

Spreadsheets in Today's Enterprise

**Making Intelligent Use of a Core
Technology**



Benchmark Research
Research Report
Executive Summary

Sponsored by



V E N T A N A
R E S E A R C H

Aligning Business and IT To Improve Performance

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Ventana Research performed this research to determine attitudes toward and utilization of spreadsheets for business purposes. This document is based on our research and analysis of information provided by organizations that we deemed qualified to participate in this benchmark research.

This research was designed to investigate spreadsheet usage practices and needs of individuals and organizations and the potential benefits from improving their existing processes, information and systems. This research is not intended for use outside of this context and does not imply that organizations are guaranteed success by relying on these results to improve planning. Moreover, gaining the most benefit from improving the use of spreadsheets requires an assessment of your organization's unique needs to identify gaps and priorities for improvement.

The full report with detailed analysis is available for purchase. We can provide detailed insights on this benchmark research and advice on its relevance to an organization through the Ventana On-Demand research and advisory service. Assessment Services based on this benchmark research also are available.

We certify that Ventana Research wrote and edited this report independently, that the analysis contained herein is a faithful representation of our evaluation based on our experience with and knowledge of spreadsheets in general and in a business context, and that the analysis and conclusions are entirely our own.

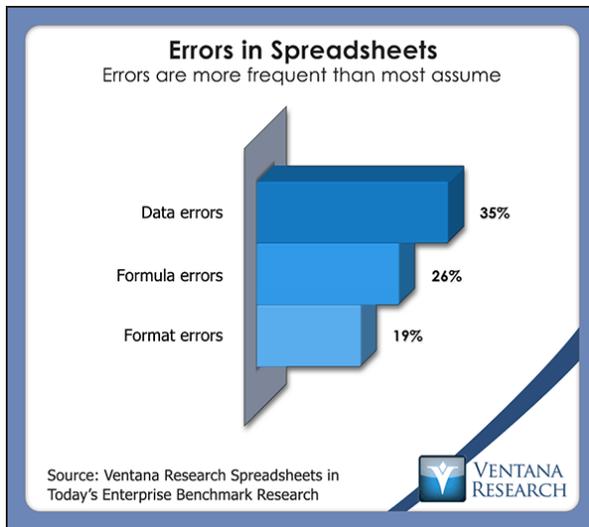
A stylized, handwritten signature of 'Ventana Research' in black ink.

Executive Summary

It is not news that stand-alone PC-based spreadsheets, originally designed to be a personal productivity tool, are ubiquitous in the enterprise, and problematic as well. Ventana Research and other observers have documented their inappropriateness for this environment. When spreadsheets are used in recurring, collaborative processes, their versatility is more than offset by the frequency of errors resulting from the manual entry of data and formulas and the lack of referential and data integrity. For users who rely on this information, these inherent defects pose the risks of making wrong decisions based on inaccurate analysis or of financial misstatement. Stand-alone spreadsheets also pose a security management challenge: It is difficult to restrict access to authorized people and to track who changed what and when; in the worst cases, spreadsheets have been a vehicle for financial fraud.

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In 2004, Ventana Research coined the term “enterprise spreadsheet” to describe products that addresses these issues by in effect marrying a spreadsheet user interface to an application or a database program. Since then we have conducted research periodically to examine developments in the use of desktop spreadsheets and interest in alternatives that can help companies gain control of these tools and overcome the barriers they raise to productivity and organizational effectiveness. We conducted a groundbreaking study of the issue in 2007, and now we have followed up on it with new benchmark research. We undertook this research to discover what has changed since then, to explore trends in how organizations use spreadsheets and to gain insight into the issues that organizations and individuals face when they use them.



We found that participants have greater confidence in the reliability of the spreadsheets they use: More said that the spreadsheets are accurate and timely (49% vs. 35% in 2007) and that reports derived from data in spreadsheets that they receive are very accurate (21% vs. 14%). In 2007, 20 percent said they found multiple versions of a spreadsheet file that do not agree with one another circulating in the business all the time; that is down to 11 percent now. And not as many disagree frequently or all the time about the numbers and

analyses that are done in spreadsheets (51% vs. 63% before). Nonetheless, errors in spreadsheets occur: 35 percent of participants acknowledged data errors, and lesser percentages cited formula and format errors.

