OPPORTUNITIES AND CHALLENGES FOR ENTREPRENEURSHIP IN AUTOMOBILE AND AUTOMOBILE COMPONENT INDUSTRIES

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INTRODUCTION

'Spice Group would start mobile phone manufacturing unit in Uttar Pradesh with an investment

of Rs. 500 crore'

'Hitachi will start their auto component plant in Chennai in 2016'

'Volvo to make history by becoming the 1st bus maker to export fully built #MAKE IN INDIA buses to Europe '

'Warburg Pincus set to invest INR 1,800 Cr in Piramal Realty.

Such news in the media has become the order of the day since the day Narendra Modi has launched MAKE IN INDIA program. Many bigwigs in manufacturing around the world are looking for either establishing their manufacturing plant or wants to expand their existing one. These industry houses finding manufacturing in India easier than before.

India's integration with the world's economy started in 1991, when it has opened its economy to the world and initiative of MAKE IN INDIA will take this to new level. MAKE IN INDIA campaign was launched by Prime Minister Narendra Modi on 25th September, 2014. It is a national program designed to transform India into global manufacturing hub. The initiative is meant to cut red tape, spur foreign investment and transform India into a vibrant economy. Twenty five sectors have been identified as priority areas including Automobile, Construction, Food processing, IT, Defense, Aviation and many more. Introduction of 24/7 e-portal to address the industry concern and get back to them within 48-72 hours is the differentiator of this program. It includes major new initiatives designed to facilitate investment, foster innovation, protect intellectual property and built best in class manufacturing infrastructure.

The **'MAKE IN INDIA'** initiative has received 2015 Asia-Pacific Economic Development Innovation and program implementation Excellence Award' from US- based consulting firm Frost & Sullivan 1. The award is recognition of the 'outstanding' contribution of the 'MAKE IN INDIA' program's vision and 'implementation excellence' to simplify regulatory framework, reinforce connectivity and incentives investments.

There is no doubt that India is destined to become global manufacturing hub and 'MAKE IN INDIA' will be the key driver to achieve the same.

ROLE OF MANUFACTURING IN GDP

Gross Domestic Product is the broadest quantitative measure of a nation's total economic activity. More specifically, GDP represents the monetary value of all goods and services produced within a nation's geographical border over a specific period of time2. Exhibit 1 shows GDP of India and its growth and Exhibit 2 shows sector wise contribution in GDP. Manufacturing refers to value addition to product as per the customer requirement. It is the process of converting input raw material into finish product for which customer is willing to pay. Manufacturing sector is crucial for employment generation and development of economy. In order to establish India as next super power and self-reliant, it needs to commit itself for the cause of manufacturing. This is the right opportunity because presently India is governed by a party with absolute majority. In coming years, India is expected to witness significant growth in the working age population. It is very important for the manufacturing to play an important role to absorb much of the labor force.

Over the past two decades India has taken unconventional path to become one of the fastest growing economies of the world, unlike the other developed economies. India's service sector played a key role in this growth, while manufacturing has been less robust. Weakening of global demand, exchange volatility, economic and business uncertainties slowed the growth of manufacturing. Growth rate in the manufacturing reduced from 9.73 per cent in 2010-11 to 2.7 per cent in 2012-13. In FY13, only 3.3 per cent of the country's growth was generated by manufacturing as opposed to 83 per cent by service. Exhibit 3 shows manufacturing gross value added in USD billion of various nations and Exhibit 4 shows projected sector wise growth till 2025 with %CAGR. Exhibit 5 shows the growth in manufacturing. Presently manufacturing contributes to 16% of GDP and its contribution in employment generation is 12%, which is much lower than its potential.

When we look at other developed countries such as USA, Japan, Germany etc., the contribution by manufacturing and service sector to GDP is roughly 25% to 70% respectively. Whereas in India it is 16% and 64% 4. The National Manufacturing Policy aims to increase the share of manufacturing to 25% of GDP by 2025 5 and provide employment to 100 million people.

