship, particularly in sectors other than agriculture like food processing and Khadi. (Mitra et al., 2020) Effective innovation must be incorporated into society and, regardless of any potential financial gains, its true worth usually comes from its ability to bring about social transformation.

The Indian Government understands the role of MSME and hence is now focusing on building a conducive business environment by easing various regulatory policies and by providing financial and technological support to this sector. Key areas to focus in order to ensure MSMEs smooth functioning and development are as follows :

- **Ease of doing business:** This has been achieved by favourable industrial policies, regulatory clearances and revision in labour laws.
- **Promoting Foreign Direct Investment:** Increases in foreign investment will lead to overall growth in the performance and productivity of the MSME sector making it much more competitive in nature.
- **Technological Progress:** Technological up gradation and digitization has eased the working of MSME by improving its productivity performance and connecting it to global supply chain.
- **Capital Access:** The MSME sector gets full support from the government to access finance through schemes like Credit Trust Fund for Micro and Small Enterprises(CGTMSE) and Credit Linked Capital Subsidy Scheme(CLCSS).

At present the total number of MSMEs is around 6.3 crore which is projected to grow at a CAGR of 2.5% to 7.5 crore in the times to come. According to the data collected from the Udyam portal and Udyam Assist Platform(UAP), the total number of MSMEs registered has reached to 4,00,42,875 crore. Similarly according to the RBI data on sectoral deployment,

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under priority sector lending a total of US\$279.18 billion has been credited to MSMEs shows an increase of 22.8% from what was deployed last year (MSME Industry in India – Market Share, Reports, Growth & Scope | IBEF, n.d.). As per the latest data collected from the Udyam registration portal, with an increase in the total number of MSMEs registered, there has been a surge in the total employment provided by this sector crossing the 19 crore mark and achieving 19.09 crore of employment generation. This is twice more than what was reported in November 2022 which was around 8.81 crore.

In order to help the expansion of the MSME sector, the Indian government established the RAMP initiative, which is supported by the World Bank. Lending and marketing facilities for MSMEs, technical advances, urbanization and electrification, and the greening of MSMEs to solve problems with delayed payments are the four components of this programme, which strengthen the ties between the Centre and the State. The Indian government's total contribution is 6062.4 crore, of which 2312.4 crore is provided by the Indian government and 3750 crore is provided by the World Bank. RAMP saw the introduction of three sub schemes: (i) MSE-GIFT MSE Green Investment and Financing for Transformation: The goal of MSE-GIFT is to give interest benefits and guarantees for MSE loans for selected green technologies at a cost of Rs. 478 crore. (ii) MSE-SPICE MSE Scheme for Promotion of Investment in Circular Economy: MSEs will be eligible to a 25% capital subsidy for implementing circular models at a cost of Rs. 472.50 crore. (iii) Rs. 188.97 crore. has been budgeted for the MSE Scheme on Online Dispute Settlement of Delayed Payments.

The Atmanirbhar Bharat Abhiyaan was rolled out by the Indian government to protect small and medium-sized enterprises (MSMEs) from the harsh winds of COVID-19. It's like throwing a life jacket to someone struggling to stay afloat. Alongside, programs such as Make in India and the Production Linked Incentive Scheme have been pumping energy into these businesses. Impact through Numbers can be seen from the following data By December 31, 2022, under

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the PLI scheme's umbrella covering 14 different areas, MSMEs had their moment with 100 out of 717 approved applications. These were spread across diverse fields: medical devices, telecom sectors, white goods manufacturing food processing industries and bulk drugs production. Moreover, the indigenisation efforts by the Indian Navy brought new vigour into this sector too. About 500 MSMEs were involved when INS Vikrant was commissioned. This not only provided jobs for around 2000 shipyard workers but also supported about 12000 folks working in related industries.

A number of factors have increased FDI in India in recent years, making it a desirable destination for FDI. India moved up three spots from 43rd place in 2021 to 40th place in the World Competitive Index in 2023. According to the Global Innovation Index 2023, India ranked 40th out of 132 economies and was ranked as the 48th most innovative nation within the top 50. Back in 2015, it stood at the 81st spot but has raced up to the 40th place by 2023. This jump is the result of foreign investments pouring into the country. In the Q3 of the financial year 2024 a GDP growth of 8.4% was noted by the Ministry of Statistics, which was more than what was recorded in the same quarter last year, that is 7.2%. The increase to 8.4% is 4.1% more than what was recorded in the same quarter in the previous year standing at 4.3%. Despite such strong overall numbers though, not everything went upwards. The portion of goods sold abroad dipped slightly with exports making up only about 22.2% of total economic activity during this period, down just a bit from before (*GDP Of India*, n.d.). The fall in export in FY24 can mainly be due to recession in the global market, strategic measures taken to reduce import spending, fall in commodity prices globally, and geo-political challenges.

The paper further discusses the performance of these economic parameters and how they are useful for India's economic growth and development.

Objective:

- To study the role of micro, small and medium enterprises in growth and development of India's economy.
- To study about the influence of government policies, reforms and initiative in improving the performance of Micro Small and Medium Enterprises.
- To study about the influence of economic indicators, technological adoption, entrepreneurship and innovation on operational efficacy, productivity, and growth potential of MSMEs.

II. Research Question

How do MSMEs (Micro, Small, and Medium Enterprises) in India contribute to the economic development and how does the economic Indicators affect their growth and performance, including government policies and initiatives, technology and innovation?

