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Different Strategies of optimization used in Indian Manufacturing Companies

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ABSTRACT- In this paper we are finding knowledge about the Different strategies of optimization used in Indian Manufacturing Companies. Most Indian companies in the manufacturing functions have been running hard for the past decade to stay competitive and cut costs. They have extended their manufacturing and supply operations to low-cost sources globally, embraced innovations in automation and cost management, leaned out operations without sacrificing quality, and made significant inroads to serving customers in emerging markets.

I. INTRODUCTION

The world in which manufacturers compete today continues to grow more complex. It may be a truism, but customers do have ever-increasing expectations of performance and in today's tough competitive market environment, those expectations get moved higher at a quicker pace. The pressure placed on the manufacturing function demands flexibility and speed along with an ability to supply unique, customer specific products or variations. A major survey conducted by Accenture among 287 manufacturing companies identified that, in order to compete effectively, manufacturers need to rebalance their existing supply footprint to better match with demand location. The majority of respondents (61 percent) reported that they are currently considering shifting their manufacturing operations closer to customers to provide better service and to enable accelerated growth. Companies are beginning to realize that having off shored much of their manufacturing and supply operations away from their demand locations, they hurt their ability to meet their customers' expectations across a wide spectrum of areas, such as being able to rapidly meet increasing customer desires for unique products, continuing to maintain rapid delivery/response times, as well as maintaining low inventories and competitive total costs.

A number of companies have also found that managing supply operations that are separated far from where demand occurs has weakened their overall operational planning, forecasting and general flexibility, while in some cases also driving up costs with the need for complex network management. In some cases, this situation has limited the companies' competitive advantage, causing limitations on growth and revenue. For example, nearly half
(49 percent) of respondents reported facing issues with cycle or delivery time, and 46 percent have experienced product quality concerns as a result of off shored manufacturing and supply operations (see Figure 1).

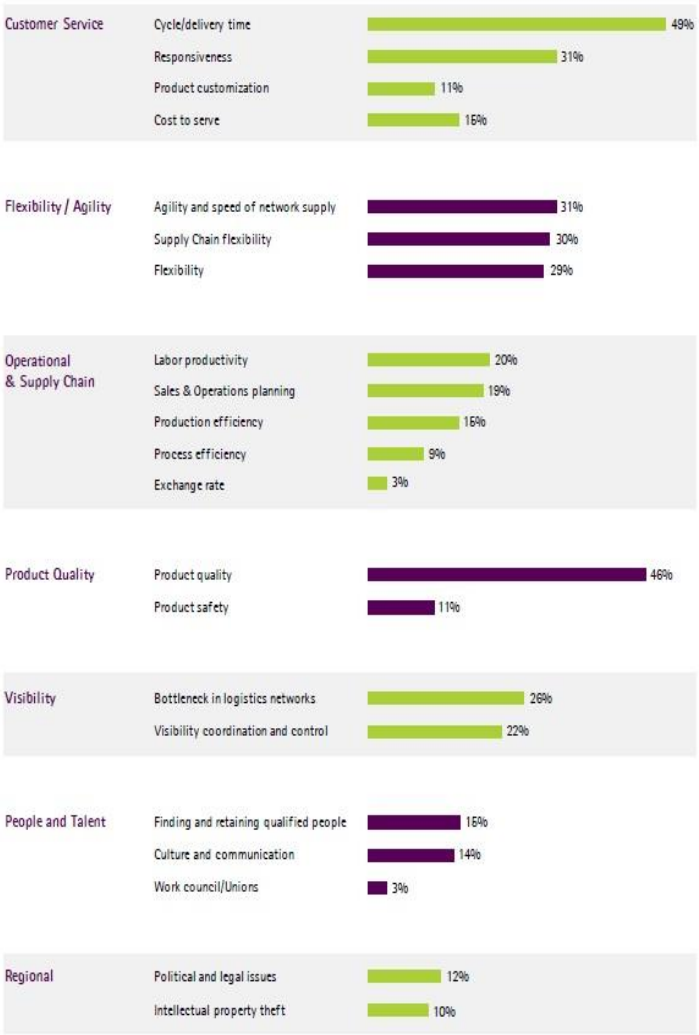


Figure 1. The issues Indian manufacturers face from off shored manufacturing and supply operations.

