

Financial Reporting Issues



Breakthrough Technology Solves Classic Spreadsheet Problems

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SPREADSHEET ERRORS

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INNOVATION ELIMINATES MAJORITY OF ERRORS

MIND technology empowers companies to eliminate an astounding 75% of the most serious spreadsheet errors.

While studies indicate that as many as 95% of companies today are still using traditional spreadsheets to create and maintain financial reports, experts point out that serious errors are found in an alarmingly high percentage of them. According to one important study by the accounting firm Coopers & Lybrand, a staggering 90% of the spreadsheets audited contained errors. And the dilemma isn't confined to just one study, as unfortunately every study on the subject reports a similar story. As the experts citing the Coopers & Lybrand study rightly insist, “the occurrence of spreadsheet errors is a major problem for businesses and needs to be addressed urgently” [Rajalingham et al].

Business Intelligence products have promised some relief, but research show that most companies aren't adopting them because of their overall high IT costs and they typically don't have the spreadsheet format and ease of use to which companies are accustomed. BI tools tend, in other words, to trade one pain for another. This all highlights that although a host of BI tools exist, developers are failing to really meet customer demand.

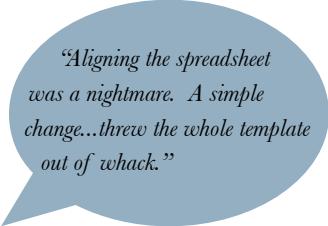
To address this dilemma, a ground breaking advance known as Multi-dimensional INtelligent Data-store™ (MIND™) technology empowers companies to eliminate 75% of the most serious spreadsheet errors. It does so by uniquely retaining the spreadsheet model companies embrace while providing database capabilities usually attributed exclusively to BI products. Paradoxically, MIND delivers the spreadsheet format companies are used to while eliminating the inherent limitations of traditional spreadsheets.

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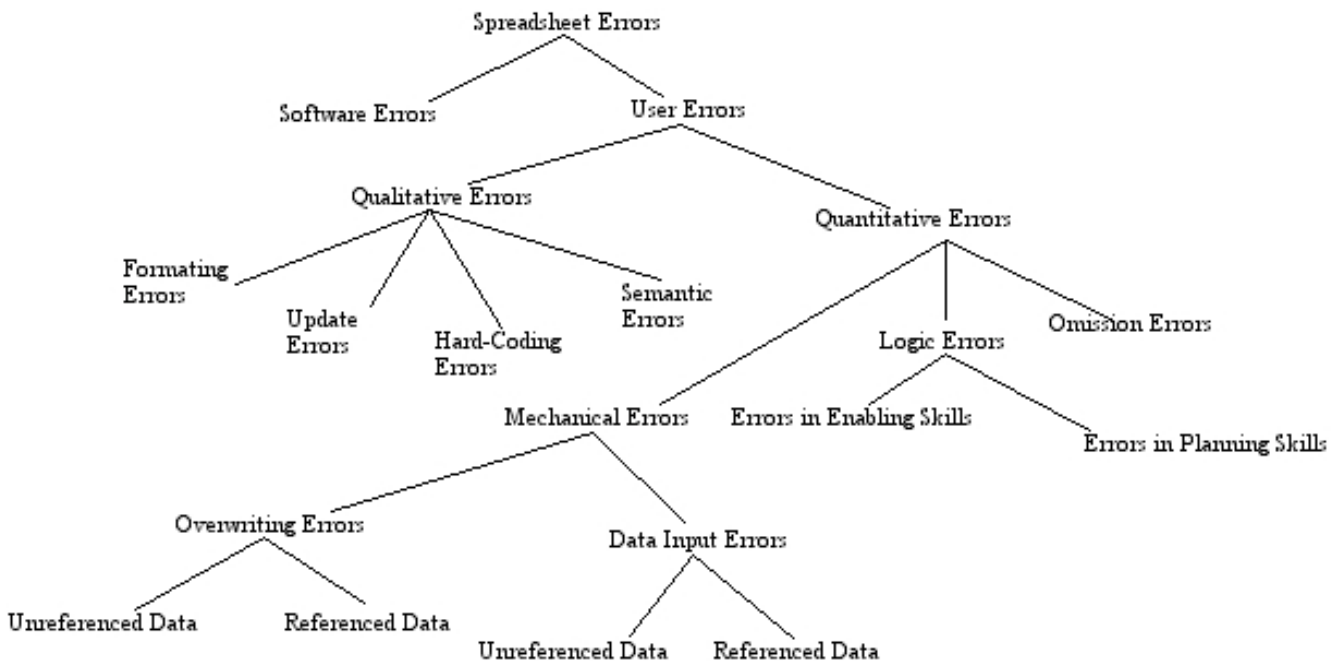
The Dilemmas of Traditional Spreadsheets