III. Research Methodology:

The research is entirely based on secondary data. The information has been collected from, MSME Annual Report, RBI Report, various Journals, periodicals and Ministry of MSMEs website.

1. **Data Collection:** Data was gathered from reliable sources detailing the contributions of MSMEs to the Indian economy, including their share in GDP, manufacturing output, and exports and PMEGP records for the specified years.
2. **Descriptive Statistics:** Analyzed basic trends and summary statistics for the variables.

Variables Defined

- X_1: Share of MSME Gross Value Added (GVA) in All India GDP.

- X_2: Share of MSME Manufacturing Output in All India Manufacturing Output.
 - X_3: Percentage Share of MSMEs in Total Exports.
 - Units Assisted: Number of units receiving assistance under PMEGP.
 - Margin Money Subsidy Disbursed: Financial support provided to units.
 - Estimated Employment Generated: Number of jobs created due to the assistance.
3. **Correlation Analysis:** Computed Pearson's correlation coefficients to understand the relationships between the variables. To measure the strength and direction of the linear relationship between pairs of variables, a correlation matrix was constructed to show the pairwise correlation coefficients among the variables. The correlation coefficients were interpreted to determine the degree of association between variables.
 4. **Regression Analysis:** To model the relationship between the dependent variable and the independent variable, the linear regression model used
 5. **Interpretation:** Interpreted the results of the correlation and regression analyses to derive meaningful insights.

The above data was analysed using Karl Pearson Coefficient Correlation and Regression Analysis where needed using MS EXCEL.

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IV. Review of Literature

Due to their accessibility in both urban and rural locations and low capital investment requirements, MSMEs foster development. They contribute by generating jobs and encouraging entrepreneurship, particularly among women entrepreneurs, which closes the gender gap and benefits the younger generation and those from underdeveloped cultures. The

Indian government, collaborating with state governments, has aided MSMEs in growing and becoming globally competitive through the implementation of clustering and networking approaches (Baral, 2019). The legal and regulatory landscape has improved, and the government has supported the MSME sector. As a result, financial institutions are now lending more money to MSMEs, which has strengthened and made them more competitive in the global market (Dahale et al., 2015). Regarded as the primary driver of economic growth in India, the sector highlights its labor-intensive nature, which facilitates the efficient use of labor and material resources. Additionally, it presents opportunities for optimal technology adoption, is widely present in rural areas, which mitigates regional disparities, exhibits operational flexibility, is export-focused, and fosters entrepreneurship (Ahmed & Haseen, n.d.). According to (Jarwal, 2020) study, the SMEs' role as a support system for larger companies contributes to the nation's inclusive industrial development. (Jain and Rekha, 2022), state in their paper that there is a positive and simultaneous growing relationship between MSMEs in India and the GDP and GVA of the nation, since MSMEs contribute to economic growth. The author also claims that the nation's economy will flourish due to its high msme growth rate. Digitalization has made it possible for the msme sector to expand internationally by providing access to emerging technologies such as ERP, fin tech, and e-commerce, as well as increasing revenue growth, operational efficiency, and sound customer engagement (Pawan Kumar Gupta, 2023).

Despite the support that the MSME sector is getting from the government and other major industrial bodies they still need to be strengthened in various areas and there also is the need for proper implementation of policies that have been introduced for the upliftment of MSME sector. In his work, Prakash et al. (2021) discussed the obstacles or issues that MSMEs encounter and how they impede their effective expansion. The article lists a number of obstacles to MSMEs' development, including inadequate infrastructure, managerial problems, a lack of expertise and training, gender bias, inappropriate government schemes and policies,

a lack of funding, technological difficulties, and other issues. According to (Singh, 2020), the government must establish policies that take into account a number of factors, including labor shock, supply, and market demand, in order to assist the expansion of the MSME sector in India. The most recent statistics on the MSME sector is also necessary, as its definition is now based on investment rather than the old one. The main issues that SMEs confront as they grow are those pertaining to standardizing production processes, facilitating economic growth, and lacking managerial and technical expertise. Small-scale businesses find it challenging to allocate enough resources to create strategies that would enable them to grow sustainably because of their low resources (Maheshkar & Soni, 2021). (Baral, 2019) In his article, he said that before pursuing innovation in India, business owners should evaluate local conditions, such as the size of their target market, price points, reach, and the availability of local resources, and how best to exploit them while keeping regional sensitivity in mind.

V. An overview on the contribution of MSME in development and growth of Indian Economy:

Economic Contribution of MSME in India's Growth and Development.

1. Contribution of MSME in India's GDP and Export

The MSME sector is a crucial factor that help to solve the problem of income disparity between the urban and rural areas and the local job opportunities. It is the main reason why the big industries can handle large scale and, therefore, they get the integration that is the advantage of big scale industries. The GDP growth rate of India is better than that of several rich countries despite the pandemic outbreak.

The MSME sector plays an important role in bridging the gap between urban and rural economy. The development of big cities has been largely backed by the service sectors. Although the MSME sector is not big, it has proved to be a great contributor for the expansion. By supporting large scale industries as ancillaries to them this sector expand their business gains. They help in generating and improving the nations income and output, profitability and employment. The GDP of India has shown a dramatic rise despite the Covid effect globally. Rising from 6.5% in 2019 to 3.7% in 2020 to 8.7% in 2022 to a forecast 7% rise in 2023. Although small but the MSME sector has played a major role in this rise. Despite a decline in its proportion of GDP in the most recent fiscal year due to the pandemic, supply chain disruptions, and other geo-political issues, the MSME sector has significantly contributed to this expansion and is on the cusp of recovery.

