# SPECIAL REPORT



# The next growth story

Experts predict what 2015 entails for Indian manufacturers

anufacturing and related services have created virtuous cycles of economic growth in many countries. Germany, Japan, South Korea and China are just some of the positive examples of a consistent focus on manufacturing and related technology development. India's potential to become a leader in manufacturing and technology cannot be doubted. Well-run manufacturing companies in India clearly demonstrate that Indians are as adept at high-quality manufacturing as the Germans or East Asians. However, so far, there have been two main challenges with the Indian manufacturing model.

Wilfried G Aulbur, managing partner, Roland Berger Strategy Consultants stated, "For one, Indian manufacturing leaders have increasingly looked abroad to grow

and de-risk their business. For many of the big Indian players, more than 50% of revenue is earned outside India. Investments have happened in developed and emerging economies and created or secured jobs in those countries rather than at home."

In addition, India has not yet managed to create a "manufacturing DNA" in the sense that generally Indian companies are perceived as (and provide) high-quality products that are produced in an efficient way. Consistency across companies is necessary to drive brand building at a national level. "Both points can potentially be addressed through the 'Make in India' program", asserted Aulbur.

After the new government came to power, the country's growth outlook has improved. While there are serious challenges, some positive indicators and initia-

tives herald hopes of getting the economy back on the growth track. "The mood is upbeat and most analysts believe that the growth trend is sustainable," affirmed Rajabahadur V Arcot, an independent industry analyst.

While the Asian Development Bank in its 'Outlook 2014 Update' forecasts 6.3% GDP growth for India in FY 2015, the Japanese Brokerage firm Namura forecasts a 6% growth for the same fiscal and over 7% in FY 2016. India Ratings and Research (Ind-Ra)— a part of international rating agency Fitch Group - revised its FY 2015 GDP growth forecast to 5.7% from its earlier 5.6% (April 2014 forecast).

"Reflecting these sentiments, the country's stock market has emerged as one among the best performing in the world in recent weeks. Additionally, the Rupee has recovered significantly and the current ac-

count deficit has gone down. The raising of India's sovereign rating by Standard & Poor (S&P) is the icing on the cake," added Arcot.

The revival in the last two quarters has been a mixed bag. The favourable crude prices have helped ease inflation. "Along with the 'Make in India' campaign uplifting sentiments, we know that the various ministries are working overtime to clear policies and bring in new legislations. There have been reasonable efforts to mobilise foreign investments in infrastructure and manufacturing," said K Jayaraman, partner, strategy and operations practice, KPMG.

The campaign would also encourage foreign investors to further invest in local manufacturing. "The automotive industry will definitely benefit from this development. The proposed reforms such as development of infrastructure - roads, rails, ports, power and information technology - will boost the manufacturing sector in India," avowed Mahesh Kodumudi, president & MD, Volkswagen India.

7ith the manufacturing industry changing world over, advanced countries that were leaders in manufacturing are also struggling to keep their shares let alone enhance it. In India's context, the big paradigm change that has happened vet again is the "Make in India" initiative. Seconding this view, Baldev Raj, president, Indian National Academy of Engineering, and director at National Institute of Advanced Studies said, "I think this initiative will change the course of the game. Having said that, while it is all right to have a vision what is also necessary is to have a proper pathway to generate results."

He further added, "Manufacturing is a full cycle. And in India we have been successful in manufacturing a product once its concept is known. However, when it comes to innovation and making a new product that has captured the market, like say the Apple iPhone, we do not have great stories to tell."

Innovation must be addressed by private and public sectors alike. China is currently moving from "Make in China" to "Innovate in China", and India cannot afford to be far behind in this journey. Elucidating this thought, Aulbur opined, "Many of India's innovations have been cost-based, i.e., provide appropriate value with less cost by changing materials, value chains, product specifications, etc. Other innovations have



I believe the power sector is going to be a major gainer if we are going to enhance energy especially renewable, where there are immense opportunities.