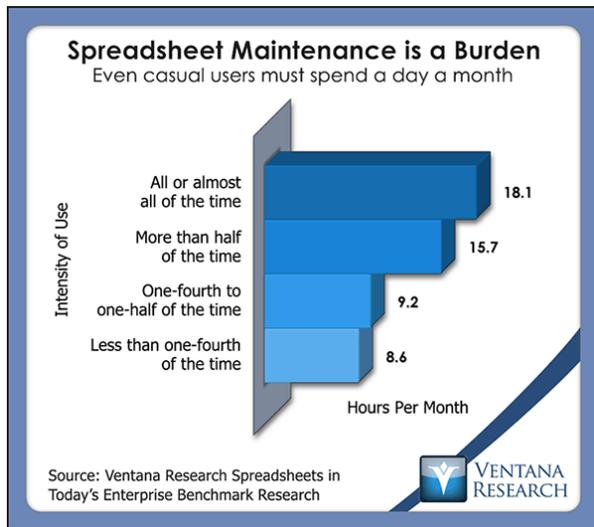
This improved outlook occurs in a context where the use of spreadsheets in collaborative, repetitive processes remains entrenched. Nearly three-fourths (72%) of participants said that their most important spreadsheets are the ones they share with others. Two-thirds use spreadsheets (alone or in conjunction with a software application) to collect data from multiple people and to create reports shared across the organization. Three-fourths use them to summarize and consolidate values that are included in documents, as do about two-thirds to create operational awareness so people know what to do next.

These tools are in regular use by people comfortable with them. One-fifth of participants spend more than half of their time using spreadsheets, and another 16 percent do almost all of their work in them. One-fourth of the total described themselves as extremely proficient in their ability to use spreadsheets, and nearly half (46%) said they are proficient. Almost all (88%) have more than 10 years of experience in using spreadsheets. To summarize, 69 percent of participants said that all or some people in their department or business unit are heavy users of spreadsheets in their day-to-day jobs. The functional areas most often reporting heavy users are Finance (91%), where 59% spend more than half their time working with them, and the Front Office (80%; 52% more than half their time).

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The research shows that users spend significant portions of time in what we call “spreadsheet maintenance” – that is, the updating, revising, consolidating, modifying and correcting the spreadsheets they collaborate with others on and reuse frequently. On average participants spend approximately 12 hours (one-and-a-half eight-hour workdays) per month doing these tasks. For those who spend most of

their time working with spreadsheets, the figure is 18 hours, and the Front Office spends the most time – 15 hours per month – among functional areas. We question how productively these hours are spent.



These findings give some indication of the state of spreadsheet use in organizations, which we assessed in our Maturity Index analysis. In each of the four dimensions by which we segment that analysis, we rank at least two-thirds of organizations at the lowest two of four levels in our maturity hierarchy; only one in eight reach the top Innovative level. They

are somewhat more mature in the Technology and People dimensions, as the discussion about experience with spreadsheets and regular use of them suggests. In the other two, Process and Information, familiarity and persistence are not enough, as time-consuming work-arounds and searching for errors in an ad-hoc manner prevent efficient and reliable information for decision-making.

We explored the impacts of flaws inherent in desktop spreadsheets. About half of participants said they find errors in data frequently or occasionally, some of which are major, and one-third find errors in formulas in the most important process they use spreadsheets for. One in four occasionally have to go back and forth to resolve issues about what is in a spreadsheet, and this lengthens the time it takes to complete business processes. And although fewer organizations than in 2007 have to deal constantly with multiple versions of a spreadsheet file that do not agree with one another, this still happens frequently for one in three. All of these issues increase the time users must spend on tasks that do not serve business purposes directly.

We find it puzzling that people are rather complacent about these encumbrances,

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according to the research. Despite the frequency of errors found in their most important spreadsheets (not to mention the likelihood of others), few of even the most experienced and proficient users said they do rigorous checking to ensure accuracy of the data; half check only when something doesn’t look right, and then they look only at selected cells. Similarly, 55 percent said they spend little time dealing with problems in spreadsheets and that it has no noticeable impact on their productivity; heavy users, however, said more often that such problems reduce their productivity.