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The Ministry of MSME has created a specialized support system for export promotion from the MSME Sector through the establishment of 59 Export Facilitation Cells (EFCs) in its field institutions MSME Development and Facilitation Offices, MSME Technology Centres, and MSME Testing Centres. Out of the fifty-nine EFCs, seven of them were established between January 2023 and December 2023. By providing extensive assistance to MSME exporters and helping them understand the entire export process and documentation needed, such as common export documents, transportation documents, compliance documents, certificates of origin, certificates needed for the shipment of particular goods, invoices, etc., the EFCs are helping the MSMEs.

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The data below shows the MSMEs contribution to the GDP of the country, its share of the nation's total manufacturing output, and its share of the nation's total exports. The MSME GVA in the overall GDP of India changed from 30% in 2023-24 to 29.70% in 2017-18. The increase in its share reveals MSMEs considerable part in the creation of economic value. The same is also true for the manufacturing output of MSME which was at 40.83% in 2022-23 is the highest

among all the sectors which shows its colossal role. Even though the export contribution of MSME has dropped from its top 49.77% to 43.59% in 2022-23. The cause of the fall was mostly because of the geopolitical tensions all over the world as well as the slowdown in the global economy, however the export sector has fast recovery which shows the India's determination to become a 5 trillion economy by 2025.

Table 1. Share of MSME GVA in All India GDP, Share of MSME Manufacturing Output in All India Manufacturing Output, and % Share of MSMEs in Total Exports.

Year	Share of MSME GVA in All India GDP (in %)	Share of MSME Manufacturing Output in All India Manufacturing Output (in %)	%Share of MSME in total Export
2017-18	29.70%	37.40%	48.10%
2018-19	30.50%	36.90%	48.10%
2019-20	30.50%	36.60%	49.77%
2020-21	27.20%	36.90%	49.35%
2021-22	29.10%	36.20%	45.03%
2022-23	29.15%	40.83%	43.59%
2023-24	30.00%	31.00%	45.56%

Source: DGCI&S, Kolkata, Ministry of Statistics & Programme Implementation.

2. Employment Generation by MSME

MSMEs are involved in a variety of business activities, from the traditional manufacturing to conventional arts and craft to the modern services and technology. The job opportunities in the different sectors of industries and skill levels are created by this diversity. The MSME sector

is an important part of the country's economic structure, which makes a big contribution to the employment, export, and industrial output. The Ministry of Micro, Small, and Medium Enterprises (MSMEs) has a number of programs that it runs to heighten the job opportunities in the MSME sector in the country. One of the programs promoting innovation, rural industry and entrepreneurship that can also be applied is ASPIRE, PMEGP, Micro and Small Enterprises-Cluster Development Programme (MSE-CDP), Scheme of Fund for Regeneration of Traditional Industries (SFURTI), and Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE).

As per the National Sample Survey (NSS) 73rd round conducted during the period 2015-16, MSME sector has been creating 11.10 crore jobs (360.41 lakh in Manufacturing, 0.07 lakh in Non-captive Electricity Generation and Transmission, 387.18 lakh in Trade and 362.82 lakh in Other Services) in the rural and the urban areas across the country. As the number of registrations surpassed 3 crore (3.06 crore), 2.06 MSMEs registered directly on the portal reported 13.86 crore job creation (including 3.41 crore women employees), while 99.98 lakh micro units registered on the Udyam portal via the government's Udyam Assist Portal (UAP) reported the remaining 1.17 crore job creation, according to platform data in financial year 23.

The MSME sector being one of the largest employer in the country plays an important role in generating employment in both rural and remote areas. Setting up an MSME does not involve large capital and provides job to the owner and creates employment opportunities for few others, thus helping the locals to avoid looking for job elsewhere.

The business sector is immersed in numerous kinds of skill development and training projects to cope with the new demands of the market and technological progress. These initiatives aim at the enhancement of the staff's productivity and competence, which will in turn, encourage the growth and productivity. The MSME sector in India employs a wide range of activities and

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methods in the training and skill development of its members, which include targeted plans, industry-specific councils, and government assistance. The MSME sector in India is a very promising sector when it comes to the employment prospects, it does more than just create jobs, it also promotes entrepreneurship, inclusive development and innovation. The MSMEs are foreseen to have a very high influence on the future direction of India's economic growth and job market if the laws and the programs supporting them keep developing.

Table 2 - Performance under PMEGP from 2018-19 to 2022-23 (as on 31.01.2023)

(MM: Rs. In Lakh, Project/Employment : in Numbers)			
Years	Units Assisted	Margin Money	Estimated Employment Generated
2018-19	73427	207000.54	587416
2019-20	66653	195082.15	533224
2020-21	74415	218880.15	595320
2021-22	103219	297765.91	825752
2022-23	55499	178231	443992
(as on 31.01.2023)			
Total	373213	1096959.75	2985704

Source: RAJYA SABHA SESSION - 259 UNSTARRED QUESTION No 1225. ANSWERED ON, 13TH FEBRUARY 2023. Data Figures are in (MM - Rs. In Lakh, Project/Employment - in Numbers. Data (as on 31-01-2023).