The policy is expected to focus on (i) improving the business environment and facilitating easy technology acquisition and development (2) providing easy access to capital for SMEs and (3) enhancing the private sector's role in skill development. The manufacturing sector in India has a potential to reach USD 1 trillion by 2025 and contribute to 25-30% to India's GDP. It has a potential to create 90 million jobs by 2025 5. Thus Manufacturing needs to grow at a higher rate than the GDP growth to realize its true potential. Growing working population, increased disposal income in rural areas, easy finance schemes & favorable government policies can act as facilitators in growth and MAKE IN INDIA is the best platform in achieving growth in manufacturing.

AUTOMOTIVE SECTOR AND MAKE IN INDIA

India's automotive sector is one of the largest manufacturing sectors in the World; accounting for 22 per cent on India's manufacturing GDP. By 20166, the Indian automotive manufacturing industry is expected to have a value of INR 5110 billion, an increase of 57.2 per cent since 2011. During 2007-11, the industry grew at a CAGR of 12.4 per cent to reach INR 3252 billion and is expected to grow at a CAGR of 7.8 per cent during 2011-16 to reach INR 5110 billion 56 . The auto component sector employs 19 million people (direct and indirect) and the requirement is expected to reach 25 million by 2016 and 35 million by 2022 7 7. Exhibit 6 shows the gross turnover of automotive sector in India.

By 2016, India is expected to be the third largest automotive market by volume in the world8. Presently Indian auto industries are majorly situated in three clusters Chennai, Pune-Nasik and Capital NCR region. Now Gujrat is emerging as new cluster for auto manufacturing 9. Global car manufactures have been ramping up their investments in India to cater to increasing domestic demand. These manufactures also planned to leverage India's competitive advantage by making their Indian plants as export hubs. Many foreign players such as Hyundai, Suzuki, Ford, and GM started their exports from their Indian plants. Volvo, a Swedish firm has declared, they will export fully built buses to Europe from India.

There are many reasons, why India is becoming a favorite destination for automobile and auto components industry. Passenger vehicles, 2/3 wheelers, commercial vehicles and tractors are expected

to grow at a CAGR between 7 to 16%. Growing working population, expanding middle class, increasing income levels in rural areas, availability of labors, and availability of easy finance are major factors, which facilitates this growth and reasons for attracting investments. But all these factors will helps to some extent and growth will be limited in absence of favorable government policies and initiatives. Lower taxes, exemptions, short term and long term policies, mission plans, availability of industrial land at key locations, logistics infrastructure such as good roads, congestion free ports, better power infrastructure to facilitate 24x7 electricity at affordable rates, these are few areas which government planned to focus MAKE IN INDIA program.

OPPORTUNITIES FOR ENTREPRENEURS IN MAKE IN INDIA

Small and medium scale enterprise in the manufacturing sector have huge opportunities to tap through MAKE IN INDIA initiative. In India just eight states contributes to 70 per cent of the country's manufacturing. There should be equitable spread of manufacturing activity. 'MAKE IN INDIA' focuses on about 180 products that are completely imported, which includes telecom, power, and defense equipment and portable digital computers.The proposal is to start making at least 30 of these products in the country in one year. MAKE IN INDIA in auto sector will bring opportunities in many areas, but the following three areas will be see major push; **Ease of Resource mobilization, Competitiveness and Growth.**

1. EASE OF RESOURCE MOBALISATION:- Entrepreneurs need various types of resources for their business activities, may it, skilled manpower, capital, technical know-how for equipment and processes, 24/7 power, input material etc. MAKE IN INDIA will largely focus on building infrastructure required for industries, it will also work on removing obstacles for ensuring capital inflow to SME's. The new initiative of '**Stand up India, Start up India'** will help entrepreneurs for securing loans. Through Skill India initiative, skilled workforce will be made available. Also with the entry of many MNC's, technical know-how will available for SME's. Thus 'MAKE IN INDIA' will open opportunities for mobilizing resources on many fronts for entrepreneurs.

