Reporting tools — Moving beyond spreadsheets

In a business world driven by KPIs, data visualization is becoming a core competency.

By Jacob Stoller

The spreadsheet has become the virtual “slide rule” for CMAs. It’s used for everything from preliminary strategic plans to financial statements. As with any familiar method, it finds its way into numerous situations where better alternatives are available, most significantly in its widespread use as a de facto reporting tool.

The appeal of the spreadsheet as the quickest way to get a report out is not hard to appreciate. “Excel is probably the most comfortable environment for a lot of financial professionals,” Alok Ajmera, vice-president, professional services with Mississauga, Ont.-based Prophix Software, says. “There’s a very little learning curve, you can effectively do whatever you want with the data, and it works fairly well in smaller organizations.”

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If anything, it could be argued that the spreadsheet is a little too user-friendly. “Once you actually put data into Excel, it’s free-form, and it can be manipulated and modified, either consciously or by accident,” Ajmera adds. “Most financial professionals have tight deadlines, they have to close the books, they have to get the reports out, and during that process, if it’s all relatively manual, you open yourself up to human error.”

Periodic and complex reporting in processes like revenue management or cost management, however, is where the spreadsheet model really starts to break down. “Excel does allow you to poll real-time data using things like pivot tables for instance, but it can be a little bit cumbersome,” says Grant Perreault, application consultant for Edmonton-based IT solution provider SSI Solutions, “especially to re-visualize data that you want to see repeatedly, or once you need advanced capabilities that you can no longer see and present.”

Reporting tools, on the other hand, are designed for accessing multiple live databases. They automate the data access process, resulting in less work once the standard report has been set-up. They prevent headaches such as broken links, and provide protection against errors. As well, they provide a professional looking presentation with minimum effort.
The real advantage of reporting tools, however, is the added power that they give companies when it comes to visualizing their data. “We live in a database-centric world — all of our data is in databases at this point,” Perreault says. “We have so much data coming in from various systems that reporting tools are becoming essential to analyze that data — it’s the only way to visualize it. And being able to visualize your data, I think, is a good first step to becoming a successful analyst.”

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SSI’s business model is an interesting case when it comes to applying these capabilities. As a provider of hosted IT services, the company allocates a number of shared resources — servers, monitoring infrastructure, and staff — to respective clients. “We’re undertaking a new initiative here to organize the organization into discrete cost centres,” says Mark Morpurgo, FCMA, SSI’s CFO, “and so, a big piece here is that we need to allocate those costs from cost centres to operating departments. So the question is, ‘on what basis are we going to allocate those costs?’ The answer will be some form of usage. So we have to come up with some type of measurement that says, ‘here’s our capacity, and here’s how those servers are being utilized according to that capacity.’”

Like many companies, SSI uses SAP’s Crystal Reports for reporting, and typically, they do so with the assistance of IT. “Some people will say Crystal Reports is easy to use, but it’s not that easy,” Morpurgo says, “so we have two people who do that. It’s critical, actually. I don’t think we could run our businesses effectively otherwise.”

The growing use of formal KPIs to measure performance has also put new pressures on analysts’ ability to visualize data. “I think the competency necessary to utilize these tools is higher than it used to be,” Morpurgo says, “and I think we’re moving away from inputting data to extracting data — instead of creating databases, we need to be able to understand how to get in and extract the data from an existing database.”

A lot of this is about understanding how databases are organized. “Everything deals with the tables and the relationships between those tables, and how data is interrelated,” Perreault says, “and so it’s very important to know how your data is being laid out in the database, so it may require some more intimate knowledge if you’re connecting with a back-end system, an internal system, for instance. That I think is probably the biggest stumbling block — knowing the layout of your systems.”

For companies that don’t have the IT resources to help with these tasks, some other options are emerging. “What’s happening with companies like Prophix,” says Ajmera, “is we’re building applications that are meant to be maintained and owned by non-technical finance people. A tool like Prophix is really geared toward helping the transition for the finance people from a comfortable Excel environment to something that’s very similar in look and feel, but more structured ... giving them that ability without having to learn things from an IT perspective.”

Regardless of the tool, however, there will still be data issues. Polling large amounts of data can slow down databases and impact users. There could be security concerns as well — because dynamic reports involve live data, this means that the recipients of the reports are effectively given access to the source databases. “If the information is for invoicing data, it’s fine to analyze that data between multiple sets by internal users at least, but once you start dealing with very sensitive topics, like payroll, you need to be careful,” Perreault says. “You may need to work with your IT department to ensure you have the proper permissions.”

The ability of analysts to design will become more critical as they use tools to generate more sophisticated reports. “The key before creating a report is to sit down and ask, ‘What are we missing? What are the gaps in our performance? And what data is missing to help us determine to make a decision to make us resolve that issue?’ After that, we can produce a focused report,” Morpurgo says.

Ultimately, reports have no purpose unless they get read. “We could potentially have all these reports, and we could crank them out every month,” Morpurgo says, “but are the right people looking at them? Did they just gloss over them? Are they using them to make the right decisions? And six months or a year after a report was generated, has anybody taken a step back and asked ‘Is this still valid?’”

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