

More to come



PMP research finds manufacturing and supply chain companies ready to invest further in IT despite mixed results.

MOST COMPANIES VIEW their manufacturing and supply chain systems as a 'work in progress'. And while they have seen some benefits from the greater use of technology in these key areas, many feel that there is still a considerable way to go.

This year's PMP Research survey focuses on the issues facing these supply chain and engineering companies, with three-quarters of our respondents having board-level representation for supply chain and manufacturing operations either via a specially designated supply chain director (48%) or another director (28%).

Half (50%) of our sample have a five-year strategy for supply chain and manufacturing systems and technology, and in 30% of cases this has been revised within the last six months.

Clearly, this is a high-profile area of activity which is subject to frequent review. Yet only a tiny minority – 2% – of the companies polled have realised all the benefits they expected to gain from their current supply chain and manufacturing systems (see Figure 1).

The majority display a much more lukewarm response to what IT has done for their organisation.

Half (54%) reckon to have seen some improvements and a third (32%) have had no such success so far, though they are hopeful of seeing benefits at some point in the future. However, 10% state firmly that they have identified no benefits to date and feel they are very unlikely to do so.

Asked why their supply chain and manufacturing applications have failed to come up to scratch, the respondents identify three main areas of difficulty – problems with internal processes which are too inflexible or difficult to change, cited by 54%; the impact of external influences on systems such as supplier requirements (38%); and a lack of management commitment (36%).

As well as these three specific barriers, several respondents make the point in their individual replies that they face a 'double whammy' when it comes to realising benefits from such systems – namely, the time and the cost involved.

The implication here is that many supply chain and manufacturing systems take a while to implement. During that period an organisation's demands and requirements may change, making it either difficult or even inappropriate for them to achieve the benefits they originally sought.

Keeping senior management and key staff on track for the long haul can also be a challenge.

Optimism

The cost issue, given the currently tough economic conditions for many industrial companies, seems self-evident. Many manufacturing and supply chain projects involve complex and often expensive integrated suites of software that come with not only a large price tag but also substantial implementation and integration costs.

Yet our survey reveals that despite their apparent lack of success to date, companies are still willing to spend money on IT.

This is despite the recent upheavals amongst the major ERP vendors – which seem to have had little effect on buying decisions. As Figure 2 shows, 68% will invest as planned, with only 9% deciding to delay any purchase until the situation is clearer and 2% electing to choose a different supplier.

When asked to describe their current levels of investment in supply chain and manufacturing systems, the biggest proportion (48%) are putting in about the same amount of cash now as they did three years ago.

More significantly, 37% reckon they are spending considerably more now on IT systems compared with three years ago, and only 7% feel investment has been cut back substantially in recent times.

This suggests organisations remain convinced that technology can be of considerable help, whilst also acknowledging that they have not got it quite right so far.

Part of the problem may well be the extremely challenging environment many find themselves operating in. Around half (56%) currently manage their company's supply chain at a national level, for example, but this is set to drop to 40% in two years' time.

In comparison, 16% now manage their supply chain at a pan-European level, with 20% predicted to do so in future. And while 30% manage their supply chain globally for the moment, this proportion is set to rise to 40% in the next couple of years.

Clearly, supply chain management is becoming more complex as companies strive to take a much broader view of how they operate across different countries. Drawing together manufacturing facilities and distribution centres from different locations into a single system is a major task.

Added to this, many operations must now operate in a much faster and more flexible way than before. 40% of our sample say the product lifecycle of their best-selling items is shorter, compared to two or three years ago.

In 49% of cases, the product lifecycle has remained the same, and in only 2% has it become longer.

For a significant number of companies, more innovation and change is becoming the norm and this has implications

for their supply chain and manufacturing technology.

A third of companies in the survey report a typical product lifecycle of either less than six months (9%) or of between six months and two years (23%). In contrast, 28% reckon product lifecycles are between two and five years, 13% estimate five to 10 years, and in 21% of cases it is more than 10 years.

Overall, the trend is towards changing or updating products more frequently.

