

Top tools - one-hit wonders or lasting classics?

Some techniques for improving purchasing effectiveness are more popular than others. Andrew Cox and Glyn Watson identify which are top of the profession's chart and how they got there

Like professionals in any other function, purchasers and supply managers are bombarded with wonder cures for all of their management ailments. Consultants, academics, software developers and industry specialists are all vying to make headlines - and perhaps a few bucks - with a tool that will prove useful to their colleagues at the sharp end of business.

But how useful are these tools? Are they simply fads that offer little value to practitioners or are they the first requirement of competence? Are they merely snake oil sold by academics and consultants to gullible practitioners, or are they a way of forcing busy managers to focus on the critical aspects of their businesses so that they can perform to the highest standard possible?

We have recently finished a research project aiming to answer these questions. It showed that some tools are used much more frequently than others.

Purchasing and supply chain professionals find some tools effective and use them frequently. But they do not appear to use others at all.

We defined tools as: structured and codified ways of thinking and acting. In other words, a tool is a software or non-software based system or process that forces managers to ask specific questions and to collect particular information in order for them to arrive at more appropriate sourcing decisions. An extensive search of the existing literature on the subject led to 65 purchasing and supply tools being identified.

The survey of 122 companies found that 42 of these tools were in use, but 23 were not found to be in use in any of the companies surveyed. The five most commonly used tools at the top of the poll were:

1. Vendor rating: a methodology that allows suppliers to be objectively and subjectively rated against one another in the selection process. 40 per cent of respondents used this tool.
2. Purchasing portfolio analysis: a segmentation tool that allows buyers to assess sourcing approaches against market difficulty and category criticality (33 per cent).
3. Enterprise resource planning (ERP) systems: internal database warehousing and information management systems (32 per cent).
4. Supplier development: working with suppliers to improve their competence against defined improvement parameters (25 per cent).
5. Service-level agreements: about the terms and conditions of the services against which a supplier's performance will be measured post-contractually (22 per cent).

Tools also appear to be used more frequently in some industries than in others. Process rather than project-based industries appear to use tools most frequently. Process industries are those where firms deliver standard products and services through routine systems (say, cars or computers).

Project industries are those where firms deliver unique products and services through non-routinised systems (such as one-off construction projects or one-night entertainment events).

Despite this, the evidence shows that tools are not used widely, with the average tool usage being only 3.74 per company. Thus, while 40 per cent of respondents use vendor-rating tools, 60 per cent do not, and 33 per cent use purchasing portfolio analysis, but 67 per cent do not.

This shows that even for the most popular tools, most of the companies surveyed do not appear to use them at all.

Different areas

When tools are used they are focused on very different areas of the sourcing process. Purchasing portfolio analysis and supplier development are linked to the creation and implementation of alternative sourcing strategies, while vendor rating is an operational tool for selecting suppliers once a strategy has been devised. ERP systems and service-level agreements are focused on contract delivery and order-to-payment optimisation.

Tools for procurement and supply activities associated with process optimisation are more commonly used than those for strategising. Process optimisation tools allow managers to improve on the systems and processes that they use to make decisions and manage the order-to-payments process effectively.

In this category, tools that focus on managing performance (such as key performance indicators or benchmarking) account for 20 per cent of usage. Tools that assist with enhancing delivery processes (for example, management information systems or vendor-managed inventory) account for 19 per cent, and IT and Internet applications (such as materials resource planning and ERP systems and online exchanges, catalogues and reverse auctions) account for 16 per cent.

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More strategically focused tools account for 45 per cent of tool uses. Supplier selection and negotiation tools (such as vendor rating or transparency) account for 16 per cent, supplier development tools (such as value stream management or target costing) account for 13 per cent, segmentation of spend tools (for example, the purchasing portfolio matrix or the power matrix) for 10 per cent and tools to assist with make-or-buy decisions (such as core competence analysis or the QV methodology) account for 6 per cent.

This leads one to ask why is it that some tools - like vendor rating and purchasing portfolio analysis - are used more frequently than others, but also why is it that many companies do not see the need to use structured tools at all?

The survey found eight major reasons why practitioners adopt tools:

1. It had always been done that way in the company (status quo).
2. It was learnt elsewhere.
3. It is what was taught as best practice by CIPS/college/university.
4. It was introduced to me by a well-respected colleague.
5. It was in an article or book and seemed like a good idea.
6. It was based on experience and common sense on the job.
7. It was imposed by another function or manager in the business.
8. It was introduced by an outside adviser (academic/consultancy).

The reasons why tools are introduced indicate that this is not an exact science based on a rigorous and robust approach to knowledge management. Rather, the process of tool discovery and implementation appears to be haphazard and based on chance. Furthermore, the fact that many companies do not use tools very much at all requires explanation.

Anecdotal evidence suggests some reasons why tools are not being used extensively in companies. First, practitioners are often unaware of the availability of tools. Second, they are aware of them and have tried them, only to discard them because they believe that the tools are not worth the effort.

But there are more worrying reasons why tools are not being used. For many of the respondents in our survey, the primary reason was a lack of resources or time to be able to undertake structured ways of working and thinking.

Far too many of the respondents were involved at a low tactical level of activity and were firefighting. This made it impossible for them to find the time to think about tools or to train their staff in any of them.

Unfortunately, there is another reason for non-use that is associated with benign and pernicious forms of scepticism. It is only right and proper that the profession whose watchword is caveat emptor (let the buyer beware) should have sceptics who question the value of tools.

But this does not mean that it is also sensible for practitioners to turn scepticism into small-mindedness.

