## When Do Companies Outgrow Their Spreadsheets?

There comes a time at every smaller, growing company when managers perceive a need for more sophisticated software tools than spreadsheet-dependent planning, budgeting, and forecasting.

Russ Banham and Sam Knox, CFO Research Services June 01, 2004

Pressured by senior management and boards of directors to produce more detailed budgets, forecasts, and performance data, while seeking a longer term view of the financial horizon, many finance executives at midsize companies are reevaluating their reliance on spreadsheets for planning, budgeting, and forecasting.

Many of the financial analysis problems endemic at large, complex public companies — such as finance's need to cut costs and drive profitability, to make financial reports more transparent, and to partner with operating units in business planning — are also prevalent at smaller companies.

Midsize companies have relied on spreadsheets and manual budgeting and forecasting processes since the earliest days of personal computers, and spreadsheets remain the de facto standard for day-to-day quantitative analysis. Indeed, well-crafted spreadsheets may be all the technology a new company needs to get up and running quickly. They are easy to understand and use; nearly all staff have some proficiency with Microsoft Excel.

However, large enterprises in recent years have migrated from spreadsheet-dependent processes toward more sophisticated automated planning, budgeting, and forecasting tools. These tools promise a greater level of operational detail for analytical purposes, more robust financial reporting, quick consolidations of financial data, and more input by business managers. The tools also liberate finance departments from the mundane manual processes of "racking and stacking" data to focus on a more robust understanding of the real drivers of business. As software technology improves and a corps of technologically sophisticated finance executives come to lead new and smaller companies, a provocative question emerges: Can midsize companies derive similar benefits by implementing these analytical applications?

## The Status Quo — "Spreadsheets from Hell"

Most midsize companies depend on spreadsheets and manual processes for planning, budgeting, and forecasting. A recent survey by CFO Research Services (a sibling of CFO.com) asked finance executives at midsize companies about their efforts to transform their planning, budgeting, and forecasting processes. Of the 287 company responses to the survey, 73 percent rely primarily on spreadsheets and manual processes, with only 16 percent using analytical applications, and 11 percent extracting the necessary numerical information from their accounting modules. The prevalence of spreadsheets is not surprising, given the vast installed base, ease of use, low cost, and simple user interface of this commonplace application.

This study found, across the board, that survey respondents believe they spend too much time on forecasting, budgeting, and planning. When asked about the most acute problems with their current planning process, more than 60 percent said it "takes too long." Nearly 43 percent said "not enough time to analyze data," and more than a third cited "lack of ownership by business units." Among larger companies — those with more than \$500 million in annual revenue — the inability to revise forecasts and budgets during the financial period was cited as the major problem.

What are the root causes of these problems? Respondents indicated that human factors such as collaboration among planning participants and uneven technical proficiency were primary causes. "Overdependence on key personnel" was cited by nearly 50 percent of respondents, "version control" by more than 35 percent, and "collaboration, consolidation of users' work" by nearly 35 percent of respondents. These issues add time to the planning, budgeting, and forecasting process, thereby reducing the amount of time left to actually analyze data on operational performance.

## Real Problems in the Real World

Interviews with CFOs at midsize companies confirm these survey findings and shed light on the real world

problems that companies face when running their enterprises off a mosaic of spreadsheets. Warren Green, CFO of One Call Medical Inc., a New Jersey-based outsourcing company specializing in medical services for workers' compensation claims, bemoans the inflexibility, data inaccuracy, and time-consuming aspects of spreadsheets. "With our spreadsheet model, I was unable to do 'what if' scenarios or work flow management," Green says. "I spent more time building and managing the model, and making sure none of the links were broken, than I did managing the data and analyzing it to ensure it fit the strategic plan. Aligning the spreadsheets was a nightmare. A simple change like someone adding an account threw the whole template [of operating expenses] out of whack. But the real drawback was my inability to do an analysis of data to make better decisions, to re-forecast or otherwise plan accordingly."

The finance team at Brock White Co. relies entirely on spreadsheets for planning. And the company's struggle to build and maintain accurate analytical models distracts finance staff from higher value, analytical activities. "It's a hellish process that gets more complex every year," says Ted McArthur, vice president of finance at the St. Paul, Minnesota-based distributor of construction products, with nearly \$100 million in annual sales. "We do 30 lines of revenue per branch at each of our 13 locations, with each line representing a product segment," says McArthur. "If we take an annual salary for someone and spread it over 21 business days in a month, a simple change to 22 business days requires us to change a ton of formulas. We've also had to endure errors, where we've added up sales for all the branches, but we're undermined by the one branch that didn't extend the formula to reach enough rows and missed a whole person's salary." McArthur says that each year the model gets more complex, and "we introduce more potential for error. We need improved clerical accuracy on the budgeting side, where the numbers always add up. And on the forecasting side we need better analysis tools for looking at the business."