Studies show that a company's ability to analyze data and react in a timely manner is greatly reduced because of the onerous work spreadsheets require. CFO Warren Green of One Call Medical Inc. sums the spreadsheet problem up concisely:

“I spent more time building and managing the [spreadsheet] 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” [Banham & Knox].



As problematic as these issues are, they're made all the more debilitating combined with the serious errors that traditional spreadsheets inherently create. The chart below illustrates 16 areas that spreadsheet experts Rajalingham, Chadwick, Knight, and Edwards summarize as error-producing in spreadsheets:



Divided into two main headings, the most serious spreadsheet mistakes fall under Quantitative Errors. Mechanical Errors are mistakes such as pointing to the wrong cell, mistyping a number, or accidentally overwriting data. Omission Errors occur when something is accidentally left out of the report, while Logic Errors are mistakes in writing formulas. As Rajalingham et al point out, creating spreadsheets is very similar to traditional programming because of the technical nature of spreadsheet formulas. And in fact, because most who create spreadsheets aren't programmers, the majority of spreadsheet errors are formula based. What makes these errors especially dangerous is that they're very difficult to detect and correct, costing companies countless wasted hours and thousands, tens of thousands, or even hundreds of thousand of dollars or more.

The reality is sobering for most companies. While they're interested in the database capabilities BI products offer, they're not willing to give up that intuitive spreadsheet look and feel. Given the fact then that most of them say they'll continue to use spreadsheets for reporting, they're facing a major dilemma: a dilemma because spreadsheets present an inherent barrier to being able to analyze key performance indicators in a timely and effective manner.

Solving the Reporting Dilemma

What companies seem to be saying with their habitual use of spreadsheets is that they want spreadsheet ease of use, without the inherent limitations of spreadsheets. To meet industry demand, MIND uniquely delivers an unprecedented melding of database capabilities with the flexibility and ease of use of a standard spreadsheet.

More technically, in addition to a spreadsheet cell's traditional ability to contain labels, numbers, and formulas, MIND empowers a spreadsheet cell with an all-important capability it has previously lacked: the ability to intelligently retrieve actual data.

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For users, this means that instead of tracking numbers by manually entering/re-entering data and constructing complex spreadsheet formulas, MIND allows them to have data *automatically* populated in a particular cell. Behaving in this respect like a database, the cell tracks the data automatically, no matter what changes occur in the report. And while MIND provides the cell abilities only a true database can, users simultaneously retain that spreadsheet look, feel, and functionality with which they're intimately familiar.

Important to anyone creating reports in spreadsheets, **MIND instantly eliminates the most serious spreadsheet errors.** As noted, the bulk of potentially serious errors occur when using formulas to populate cells, or as they're called in our chart above, Logic Errors. Because MIND retrieves actual data most of the formulas users write are eliminated from the start. How? An example will serve to illustrate the point.

When developing financial statements, it's very common for accountants to use formulas to reference numbers on another sheet. For instance, Sheet 1 may contain a Trial Balance from which they need to reference cell B5 for an Income Statement in Sheet 3. A simple enough formula, they simply enter =Sheet1.B5 (or something similar depending on the package). However as commonly happens, the cells in Sheet 1 change because account numbers have been added, thereby rendering the numbers in Sheet 3 - and any other sheets referencing that cell - invalid.