Table 3- Growth in MSMEs and Employment Generated on YoY basis from 2020-21 to 2023-24

Year	Total No Of persons employed by MSMEs Registered Under Udyam Portal (crores)	Total number of MSMEs which were registered since inception (01.07.2020) to 04.12.2023 on Udyam registration Portal (including informal micro enterprises registered on Udyam Assist Platform)
2020-21	27510401	2847544
2021-22	35365249	5147993
2022-23	45275820	8582179
2023-24	21900000	15027865

Source:Udyam Registration Portal(from 01.07.2020 up to 01.08.2023).

3.Finance and Investment of MSME sector

Since FDI is a major source of long-term private capital injections into India's economy, it promotes economic growth, the creation of jobs, and industrial expansion. Economists believe FDI has a positive impact since it provides developing countries with a plethora of capital, foreign exchange, technology, managerial expertise, and other resources essential to the expansion of the Indian economy. FDI will lead to a more equitable allocation of international capital. Through FDI, the nation can introduce new production technologies and other resources from the host economy, which is advantageous to both the host and the source nations. In the upcoming years, the liberalization policy and FDI approach are probably going to stay the same (V. Mamatha & Nishad Begum, n.d.). (*FDI in India*, n.d.) as per the article, India's FDI has soared 20 times from the year 2020-21 to 2021-22. This increment in FDI in the recent year is because of the liberalised government policies and regulations, with recent changes India now allows 100% FDI under automatic route in most of the sectors including MSMEs. Recent FDI policy of 'Single Brand Product Retail Trading' has provided the MSME sector with the much needed boost as the policy makes it mandatory for Foreign companies to source 30% goods from India especially from local artisans, craftsman and from MSMEs in Village and Cottage industries thus leading to growth in the MSME sector and also in India's economic progress.

To help the MSME sector to cope up with the aftershock of Covid-19 an Equity infusion of Rs. 50000 crore was proposed under the Atmanirbhar Bharat Abhiyaan. This equity infusion through Self Reliant India Fund helps meet equity and capital needs of MSMEs. The 10,000 crore FOF established under Atmanirbhar Bharat for MSMEs, is aimed at encouraging Venture Capitalists and Private Equity investors to put money in the MSME sector. As on 31.12.2022, there were a total of 34 Daughter Funds empanelled with National Small Industrial Corporation (NSIC) Venture Capital Fund Limited (NVCFL) (Mother Fund) and these have helped a total of 140 prospective MSMEs with Rs. 2,790 crore investment. The Ministry of MSME has

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sanctioned and released Rs. 212.57 crore so far in the current FY 2022-23 to NVCFL for disbursement under SRI-Fund. Bank credit to MSMEs registered a Compound Annual Growth Rate of 14.2 % from FY19 to FY24, indicating sustained financial support and investment in the MSME sector, contributing to its growth and development. In FY24, Rs. 4.82 lakh crore, was sanctioned under 5.8 crore Mudra loans to non-corporate and non-farm MSEs, indicating substantial financial support for MSMEs. Under the Credit Guarantee Scheme for Micro and Small Enterprises (CGMSE), the Credit Guarantee Trust Fund for Micro and Small Enterprises (CGTMSE) has granted guarantees of Rs. 5,33,587 crore till November 30, 2023, demonstrating a substantial level of financial support for MSMEs. The PM Vishwakarma Scheme, which was introduced on November 17, 2023, offers comprehensive assistance to artisans and craftsmen. With a total budget of Rs. 13,000 crore and a goal of 30,00,000 beneficiaries by 2027–2028, it represents a significant investment in the industry.

FinAGG Technologies, an MSME financing specialist, obtained US\$ 11 million in funding in January 2024, with the help of Blue Orchard and Tata Capital Ltd. The company's goals are to increase its footprint, spur innovation, and support female entrepreneurs. DealShare unveiled a five-year investment of Rs. 1,000 crore in MSME partners in six states with the goal of promoting R&D, strengthening partner capacity, and lowering costs through privately held and indigenous brands.

The financial year 2024 saw FDI reduced in India where there was a fall of \$38.15 to \$15.42 billion as per RBI report. This is attributed to volatile geopolitical conditions within Asia-Pacific region coupled with high interest rates that have made investors apprehensive along with increasing repatriation activities by foreign investors, global economic slowdown and private venture capital funding from initiatives like start up India among others. In the year 2023 alone, UNSTAD's World Investment Report(2024) has found that globally, the FDI flow decreased by 18%. According to the World Investment Report 2023, India was at eighth

position among both developing and developed nations regarding inflows of foreign direct investment (FDI). This illustrates the allure of India's market to investment firms, and potential for India to achieve more sustainable economic growth. Foreign Direct Investment into industry between April 2023 – December 2023 were USD 51.50 billion, while FDI, equity inflow during the above date were USD 32.04 billion. Overall, the sector with the highest FDI of Equity both pipe and inflow from April 2000 – December 2023 is Indian services with the total USD 108.04 billion or 16.21% of the overall FDI equity inflow, in second place is computer software & hardware with USD 98.32 billion and uptrend at 6.33% trend, preceded by trading of USD 42.19.