On top of this, products are also becoming more individual, with a move towards manufacturing in smaller unit numbers rather than volume production. Compared to what they were doing two or three years ago, 60% of respondents say their products are now more customised or personalised, and that they are offering a greater choice of options (see Figure 3).

This kind of flexibility has been pioneered by suppliers like Dell, who allow customers to configure their own PC as part of the purchasing process. Manufacturing to order in this way is a huge challenge in terms of inventory requirements, production scheduling and plant turnaround times.

Indeed, when we asked respondents to identify the main pressure on their supply chain and manufacturing requirements, customer order patterns top the list, cited by 66%.

This is seen as more of an issue than threats from the competition (56%), the demands of new product introduction (50%), raw material prices (48%) or increasing globalisation (38%).

Given this background, it is not surprising that 38% of our sample describe re-engineering their supply chain as an ongoing process, with 46% expecting to be re-engineering on a continuous basis in the future (see Figure 4).

Those who leave their supply chain as it is for any length of time are clearly in the minority. While 22% last re-engineered this area one to two years ago, only 8% did so between three and five years ago and 4% between six and 10 years back.

None has left it longer than 10 years to take a close look at how their supply chain operates.

Moreover, the pace of change is accelerating, since only 14% expect to wait between one and two years before re-engineering in the future, while just 4% plan to leave it as long as a three to five-year timeframe, and none anticipates waiting any longer than six years before making alterations.

Whilst it is true that the majority of organisations (74%) believe they will be re-engineering selected elements of their supply chain – rather than the whole of it (18%) – nonetheless this represents a considerable level of volatility.

The principal reasons for supply chain re-engineering emerge as the need to cut costs, which is cited by 84%, along with the desire to improve service (76%) and increase profits (72%). These aims are followed by ambitions such as improving management decisions (56%), getting products to market faster (52%), and introducing new products.

Another major issue for most companies (82%) is improving communication and collaboration, both along the supply chain and within manufacturing operations.

In order to produce more customised items more quickly, organisations need to be able to pass vital data around the enterprise seamlessly and share information with partners.

Fax remains the most common method of communication, mentioned by 82%, but both the web (78%) and EDI (74%) are attracting widespread use. Half of our sample now use the web for order management (56%) and purchasing (54%), with 46% offering web-based customer management and 34% online supplier management.

Clearly such an approach is bearing fruit, since 79% of the respondents plan to use the web for supply chain activities in future.

Interestingly, given the emphasis many organisations put on remodelling their supply chain in order to cut costs, online working is not widely seen as a way to achieve this particular goal.

Instead, the majority (88%) reckon that the main benefit of using the web is the chance to improve service, along with greater responsiveness (76%). These gains are coupled with shorter timescales (74%) and the opportunity to create an integrated view of transactions (72%).

Improvements such as reduced costs (68%), improved customer or supplier relationships (56%) and improved decision making (48%) come some way down the scale.

There is a hint here, perhaps, that some companies regard having an online presence as a important declaration of a commitment to service, so it is a response to external drivers rather than internal needs.

However, some companies undoubtedly find themselves in a Catch 22 situation. As Figure 5 shows, whilst security issues (52%) inevitably come high up the list of concerns about using the web, companies are equally exercised about the lack of take-up of online services amongst suppliers (54%) and amongst customers (50%).

Unless a substantial body of companies move their supply chain activities online at the same time, early pioneers face paying a substantial bill to create a web-based set of systems which may then be under-utilised.

This is especially true once companies try to get their suppliers involved in online working – and indeed one respondent comments that “B2C is much simpler than full B2B”.

However, half of our sample do use B2B marketplaces and 16% plan to do so in the future. The most common application in this area is procurement (46%), followed by sales (36%) and marketing (24%). Despite some early predictions, adoption rates for auctioning remain quite low (16%).

One reason why companies are moving relatively slowly towards online collaboration may be the difficulties many have with their data.