Baldev Raj, president, Indian National Academy of Engineering and director at National Institute of Advanced Studies



I am confident, that a consistent, step-by-step approach towards 'Make (and eventually innovate) in India' will bring the change that we all desire and

Wilfried Aulbur, managing partner, Roland Berger Strategy Consultants



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focused on new business models, e.g., the transformation of fixed cost into variable cost. Real product-based innovations resulting from the R in Research & Development are still rare in an international comparison. This area needs to be driven going forward, it is after all an area that provides the most sustainable competitive advantage."

Talking about the new trends that can be seen in the industry, Kodumudi said, "We could start seeing state-of-the-art technology centres coming up in the near future that would support manufacturing processes seamlessly for higher efficiency and productivity. Data analytics, Internet of things, big data and multi-modal facility are the next trends we would see in the manufacturing industry. In the long term, the connectivity between manufacturing processes and IT would result in smart factories which organise their systems without human interferences."

Seconding his thought is Arvind Goel, MD, Auma India who believes that it is communication technologies like Fieldbus, Foundation Fieldbus or Profibus that would drive the trends in the valve and actuation industry. "Controlling the devices using Bluetooth or over Wi-Fi will be the next big thing in the actuation industry," he said.

The other key areas of focus that will see L changes are easing up of the metals and mining sector. Environment clearances for several projects have started happening. As per latest reports, there have been announcements of several new projects in the manufacturing sector. "We are slowly moving from a wait and watch situation to announcing projects, though it is at a very early stage of revival," affirmed Jayaraman.

"I see immediate boosts in construction and infrastructure, power, and mining sectors and thus the related manufacturing sectors - capital goods, cement, steel and metals. I also see a growth in consumer spending which would boost the FMCG,

# **TOP TRENDS - TEN PÓSITIONS**

# FACTORY OF THE FUTURE



## TALENT CHALLENGE



- Automation may be even more cost effective than outsourcing manufacturing to developing economies.
- Within an interconnected manufacturing value chain, companies will face increasing industrial IT security risks.
- Increase in legal provisions, regulations and industry standards.
- Demand for MINT\* talents (machinists, tool makers and machine programmers) is on the rise.
- Adding to the economic pressures will be a steady increase in wages for "rare" specialists.

\*MINT: mathematics, informatics, natural sciences and engineering

#### **NEAR-SHORING**



# NANOTECHNOLOGY/NANOMANUFACTURING



- Manufacturing companies look to externalize back office services to focus on core operations.
- · Wages in offshore locations are increasing.
- Eastern Europe is expected to witness significant manufacturing inward investment in the near future.
- Nanotechnology is expected to have a big impact on sustainability in the near future.
- Unknown environmental, health and safety (EHS) implications arising from nanoparticles during their lifecycle present research-based industries with significant challenges and opportunities in risk management.

#### **DEMAND SHIFT TO THE EAST**



#### **SERVICE DRIVEN BUSINESS MODELS**



- Asia's economic influence on the global landscape is growing.
- Increasing importance for local R&D, production and assembling facilities, regional supply chains and adapting products to meet the needs of local markets.
- Manufacturers should find ways to sell ongoing services to their customers by taking a holistic view of customers' needs.
- The challenge for manufacturers is to commercialise scientific and technological innovation into a marketable product and service combination.

#### **CLUSTER MANUFACTURING**



### **SOURCING GOVERNANCE**



- Clusters will become a key pillar for strengthening the manufacturing industry in terms of innovation and efficiency.
- It will be important to remain in close physical proximity to the engineering centres of major customers, as well as to scientific research institutes in Europe.
- Companies need a highly skilled procurement organization engaged at appropriate levels of the value chain employing disciplined, rigorous world-class processes.
- The sourcing governance approach focuses on the complete external supply chain of the company – suppliers and pre-suppliers are therefore a part of corporate responsibility.