2. COMPETITIVENESS:- With increasing auto MNC's setting their manufacturing plants in India, they will be forced to compete with each other locally and globally. Auto players will compete not only on cost but also on product quality, service, delivery etc. Fierce competition will force auto and auto-part companies to innovate new products, new processes to remain in the market and to retain old customers and attract new ones. MNC's will also bring new technology along with them which will help to achieve ZERO DEFECT and ZERO EFFECT. Indian manufacturing plants will ensure more and more value addition in their products and services.

3. GROWTH:- Ease of doing business in India by various measure through MAKE IN INDIA and availability of skilled manpower through 'Skill India' for auto and auto part companies will help to compete globally. Many big automobile MNC's such as Volvo, Daimler, Hyundai etc. have decided to use their Indian base for exports to other countries and many MNC's are looking to increase their sourcing of auto parts from Indian suppliers. This will help in increasing exports and earning of foreign exchange. See exhibit 7 & 8 for growth of auto parts.

In the following para we will see one success story of Japanese auto industry and what India can learn from their success.

SUCCESS STORY:- JAPANESE AUTO INDUSTRY:- After world war-II when Japan was bombed, it had 3 million war dead and the loss of a quarter of the national wealth, many felt it was an end of Japan. But thanks to 'NEVER SAY DIE' attitude of Japanese people. During 1940-50's 'Made in Japan' brand was most hated. This brand was not performing well in the eyes of customers on quality, service front. After destruction in world war, Japanese people found an opportunity in building of new era in automobile industry. There were many areas which were instrumental in the Japanese auto makers turn around, but three most impressive initiatives which are core to manufacturing, sustainable and has created major impact on Japanese auto manufacturing are shown in Fig (1) below. India can learn and implement to repeat success.

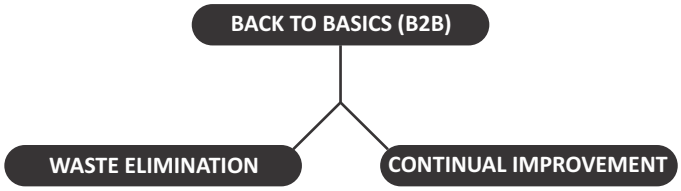

Fig (1) Three Major Initiatives of Japanese Auto Makers

1. B2B (Back to Basics):- All industrial processes has some basic standard operating procedures known as SOPs. Any deviation from the standard operating procedure or basics will hamper process and product quality or it will have adverse impact on results. Japanese believed in this and worked extensively on **B2B- Back to Basics,** which is the core of TQM (Total Quality Management). TQM became philosophy for Japanese auto industries after 1950. Japanese worked on correcting basics by designing robust processes. This approach helped them in achieving consistent quality, delivery and standardization, which in turn helped to enhance customer's confidence and loyalty towards Japanese auto products. Japanese way of working focuses more on process design instead of concentrating on results from beginning unlike west

2. Waste (Muda) Elimination:- Anything, for which customer is not willing to pay is waste. There are seven type of wastes identified by Japanese, these are transportation, inventory, movement (unnecessary), waiting, overproduction, over processing, defects 10etc. Unlike western auto makers Japanese worked extensively on identifying and eliminating wastes in the process. Western auto makers believed in mass production to enhance efficiency. It is true that mass production will reduce fixed costs, but it is not feasible in all areas and in all seasons hence Japanese auto makers focused more waste elimination, in other words they worked more on improving process efficiencies .i.e. to get more output from same amount of input or to get same output with less input. One of the classics example is Toyota Production System which worldwide OEM's and Tier 1 companies tries to copy. **TPS**[11] has two pillars namely **JIT**[11] i.e. Just in Time and **Jidoka**[11] means automation with human intelligence. **JIT** avoids wastage of overproduction, transportation and inventory while Jidoka avoids producing defective products.