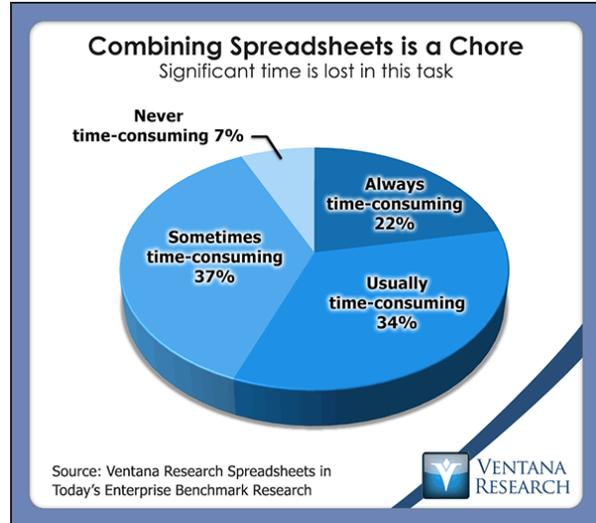
The research also shows that executives, the leaders of the organization, are more complacent about spreadsheet use than those below them: Many said that they rarely see errors in data, formats, design and formulas, and more of them (55%) expressed confidence that spreadsheets are accurate and timely than did others. It’s not clear how rigorously busy executives audit the spreadsheets they use for errors, and in any case, those who prepared the files are likely to have corrected obvious mistakes before submitting them. It appears that many organizations have become inured to the flaws in spreadsheets.

Another sign of inattention to optimizing the use of these ubiquitous tools is the general indifference to proficiency training and testing of skills. Only 8 percent of organizations have regular training sessions; nearly half (45%) offer none at all. We correlate the lack of training with the finding that only 9 percent reported that the spreadsheet skills of the people in their organization are excellent, the same number as said the skills are below average. The impact of training, if offered, and the need for it can be assessed through skills testing, but here even fewer organizations (3%) have a regular program and just 10 percent test skills at all. We have no way to measure the time lost by users who cannot take advantage of advanced features,



but it seems certain that improved skills could help them be more productive.

The combining of spreadsheets is a chore found in 93 percent of organizations, which said it is a time-consuming task; 81 percent of participants said they routinely have to combine data from multiple spreadsheets to perform some business process. The average is five spreadsheets combined at a time, and more than half of users (56%) said that combining spreadsheets is a time-consuming chore. Those individual spreadsheets often from different contributors, even external ones: Two-thirds use spreadsheets to collaborate with people outside the company frequently or occasionally. In addition, participants most commonly use email to communicate questions about important spreadsheets shared with others, and the inherent time lags in that conduit can slow processes even more.



This reminds us that spreadsheets are tools not only for data collection and analysis but also for communicating information. The charts and graphs available in spreadsheets are familiar to many people in business, including those who only consume rather than create them. Almost two-thirds of research participants – and 80 percent of those who spend more than three-fourths of their time working with spreadsheets – find it easy or very easy to create these visual aids. However, that does not mean they are sufficiently useful: One in four said they are adequate for

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only some of their work, and 44 percent they are adequate for most but not all work. Just 18 percent of those from large and very large organizations said spreadsheets are the only visual communications tool they need. Larger companies may have higher expectations for the quality of presentations and more complex information to convey.

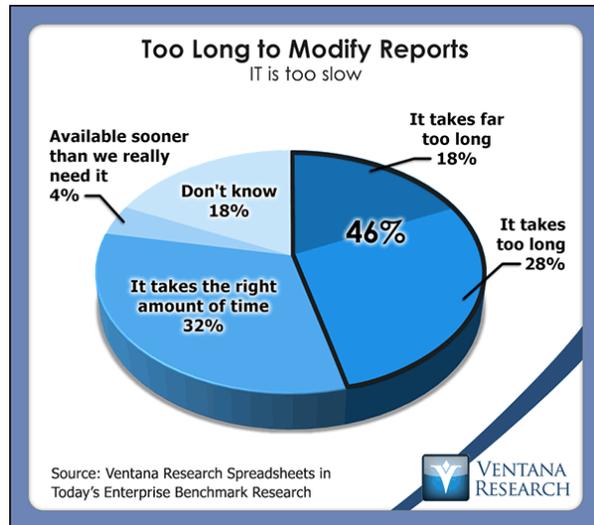
The research identifies other capabilities users desire that conventional spreadsheets lack. More than half of participants

