

How Technology is Revolutionizing the Way We Manufacture Clothes

Written by Melissa Twigg, Global Sourcing Society contributor – February 21, 2018



The demand for fast, affordable and even disposable fashion has soared over the last decade. And as a result, mass retailers are under pressure to find the next low-cost retail sourcing destination, where cheap labour and low overheads mean jeans, dresses and jackets can arrive in London, New York and Shanghai costing less than the price of lunch.

Known as the total sourcing management caravan, it has led apparel manufacturers on a quest from China and Malaysia to Bangladesh and now Ethiopia. However, the rise of digitization - and alongside that, automation - looks set to irrevocably alter this model, shifting the focus away from destinations with low labour costs to those that are geographically closer to the end market.

In the age of Instagram influencers and mass fashion sites, customers expect to find a high-street version of a designer outfit weeks rather than months after its catwalk debut. And in order to fulfil this, manufacturers will need to be closer to major world cities than they currently are. But how will technology help achieve this goal?



It is divided in two parts. The first is digitization, which will lower costs by saving on prototypes and stock, leaving more money for labour costs. This is done by linking all in-house retail sourcing software patterns while housing information, allowing cost analysis to be done at an immeasurably faster rate, while digital renderings of products reduce the need for expensive prototypes.

Further down the line, but also in development, is automation, which aims to replace humans on the factory floor with robots, shifting from a large unskilled workforce to a smaller skilled one.

Both these developments will allow the manufacturing model to move away from low-cost labour countries such as Bangladesh and towards those that are geographically closer to the end market, such as Turkey and Mexico. And while it is unlikely that this will bring mass manufacturing back to the West, as costs involved are still too high, it will allow luxury brands that play off the concept of 'Made in France' or 'Made in Italy' to continue to do so without facing crippling costs.

But what impact will this have on mass manufacturing nations such as China? Interestingly, China, despite still relying on mass manufacturing, should fare better than countries such as Bangladesh. This is because China's rising labour costs and increased unionization has already led certain manufacturers to move to cheaper markets – this could be a way to lure them back. Chinese factories have also been ahead of the curve when it comes to using collaboration networks such as PLM system software and or global sourcing software to support digitization and training their workforce in this associated technology, and that – combined with China's vast domestic market – means they should not only weather this storm, but profit from it.

As should East Africa, where Chinese manufacturers are opening modern factories fully incorporated with digitisation to anticipate the next step. Ethiopia is also geographically close to the European market, so could lure brands away from Southeast Asia.

And while digitization is very much in development, with factories around the world adapting to the new model of working, automation and artificial intelligent are still a few years behind – but will prove more revolutionary when they do arrive.



For a McKinsey 2017 report on this entitled "The Apparel Sourcing Caravan's Next Stop: Digitisation" the company surveyed the chief purchasing officers of apparel companies, and more than 60 percent of respondents believed that retail sourcing automation will be a major driver of sourcing decisions instead of labour cost by or before 2025.

And while this may seem like a bleak prognosis for workers, typifying the modern fear that robots will take all our jobs, it could actually improve certain workers' rights, as the workforce becomes more skilled and better paid.

As with all technological leaps forward, there will be winners and losers and the apparel industry shifts on its axis – but good or bad, one thing is sure: the change is coming. To learn more about Global Sourcing Society more please [Contact Us](#) or visit www.globalsourcingsociety.com.