The creation of a Rs 1 lakh crore corpus to offer tech-savvy youngsters, 50-year, interest-free loans is a big step that can encourage innovation and technical developments in the MSME sector. The infusion of long-term funding can support research and development, putting India's younger demographic in an advantageous situation to succeed in developing markets. The provisional budget of 2024 has allocated ₹22,137.95 crores for MSMEs to support establishment of more clusters and new technology centres that would enhance global competitiveness. This presents an enormous financial infusion aimed at igniting entrepreneurial hopes of Indian youth by allocating a staggering 43 crore loans under PM Mudra Yojana translating into a colossal Rs 22.5 lakh crore. The additional tax incentives and interest-free fifty-year loan corpus for start-ups are a great support. These policies are designed to encourage the entrepreneurial spirit of the country and promote innovation. In conjunction with India-Middle East-Europe Economic Corridor, the focus on creating a strong gateway for global investment and financial services such as GIFT City and IFSCA is expected to open up new opportunities for MSMEs in the global markets. It can be argued that such heavy reliance on worldwide market integration will greatly enhance performance of MSMEs at international level. The government's target capex of Rs 11.1 lakh crore for FY2025, indicates its

commitment towards investing in infrastructure. This is a demonstration by the Government that it plans on putting up social, digital, physical infrastructures needed for long-term industrialization as well as commercial growths within its territory.

Table 4 : Inflow of FDI from 2017-18 to 2023-24

Financial Year	Amount of FDI inflows (in USD billion)
2017-18	36
2018-19	62
2019-20	74.39
2020-21	81.97
2021-22	83.57
2022-23	70.9
2023-24	17.96

Source: Reserve Bank of India.

4. Innovation, Tech and Entrepreneurship in MSME Sector

MSME being a leading sector in India's growth journey, digital transformation is aiding and accelerating this growth to another level. Through digital transformation MSMEs can reorganise and upgrade its business operations and strategies. It can use digital technology in tracking its customer preferences and experiences, in modifying its business processes and meet the changes in business environment and culture. However, with GSTN, e-invoicing and e-way bill data coming together, invoicing is surely going to be a significant inflection point for MSMEs, where they can hopefully begin factoring their invoices by leveraging technology, which means that the sector is going to be getting much more streamlined and automated.

Enhancing worker productivity and effectiveness by leveraging technological advancements, including artificial intelligence (AI), automation and cloud computing, will be an inevitable necessity in the near future.

MSMEs can use technology in enhancing its productivity and large cost reduction. It helps in automating jobs and make better use of available data in improving business through digital technology thereby leading to better sales, improved customer satisfaction and loyalty. This is also lauded on the pretext that a mass-scale propagation of EVs, rooftop solarisation and offshore wind generation along with incentives for producing biofuels will inculcate environment-friendly energy habits across the board, and lead India to its net zero target by '70. This programme, too, will facilitate more investments in green technology, expansion of MSMEs and creation of jobs, all in the long run. World class innovation can happen if academia and business collaborate according to certain technical institutions and academic. The ability of MSMEs to innovate is restricted by two kind of challenges which are strategic like intellectual property rights and high cost of credit and the other one is operational which consists of the following subparts that includes, lower technology level, unskilled manpower, settlements delay, lack of infrastructure and production issues like packaging, storage, designing and product display(Baral, 2019).

Furthermore, it might be strategic, with the possibility of the implementation of the Open Network for Digital Commerce initiative, to also position ReNew MSME Package initiative with the RAMP's poised focus on technology and digital solutions. In this regard, as RAMP initiative has quality assessment amongst stakeholders, incentives and criticism for use of quality, the installation of these quality evaluation terms micro, small and medium entrepreneurs with a due relation to their modern technological adoptions, accessibility to lucrative markets and availability to interact interconnect and connect at various digital commerce platforms.

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The MSME sector's changing demands and prospects for economic growth are aligned with the growing focus on e-commerce connectivity and technology adoption. (Manimala, 1996) In his paper has talked about a variety of entrepreneurs by dividing them into two categories: High innovation entrepreneurs and low innovation entrepreneurs. In order for the MSME sector to excel we at present need high level entrepreneurs especially the one belonging to innovators and adventurer sub type for a holistic growth as these to sub categories will attract many youths towards entrepreneurship thereby boosting the growth of MSME sector.

Schemes and initiatives like Entrepreneurship and Skill Development Programs (ESDPs), Scheme of Surveys, Studies and Policy Research, Technology Upgradation and Quality Certification, Sector Skill Councils (SSCs) taken by the government and industrial sector is helping MSMEs with proper opportunities with training and skill development of entrepreneurs and existing workforce, improving formulation of policies and strategy implementation along with better financial assistance for building training facilities and providing skill training. They help MSMEs with technological enhancement and modernization which helps in better product quality that meets domestic and international requirements. SSCs first determines the skill gaps and training need of specific industries in the MSME sector and thereafter helps in meeting these requirements by developing specialized training modules for each sector and maintains the quality and relevance of the training. These initiatives have led to growth in entrepreneurship, and upskilled the workforce thereby improving production and quality and making MSMEs competitive globally. Companies such as Amazon and Netflix highlight the need for a more sophisticated strategy in market expansion, one that incorporates digital innovation, resource adjustment, localization, and strategic collaborations.

