I. Abstract:
With the introduction of Industry 4.0, there has been a revolutionary change in the way of manufacturing. Digitalization being an important factor of this insurgence is playing a crucial role in enhancing the efficiency of production, producing better quality goods and helping in construction of novel and innovative business models. The Small and Medium scale Enterprises are backbone to developing nations like India, which are a source of income and employment to millions of families. In a country with a huge demographic sector and abundant labour, SMEs play a crucial role in the development and growth of the economy. The contribution of SMEs to the national GDP is around 29% and 49.6% to the total exports in the financial year 2018-19 (PIB Delhi, 2019). That is why they are called as the growth engine of the Indian economy. But in digital era, they fail to make their stand in the global market due to lack of technology upgradation and digitalization. The focus of this paper is on the need and requirement for digitalization in SMEs in India. With the present government schemes like Digital India, Make in India, E-Governance, a new and emerging consumer market the paper further explores possible opportunities and challenges in the way for adopting a complete digitalization of SMEs.

Keywords: Digitalization, technology, SMEs

II. Introduction:
India currently is the fifth largest economy in the world in terms of nominal GDP and the second largest in Asia. According to the reports of World Bank, the total number of labour force in India accounted for 492 million in the year 2019 (World Bank, 21 June 2020). Among these over 110 million people were employed in Micro, Small and Medium Scale Industries in the year 2019 (Statista, Number of Employees at micro, small and medium enterprises across India, 2020)

SMEs (Small, Medium Enterprises) are the backbone of Indian Economy. Their contribution is significant in terms of Employment, Exports, Socio-economic development and innovation. The total number of MSMEs accounted for 63.3 million of which there are 110 million employees working in different sectors. To a densely populated country like India, which accounts for more of semi or unskilled labours than skilled, SMEs generate employment to all such labours.

The classification of sectors in different economies depend upon employment, capital invested and revenue generated (Nayak, 2016), however there is no any particular definition for these. According to the Indian Ministry, the SMEs are defined on the basis investment in the machinery/plant in the business. The following table reveals the segregation of SMEs with the new effect from July, 01, 2020:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing Enterprises and Enterprises rendering Services</td>
<td>Investment in Plant and Machinery or Equipment: Not more than Rs. 1 crore and Annual Turnover; not more than Rs. 5 crore</td>
<td>Investment in Plant and Machinery or Equipment: Not more than Rs. 10 crore and Annual Turnover; not more than Rs. 50 crore</td>
<td>Investment in Plant and Machinery or Equipment: Not more than Rs. 50 crore and Annual Turnover; not more than Rs. 250 crore</td>
</tr>
</tbody>
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Figure II-1 Classification of MSMEs
Source: https://msme.gov.in/know-about-msme
III. Literature Review

Development in Artificial Intelligence, Robotics, Data analytics is taking place rapidly in the current Industrial Revolution. Digitalization is one such tool which is assessing the industries for ease of doing business though creating platforms for not only assessing in marketing the product but also in easy financing, payment transactions, and to expand the business to a wider reach. It is important for SMEs to adopt these skills in order to establish themselves in the market and for further growth.

According to research conducted by (Kumari, 2018), adopting to digitalization will not just help SMEs to grow but also in reducing poverty, unemployment, skilled manpower. Moreover, it would also have a positive impact on the environment by reducing the carbon footprint and carbon emission, water wastage, fuel, consumption, through use of next generation technologies. In a research paper written by (Singh, 2017), adopting digitalization tools, around 46% of SMEs have witnessed a significant growth in their sales. The paper also suggested based on the Snapdeal findings that digitalization can optimise 60% to 80% of the operating cost in marketing.

A survey conducted by (KPMG, January 2017), reveals the effect of digitalization in relation to the micro, small and medium enterprises. The survey estimates that digitally enabled SMEs, can generate five times more employment than those SMEs owing to traditional methods. The market reach for the modern SMEs are far better and wider.

Digitalization can also enable a better B2B business relation, according to the report by (Internet and Mobile Association of India, January 2019), a survey of 300 participants engaged in around 70 MSMEs were conducted in sectors namely, retail, professional services and manufacturing. The report states different tools of digitalization in B2B business such as digital payments, logistic services, advertisement, inventory management, enabling, anti-theft and anti-fraud technology and accessing to different financial services through Fintech institutes.

With the emerging Industrial fourth revolution, it is necessary for the SMEs to be equipped with latest digitalized tools, to be able to compete with other large firms and industries. Digitalization will also help in improved efficiency, better customer relations. It will also lead to increase in the country’s GDP, per capita income and employment opportunities with the development in ITC infrastructure and innovation in the economy.