Brock White is currently evaluating analytical applications for planning, budgeting, and forecasting with a view toward improving data analysis and engaging more managers in the financial side of the business. Says McArthur, "I want to get away from spreadsheets and publish the data electronically, then push it to more people than just finance or senior management so they can make more informed decisions. I also want to take the resources out of maintaining the spreadsheet-based model and put them into thinking about the business itself."

Re-forecasting in a complicated spreadsheet environment drove Timothy McNair, controller at Pennsylvania-based C.F. Martin & Co. Inc., the well-known manufacturer of guitars and acoustical instrument strings, to rethink the technology behind his planning process. "At the end of 2002, our sales were \$77 million, and we forecast 2003 sales of \$81 million," recalls McNair. "We hit the month of May and realized there was no way we would make the forecast and cut our sales plan back almost 10 percent." C.F. Martin's executive team needed to immediately determine the overall financial impact of the reduced sales plan.

"I spent a week without sleep trying to forecast the impact," McNair says. "Unfortunately, our spreadsheet-based systems were inadequate to successfully provide this analysis in a timely manner. I couldn't take all 50 budget centers and blow down the sales impact quickly to each individual budget, so I ended up doing this top-down, with a new operating plan focused on executive level budgets. We spent the next six months trying to drive the changes down to the responsibility managers who needed the appropriate metrics for measuring their performance against the revised plan. For the rest of the year, we were not as effective as we could have been." Had he used an analytical application for the re-forecasting, McNair says, "none of this would have happened — I would've hit a couple buttons and budget managers would have instantly realized the impact of the re-forecast on budgets, allowing them to make decisions accordingly."

C.F. Martin is currently rolling out an analytical application for planning to its budget managers. "We bought it as a budgeting and planning tool, and the first thing we learned was that it was a great financial reporting tool, much better than our ERP system," McNair notes. "No one ever kept a database of financial performance here because of the spreadsheet-based process and the inferior reporting provided by our accounting module. Now we've got one, and it takes two seconds to use it."

Wastren Inc. considered its former spreadsheet-based budgeting process ineffective, with too many individuals required to contribute to it. "It would take so long before it was completed that two months later when we were into it, it just didn't mean a whole lot," says Tom Kaupas, CFO of the Colorado-based privately-owned waste maintenance contractor, with \$43 million in annual revenues, nearly all from government

contracts. "I needed something that would refresh quarterly," Kaupas adds. "I wanted a rolling four-quarter forecast, the consolidations, and the 'what if' scenarios that I could review — the spreadsheets always came up short. We did a technology versus manpower assessment [as it related to planning, budgeting, and forecasting] and it clearly weighed in favor of applying technology — an automated analytical tool." The company built the tool internally in early 2003.

Interview subjects say poor data integrity and accuracy affect their satisfaction with planning, budgeting, and forecasting. Finance staff at Thales Broadcasting & Multimedia, for example, used to manually key in an entire trial balance for two separate divisions as part of its consolidation process. This was "an enormous volume of line items and numbers, making the process prone to error," says Joan Hartung, manager of financial analysis and reporting at the Massachusetts-based manufacturer of television transmitter systems. "Because this was a consolidation, from a financial standpoint it has to equal out to the penny. But spreadsheets are open to human error. Even I've stepped on a mathematical formula and made it go away, consuming time and resources."

Hartung says the company had a "pretty complex spreadsheet process — the 'file from hell,' we called it — that only one person [in finance] could effectively use at a time. It is huge, and it occasionally locked up the entire computer, and we weren't nearly as efficient as we could have been." Thales recently purchased an analytical tool that it is using for corporate reporting and financial consolidations, and expects to roll out the tool's planning and budgeting features in the next year.

Many users of analytical applications for their planning, budgeting, and forecasting do not migrate completely away from spreadsheets. The survey indicates nearly 70 percent of analytical application users continue to use spreadsheets for local, ad hoc analyses of data from other applications. Companies that use analytical applications for planning, budgeting, and forecasting are generally satisfied with the software. The converse seems to be the case among midsize companies reliant on spreadsheets. Of the 189 survey respondents whose primary planning, budgeting, and forecasting technology is spreadsheets, 20 percent of respondents say their finance staff is "very satisfied," compared with 33 percent of those whose primary technology is an automated analytical application.