# Deloitte report: consumers set to become manufacturing co-creators

Deloitte released a detailed research report on manufacturing, titled *The Future of Manufacturing: Making Things in a Changing World* which suggests that the likely result of disrupting technologies will be a significant restructuring of existing product manufacturers.

U.S. Department of Agriculture via [Wikimedia Commons]

The manufacturing industry is a key focus area for Deloitte, which has been appointed knowledge partner for the 2015 Manufacturing Indaba happening on 29-30 June. Karthi Pillay, manufacturing industry leader at Deloitte Africa, will be a keynote speaker addressing the Indaba on Industry 4.0.

## Manufacturing will not be about numbers

South Africa's manufacturing industry is enduring massive upheaval, job losses and companies struggling in an anemic economy. Few topics have been more stressed than the fate of South African manufacturing. The sharp loss of manufacturing jobs since 2006 - Stats SA says some 188,000 jobs were lost in the manufacturing sector between September 2006 and March 2014, translating to a 14% decrease in jobs - has triggered legitimate concern that South African manufacturing faces some crucial challenges.

Yet South Africa is still making things and South Africans are continuously innovating. The fact is that we manufacture more now than we ever have in our history - but the future of manufacturing will not be about numbers of low-skilled jobs created, but about rapidly advancing technology. To understand manufacturing in the 21st century, we need to understand the technology behind it rather than just Stats SA's numbers of employed people.

## Deloitte research identifies changes in manufacturing

It was in this context that Deloitte released its detailed research study, *The Future of Manufacturing: Making Things in a Changing World* which finds that manufacturing "is no longer simply about making physical products. Changes in consumer demand, the nature of products, the economics of production, and the economics of the supply chain have led to a fundamental shift in the way companies do business".

Commenting on the recent Deloitte report, Pillay said that manufacturing plants made to global best standards are today tooled with technology which is able to meet customers demand for personalisation and customisation as "the line between consumer and creator continues to blur". He noted that consumers' rising power and unmet needs around personalisation, customisation, and co-creation are causing niche markets to proliferate.

This is already evident all about us: added sensors and connectivity turn previously 'dumb' products into 'smart' one's, while products increasingly become platforms and even move into the realm of services. "Advancements in materials science are enabling the creation of far more intricate, capable, and advanced objects, smart or otherwise. At the same time, the nature of the product is changing, with many products transcending their roles as material possessions that people own, to become services to which they buy access," said Pillay.

## New entrants

The report continues: "As technology continues to advance exponentially, barriers to entry, commercialisation and learning are eroding. The result is that new market entrants with access to new tools can operate at much smaller scales, enabling them to create offerings which were once the sole field of the major incumbents. Although large-scale production will always dominate some segments of the value chain, innovative manufacturing models - distributed small-scale local manufacturing, loosely coupled manufacturing ecosystems, and agile manufacturing - are arising which can take advantage of these new opportunities."

The report states that "Technologies such as additive manufacturing are making it possible to cost-effectively manufacture products more quickly, in smaller and smaller batches. Digital technologies are narrowing the distance between manufacturer and consumer, allowing manufacturers to bypass traditional intermediaries. Numerous factors are leading manufacturers to build to order rather than building to stock. In this environment, intermediaries that create value by holding inventory are becoming less and less necessary. Together, these shifts have made it more difficult to create value in traditional ways."

Pillay notes that at the same time products are becoming less objects of value in their own right and more the means for accessing information and experiences, and that creating and capturing value has moved from delivering physical objects to enabling that access. "These trends have the capability of affecting different manufacturing sectors at different rates. To determine the speed and intensity of the coming shifts in a particular sector, companies should consider factors including the extent of regulation, product size and complexity, and the sector's level of digitisation."

## As trends play out

The report advises manufacturers that as these trends play out within a growing number of manufacturing sectors, larger manufacturers should focus their strategies on concentration and consolidation, rather than fragmentation. "Due to competitive pressures, large manufacturers may experience increasing pressure to focus on just one role, shedding aspects of the business that might distract from the company becoming world class in its chosen role. The likely result is a significant restructuring of existing product manufacturers."

The report continues: "Rather than focusing solely on 'make vs buy' options, large players will have an opportunity to connect with, and mobilise, a growing array of new entrants, many of which will target fragmenting portions of the manufacturing value chain in order to deliver more value to their customers. Two emerging business models, 'product to platform' and 'ownership to access', seem particularly promising in terms of driving leveraged growth strategies.

"Finally, given the emergence of more complex ecosystems of fragmented and concentrated players across a growing array of manufacturing value chains, businesses that understand emerging 'influence points' will have a significant strategic advantage. As the manufacturing landscape evolves and competitive pressure mounts, driven by the needs of ever more demanding customers, position will matter more than ever."

## Africa

Much of the findings of the Deloitte report will be played out in Africa as new manufacturing plants will be enabled to leapfrog the technology divide. This is reflected in another Deloitte report, Africa Private Equity Confidence Survey 2015, which found that manufacturing opportunities in Africa had long been favourites for private equity investors. Of respondents, a high proportion said they were looking at manufacturing and industrial opportunities in Africa, on average the third-highest placed sector and one which also was the one common investment focus among all three territories: Southern Africa (41%), East Africa (43%) and West Africa (42%).

Underlying this theme the report indicates that Africa's middle class is expected to increase to more than half a billion people by 2030. The report stated that in Southern Africa, "the focus in 2015 among Southern African PE investors will also be in food and beverages and manufacturing... it stands to reason that activity in this area would likely be dominated by the production of fast moving consumer goods".

"In all the decisions about where and how to play in this new environment, there is no master playbook and no single path to success. By understanding these shifts, roles, and influence points, both incumbents and new entrants can give themselves the tools to successfully navigate the new landscape of manufacturing," the report states.