There has been much debate about the strengths and weaknesses of ‘lean’ and ‘agile’ improvement philosophies. While there are still widely differing opinions on the compatibility of these approaches, it is obvious that since each customer’s requirements are diverse for different types of product and range enormously from one market sector to another, there is no single solution.

The main issue, however, is not so much which strategy to choose—lean, agile, ‘Manufacture in China’ or whatever, but to have a clear picture of your company’s specific market and product requirements, before choosing a single path to take. If you are going to recommend thousands of pounds of investment and months of time in implementation of a solution, isn’t it best to first identify which elements of these philosophies are right for your own company?

Christmas tree decorations, for example, have a very sharp and seasonal consumer demand, while lap top computers have very short product life cycles coupled with high levels of innovation. Both cases need responsive supply chains in order to respond to fluctuating demands and to avoid obsolescent stock. The humble spark plug, however, has a reasonably predictable demand over an extended time period, although the spares and repairs requirements will be vastly different to those of OEM fitment.

It is by analysing this type of information about the product ranges that will identify the most appropriate methodologies to adopt. How does the ‘lean and agile’ debate help with this?

The argument goes that it is inappropriate to use a lean strategy in circumstances of high demand uncertainty, because variability in demand volumes and variant mix make level scheduling infeasible. Conversely, it is also inappropriate to use an agile strategy for products with relatively low demand uncertainty, because the ‘surplus flexibility’ would not be cost competitive compared to those using a lean supply chain strategy.

REAL LIFE

However a ‘two box’ model is too simplistic for most real life situations, even though it usefully indicates that there are choices to make and these are two of the factors that play a key part in the decision making process.

You need to discover first whether all your products should be treated together as one, as different clusters, or as individual product families. One model is that of ‘runners, repeaters and strangers’ based on product volumes, but there are other factors that should perhaps be included for a more robust picture. Key characteristics that can be used to cluster products include volume, demand variability, demand lead time, variety, product life cycle, product and total supply chain cost breakdown.

The challenge then is to determine which of these factors are vital, and should drive the clustering process, and which to leave out to avoid unnecessary complication.

The key is to identify the most appropriate and effective techniques for your products and customers. For example a technique such as S5 may be applicable to all products and companies, but kanban scheduling may not. Equally sourcing a product in China may be ideal for certain products but prove fatal for others (which have high demand uncertainty and short product lead times.) This is more complicated than a binary ‘lean vs. agile’ argument and in any case there is a great deal of overlap in the two techniques.

The key motto is look before you leap. This applies as much to deciding on a particular technique to improve business profitability, as well as to looking for a ‘magic wand’ solution to revolutionise the company.

Tim Waddington, The Delos Partnership