3. Continual Improvement (Kaizen[12]**):-** 'If you stop learning, you stop creating history and become history'. Japanese firms don't believe in excellence in one day- but only in constant improvement and constant change. Japanese auto firms uses the Deming cycle of PLAN-DO-CHECK-ACT (PDCA) extensively for continual improvement. Application of PDCA13 cycle forces people to revisit their processes, correct/improve it, compare with standard and move on. Even small improvements done were given due importance. Japanese automobile firms ensured involvement of all their employees in continual improvements through Quality circle and kaizen. It became mass movement in all auto companies. Continual Improvement forced companies to think for more innovative ways to do their job. If Indian automobile industry wants to become world class destination of manufacturing it should improve on cost competitiveness, quality, reliability and service level by working on B2B, waste elimination and continual improvements.

CHAPTER 5- CHALLENGES FOR ENTERPRUNERS IN MAKE IN INDIA

Even though Make in India brings lot of opportunities for automobile and auto part components, it will not be free from challenges. It will be big task for Government, Industry bodies such as SIAM (Society of India Automobile Manufacturers), ACMA (Automotive Components Manufacturing Association) to overcome various challenges. There will many road blocks

hindering in getting benefits of MAKE IN INDIA, but major three are shown in fig (2) below.

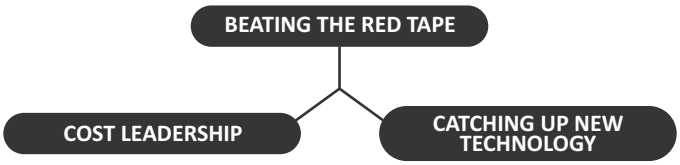

Fig (2):- Challenges for Entrepreneurs

1. BEATING THE RED TAPE:- Our country has a democratic style of governance and hence it becomes much more crucial to ensure holistic development of society. According to latest World Bank reports, India stands at a dismal 142 out of 184 countries 14 surveyed in terms of ease of doing business. Mumbai which is financial capital of India requires 13 procedures to start business and took 30 days to complete, whereas in advanced economies it requires average 4.8 procedures and 9.2 days14. Any public or government work has to move through various procedures and departments. It increases delay and make way for corrupt practices. The executive machinery is been less efficient and their style of functioning is affecting in decision making procedure. Now due to RTI (Right of Information) and more vigil media, any wrong doing or wrong decision comes to public scrutiny immediately. This further restrict executives in taking decision making in timely manner. This indicates huge task in front of Government. Two major obstacles faced by automobile industry are labor problems and land acquisition. There shall be sincere effort from Government and Industry bodies to work unitedly by taking worker class and land owners into confidence to beat red tape and delays.

A business friendly environment in India for entrepreneurs will only be generated if red tape in clearing of projects, awarding of permissions/approvals has been eliminated. The new and revised government policies must put end to red tapes and move towards red carpet for entrepreneurs. The outdated and old rules/procedures/laws must be replaced with new/time bound and industry friendly procedures.

2. Cost Leadership:- India has been destined as one of the low cost destination for automobile and auto component manufacturing industries. Cost leadership in manufacturing of automobile is one of the major facilitators for success of MAKE IN INDIA. There are other input resources such as cost of raw material, logistics cost, power cost, overheads apart from manpower costs which contributes to cost of manufacturing. It will be great challenges for automobile companies to maintain the cost leadership due to inflation. The demand for skilled/semi-skilled labours will increase in the coming days with entry of more industries. The automobile industry will face a major challenge for retaining or attracting talents with opening of job opportunities in other sectors such as services. This will impact on cost leadership hence automobile and auto components sectors must find better and more innovative ways to sustain cost leadership.