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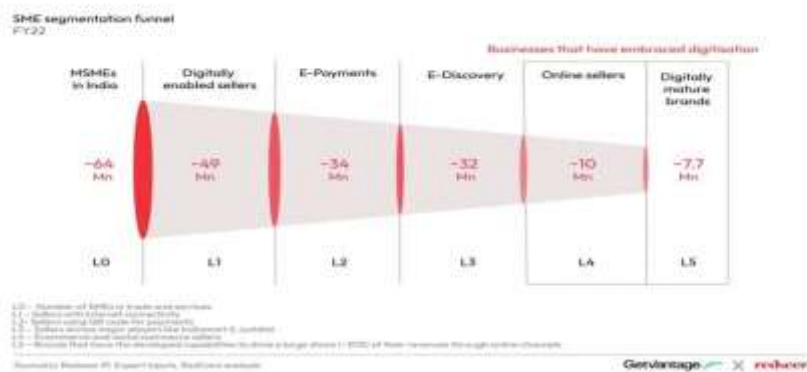
These strategies can teach businesses that are trying to get market share a lot since they demonstrate that it is very important to understand local customs, consumer trends, and regulatory frameworks in order to enter and expand into new markets.

Micro, small, and medium-sized firms (MSMEs) have been keen to boost their digital presence in order to promote transparency and accountability. In India, out of the 64 million Micro, Small, and Medium Enterprises (MSMEs), about 12% have reached the stage of digital maturity, which is approximately 7.7 million firms, as a RedSeer survey shows. The other companies are now applying the digital technologies at different stages. SMEs have enjoyed a lot from this trend toward digitalization, which has enabled them to widen their customer base, to improve their operational efficiency and to produce better results. The pandemic served as a stimulus for the SMEs by cutting down the costs of digital transformation, raising the benefits of digital solutions, and encouraging the revenue development, even if the shift towards digital adoption has been going on for the past ten years.

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Companies looking to increase their market share may learn a lot from these tactics, which highlight how crucial it is to comprehend local customs, customer trends, and legal frameworks in order to successfully join and grow in new markets.

Figure 1. SMY Segmentation funnel of 2022 shows shift towards digital adoption



Source(s): Redseer IP, Expert Inputs, RedCare analysis

5. Government initiatives and Schemes.

- **Prime Minister's Employment Generation Programme (PMEGP)**- PMEGP- Prime Minister's Employment Generation Programme (PMEGP) PMEGP is a credit linked subsidy scheme that intends at creating employment by establishing micro units in non farm sector. The programme has until November 30th 2023 generated a total of 78.36 lakh employment of the entire population of the country, by helping 9.29 lakh micro-enterprise with disbursement of a margin money subsidy amounting to 34,517 crore.
- **The Credit Guarantee for Micro and Small Enterprises(CGT MSE)**- Scheme was revamped in 2023 and 12.50 lakh guarantees were approved from January 2023 to November,2023 amounting to 1.46 lakh crore.
- **SRI Fund** -Through the introduction of over Rs. 3658 crore as investment between January 1st, 2023 and November 30th, 2023, 14 daughter funds were partnered with NSIC Venture Capital Fund Limited (NVCFL), a mother fund, to support 242 potential MSMEs.

The aim of the Micro and Small Enterprises Cluster Development Programme (MSE-CDP) is to enhance the output and competitiveness of Micro and Small Enterprises (MSEs) by securing the funding for the construction of industrial estates and the installation of Common Facility Centers(CFCs).

- **Micro and Small Enterprises Cluster Development Programme (MSE-CDP)**-The scheme's goal is to increase the output and competitiveness of Micro and Small Enterprises (MSEs) by providing funding for the construction of industrial estates and the installation of "Common Facility Centers (CFCs)". Under the plan, the establishment of flatted factory complexes is also encouraged. Out of the 580 projects that have been accepted since the scheme's beginning, 308 have been finished. Of the 580 approved projects, 40 projects with a combined project cost of around 560 crore

were given in the period of January to December of 2023 with the help of the Government of India of Rs. 386 crore.

➤ **The scheme of Fund for Regeneration of Traditional Industries (SFURTI)-** aims at clustering traditional industries and craftsmen in order to create job opportunities, to develop the competitiveness and to make the products produced by these clusters more marketable. Out of the 513 clusters that have been authorized to operate, 389 are now operating. 50,166 craftsmen in 25 States received the benefits of the 89 clusters that started working between January 2023 and December 2023. A sum of Rs.40.01 crore in Government of India aid, 15 clusters have been approved which will directly help 8,875 artisans.

➤ **A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship-**

- **Livelihood Business Incubator (LBI)ASPIRE)** The goal of (ASPIRE) is to generate jobs in the agro-rural sector. Incubator for Livelihood Businesses (LBI): an entity founded with The primary goals of LBI are to create job opportunities by supporting the formal, scalable establishment of microenterprises and to train, upskill, and reskill jobless individuals as well as current salaried and self-employed individuals in emerging technologies. During the period from January 2023 to December 2023, ASPIRE approved four new Livelihood Business Incubators (LBIs), training 25,468 beneficiaries, of which 1,458 were wage employees. Besides, 225 micro-enterprises were started because of the LBIs' incubation programs.
- **ASPIRE Fund of Funds (FoF)** - The FoF, which is the SIDBI managed, was set up with the aim of investing through alternative investment funds, or AIFs. The total corpus of Rs. 310 crore, the FoF was started. The ASPIRE scheme's Fund of Fund component saw the launch of five new Alternative Investment Funds (AIFs)

between January 2023 and December 2023 with a Rs. commitment. 145 crore, which means the total financial commitment to Rs. 217. 50 crore to 11 AIFs out of the total capacity of Rs. 310 crore.

VI. Data Analysis and Interpretation.

VI.A. Here data analysis of Share of MSME GVA in All India GDP, Share of MSME Manufacturing Output in All India Manufacturing Output, and % Share of MSMEs in Total Exports will be done. The methods used are Correlation and Regression Analysis using MS-Excel.

