

# Excel productivity cubed

The spreadsheet may be all-pervasive in business but its capabilities are limited in scope, so BIOLAP and US publisher PARIS Technologies are exploring extra dimensions in decision support.



Theunis Viljoen and Duane Presti

Developments in information technology have revolutionised the way organisations work. Yet technology can also stifle productivity, trapping people in a systems cul-de-sac and costing companies a fortune. A good example of this is how businesses have used relational databases and Microsoft Excel for analytics, forecasting and modelling, in much the same way for the last 15 years, even though they provide a limited, two-dimensional view of business information. Excel is a good tool but it is a poor data repository and is less than efficient for accessing data from external sources.

Now, however, say Theunis Viljoen, founder of BIOLAP, a business intelligence software consultancy firm, and Duane Presti, CEO of PARIS Technologies, a global software publisher, it is possible to break that paradigm, and instead view business information in a multi-dimensional way via a powerful business intelligence tool, used by management to optimise decision making.

'We noticed a huge gap in the way that most companies work,' says Viljoen. 'In the IT department, people seem to want to solve everything using relational databases. But there is a separate culture of people, typically in finance departments, under pressure to get reporting or analytics done for senior management that tends to want to solve everything using just Excel.'

The difficulty using relational databases combined with Excel is that the user is limited to a rigid data structure in two dimensions, whereas activities like analytics, forecasting and modelling really require agility in order to fully interpret and solve a problem.

'There is an outdated Excel culture in many companies, where people do things out of habit, the way they have for the last 15 years. They really haven't changed the processes around the way that they work with Excel.'

Using existing methods requires a lot of data manipulation, including a lot of manual data inputting. 'It is a clerical nightmare, and extremely unproductive, using highly skilled people to maintain what is, in some cases, many thousands of spreadsheets,' says Presti.

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'One company had people typing sales data into a spreadsheet that took three days to complete. In another, there were 3,000 people crunching in Excel for several hours a day. The failure to evolve and improve the Excel culture is costly; it can be a big part of the payroll and, in some companies, their single largest cost.'

PARIS set about developing a better link between the customer's data sources and the Excel spreadsheet – accepting that these two tools were unlikely to be abandoned by organisations. 'The challenge was to access the data in a customer's database and transform it in a way that Excel can make the most of,' says Presti.

They had three main goals: to improve the lives of people working with Excel, who waste a lot of valuable time doing clerical work; to give IT departments a tool that could be deployed to satisfy the needs of Excel users;

and to help senior management – because a significant proportion of decision support information is provided to management in Excel spreadsheets.

The result was PowerOLAP, which takes the relational data and transforms it into a multidimensional cube, then allowing the user to represent multidimensional information in Excel. It dynamically integrates the spreadsheet, Web browser, relational database and an optimised multidimensional database, creating a single, more powerful, more flexible application. Users notice a number of differences in their business after deploying PowerOLAP, says Presti.

'You are going to notice an improvement in the morale of people who work with Excel. They will be making a greater contribution to the business because they will now have more time to analyse the data that they just obtained from the PowerOLAP cube. This instant access to real-time data is what empowers the Excel user to employ their analytical skills and make a broader, more significant contribution to the business.'

'We guarantee time savings of 25%, but many businesses save up to 90% of clerical time on spreadsheets; it dramatically changes their lives and the way that they use spreadsheets.'

Perhaps the most significant advantage, says Viljoen, is how PowerOLAP helps senior management get the information they need faster than ever to make better business decisions much quicker. 'A huge benefit is the agility of the system in responding to the analytics and reporting needs of management. The decisions that come from that can have a huge impact on the company and be the difference between a good quarter and a tremendous quarter.'

#### Further information

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