

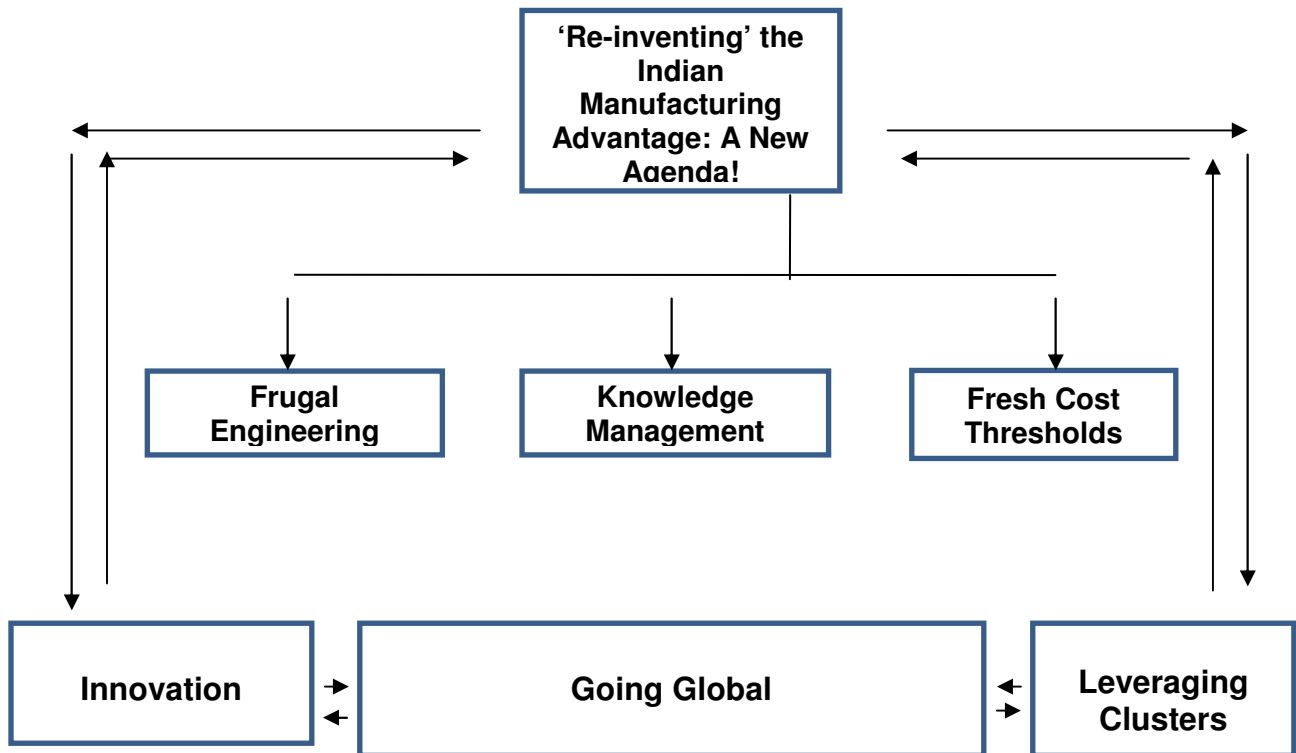


Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

SUMMIT MATRIX



(1) THEME

Indian manufacturing sector has ably supported the robust growth of the Indian economy; by expanding at the rate of 12.4 per cent, as against the rate of 3.8 per cent last year. Indian economy has grown by around 8.8 per cent, inspite of withdrawal of various financial stimuli by the Government. Future is also expected to register growth on similar lines. This is especially



Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

commendable if we perceive that the encouraging news comes at the heels of the spectre of a global meltdown and its hesitant recovery, which implies that things are not the same as before. Interestingly this brings us to the very core of the situation – what is it that has propelled this growth? How is it sustainable given that Market Dynamics and Value propositions are now entirely different? The markets are changing like never before. In this new state of affairs, a rethink of the strategies of manufacturing sector is on the cards, involving a holistic approach to the very concept of manufacturing.