Correlation Analysis: To Understand the linear relation between the variables correlation analysis (Pearson's correlation) is used.

Correlation Coefficient Ranges

- **Range:** The correlation coefficient (r) ranges from -1 to 1.
 - **$r = 1$:** Perfect positive correlation.
 - **$r = -1$:** Perfect negative correlation.
 - **$r = 0$:** No correlation.

Variables

- (X_1): Share of MSME GVA in All India GDP
- (X_2): Share of MSME Manufacturing Output in All India Manufacturing Output
- (X_3): % Share of MSMEs in Total Exports

Table 5A. The correlation matrix is as follows

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	(X_1)	(X_2)	(X_3)
(X_1)	1.000	0.834	-0.842
(X_2)	0.834	1.000	-0.951
(X_3)	-0.842	-0.951	1.000

Interpretation:

(X_1) and (X_2) are positively correlated with a coefficient of 0.834. This depicts that with the rise in MSME GVA in GDP there will be an increase in the share of MSME manufacturing output.

(X_2) and (X_3) is negatively correlated, with a coefficient of **-0.951**. It depicts that as the share of MSME manufacturing output increases, the % share of MSMEs in total exports decreases.

Similarly, there is a negative correlation between (X_1) and (X_3), with a coefficient of **-0.842**.

Regression Analysis:

Linear regression was performed to model the relationship between two of the variables.

- Dependent variable: (X_3) (Share of MSMEs in Total Exports)
- Independent variable: (X_1) (Share of MSME GVA in All India GDP)

A linear regression model was performed to explore the relationship between the share of MSMEs in total exports (X_3) and the share of MSME GVA in All India GDP (X_1).

- **Regression Equation:** $X_3 = \beta_0 + \beta_1 X_1 + \epsilon$
 - Where:

- (X_3) is the dependent variable.
- (β_0) is the intercept.
- (β_1) is the slope (coefficient for (X_1)).
- (X_1) is the independent variable.
- (ϵ) is the error term.
- **Estimated Coefficients:**
 - **Intercept** (β_0): 45.56
 - **Slope** (β_1): -0.16

Interpretation of the Regression Equation:

- The intercept (45.56) represents the predicted value of X_3 (Share of MSMEs in Total Exports) when X_1 (Share of MSME GVA in All India GDP) is zero.
- The slope (-0.16) indicates that for each unit increase in X_1 , X_3 is expected to decrease by 0.16 units. This negative slope is consistent with the negative correlation observed between X_1 and X_3 .

VI.B. Here we analyse the data that was mentioned in Contribution of MSME in employment generation under PMEGP from 2018-19 to 2022-23 (as on 31.01.2023). The method used was correlation and regression analysis to interpret their relation with India's growing economy.

- **Units Assisted:**
 - Increased from 73,427 in 2018-19 to 103,219 in 2021-22.
- **Margin Money Subsidy Disbursed:**
 - Consistently increased over the years.

- **Estimated Employment Generated:**

- Substantial growth, reaching 825,752 in 2021-22.

Correlation Analysis:

Table 5B. The correlation matrix is as follows

	Units Assisted	Margin Money Subsidy Disbursed	Estimated Employment Generated
Units Assisted	1.000	0.986	0.993
Margin Money Subsidy Disbursed	0.986	1.000	0.998
Estimated Employment Generated	0.993	0.998	1.000

Interpretation:

As the Coefficient of Units Assisted and Margin Money Subsidy Disbursed is 0.986 there is a strong positive correlation between the number of units assisted and the margin money subsidy disbursed. Hence it shows that as more number of MSMEs financial receive assistance, the total subsidy disbursement also grows.

The Coefficient of Units Assisted and Estimated Employment Generated is 0.993 which demonstrates a strong positive correlation between the number of units assisted and the estimated employment generated, indicating that with increase in the number of units assisted there is an increase in employment generated.

Lastly the Coefficient of Margin Money Subsidy Disbursed and Estimated Employment Generated is 0.998 that shows a nearabout positive relation between the variables. Hence interpreting that with increase in the amount of subsidy more jobs are generated.

Regression Analysis:

A linear regression model was performed to understand the relationship between units assisted and estimated employment generated.

- **Regression Equation:** Estimated Employment = $\beta_0 + \beta_1 \times \text{Units Assisted} + \epsilon$
- **Estimated Coefficients:**
 - **Intercept** (β_0): -1,724.18
 - **Slope** (β_1): 11.37
- **Dependent Variable** ({Estimated Employment}): The number of jobs created.
- **Independent Variable** ({Units Assisted}): The number of MSME units that received assistance.
- (β_0): Intercept.
- (β_1): Slope (coefficient for Units Assisted).
- (ϵ): Error term.

Interpretation of the Regression Equation:

- The intercept (-1,724.18) represents the predicted value of estimated employment generated when the number of units assisted is zero.
- The slope (11.37) indicates that for each additional unit assisted, the estimated employment generated increases by 11.37 units. This positive slope is consistent with the strong positive correlation observed between units assisted and estimated employment generated.

VII. Conclusion:

This Paper is an in-depth analysis of how small and medium enterprises drive India's economic growth. The analysis delves into various dimensions, not just economic but social and environmental too, where these small players contribute significantly. It demonstrates how regional development is taking place due to localized efforts by small firms projecting self-sustainability. The government schemes like, SFURTI, PMEGP, ASPIRE have thrown their weight behind MSMEs and brought success which goes beyond agricultural sectors a resurgence of entrepreneurship and traditional businesses.