IV. Research Objectives:

Following are the research objectives of the paper

- To analyse the scope of digitalization in relation to SMEs in India
- To understand the role of Government in Digitalization of SMEs and possible challenges in the way

(a) Research Methodology

Research analysis will follow qualitative approaches. The data collected was through, various newspaper articles, reports from the Government of India, published research articles, Labour Organization, The World Bank, McKinsey Global Institute and other relevant institutions and websites. The result will include conclusion, followed by set of recommendations.

V. Fall in the growth rate

The recent survey of 73rd NSS on MSMEs, depicted a significant share of percentage of GDP which indicated a significant fall in the growth rate. In the year 2017-18 the contribution of SMEs has fallen to 28% from that of 30% in the year 2013 (Ministry of MSME, 2019). This shows a major difference in the contribution of SMEs to the country’s economy.
The setback is due to numerous reasons. Lacking in basic infrastructure facilities, unavailable of authentic information related to financial transactions, lack of technological upgradation, using outdated machineries and equipment, lack of skilled labours, the products not meeting to the standard qualities and many other reasons are responsible for SMEs lacking in progress. As per data based on March, 2016 there were a total of 6011 sick SMEs in the country (Soni, 2019). In terms of digitalization and technological advancement only 34% of SMEs so far have been able to adapt the changes (Financial Express, 2019). With the present number of SMEs and total output generated by them, there is still a huge underutilised potential that can be achieved to spur the further growth of the sector.

VI. Digital India and SME,
Digital India is an initiative launched by Government of India under the Prime Ministership of Narendra Modi in the year 2015. The program aims to transform India into a digitally advanced and empowered economy (Government of India, 2015). For carrying out this flagship successfully many schemes and activities have been conducted in various sectors of India among which the development of SMEs in one.
With the launch of this initiative SMEs are witnessing a new wave in terms of reaching out more customers, easy financial transactions, efficiency in conducting business, and a platform to step into International Market. In addition, various other programs like “Make in India”, “e-Governance” have also been supporting this cause. A new generation of SMEs is gradually taking place by abandoning the old methods of doing business and adopting latest innovation and ICT methods.

VII. Scope for Digital SMEs
Indian economy is witnessing a wave of transformation in digitalization. India is becoming one of the largest networks of internet users. Right from online shopping to digital payments, the number is rapidly increasing. According to the report released by Internet and Mobile Association of India (IMAI), there are about 500 million active users of Internet (IMAI, 2019).
The following report by SATITICA depicts the present market size of the e-commerce sector in India which is currently around 64$ billion US dollars.
There has been a significant growth in the ecommerce industry in India, from 50 billion US dollars in the year 2018 to 64 billion dollars. It is further projected to grow by 188 billion by the year 2025 and to 200 billion dollars by the end of 2027 (Statista, Market size of e-commerce industry across India from 2014 to 2017, 2020). McKinsey Global Institute has projected a potential to create around 65 million jobs by the end of 2025 year owing to the effect of digitalization (McKinsey Global Institute, 2019). SMEs being one of the largest employment generator in the economy, have a huge scope for its development by implementing digitalization.

VIII. Need for Digitalization:
With the current phase at which ICT is trending, it has become the need of the hour. Digitalization can help revive sick industrial units, and also encourage new entrepreneurs to set up their SMEs in India and reach out to the maximum customers.

According to the survey conducted by ITOPS™ in 2016 laid out a pyramid which depicted the present landscape of digital engagement by the SMEs, according to which there were only 2% enterprises completely digitalized. Meaning they have implemented latest tools such as CRM and database tools as well as other backend software. Around 15% of the have enabled certain digital tools and the other 15% are merely connected but not actively participating on online platforms. They are using basic accounting and billing software. The majority of 68% SMEs are still offline, they are using conventional methods for business (KPMG, January 2017).
Most of the SMEs are utilizing outdated techniques for production resulting in low quality output and high production costs. The reach of their product is also limited to the local markets. These industries cannot compete with the multinational companies who use latest innovation and technology and thus fail to survive in the market.

Digitalization of SMEs is needed not only to increase their business but also to generate more employment opportunities in the country. To bridge the gap of inequality, encourage young population to take initiative in creating innovative and ITC enabled business models. Digitalization would also help in creating the business that meets the international standard. It is possible for SMEs to revive and achieve optimum production capacity and a tremendous growth in the coming years.

IX. Impact of Digitalization in SMEs

Increase in Revenue
Adopting ITC tools can help in increasing the accessibility to a wider market and thereby increase in the sales profit. Digitalization helps in eliminating the barrier and help in reaching out to a large number of customers through various online platforms. It is estimated by KPMG report SMEs adopting to digitalization generated a revenue of 19% as compared to that of SMEs using conventional tools which made a revenue of 10% in the financial year 2016. The report also stated that Indian enterprises which are digitally engaged are expected to grow 4 times more than traditional business firms. (KPMG, January 2017).