Today, Indian manufacturing has become the launch pad for various strategic ventures and has risen above the numerous societal and bureaucratic hurdles. Still, it is widely felt that the Indian Industry lacks sufficient depth. To increase its rate of growth, as well as to shape its growth and to achieve its goals, India could do well with a manufacturing agenda/ strategy. This strategy/ agenda would in turn determine the choices that Indian Industry has to make in order to achieve the desired results.

The 9th Manufacturing Summit will focus on some trend-setting vistas revealed by new age innovations and developments in the sphere of manufacturing and also address ways to leverage our demographic advantage, moulding it into a new Interface with machines and manufacturing processes.

(2) FRUGAL ENGINEERING

Frugal Engineering has become a powerful and essential approach to developing and delivering products and services. It is a big ‘thing’ in the Indian manufacturing arena since it symbolizes a philosophy that enables a true “*clean sheet*” approach. It is not merely low-cost production and neither is a scheme to boost profit margins. The main motto of Frugal Engineering is to avoid needless costs in the first place. i.e. maximizing value to the customer while minimizing non-essential costs. In fact, we can say that the ultimate goal of Frugal Engineering is basic in nature – it strives to provide the essential functions people need at a price that they can afford or even less.



Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

Carlos Ghosn, President + CEO of Renault and Nissan coined the term “Frugal Engineering” while describing the competency of Indian engineers in developing products like Tata Motors’ Nano (lowest cost car in the world), which is based on a bottom-up approach to product development. Examples of Frugal Engineering abound in the country, like the Scorpio off-roader by Mahindra (lowest cost and time to market), provision for three wheelers by Bajaj at \$ 2000 (Bajaj is a generic name for 3 wheelers in many countries), Health Care (Cataract Surgery, Jaipur Foot, lowest cost CRBP procedure), Telecom (Voice of the people), drug development etc. There are acknowledged cost savings of between 15-30% in many sectors.

Frugal Engineering is expected to address the billions of consumers at the bottom of the pyramid where Affordability, Accessibility and Availability meets people who are quickly moving out of poverty zones. This is especially true of the BRIC countries, and we should remember that these new consumers, while enjoying the first pangs of modern prosperity, are actually shopping for basics and not fancy features. This is exactly what Frugal Engineering promises and as per the Late Prof. C. K. Prahalad, these potential customers “*unserved and underserved by the large organized private sector, including MNCs*” today accounts for a whopping 4 to 5 billion of the 6.7 billion of the Earth’s population.

We really need to start to shape contours of ‘Frugal Engineering’ concept in a grand way now to reach out to this population. Thirst for Learning, practical and sensible approach to design and usage, establishing unique man-machine interface in automation, a centuries long tradition of not wasting anything, the famous ‘jugad’ culture, skills of its people, leveraging demographic advantages and above all ability to listen to customer, all form the core of a frugal engineering process. Carlos Ghosn had remarked enthusiastically about the curve that he saw and said “*I expect India to be exporting this form of process innovation all around the world, just as the Japanese exported Quality Manufacturing*”. Can we, at the 9th Manufacturing Summit, prove him right?



Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

(3) BUILDING COMPETENCIES

Indian Industry, faced with severe talent shortages in recent times, has to rethink of the initiatives to retain skills and build competencies in their systems. This would involve the development of ability to turn workers into specialists, catering to various areas of manufacturing, so that they could compete skillfully in the global arena. It also involves adapting the best practices by most companies, improving and improvising on these techniques and methods and refining and integrating them into a unified system. We are aware that the biggest challenge of any business is to sustain and grow. In order to compete, it is essential to know what competencies a business needs and often, people are more critical than the plan. Strategies can only be effectively implemented if organisations have a competent force of employees.

Peter Drucker defines knowledge as *“information that changes something or somebody --- either by becoming grounds for actions or by making an individual (or an institution) capable of different or more effective action.”* As we know, Knowledge Management is a perspective for implementing organizational change; it isn't a technology or a given discipline. However, its importance lies in the fact that its careful application, like other assets, can surely lead to better decisions, increase relevant information access, retain institutional knowledge and overcome organizational and geographical boundaries. Thus, Knowledge Management assumes importance in today's business environment which is characterized by continuous and often volatile changes demanding a new attitude and approach within organizations. It is a precious *value-added* catalyst since it rests on the joint premises of pooled expertise, relationships, and alliances.