3. Catching up new technology: - Sir Arthur Clarke once said 'Any sufficient advanced technology is equivalent to magic'. It is true, advanced technology will make our life a lot easier. It helps to remove Muda (Waste) Mura (Inconsistencies) and Muri (Overburden) 15. Technology brings more efficient tools for entrepreneurs for running their daily operations. Technology can also play an important role in manufacturing operations. 'ERP systems, robot for repetitive and more precise works, CNC enabled machines, EDI (Electronic Data Interface), digital signature' are few examples of technological innovations, available for auto manufactures. But due to high initial and operating cost it is unaffordable for most of the automobile components manufactures especially SME's. Its maintenance and up keeping, knowledge & skill required to operate it, are the other few factors which forcing entrepreneurs away from acquiring of latest technologies for automobile components manufacturing.

Government, industry bodies must work on ways and means to make technologies available at affordable prices to automobile manufactures especially SME's. The new technologies will help

manufacturers to improve quality, delivery, reliability, safety, cost and productivity. It will also help them to compete globally especially from China, which has also launched 'Make in China' campmgn.

CHAPTER 6- MODEL FOR AUTO SECTOR IN MAKE IN INDIA

All good initiatives will give targeted results only if it is well supported by proper model for its sustenance. MAKE IN INDIA is no exception to this. So which model is best suited for sustenance? There are various factors which influences the success of MAKE IN INDIA program. But following 3 areas as shown in fig (3) are most important. This great initiative will not get push without favorable government policies and world class infrastructure and to sustain this, availability of skilled workforce is must. Industry favorable policies and skilled workforce will ensure continuous flow of investments in auto sectors.

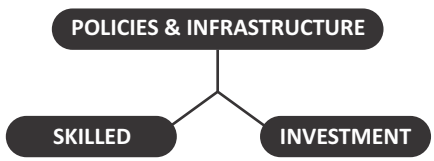

Fig (3) Model for sustenance of MAKE IN INDIA

In order to ensure success of MAKE IN INDIA all three areas needs focused efforts. In a bid to make India attractive to the outside world, the policy comprehensively must tries to address the issues like regulation, skill development, technology inflow, infrastructure, capital inflow, taxes and exit mechanism. These policies must be well supported by very good Infrastructure. Industries requires land, power and access at affordable cost to ensure optimal cost of operations and to become viable in the long run. The growing auto industry will require skilled workforce in big numbers.

Favorable policies, world class infrastructure and skilled workforce will not only attracts investment in auto sector but also ensures its flow in the long run. Investment can continue only when guaranteed returns in long run are ensured and first two parts i.e. policies, infrastructure and skilled workforce will act as catalyst for third part i.e. investment.

CHAPTER 7- THE ROAD AHEAD FOR AUTOMOBILE SECTOR

The main objective of MAKE IN INDIA is to focus on 25 sectors of the economy for job creation and skill enhancement. Automobile is one of the most important sector among these 25 sectors. India is slowly becoming major hub for automobile and auto components in the world. MAKE IN INDIA initiative will further boost the prospectus of auto manufacturing in India and will help to generate more employment and improves export. Government has put an ambitious target to increase share of manufacturing in GDP to 25% and provide employment to 100 million people by 20255. Government policies must be in line with improving ease of doing business and faster reforms in regulations, labor laws, land acquisition, capital inflow and exit routes. Rapid actions on improvement of necessary infrastructure are must so as to attract global investors

The road ahead is tough but not impossible. In order to compete with the rest of the world our Prime minister has talked about the three D's which India has: Democracy, Demographic and Demand. Our country is in dire need of employable people as the industry often points out. A good proportion of the youth lacks practical knowledge and skills required for the industry, hence cannot be employable. We also lacks in technical innovation in spite of having a vast pool of engineers and technical scholars and researchers. The education system is to be revamped in order to promote a culture of practical, in-hand learning, rather than learning only from books. Private/public sector is also to be blamed to some extent for the lack of employable skills in today's youth due to their apathy and lethargy. India has very low numbers of apprentices as compared to global manufacturing hubs like Germany. Having a practical training parallel to the theoretical learning will help in a better understanding of the concepts. Reforms in our education system are must to utilize the advantage of huge demographics of 65% population below the age of thirty five. Only then India will be able to provide quality product and workforce to the world4.