responded positively to all 12 enhancements that we asked about. In particular, three-fourths said it would be useful or very useful if they could make real-time connections to company data from within a spreadsheet; do detailed drill-down analysis within a spreadsheet; find errors automatically in formulas, broken links and references to blank cells; and provide workbooks that decision-makers can refresh and filter themselves. Heavier users of spreadsheets valued these improvements more highly than more casual ones. All of the capabilities on our list are currently available in applications on the market, so users need not make do without them if their value is understood by those who approve investments.

Half of participants are aware of such options, saying that there are better alternatives to using spreadsheets for their most important process. Those from large (71%) and very large (82%) organizations and users in Finance and Front Office

positions (75% each) said this most often. Other findings show that these groups have many heavy users and are more insistent about limitations in their current tools.

Among the other half, however, more said they don’t know whether there are alternatives (32%) than said there are none (19%), indicating that as many are unaware of options. This is consistent with another finding that half of organizations have not produced a formal proposal to replace spreadsheets in important business processes; so far, only 17 percent have followed through to implement a new system, and here again large (23%) and very large (21%) organizations are in the vanguard. One justification is the length of time it takes to modify reports: Almost half (46%) of organizations said it takes too long. This indicates that those with more complex needs and more resources are the likeliest candidates for adopting enterprise spreadsheets. We recommend that all organizations look seriously at the time and efficiency they may be wasting in continuing to use desktop spreadsheets as they have in the past; we urge them to evaluate the advantages in productivity and reliable information for decision-making that they can gain by investing in more capable tools and streamlining outmoded, informal processes.



This Executive Summary is drawn from the full Ventana Research Benchmark Research report. The full report is available for purchase, payable by check or credit card. Advice and focused guidance based on this benchmark research can be purchased through our Ventana On-Demand service. For more information about the full Benchmark Research report or assessment of your organization using our Maturity Index methodology, please contact us at sales@ventanaresearch.com.

About This Benchmark Research

Ventana Research designed this benchmark research for finance, business and IT managers involved in the use of and plans for spreadsheets. The research was conducted in September and October 2012. Applying our standard methodology and quality assurance criteria, we identified 289 qualified participants. They represent a range of organization sizes: 27 percent from very large companies (having 10,000 or more employees), 32 percent from large companies (with 1,000 to 9,999 employees), 23 percent from midsize companies (with 100 to 999 employees) and 18 percent from small companies (with fewer than 100 employees). Most (84%) of these companies are located or headquartered in North America, although many operate globally. Among industry categories, nearly three-fourths of participating organizations provide services (42%) or are manufacturers (30%); finance, insurance and real estate accounted for 18 percent, and government, education and nonprofits for the remaining 9 percent. Categorized by their job titles, three in 10 participants are executives (18%) or in management (12%), and nearly two-thirds (64%) are what we term users in the lines of business. The most common functional areas in which they work are IT (29%) and accounting and finance (14%); myriad other areas were represented, but none by more than 7 percent. (More demographic detail about the participants is available in the full research report.)

About Ventana Research

Ventana Research is the most authoritative and respected benchmark business technology research and advisory services firm. We provide insight and expert guidance on mainstream and disruptive technologies through a unique set of research-based offerings including benchmark research and technology evaluation assessments, education workshops and our research and advisory services, Ventana On-Demand. Our unparalleled understanding of the role of technology in optimizing business processes and performance and our best practices guidance are rooted in our rigorous research-based benchmarking of people, processes, information and technology across business and IT functions in every industry. This benchmark research plus our market coverage and in-depth knowledge of hundreds of technology providers means we can deliver education and expertise to our clients to increase the value they derive from technology investments while reducing time, cost and risk.

Ventana Research provides the most comprehensive analyst and research coverage in the industry; business and IT professionals worldwide are members of our community and benefit from Ventana Research's insights, as do highly regarded media and association partners around the globe. Our views and analyses are distributed daily through blogs and social media channels including [Twitter](#), [Facebook](#), [LinkedIn](#) and [Google+](#).

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