Organisations need to be sure that their forecasting and supply information is sound before opening up access to

their systems, and yet just 8% claim to be 'very happy' with the quality of the data held in their supply chain and manufacturing applications (see Figure 6).

And while the majority (70%) describe themselves as 'happy' about data quality, 20% reckon to be 'unhappy' about poor data and 2% feel 'very unhappy'. Most are seeking to improve on this state of affairs, however, since 68% say they already have projects in place to tackle data quality.

It is only by going back to basics in this way that companies can hope to make progress with their supply chain and manufacturing systems. As our findings emphasise, there is much more still to do before real benefits come onstream.

● If you are interested in this study, please contact Steve Markwell at PMP Research. Email: stevem@pmp.co.uk.

FIGURE 1: Benefit levels

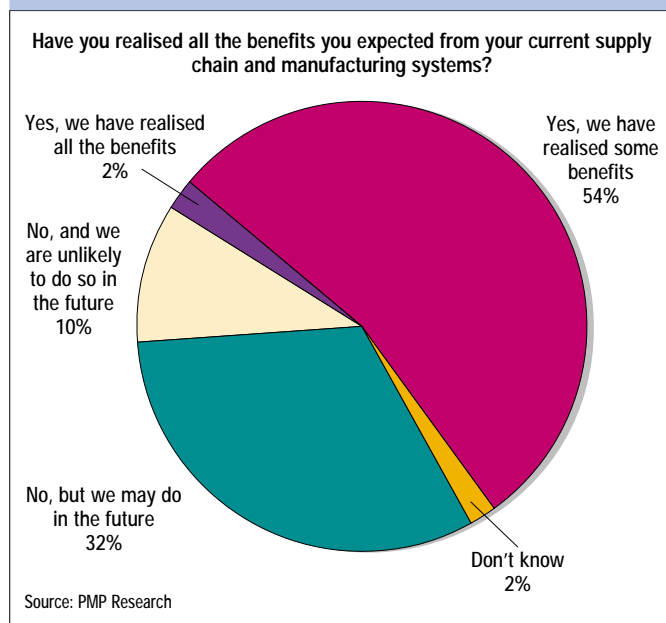


FIGURE 2: Impact of market upheaval

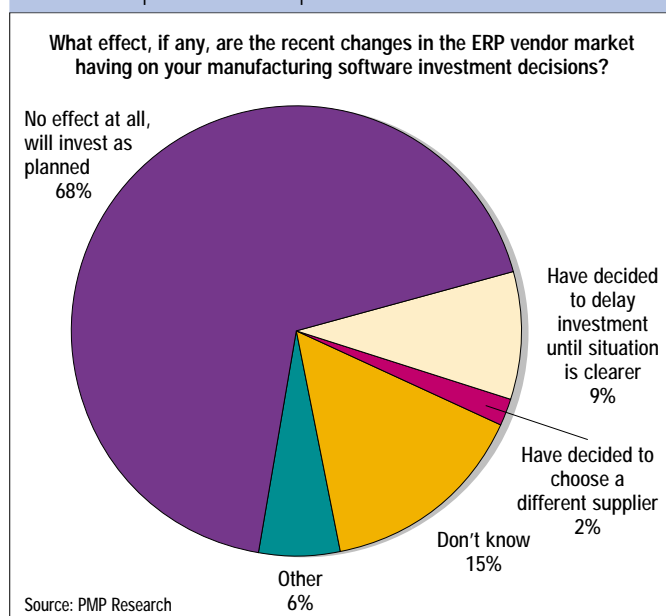
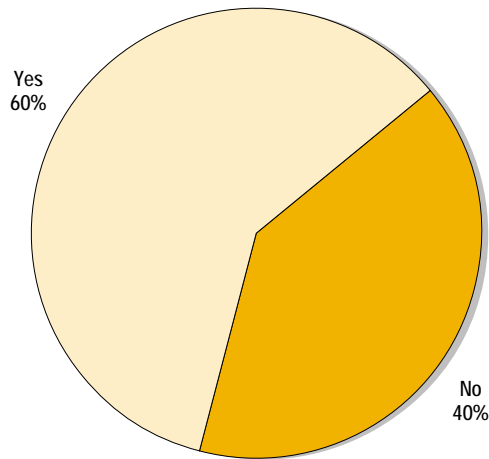