According to Arvind Subramanian, the Chief Economic Adviser, India needs to grow at the rate of 8 % for the next twenty years to provide jobs for the entire population. This is the huge task for the Governments considering democratic style of governance in India. Manufacturing, in general & auto sector, in particular has to play a key role, which will help in building a nation which is sustainable as well as self-reliant. "MAKE IN INDIA" is one of the correct initiatives undertaken in this respect by our Prime minister. Will this remain just a slogan or will we really see some concrete commitment from the government? Only future can tell the answer.

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10 https://en.wikipedia.org/wiki/Muda_(Japanese_term)

11 Toyota Production System-Beyond Large Scale Production by Taiichi Ohno. TPS- Toyota Production System.

JIT- Just in Time, A term used to replenish material in required quantity, at required time, in required container and at required place.

JIDOKA- Autonomation means automation with human intelligence. Design a process in such a way that it should stop production when defects are being produced.

12 www.kaizen.com **Kaizen** is the practice of continuous improvement. **Kaizen** was originally introduced to the West by Masaaki Imai in his book **Kaizen:** The Key to Japan's Competitive Success in 1986. Today **Kaizen** is recognized worldwide as an important pillar of an organization's long-term competitive strategy.

13 https://en.wikipedia.org/wiki/PDCA- PDCA- is an iterative four-step management method used in business for the control and continuous improvement of processes and products. It is also known as the Deming circle/cycle/wheel, Shewhart cycle, control circle/cycle, or plan–do–study–act (PDSA).

14 www.doingbusiness.com

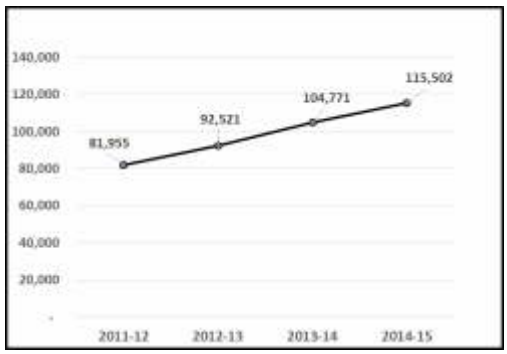
15 leanmanufacturingtools.org/.../**muda-mura**-and-**muri**-lean-manufacturing

Muda is the non-value adding actions within your processes; Muri is to overburden or be unreasonable while

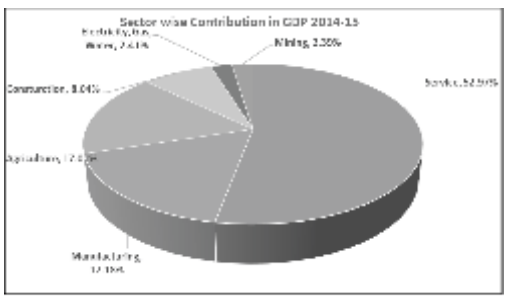
Mura is unevenness.

GRAPHS AND CHARTS

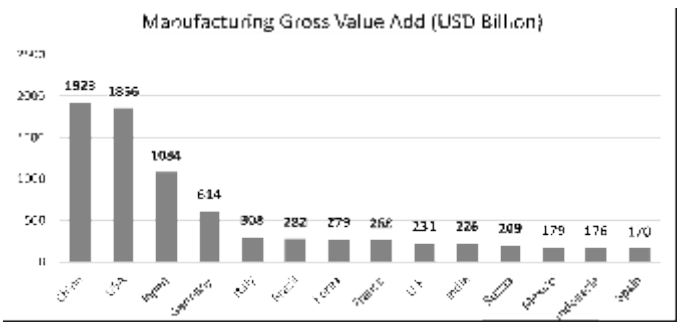
A.Exhibit 1 :- India's GDP Trend (Source: Planning Commission GoI) http://statisticstimes.com/economy/sectorwise-gdp-contribution-of-india.php)