There is a need to understand and highlight the issues of talent retention within an organization; creation of a repository and further levels of skill development - so as to integrate it with other techniques like TQM. The Summit will attempt to place it in Mission Mode and also provide for an *industry-academia interaction* to promote a collaborative effort with Universities specialising in the related areas.



Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

(4) DISCOVERING NEW COST THRESHOLDS

Generally, there is a great emphasis in India on Cost Reduction, some call it Cost Erosion. Essentially, it entails looking at best practices and following them to achieve lower costs. This reactive process will provide us temporary cost advantage but it is not enough to make Indian Manufacturing globally competitive. If Cost advantage has to be leveraged on a sustainable basis, we will have to set benchmarks not follow them and thereby attain cost leadership.

Cost leadership can be achieved by Indian Industry if the issue of creating fresh cost thresholds is created, as per the demand for the product at every threshold. The onus would be on utilizing the four cornerstones of knowledge, skill, talent and innovation in bringing about diversity in the cost thresholds of any organization. Case in point is Maruti Suzuki which is considered as a leader for opening up the country to the concept of fresh cost thresholds by way of adapting themselves and creating a common platform for some of their cars.

Also, the flexi-response approach, inculcated by the Indian manufacturing sector, enables the sector to adjust to the changing market conditions, since Indian companies by nature are very flexible. The Summit aims to highlight the engagement of the manufacturing process in a forward linkage with knowledge and a backward integration with national resource.

(5) INNOVATION

India is often referred to as a ‘nation of entrepreneurs’ and the innovation energy is tremendous in the country. So much so that innovative companies from around the world are discovering the R&D advantages in India. Like GE, which had designed the MAC 400 in 2009 in it’s Technology Center in Bangalore, a portable ECG machine, which can take 100 EKGs on a single battery charge, weighing less than 3 pounds, an ultimate necessity in the rural areas. We can cite the examples of similar other companies as well and this can be attributed to a vibrant and structured educational system and a strong IPR regime. But India is steadily



Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

emerging into the limelight and there is a dramatic rise in India’s participation in the global R&D arena.

An interesting part of the innovation drive in India is that the idea really works at the grassroots level since it involves inventions for a milieu that is basically Indian. Also these inventions are non-transplantable to other places in view of the culture, traditions and environment in which they have taken birth. Nevertheless, these inventions are important in terms of the Indian ingenuity that is expected to transform our circumstances in a way that the corporate research laboratories cannot do. For instance, Balubhai Vasoya from Ahmedabad has developed a stove that uses both kerosene and electricity; Anna Saheb Udgave from Belgaum district of Karnataka has developed a low-cost drip mega sprinkler to fight water woes in his village; Manoharan from Batlagundu area in Tamil Nadu has developed a banana stem injector to inject pesticides in the diseased plants; etc. Other examples would include a cycle that runs on water, a solar mosquito killer, a cycle-powered washing machine etc. The examples abound all around.

Often innovation is equated with craziness, but the success of innovation all across the country would lay on identifying more such Balubhais’ and Anna Sahebs’ so that the country can witness a revolution in this sphere. Further, these discoveries have the potential to be commercialized and even exported. There are actually wagonloads of such ideas waiting for assistance in terms of funds, and support -both technical and design. Lack of interest and awareness of such rural innovations are often the main deterrents in the path of creating an innovation wave all across the country. The 9th Manufacturing Summit looks at acknowledging the need to step forward and work collectively so that a strong, resurgent India can be built and the true spirit of India may be exemplified. Can we lead the way to an entrepreneurial revolution that converts at least a thousand such ideas into commercial ventures?



Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

(6) GOING GLOBAL

The overall effect of the path breaking changes is literally visible in the present times. India has emerged as one of the world's top ten countries in industrial production as per UNIDO in its Report titled 'Yearbook of Industrial Statistics 2010'. Further, the HSBC Markit Purchasing Managers' Index (PMI), based on a survey of 500 companies, has recorded a 27 month high in May 2010 to 59 from 57.2 in April 2010. This assumes importance since a figure above 50 would imply that manufacturing activity in the country is expanding.