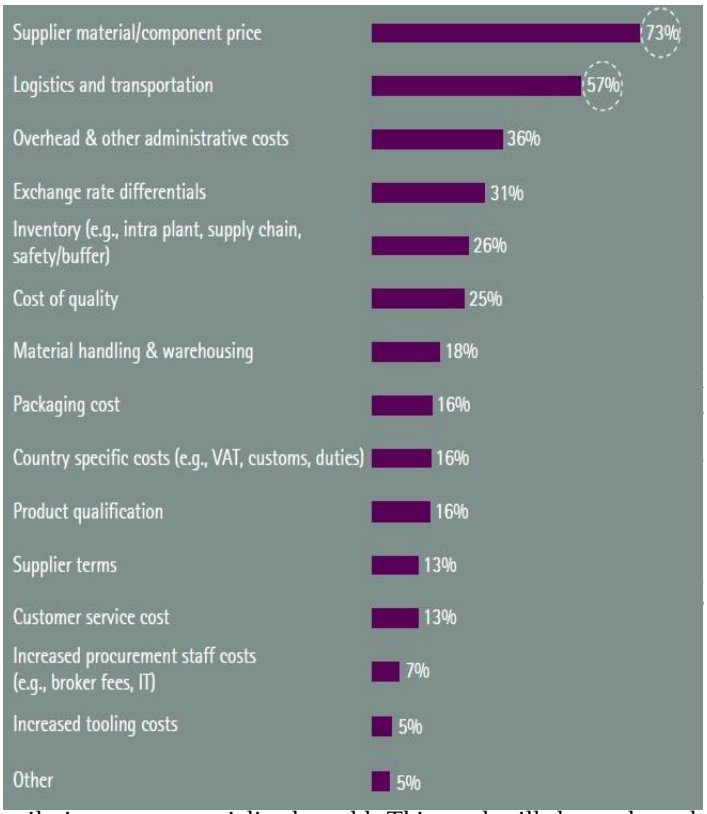
Index Term : Introduce Different strategies of optimization used in Indian Manufacturing ***Companies, Change, Customer , strategies, Challenge, solutions.***

II

Changes in the manufacturing environment

Moreover, manufacturers are beginning to recognize that many of the factors they previously based their off shoring manufacturing and supply decisions on most heavily, such as component price and transportation costs, have dramatically increased over the last few years—and those seemingly initial cost savings are no longer so big. They are, in fact, diminishing as transportation, commodity costs and in-country labor rates rise and exchange rates change.

Manufacturers have been dealing with greater volatility in many different variables, from energy and material input prices to political instability (see Figure 2).



agile in a more specialized world. This goal will demand much faster response times and better integration—all in an environment where uncertainty is increasing on what is needed when, thus creating the quiet trend of manufacturers moving closer to their customers.

III

Moving closer to the customer

The results of the study indicated that respondents acknowledged that in order to compete effectively they need to rebalance their existing supply footprint. It is becoming increasingly clear that the physical location of supply and manufacturing operations can have a significant

impact on overall competitiveness. Getting closer to the customer allows for improved flexibility to respond to uncertain demand and unknown customer requests in an agile way with fast delivery times while maintaining high quality and optimized costs. The ability to do this may not always be the lowest-cost approach, but other value drivers that the customer may require, such as also having the ability to supply customized product or customer-specific SKUs in a timely fashion may be more important. The study's findings reveal the beginning of a trend reversal that, over the past decade, found companies relocating their manufacturing and supply operations to lower-cost areas only to re-import those goods to meet regional, demand requirements. A shift to onshore or nearshore (production of local demand in nearby low-cost countries, e.g., Mexico for the United States, Eastern Europe for Western Europe) manufacturing operations appears to be here to stay as manufacturers look for the next level of competitive advantage. More than half (59 percent) of respondents also stated they intend to pursue new supplier options, whether near or abroad, and 54 percent of companies plan to improve existing supply networks in light of changing costs and competitive issues (see Figure 3). An additional 37 percent of respondents said they were shifting their networks to better align with the customer base and the real sources of demand.

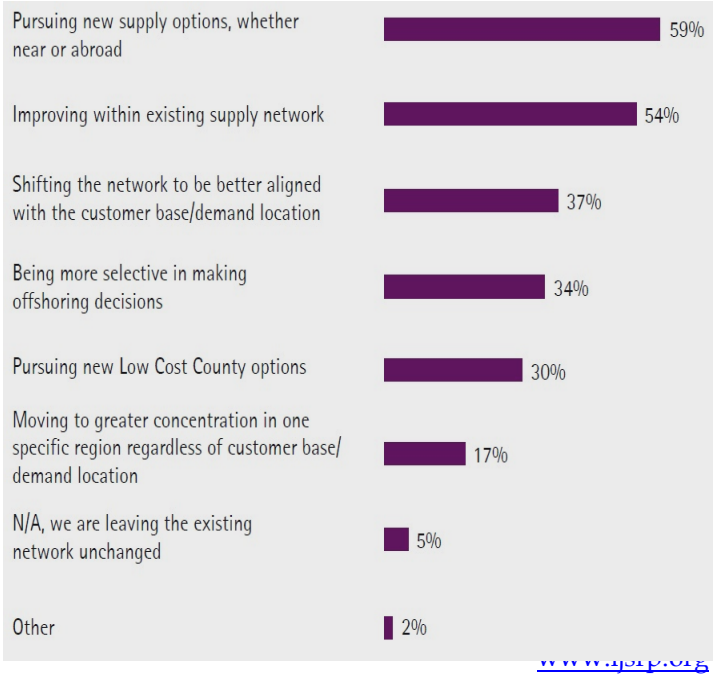


Figure 3. Key actions companies have taken or plan to take with regard to their manufacturing supplier base in light of changing costs and competitive issues.

