SOUPING UP THE SHOP FLOOR

Many companies have acknowledged that supply chain technology is vital and are biting the bullet with further IT investment, reports Pat Sweet.

Getting the supply chain right is an increasingly critical consideration for many companies, and many are prepared to invest substantial sums in the technology designed to help them do just that. But how successful are such implementations? The findings of this year's PMP Research survey into supply chain and manufacturing systems underline how important such applications have become. Half (48%) of those polled, for example, have Board representation for their supply chain operations, and for a third (31%) this means a dedicated supply chain director.

A similar proportion (50%) report that their organisation has a five-year strategy for its supply chain systems and technology. And our research suggests this is unlikely simply to be a large document sitting gathering dust on a shelf, since 72% of respondents reckon to revise their strategy annually, with 6% looking at the issues every six months. None admit to leaving their supply chain strategy untouched (see Figure 1). Yet despite these levels of commitment, just 4% of our sample claim to have realised all the benefits they expected from their current supply chain and manufacturing systems. This may be double the paltry 2% who held this view when we last ran this survey in 2004, but it remains a strong indication that all is not well with supply chain applications.

Part of the problem seems to be that such systems are complex and take time and effort to introduce successfully. It is worth noting, for instance, that half (50%) our current sample reckon they have seen some of the benefits they were anticipating, and more than a third (39%) expect to see gains at some point in the future. In contrast, only 4% rule this out completely, with 3% undecided.

The biggest barrier to achieving benefits is that many internal processes are too inflexible and hard to change, a problem identified by 52% of those we polled (see Figure 2, next page). Lack of management commitment is also seen as part of the problem (38%), along with external influences (31%). And one in five (20%) concede it is simply too early in the implementation to give a balanced view.

Organisations also face a much more challenging environment when it comes to developing supply chain applications. Half (52%) report that the lifecycle of their best-selling product or service is now shorter than it was three years ago. For a third (34%), product lifecycles remain the same, but only 4% have the luxury of a longer timeframe. In addition, three-quarters of companies (76%) say that their products and services are now becoming much more customised or personalised than two or three years ago. The picture which emerges is that companies are having to offer a greater variety of options to an increasingly demanding customer base. And no sooner has a new product or service been launched, than the next is in the pipeline, so constant change is now an inevitability.

FIGURE 1: Strategic approach to supply chain

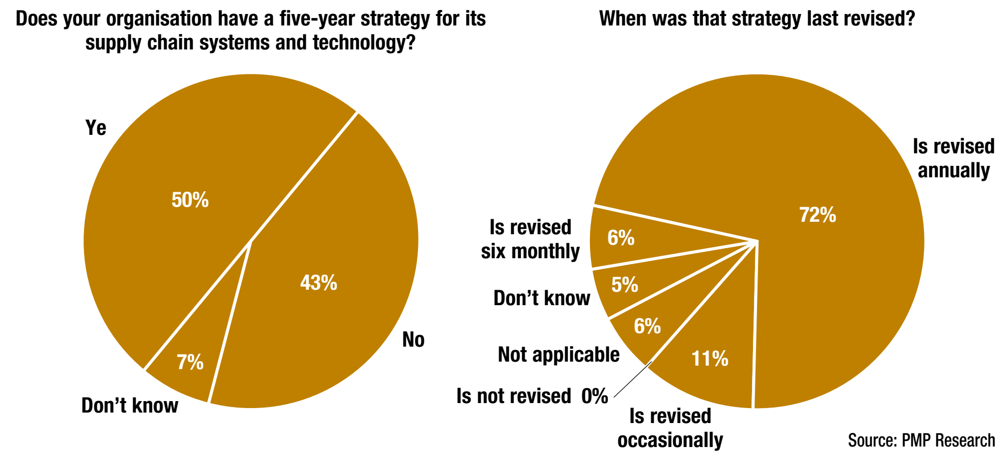
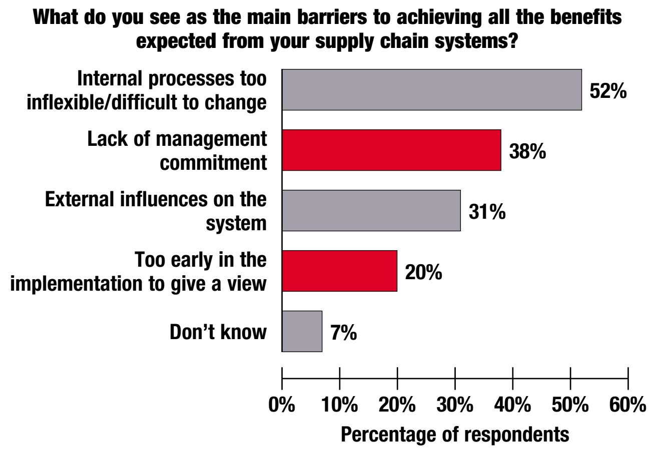
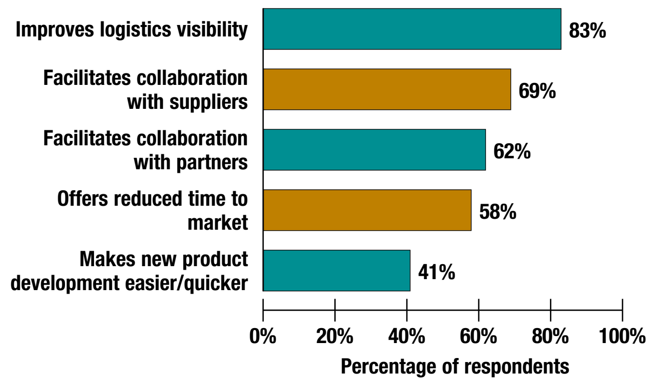