The data clearly shows how much MSMEs have contributed to various aspects of India's economy like India's GDP numbers, Manufacturing output statistics, Export sector performance and other growth and developmental aspects. A multifaceted demonstration of resilience, in addition to revealing the employment generation potential, financial backing through schemes like PMEGP and CGTMSE, and injections into the MSME sector as indicators of its vigor, its trajectory toward growth is also unveiled.

The adaptability and competitiveness of MSMEs are underscored in the Indian economic landscape that continues to evolve with technological advancements, digitalization, and an eye for innovation making headway into their operations. An analysis of different factors such as share of MSMEs in GDP, manufacturing output and total exports, underscores not only individual importance but also collective impact on driving economic growth. PMEGP can be seen lifting units assisted and subsidy disbursed as well as employment generated from doldrums into positive figures, thereby leading to job creation, entrepreneurial assistance with a strong resonance at grassroots levels within Indian economy.

The study concludes by asserting the pivotal role MSMEs play in India's economic growth and hence calls for further innovation, technological advancement in addition to the continued

support from government, that would propel more growth within the MSME sector and make it more competitive and contributory to the larger economic development of the nation. The major concerns that the MSMEs face in its development are problems related to standardisation of production procedures, economic facilitation, lack of technical and managerial skills. Due to limited resources small scale firms faces difficulty in allocating sufficient resources to develop strategies which can aid them to grow sustainably (Maheshkar & Soni, 2021). As the MSMEs are facing several internal and external complexities in areas such as technology, marketing, finance, raw material and labour they need to keep thriving based on their competitive strength and be viable commercially.

References:

- Baral, S. (2019). An Empirical Study on Changing Face of MSME Towards Emerging Economies in India. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3375260>
- FDI in India: Foreign Direct Investment Opportunities, Policy | IBEF*. (n.d.). India Brand Equity Foundation. Retrieved February 23, 2023, from <https://www.ibef.org/economy/foreign-direct-investment>
- GDP Of India: Current And Historical Growth Rate, India's Rank In The World*. (n.d.). Forbes India. Retrieved May 14, 2024, from <https://www.forbesindia.com/article/explainers/gdp-india/85337/1>
- Jarwal, D. (2020). MSME Sector: A Multifaceted Model to Achieve Prosperity. *Shanlax International Journal of Economics*, 8(4), 12–19. <https://doi.org/10.34293/economics.v8i4.3331>
- Maheshkar, C., & Soni, N. (2021). Problems Faced by Indian Micro, Small and Medium Enterprises (MSMEs). *SEDME (Small Enterprises Development, Management & Extension Journal): A Worldwide Window on MSME Studies*, 48(2), 142–159. <https://doi.org/10.1177/09708464211064498>
- Manimala, M. J. (1996). Beyond Innovators and Imitators: A Taxonomy of Entrepreneurs. *Creativity and Innovation Management*, 5(3), 179–189. <https://doi.org/10.1111/j.1467-8691.1996.tb00141.x>

Ministry of Micro, Small & Medium Enterprises. (2023). *MSME Annual Report 2022-23*.

Ministry of Micro, Small & Medium Enterprises. (n.d.). *Udyam Registration Portal*.

Ministry of Micro, Small & Medium Enterprises. (2023, December 11). Press release on *MSME sector's contribution to India's GDP* [Press release]. Press Information Bureau. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1985020>

Ministry of Micro, Small and Medium Enterprises. (2022, May 7). Increasing employment opportunities in MSMEs. SME Venture. <https://smeventure.com/increasing-employment-opportunities-in-msmes/>

Mitra, J., Sokolowicz, M., Weisenfeld, U., Kurczewska, A., & Tegtmeier, S. (2020). Citizen Entrepreneurship: A Conceptual Picture of the Inclusion, Integration and Engagement of Citizens in the Entrepreneurial Process. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 6(2), 242–260. <https://doi.org/10.1177/2393957520936884>

MSME Industry in India – Market Share, Reports, Growth & Scope / IBEF. (n.d.). India Brand Equity Foundation. Retrieved May 14, 2024, from <https://www.ibef.org/industry/msme>

Press Information Bureau. (2024, January 3). *Year end review – 2023: Ministry of Micro, Small & Medium Enterprises*. Government of India. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1992842>

Press Information Bureau (PIB), Government of India. (2022, March 8). *Employment opportunities in MSMEs*. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1884737>

Rajya Sabha session data. (2023). Data Figures are in (MM - Rs. In Lakh, Project/Employment - in Numbers). Data (as on 31-01-2023). Retrieved from [<https://rajyasabha.nic.in/Questions/QuestionNumberWiseSearch>]

Redseer Strategy Consultants. (2023). *Unleashing the Digital Potential of MSMEs: Emerging Tech MSMEs: Igniting a New Era of Indian eCommerce Prosperity*.

Reserve Bank of India. (2022, May 27). *Foreign Direct Investment Flows to India: Country-wise and Industry-wise*. [Annual Report](#)

V. Mamatha, D. R. K., & Nishad Begum, J. S. (n.d.). *ROLE OF FOREIGN DIRECT INVESTMENT (FDI) ON INDIAN ECONOMIC GROWTH WITH SPECIAL REFERENCE TO TRADING SECTOR - AN EMPIRICAL ANALYSIS*. *Volume 11*(1), 28–38.