IV

Winning manufacturing attributes for the Use of Optimization strategies

A) Customer priorities • Customize products (and ancillary services) to serve customer's unique, specific needs and priorities—both spoken and implicit. • Differentiate by integrating the product with a compelling customer experience.
B) Globally local operations • Design the network footprint according to total "landed" value chain costs and customer service needs.
• Balance regional demand with regional supply.
• Learn to migrate modular components of the operation to the next new low-cost, appropriate-quality country or countries.
• Ensure that the global network has excellent visibility and high service levels.
C) Supply network flexibility
• Adopt differentiated models and processes to support increasingly diverse channel and customer needs.
• Shift fixed costs to variable costs in order to accommodate market changes.
D) Agility on the shop floor and beyond • Use reliable, efficient equipment that is highly configurable and easily transportable.
• Leverage advanced analytical capabilities to build predictive business knowledge.
• Determine and obtain the right mix of skills and resources.
E) Sustainability and partnering for scarce resources
• Give customers visibility into the complete product life cycle, from design through disposal.
• Learn to negotiate and "partner" with governments and regulators in nations that control key materials and commodities.

V

Challenge

Despite the desire to rebalance, it is readily acknowledged that rebalancing manufacturing and supply networks is not an easy undertaking. It is a challenging proposition—one that will take years, and require extensive planning, engineering and execution. For nearly half of the survey respondents, workforce availability, production skills and transportation costs were cited as the main obstacles hampering companies from rebalancing production. Other major well-known hurdles include access to the appropriate supply base, access to capital to restructure the network and government policies on such things as taxes, incentives, employment law, legal protection and content requirements.

VI

Finding solutions

Companies recognize they need new capabilities to address the rebalancing of their manufacturing and supply network. A large majority of respondents (61 percent) said the ability to conduct a total cost analysis properly is one of the leading capabilities they most need to address in order to rebalance their manufacturing and supply network (see Figure 4). The global manufacturing landscape has become extraordinarily complex, and companies face many more challenges than they did just a few years ago. Dramatic shifts in relative costs, market volatility and dynamic changes in customer demand patterns have all contributed to the need for companies to step back and reevaluate how they can be agile and can best meet the extraordinary and growing demands of their customers. How they assess more closely the matching of supply location with demand location by onshoring or nearshoring manufacturing and supply operations is a key strategy in enabling overall competitive advantage, and ultimately, achieving high performance. manufacturing and supply networks.

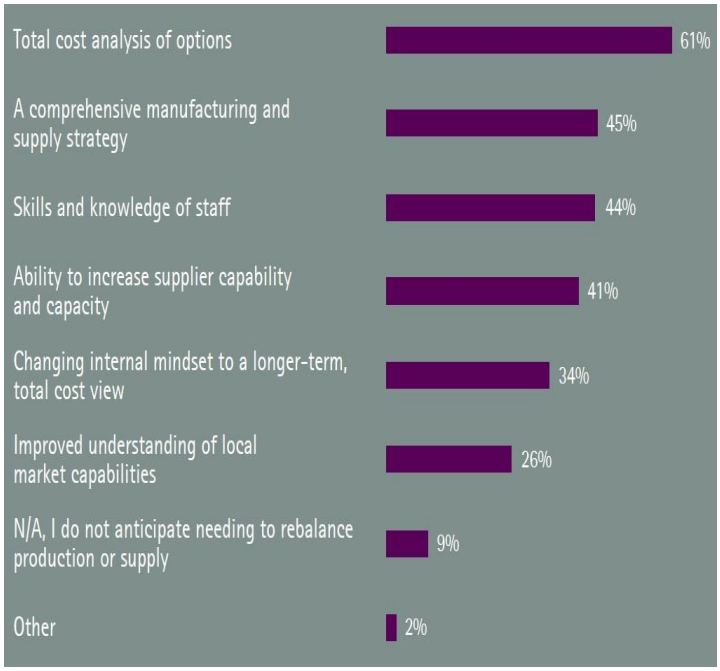


Figure 4. Capabilities companies believe are most needed to rebalance manufacturing

VII

Conclusion

To analyze the structure of manufacturing sector at the national level, then our analysis has clearly indicated that the rise in industrial output is accountable to substitution of capital for labour in almost all states. In the pre-globalization period the industries experienced increasing returns to scale. Globalization has given way to diminishing returns to scale. Along with a rise in industrial output, globalization has possibly led to a decline in regional disparities in terms of population-deflated indices of employment of manpower and capital, and the resultant output.

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