FIGURE 2: Key systems problems



Note: respondents could choose all that apply Source: PMP Research

FIGURE 3: Main business drivers for using the web



Note: respondents could choose all that apply Source: PMP Research

This trend has obvious repercussions within the supply chain, with a quarter of our sample (24%) saying they last re-engineered their supply chain less than six months ago. A further 14% have re-thought their supply chain within the past 12 months, and another 24% over the last one to two years.

Some of the changes can be radical – a quarter of respondents (24%) claim to re-engineer their entire supply chain on such occasions. More typically, companies look at making improvement to one or two discrete areas (59%). The most common reasons for companies altering their supply chain are the need to cut costs, cited by 76%, and the desire to improve service (62%). In essence, organisations want to do things better and more cheaply.

These two factors are driving a new approach to supply chain management where the concept of 'lean' manufacturing is being developed into the idea of an 'agile' supply chain which can respond flexibly to whatever new needs and demands are placed upon it. As part of the move to make the supply chain more responsive, companies need to know more about what is happening along the way, so they can fine-tune inventory holdings and design processes, in order to support new products or services.

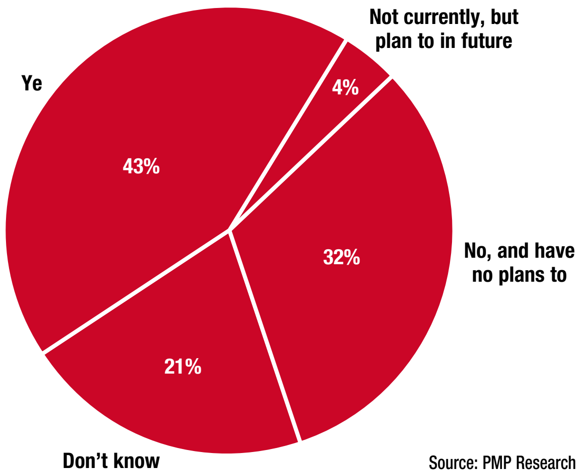
As confirmation of this, a majority (79%) of our sample agree that improved communication and collaboration along the supply chain is now more important than it was two years ago. Interestingly, this year's survey shows that electronic communication is now becoming the medium of choice. While 83% of respondents use fax to communicate within the supply chain, and 69% continue to support EDI, the vast majority (90%) opt for some kind of online services or web-based communication.