The survey demonstrated that there are a number of unreconstructed sceptics who believe that all tools are of no value whatsoever. There are, however, benign sceptics (pragmatic realists, perhaps) who take a somewhat jaundiced view of the benefits of tools and are prepared to adopt some, but only those that clearly have value for their own business circumstances.

For all of these reasons, and also because of the very low training and competence development budgets normally available to those in purchasing and supply functions, it is not surprising that structured tools are not widely used in the profession.

This is a major challenge for those who believe that rigorous and robust ways of thinking about problems are a better way of developing strategies and implementing them than subjective preference and rules of thumb.

Higher value

This is not, however, to argue that all tools are equally appropriate or valid in use. The survey demonstrated that some tools are more highly valued by practitioners than others. There was no simple correlation between the use of tools and their perceived utility for the firm, or for the function.

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Of the top 10 tools listed earlier, very few score highly in terms of high positive impact on overall performance. In fact, only one of the top 20 tools most frequently used - negotiation procedures (the nineteenth most used tool) - figures at all in the top 10 tools for impact on combined performance, and this is largely a result of the significant impact it is perceived to have at the functional level. Only core competence tools have a major perceived performance impact at the firm level. At the functional level, only supplier development tools make the top 10, alongside negotiation tools.

This seems to indicate that, while practitioners use some tools frequently, the most valuable tools in performance terms may be those that they are unaware of, or that are unique to particular functional or firm requirements.

Thus, at the functional level, some of the most highly rated tools are those focused on particular skill requirements - such as project management and first point assessment - or they provide approaches that are sometimes difficult for everyone to replicate - for example, purchasing consortia, supply chain management and life-cycle costing tools.

At the firm and combined levels, it seems that tools that provide mechanisms to allow the integration of the purchasing and supply function with the business as whole internally and externally are the most highly regarded by respondents. These include electronic data interchange, MRP, supplier managed inventory and the QV methodology that aligns business strategy with operational delivery internally and externally.

This is an important point, because while it is one thing to know which tools are being used most frequently, it is altogether another to understand which tools are the most appropriate when they are used, and under which circumstances they should be implemented.

There is another important point. New ideas take a considerable time to percolate through the business ether, and it may well be that some of the less well-known tools, and even some of those that may not currently be in use in this survey, are the ones that practitioners should be using.

The return question

The problem for practitioners is this. Just because tools exist and are used successfully by someone does not mean that everyone should use them. Conversely, just because someone does not use a tool does not mean that everyone else should follow suit.

So to be fully competent, practitioners need to be able to answer the following question: which of the currently available tools should be used and which will provide the best return on investment if it is implemented?

Clearly this is a very difficult question to answer categorically for all practitioners in all companies. The answer is always that it depends on the circumstances that a company is in, and the resources that are available to practitioners.

Ironically, in practice our survey shows that most companies manage to exist quite happily without the extensive use of tools. This implies that it is possible to survive without them.

The more interesting question is, of course, whether companies that use tools extensively perform better than those that do not. Our experience is that those organisations that use the right tools for the job and implement them rigorously improve their performance significantly relative to those that do not. This view warrants further research.

As always, when one attempts to deal with one issue it raises a host of additional questions. Nevertheless, what is clear from the research reported here is that if practitioners do not know the universe of tools available to them, and do not have a way of understanding their potential utility, then they are disadvantaged compared with those who do.

What practitioners said

'We need people who think, not talk'

Respondents to the survey gave some direct answers to questions about which purchasing techniques they used. All of them illustrate the decision-making process for choosing a tool to do their jobs:

"It's bloody obvious that you have to have some way of selecting suppliers, isn't it? We worked up our own selection criteria and scoring system. It seems to work okay."

"We got screwed! It was like in Dilbert when the dog gets the boss to sign a hardware contract without thinking about aftersales service. We won't make that mistake again. Now we have aftersales service-level agreements in place."

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"My guys are far too busy to spend time with this consulting rubbish - and academics are even more full of crap."

"We use Kraljic's purchasing portfolio matrix. It's what I was taught at university and on the CIPS diploma, so I know it's best practice."

"Look, I've got 10 staff and we manage hundreds of categories of spend. If I could spend just one day thinking about strategy, I would be happy. As it is, I have no chance to do anything but make sure we expedite and sort out payment problems."

"We need people who think for themselves here. Not people who talk about theory that we can't implement or resource."

"I never knew there were so many tools. You don't need them to get to the top here."

"We tried this partnering fad but it was garbage. All it did was allow the supplier to pull the wool over senior managers' eyes. We got rid of it after a couple of years - it was all talk, no action."

"We had this problem with the millennium bug and the supplier's system was compliant with our risk mitigation strategy. So the IT guys decided to replace our system with one that someone else was prepared to guarantee."

Top of the Tools

The top 10 most used tools were...	... and used by...	... but no organisations were using...
Vendor rating	40%	Automatic inventory replenishment
Purchasing portfolio matrix	33%	Balanced sourcing
Enterprise resource planning systems	32%	Contract price adjustment formula
Supplier development	25%	Network sourcing
Service-level agreements	22%	Competitive advantage/strategic vulnerability analysis
Core competence tools	20%	Failure mode and effects analysis
Purchasing cards	20%	Generic sourcing strategies matrix
Key performance indicators	16%	Economic order quantity/Economic batch quantity
E-business buyer-side software	15%	Synchronised production
Management information systems	15%	Vulnerability analysis

Professor Andrew Cox and Dr Glyn Watson are based at the Centre for Business Strategy and Procurement, Birmingham Business School. The findings reported here are more fully outlined in Andrew Cox et al, The Right Tools for the Job (Palgrave Macmillan).

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