The combined mantras of 'Green Manufacturing' and 'Sustainable Manufacturing' are further likely to propel India to the topmost position at the global level. The onus on Green Manufacturing comes from the fact most companies in India are far more energy efficient as compared to their counterparts in other countries which would imply that along with labour intensive character of Indian manufacturing, this would make them more environment compatible. Green Manufacturing helps in breaking the conventional idea of unidirectional flow of goods in a manufacturing environment to a closed-loop logistics system. It not only comprises of forward channel of moving goods from industry to market but also collecting them back from the market and redirecting them to the industry, where these used products are transformed to serviceable ones. Thus, 'Green manufacturing' involves product recovery activities and reverse logistics.

Although not a new concept, Sustainable Manufacturing has come of age, and has become a guiding principle for many manufacturing enterprises. Sustainable Manufacturing is a positive business approach that has as much to do with delivering economic benefits and being a responsible member of the community as it does with reducing environmental impacts. The 9th Manufacturing Summit will stress on the need for manufacturing companies to recognize that it will become increasingly difficult for manufacturing operations to drive new growth and margin without considering manufacturing “sustainability” in their business decisions.



Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

(7) LEVERAGING CLUSTERS

James V. Abraham, Senior Partner & Director, The Boston Consulting Group (BCG), had opined that SMEs need to be aware of the benefits of upgrading themselves with latest technologies and equipment, and also have the idea that such technology adoption could bring in a positive difference to their business growth. The SMEs also need to realise their full potential, since it is important for them to step up their efforts to embrace technology - not just to survive, but also to innovate and drive positive business outcomes.

The cluster approach plays an important role in this regard as it integrates the growth objective of the SMEs to their innovative spirit. Clusters give rise to collective benefits and favour the creation of providers of specialized technical, administrative and financial services, and also a conducive environment for productivity. Cluster programme aims at strengthening Indian small and medium enterprises and component suppliers to meet the requirements of global competitiveness. CII has also initiated the programme for supporting Small Scale industries (SSI) and Small & Medium Enterprises (SME's) in the format of Clusters. The objective of Clusters is to improve competitiveness of SME's through various training modules like 5S, Kaizen, Energy Conservation, Total Cost Management, Total Product Management, Total Quality Management, Manufacturing Excellence, Human Resource etc.

The singular contribution of SMEs is on account of their unique characteristics. Their role in economic activity is manifest in both tangible and intangible ways. If this contribution is to be sustained, then their uniqueness needs to be nurtured in an overt and explicit manner. The Indian experience has shown that it is possible to design targeted interventions, be they area specific like in clusters or be they sector/Subsector or product specific. The need of the hour is for us to learn from each other, drawing upon experiences and identify “best practice policies”. These in turn have to meet local conditions and circumstances. A “one size fits all” approach will definitely not work.

India certainly has a long way to go. The future of the country surely needs the involvement of all its stakeholders and intense urgency to up the ante now. And



Confederation of Indian Industry
Since 1895



THE 9th MANUFACTURING SUMMIT 2010
“Re-inventing” the Indian Manufacturing Advantage : A New Agenda!
Hyatt Regency, Pune
Friday – Saturday, 26th & 27th November 2010: Pune

Indian Industry here has to don the mantle and cap of a Leader and lead the country into a different growth trajectory totally. This assumes importance if we consider the futuristic words of Late Prof. C K Prahalad when he said

“Leadership, however, is about the future, about hope and change. Leaders must elevate the national debate and focus on the potential of India. A shared view of India@75, for example, can provide a framework for building a multi-stakeholder consensus and making choices that are directionally consistent with that goal.

Unless we are clear about the potential, it is very difficult to undertake an arduous journey. I believe that India has the potential to actively participate in shaping the emerging world order. This demands that India must acquire enough economic strength, technological vitality and moral leadership to do so. Just economic strength and technological maturity is not enough.

We know that the Soviet Union and Nazi Germany had economic and technological muscle. They failed. Morality is an integral part of leadership. We should emphasise all three dimensions, in equal measure, in India’s march to Her destiny.”