Companies are also likely to be using the web to handle transactions in areas such as purchasing (69%), order management (55%), checking order status (51%), supplier management (41%) and selling (41%). They clearly have plans to increase their efforts in these and other areas, since 82% report that they intend to use the web for supply chain activities over the coming year.

Key applications

Once again, purchasing tops the list of potential areas for activity, cited by 72%. Supplier management (58%), order status (55%) and selling (48%) also feature prominently. As Figure 3 shows, the main driver for using the web is the desire to improve logistics visibility (83%). Offering access to supply chain information via the web makes it easier and simpler for a wider community to find out the details they need. Indeed, 69% of our sample believe that online services facilitate collaboration with suppliers, and 62% maintain the web improves communication with partners. However, in practice, the outcomes seem to be subtly different. The belief that using the web will improve relations with external partners is certainly not misplaced: 62% reckon that using the web offers greater responsiveness, and the same proportion cite improved supplier relationships as the main benefit. In addition, 55% maintain that improved customer relationships are also a key benefit.

FIGURE 4: Do you use/plan to use B2B marketplaces?



Source: PMP Research

Overall, though, the top two benefits are revealed as reduced costs (72%) and improved service (72%). In fact, this finding is an encouraging sign that companies are starting to understand how to respond to the key issues they face currently in their supply chain and are finding that technology can support them. But this discovery is not without its difficulties. Getting on for two-thirds (62%) concede that the need to re-engineer business processes is a substantial barrier when it comes to using the web successfully.

There are also concerns about security (55%) and about slow rates of take-up of online services amongst both suppliers (48%) and customers (41%). In the supply chain, as on the dance floor, 'it takes two to tango'. If suppliers and customers cannot be persuaded of the benefits of using the web, then companies will have trouble reaching the critical mass they need in order to see the cost savings and service improvements they seek.

E-commerce

As it is, enthusiasm for B2B marketplaces is muted. In the early days of e-commerce, the way forward seemed to be electronic marketplaces – where companies could buy and sell products and services within a closed community. But most respondents appear to be making steady, rather than spectacular, progress in this area. While 43% currently use such marketplaces and 4% plan to do so in the future, a third (32%) have ruled this option out (see Figure 4).

The most popular use of B2B marketplaces is for procurement, with 34% already making purchases in this way and 10% planning to do so. Auctioning, however, is a route chosen by fewer companies, with only 17% currently signed up and 7% indicating they may take this option in future. As well as improving their communication and collaboration with external partners, including customers and suppliers, organisations also have to think hard about how they communicate internally.

With the move towards creating an 'agile' supply chain, companies need to be able to hold off until the last moment the point at which a generic product has to be customised. To do that requires co-operation between many different links in the supply chain, including the design team, the sourcing department and the delivery operation. The majority (60%) of companies reckon their supply chain is integrated with other key applications, while 68% say they are now making greater use than before of integration tools and technology to link together internal applications.

Whilst joining up different applications and departments is a good move, it is not without its own challenges. Many companies are finding that when they start to combine applications, serious issues emerge around the question of data quality. Indeed, not one of the companies in our survey describes the quality of the data held in their supply chain systems as 'excellent' (see Figure 5, next page). The majority (68%) profess themselves happy that their data quality is good, while 29% are unhappy with their poor data quality.

Given this background, it is not surprising to learn that most (72%) have projects ongoing to improve the quality of the data in their supply chain systems. Despite the fact that many companies have not reaped all the benefits they hoped from their supply chain implementations, most remain committed to making further investments in this area. A third (36%) claim to be investing considerably more than three years ago, while 28% are putting in about the same amount. Only 20% have actually cut their budget for supply chain systems.

