Transforming China's Manufacturing Landscape

With costs rising and offshore locations becoming increasingly attractive, manufacturing MNCs in China need to painstakingly re-examine their supply chains to improve efficiencies.

By Anna Mansson and John Jullens

RECENT MONTHS have seen pundits argue in the columns of such reputable magazines as Forbes and The Atlantic Monthly that China's days as a global manufacturing giant are, if not over, at least past their peak. China, they suggest, has reached the point where its vast supply of surplus labour from the countryside has been fully absorbed, where its wages are rising substantially, and where manufacturers across the board can only become less competitive. Exacerbating this trend are technological breakthroughs such as fracking, which are dramatically lowering factor costs in important export markets such as the US. As a result, according to these observers, China's days as an export-based economy led by low-cost manufacturing are rapidly coming to an end.

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Improving manufacturing efficiencies will require making changes to assembly operations while also optimising machinery and processes.

There is certainly some truth to this analysis. China's cost equation indeed no longer makes sense for a range of labour-intensive products that are inexpensive to ship, while certain low labour-content exports that are difficult to transport may very well be "re-shored" to their end-customer markets. Even for these products, however, it remains to be seen how much manufacturing capacity will actually leave China, as other emerging countries such as Vietnam and Bangladesh would likely see their own labour costs rise long before they can absorb all of China's volume.

Required re-examinations

In reality, the combination of growing domestic demand and significant untapped opportunities to further raise productivity levels and reduce costs suggests that China could potentially even enhance its position at the top of the world's league of manufacturers. However, this does not mean companies can rest easily Instead of leaving the country en masse, China's manufacturing base will likely begin to fragment, requiring multinational and Chinese companies to fundamentally re-examine their entire supply chains, from inbound sourcing to outbound logistics, and consider afresh where and how they operate.

To do so, companies will have to answer three related questions:

• First, they will have to look at what changes must be made to improve performance at their operations in the traditional coastal areas as well as in the newly emerging inland markets.

• Second, they must decide how to optimise their footprint by relocating all or part of their manufacturing and supply base to lower-cost inland regions, or out of China altogether.

• Third, they must ask themselves what organisational capabilities must be added or developed to transform their newly reconfigured footprints and operations.

For example, partially as a result of China's (until recently) ultra-low wage levels, many companies have yet to optimise their manufacturing, sourcing and supply chain activities. It is therefore crucial to first conduct a thorough assessment of all potential productivity and cost reduction opportunities in existing facilities before relocating a manufacturing operation to a lower-cost location in or outside of China. Typical performance improvement opportunities include substituting capital for labour, process automation and adopting lean manufacturing practices.

Similarly, many companies can still realise significant cost savings by designing parts that can be manufactured more easily and cost efficiently in China itself, and by helping Chinese suppliers improve their ability to produce such parts locally. Such firms can further reduce costs by identifying where cheaper local materials can be substituted for more expensive foreign ones, or where off-the-shelf components can replace custom-designed parts. It is worth noting that several leading Chinese manufacturers, including Galanz and Mindray, are already quite adept at making such product and process modifications. Foreign firms who have also shown this aptitude include Honeywell and P&G, who have set up local innovation organisations focused on designing low-cost products that use locally sourced inputs.

Applying new methods

Most companies also have plenty of room to improve their manufacturing or assembly operations and optimise their machinery and processes to reflect the new labour cost realities, while simultaneously increasing quality levels and speed-to-market. Likewise, additional opportunities to improve supplier performance may be found through cooperation initiatives with suppliers aimed at helping them achieve best-in-class lean production. Other areas that companies typically find useful to explore include planning and supply chain procedures as well as working jointly with their partners to reduce stock levels at all points of the supply chain, from raw material providers to stock in customers' inventories. While all of these activities are of course common practice in developed markets, they are often either still absent in China, or just not set up in ways that effectively adapt global operating standards and capabilities to local conditions.

Once they have reviewed their manufacturing and end-to-end supply chain practices, companies can next turn to developing their ideal operations footprint. This will require a structured product-by-product assessment that takes into account everything from cost drivers to customer location. Simply relocating to an inland site to pursue lower costs is unlikely to be a strategy that alone will bring positive returns over the long-term. In fact, putting aside the government's major role in making the necessary infrastructure investments, any such move will likely require

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Foxconn has led the way in expanding its footprint inland, as seen in this recruitment drive in Zhengzhou, capital of central China's Henan Province.

fundamental changes that extend well beyond a relatively simple switch in location. As part of their analysis, companies must look at how doing so can allow them to rethink and transform all aspects of their supply chain and production, if they do not to find themselves again facing the same challenges of rising labour and other costs soon afterwards.

Sly moves by Foxconn

A good example of a company which has optimised its coastal factories while simultaneously expanding its footprint inland is Taiwan's Foxconn, the world's largest electronics contract manufacturer. At its older coastal facilities – still primarily directed towards producing goods for export – Foxconn is looking at ways of raising productivity via capital investments. In Shenzhen, it has plans to invest in new robots and other automation technologies that could see its workforce there, now numbering a few hundred thousand, fall by half. At the same time, to keep close to its major customers, it has established a series of major inland manufacturing operations, and now operates 13 different facilities in nine different cities, including factories at Chongqing and Chengdu in western China and at Zhengzhou in the central province of Henan. As it has moved inland, Foxconn has required its suppliers to follow and set up their own plants – often helping them by working with local governments to ensure such moves are made smoothly and that the necessary infrastructure is in place. In Chongqing, Foxconn secured support from the municipality's government to lengthen its airport's runway, such that Boeing 747 freight aircraft could land and take off.

As Foxconn's experience highlights, the new realities of China's manufacturing and supply chain environment will require a much broader and ever-changing skill set. Companies will have to look anew at the organisational capabilities that their China ventures will require, augmenting outdated practices and introducing new ones. Managing such increasingly complex and geographically dispersed networks will naturally be a formidable challenge, but is also simply the price of admission to the world's second-largest economy and its increasingly affluent 1.5 billion consumers. SBR

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