B.Exhibit 2:- Sector-wise contribution in GDP.(Source:Planning Commission) http://statisticstimes.com/economy/sectorwise-gdp-contribution-of-india.php)



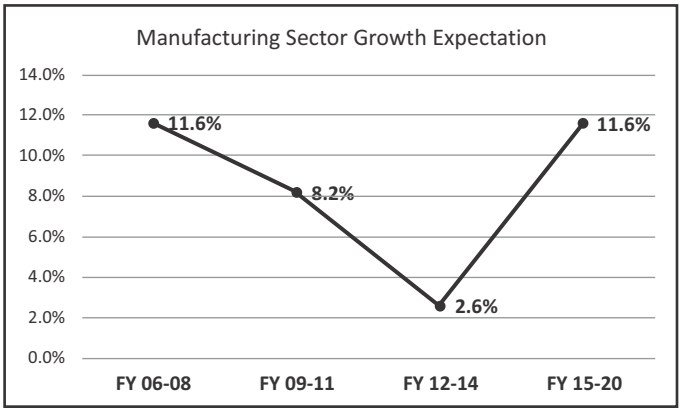
C.Exhibit no-3 (Source :- UN National Accounts main Aggregates Database, Twelfth Five Year Plan (2012-17)



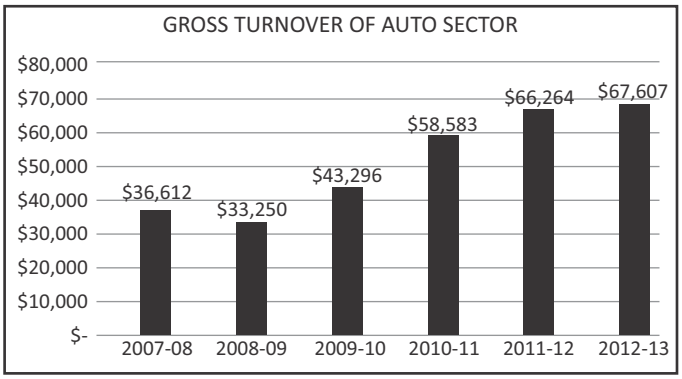
D.Exhibit no-4 (Source :- Fulfilling the promise of India's manufacturing sector' McKinsey & Company, March 2012

Sl. No.	SECTOR	Sector wise in INR Crores		
		2014	2025	% CAGR (till 2025)
1.	Industrial Manufacturing	7000	29854	14%
2.	Chemicals	1168	3681	11%
3.	Automotive	3981	10273	9%
4.	Engineering	2772	6463	8%
5.	Material & Mining	1870	3550	6%

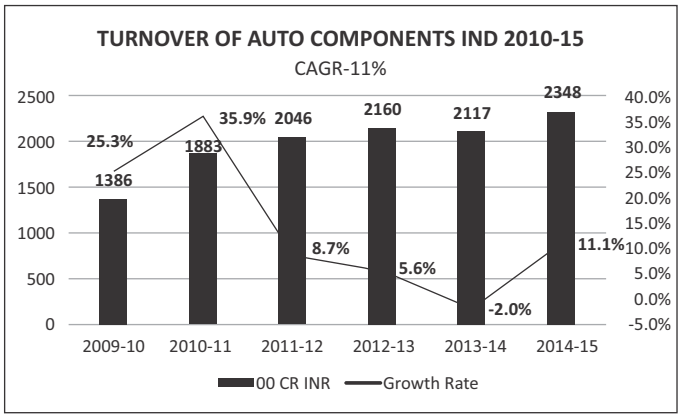
E. Exhibit no-5 (Source :-Twelfth five year plan (2012-17) Economic Sectors, Planning commission 2013, KPMG Analysis



F. Exhibit no-6 (Source :-Society of Indian Automobile Manufactures. www.siam.com/statitics)



G. Exhibit no-7 (Source :-ACMA)



H. Exhibit no-8 (Source :-ACMA)