#### **ENERGY/RESOURCE EFFICIENCY**



#### **ADDITIVE MANUFACTURING / 3D PRINTING**



- Commodity prices, energy usage and logistics management will become more crucial to maintain competitiveness.
- Automated manufacturing and new production technologies (e.g. additive manufacturing) are expected to play a key role in reducing materials and energy usage, and reducing waste.
- Additive manufacturing or 3D printing will set up new business models with effects on industries, companies and society.
- Increasing importance of a company's value-chain structure to be successful in a "disrupted new supply chain world".

**COURTESY: KPMG** 

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textiles, food, paper and consumer goods industry. However, I don't see any miracle happening in the next twelve months," he further adds.

Arcot mentioned that the industry's inability to produce enough electric power, mine coal and other minerals, produce goods that meet the basic needs and aspirational wants, and such others is largely responsible for the country's burgeoning trade deficit. Because of this, the trade balance has been rising over the years.

"Absence of a robust industrial base makes India a supply-side constrained economy and, there is therefore a dire need to establish new production facilities to produce a broad range of items catering to the basic needs at one level and aspirational wants at the other. Thus, India has an opportunity to emerge as a destination of choice for global manufacturers and the recent "Make in India" initiative is a clarion call to global and domestic manufacturers," Arcot stressed.

Allowing foreign direct investment up to 49% in the defence sector, planning to build smart cities, renewed focus on renewable energy and electronics industry, and introduction of investment allowance of 15% to a company that invests more than Rs 25 crore in any year in new plant and machinery are other complementary initiatives aimed at boosting manufacturing in India.

However, on a cautious note, Jayaraman noted that we need to be patient and give time to the new government to take follow-up actions on the announcements. "This is very critical to understand otherwise the unreasonable expectations can quickly put us into another phase of negative sentiments. Things are auguring well and we need to keep the sentiments high with measured expectations and should seriously consider strategic and tactical investments and prepare the firms now for meeting the challenges of the growth that would happen from 2016-17."

The recognition that for the country to embark upon a more sustainable long-term growth path it is necessary for the manufacturing industry to expand and play its role in creating job opportunities for the country's teeming millions is gaining acceptance among the policy makers and captains of the industry. To this extent investing in talent and skill will be of prime importance. "There is likely to be significant



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K Jayaraman, partner, strategy and operations practice, KPMG



The decision to allow 100% FDI under the automatic route for port development projects, oil and gas projects would enhance the growth in cement, steel, valve, actuators and automation industry

Arvind Goel, MD, AUMA India

investment in training infrastructure to bring people up to speed using simulators that will help to skill more people quickly and at the same time avoid expensive and prohibitive mistakes that could occur due to lack of skill," stated Jayaraman.

In order for the 'Make in India' campaign to succeed, we need solutions to some key challenges that the manufacturing sector faces. Aulbur agreed, "Labour reforms are overdue. While workers' interests need to be protected, flexibility is a key requirement in manufacturing. India needs to move up in the ease of doing business rankings by cutting red tape and improving government interactions. Infrastructure needs to be upgraded to allow efficient production, distribution, and export of goods."

FDI needs to be encouraged, the developments in defence and insurance point in the right direction. India has always had the capability in defence because she had the capability to make equipment for space, nuclear, petrochemical. "Absolutely. Earlier they did not make equipment for

defence because of the policies. Now that the policies are opening up all competent industries and not just the top bracket but also the entire supply chain will benefit from this including the SMEs and MSMEs," stressed Raj.

Single window clearances are also the need of the hour and we can now hope to see some developments on that front too. "GST is also being talked about and will bring in positivity in manufacturing. All these steps are in consideration right now and will simplify the way business is done in India. We need their implementation at the earliest. Only then can the benefits be reaped in the mid- and longer-term," professed Kodumudi.

Giving his response to the expectations that the people have from the government, Arcot summed up the discussion by stating, "While the government has taken serious policy initiatives to make India their preferred place to produce goods for the global market, it is the turn of domestic companies to accept the challenge and walk the talk."