Nor have potential purchasers been much affected by the upheavals within the ERP vendor market over the last few

FIGURE 5: Quality of supply chain data

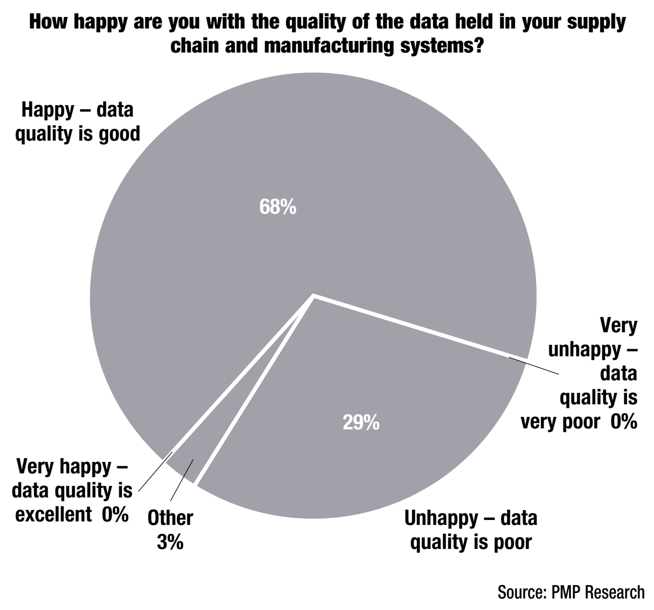
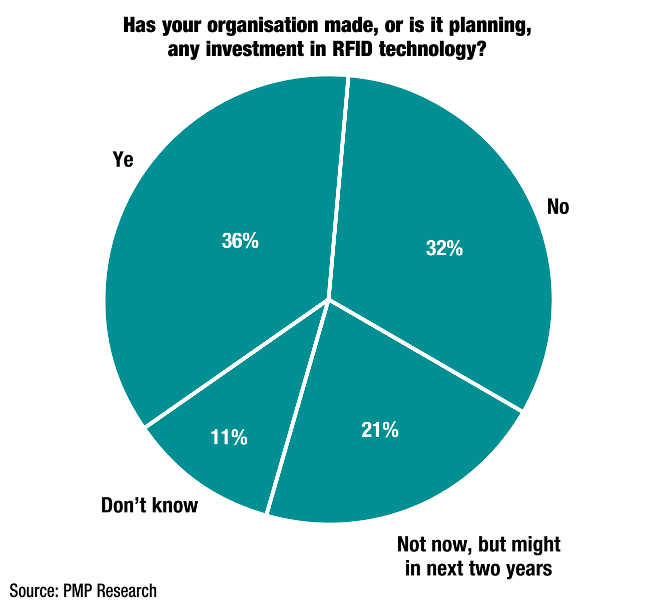


FIGURE 6: RFID strategy



years, which has seen a round of mergers and acquisitions. For the majority(69%), these changes have not affected their investment plans at all. None have decided to opt for a different supplier as a result and only 4% intend to delay investment until the situation is clearer.

Where companies are keen to put their money is into new technology options. One in five (21%) have already made an investment in advanced planning systems (APS) and the same proportion are thinking about doing so over the next couple of years.

Radio frequency identification (RFID) technology is an even more popular choice, as Figure 6 shows, with half the sample saying that they have either already made an investment in this area (36%), or plan to do so (21%).

Better stock control and inventory management is highlighted as the main benefit of RFID (58%), along with the ability to track order or products (51%) and better visibility of work in progress (41%), together with better protection against loss or theft (41%).

But the move towards large-scale adoption of RFID is likely to be quite slow. Half the respondents (51%) are worried about the cost implications. The lack of technology standards (44%) and low levels of consumer understanding (31%) are also seen as barriers.

Overall, this year's PMP Research survey confirms that many companies have an appetite for more supply chain technology. While few have grown fat on the implementations they have introduced so far, most are hopeful that the next generation of developments will give them something to get their teeth into.

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SURVEY STATISTICS

We spoke to a broad range of companies for this year's survey of supply chain challenges. A third (34%) are from the manufacturing sector, 10% come from the chemical & pharmaceutical industry, 10% from engineering, and 7% from the retail sector, amongst others.

The organisations polled are equally varied in size. The majority (27%) fall into the £150 million to £1 billion bracket for turnover, with another 7% reporting an annual turnover of between £1 billion and £5 billion, and 17% topping the £5 billion mark. At the other end of the range, 4% of our sample have a turnover of between £5 million and £10 million, while 17% are in the £10 million to £50 million range.