Wide Reach
Digitalization will help in accessing a wide market easily. Several E-commerce platforms are providing opportunities for many small and medium scale business units to sell their products online and reach maximum customers. Amazon in India has around 6 lakh sellers from Medium and small-scale sectors, mostly women entrepreneurs, wavers, and other such units selling their products across the globe (Mansur, 2020). Amazon is further expected to invest 1$ billion US dollars which is estimated to bring around 10 million business firms online. Amazon is also looking forward to establish 100 digital centers in various regions across India to help sellers in marketing their product on the e-commerce platform (Sankalp Phartiyala, 2020).

Optimum Production
The aim of any business is to produce at least possible cost with optimum use of resources. Using ITC tools will not only help in reducing the production cost but will also help in efficient production. Digital payments, online banking, e-commerce has reduced the operational cost of SMEs to a greater extent. Advertisement and promotion can be done with a minimum cost through various social media platforms. Cloud based and automated process will help in business analytics, storing data and enhance decision making abilities of the business. Digitalization also helps to assess the supply chain by analyzing demand patterns of customers, calculating inventory levels there by helps in eliminating risks and improve overall efficiency of the business.

Cashless Payment
According to report by Mckinsey & Company, around 94% of small-scale sectors accept card payments and 78% makes use of digital wallets. The institute conducted survey of small firms having an average turnover of less than 70$ billion, and that of large firms having a turnover of more than 70$ billion in the year 2017.
The figure stated that small firms are much efficient at using digital payments than that of large enterprises. 80% of small business uses Mobile Banking compared to that of large firms which is 75%, Mobile Wallets, UPI (Unified Payment Interface) transactions are used by SMEs at a larger scale. Cashless payments are easy to carry and improves the ease of doing business. Moreover, they leave a footprint which can be easily traced legally and it is easy to maintain financial records though it.

**X. Challenges in the way to Digitalization**

With the largest portion of Indian MSME using traditional methods of manufacturing, there is a need for complete transformation in terms of skills, infrastructure, manufacturing methods, and technology. A recent survey by YES bank stated that only 5% of the SMEs have adopted digitalization tools completely. The survey also highlighted lack of technical knowledge and skills and major barriers to adopt digitalization (YES Bank, 2019).

**Skill Gap**

India has majority of unskilled labours engaged in Small scale and medium enterprises. They lack technical knowledge and practice outdated methods of production. Most of these labours are based on seasonal employment. I.e., most of the labours practice agriculture and during the off season they are engaged in SMEs for their livelihood. Majority of the labours lack basic qualification; they are illiterate and uneducated. This has been creating a huge skill gap between skilled and unskilled labours. If Indian MSMEs are needed to be digitalized then it should start with tackling of basic problems of which giving proper training to labour force plays a vital role.

According to a report by Rediif, the labour participation rate in India is as low as 43% (Vyas, 2019). Government collaboration with public institutions should be conducted in order to train the employees with necessary skills, not just technical but also managerial and ethical skills are necessary to bridge the gap between skilled and unskilled labour in the economy.

**Technological Gap**

With the increase in the innovation and ITC tools it is necessary to be equipped with proper knowledge on new digitalized tools. Investments must be encouraged through various channels on increasing the
Awareness of technical know-how how various sectors of SMEs. Business though digital channels must be encouraged for instance, selling online through e-commerce, making use of social media platforms for advertising, using various digital payment methods, etc.

Although the cost of using these channels is not more as compared to few years back, many firms still hesitate to adopt to these methods due to lack of awareness. They tend to use conventional methods of production as a result they lack in quality, prone to higher cost in production and wear and tear, rigid payment methods. These SMEs are unable to compete with large firms who produce similar products and have better market reach. Moreover, these big firms are able to sell at lower cost and better quality.

**Finance Gap**

According to the report by SME Financial Forum managed by International Financial Corporation, SMEs in developing countries on an average have a financial unmet need of 41% or 131$ million approximately. The financial gap in such countries have said to be $5 trillion, the report also estimated the financial gap in India for Micro, Small and Medium Enterprises is around 62.26% (International Finance Corporation, 2017).

Lack of capital and unmet financial needs has made SMEs to still stick to old method of production. Due to lack of awareness and knowledge, SMEs are still in the belief that adopting new digitalized tools is expensive and out of their reach. Most of the finances of SMEs in rural areas are from informal channels resulting in high interest rates and higher debt. Thus, it is necessary to channelize proper financial support for the SMEs, specifically for improving financial gap and encouraging adopting to modern ITC tools.