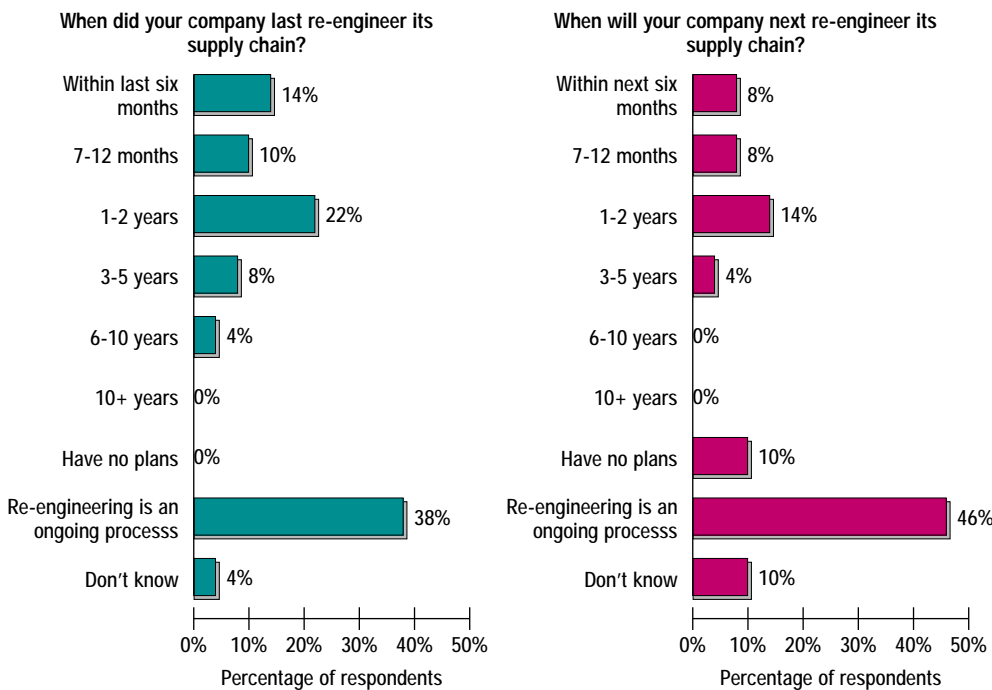
FIGURE 3: Level of customisation

Compared with two or three years ago, are your products becoming more customised or personalised, with a greater choice of options?



Source: PMP Research

FIGURE 4: Frequency of supply chain re-engineering



Source: PMP Research

FIGURE 5: Use of the internet

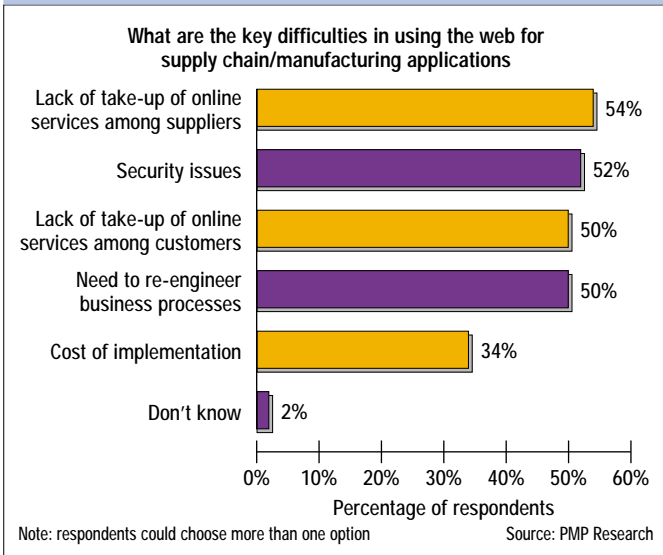


FIGURE 6: Data quality