**Structural Gap**

Majority of the small and medium units in India are unorganized and scattered throughout the nation. As a result, they lack basic infrastructure facility needed for adopting modern technical tools. Due to lack of innovation, skilled labour and technical know, SMEs have a huge structural gap compared to large established firms.

In order for SMEs to grow digitally, it is necessary bring ordered efficiency and change the business models. Basic necessities like internet, social media, e-commerce platform can be accessed with very less cost. All that is required is basic knowledge to operate the business though ITC means. Government has introduced various schemes like Digital India, make in India, in order to encourage these firms. Yet proper awareness about the available schemes and policies is requires in order to benefit from such initiatives by Government.

**XI. Role of Government**

Government of India in recent years have introduced many schemes to encourage digitalization of SMEs thorough various policies and schemes to encourage small and medium scale sectors. The initiatives like Digital India, or Make in India have helped these firms to eliminate obstacles and has assisted in their development.

**Digital India**

Digital India was launched in the year 2015, July by the current Prime Minister of India, Narendra Modi (Government of India, 2015). The scheme was launched with an aim to increase digital literacy among the masses and improve digital infrastructure and connectivity. The scheme also focuses on the rural areas to provide internet connectivity and to make India an IT hub and an influential digital society. The SMEs in this regard can benefit through numerous ways. Digital India is helping SMEs to adopt to various ITC tools thereby encouraging a new way of doing business. Besides, the program also
encourages on reducing imports and assist domestic manufacturing. Manufacturing of cell phones has seen a rise of 110 million to that of 60 million between the year 2015 and 2016 (Mazars, June 2016).

Digital MSME
The scheme was launched under the chamber of Ministry of Micro, Small and Medium Enterprises by Government of India in order to maximize the digitalization and ITC tools in MSMEs. The scheme included various initiatives:

- To encourage MSMEs to adopt ITC tools for connecting to the market and to improvise their managerial activities by using various digital software.
- To enhance the capacity for processing the information, and install automatic cost reduction ITC methods thereby improving the overall efficiency of the firm.
- Encourage Digital literacy and e-marketing by conducting various awareness campaigns.
- To set up Enterprise Development Centre (EDC), for proving training to MSME professionals.
- To improve Digital infrastructure, and encourage for adopting cloud-based software (Development Commissioner MSME, 2019).

Start-up India
Start-up India was an initiative under Department of Industrial Policy & Promotion launched in the year 2016. The program aimed at encouraging start-ups and making India self-reliant economy. Financial support is given by the Government of India for the same. Moreover, the scheme also provides a tax exemption of up to three years and a mobile online portal to interact with government regulatory is also provided (Government of India, 2020).

The Government of India apart from these has taken other initiatives like e-governance, digital payment, online registration and employment portal, e-commerce expansion etc, in order to encourage the new digitalization wave into the economy.

XII. Way Forward: Recommendations
India in order to be able to stand globally it has to be in line with the latest technology and adopt novel business models. Being one of the fastest growing economy India has a lot of potential yet to be explored. Being home to the second largest population, majority of which are young generation, India has a lot of opportunity for development. Indian SMEs being the backbone on the country can really make a great contribution for its economy. In order to do so it is important to get to the root cause of barriers and eradicate them.

- Education should be the primary concern in order to go digital. It is important that the unskilled labours are given proper training and education. Awareness also has to be created among SME sectors about the benefits of the digitalization. It is important for them to first understand the significance of Internet and e-commerce and other such tools and what happens if they don’t adopt to the changing technology and business models. Therefore, education, training and awareness are the basic steps towards achieving a successful digitalised SME.
- Investment in SMEs should be encouraged by the Government, particularly for enabling them to make use of digital infrastructure. Various means of financing is needed to be able to meet the needs of SMEs, this can be achieved through not just by the Government but also various public and private means.
- Most of the small firms are limited to local markets because of lack of finance to reach more customers. Using online platforms to sell is an easier and cost saving way of reaching to the maximum number of customers not only in the same state but also at a national and international platform. Many start-ups are using WhatsApp and Facebook as a means to advertise and communicate with
their customers. Most of the SMEs make use of digital payments which not only is easy but also keeps a record of all the financial transactions.

XIII. Conclusion
Government has been encouraging SMEs in several ways to adopt digitalization. It is also for a collaborative effect from Government, Public sector as well as SMEs in order for the to successfully become digitalized. Awareness has to be increased in order for SMEs to encourage. With everyday changing technology it is a need of the hour for SMEs to bring innovation and transformation in its way of doing business. With growth is SMEs, the growth of the economy will also be boosted making India one of the technology driven nation. It will also create employment opportunities, skilled labour and improved infrastructure in the country. though there are hurdles to achieve this growth with initiatives by government, and proper training, basic infrastructure the growth of digitalized SMEs can be successfully achieved.

References