The problem here isn't just that the numbers have changed (which is bad enough), but that the error is very difficult to detect. Difficult of course because the formula is still reporting a number, but now an incorrect one. Because spreadsheets don't track actual account numbers, there are no built-in mecha-

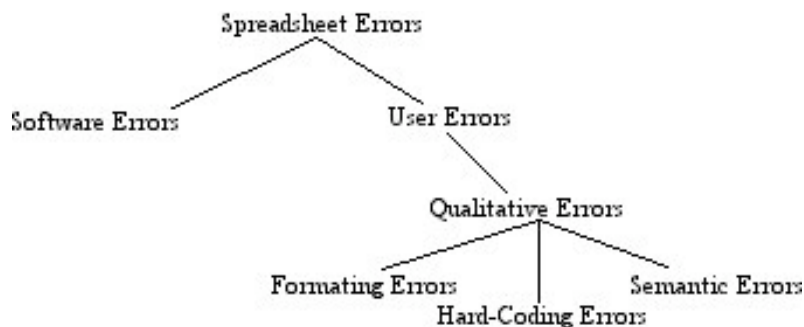
nisms for flagging these kinds of changes. The results can obviously be disastrous. Multiply this instance by fifty or one hundred across multiple sheets, and you have an extremely volatile situation considering accurate reporting of financial numbers is so important to a company's stability.

With a MIND Infused Cell™, accountants have direct access to their chart of accounts in each and every cell and can simply click on the appropriate account number(s), which then automatically populates the cell no matter what happens to the rest of the report. In fact, by entering a range of accounts, they can add account numbers as often as needed confident that the numbers are being accurately pulled in automatically; in other words, MIND does all of the heavy calculations in the background *without* the need for any formulas. Thus the age-old problem of invalidating the results of the report by adding or deleting account numbers becomes obsolete.

Importantly, MIND has literally redefined the *nature* of a spreadsheet cell. It eliminates the need for a formula to populate cells with number values... numbers which are so easily invalidated. This fact alone represents a **major technological breakthrough** with immediate application for virtually every business utilizing spreadsheets.

Mechanical errors are also virtually eliminated with MIND. Much of the time, accountants will re-key data from their ERP/accounting system back into a spreadsheet - overwriting or omitting data in many instances - in order to have them in a spreadsheet. The problem is that re-keying data opens the door for all sorts of input and omission errors. And research demonstrates that to be exactly the case in a high percentage of spreadsheets. Again, because MIND empowers the *cell* to retrieve data directly from the actual database, errors of this sort are a thing of the past. There's absolutely no need to re-key information or overwrite data because the MIND infused spreadsheet retrieves data directly, and automatically re-calculates the numbers based on up-to-date account numbers. Needless to say, omission of important data is eliminated as a matter of course, and, for the same reasons, so are Update Errors under the heading of Qualitative Errors.

To visualize how dramatically MIND reduces potential spreadsheet errors, we can reconstruct the above chart as follows:



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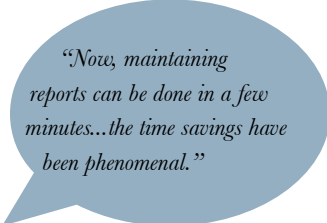
As can be seen, MIND eliminates Mechanical, Logic, and Omission Errors, along with their respective subcategories. It also eliminates Update Errors, but the same possibility of Formatting, Hard-coding, and Semantic Errors remain because MIND retains the flexibility of spreadsheets: in fact, it remains in these respects an actual spreadsheet. However, while it doesn't remove the possibility of these particular errors, it takes great strides in purging the more serious errors from the spreadsheet model affecting bottom lines – at least 75% percent of them, or from Rajalingham's 16 to only 4.

A Case in Point: Company Dramatically Slashes Reporting Time & Increases Accuracy

Sharon Swander, Controller at Sydcor Enterprises in Austin Texas, reports that MIND capabilities have had dramatic affects on her company's ability to analyze data. Before implementing a product with MIND technology called Synoptix™ (also available in ReportsPro™ and Made2Manage Systems' Advanced Reporting™), it could literally take her a full day to complete company level financial statements in a traditional spreadsheet. Like many accountants, she was having to either re-key or import financial numbers into a spreadsheet, and then manipulate it from there to meet corporate requirements. “Maintaining complex financial statements was a nightmare, because if I needed to add an account number or just update the balances for a journal entry, it created significant extra work having to adjust the cells and re-check formulae so that our numbers didn't end up wrong.”

Swander points out that the inordinate amount of time it was taking to create and maintain financial reports from Sydcor's software system was hampering management's ability to make critical business decisions in a timely manner. After implementing Synoptix, Swander was able to dramatically reduce the time it takes to create and maintain reports.

“Reports that used to take me up to a day to create the way corporate wanted to view them can now be completed within a matter of minutes. As far as report maintenance goes, there's absolutely no comparison to traditional spreadsheets. Now, maintaining reports can be done in a few minutes, and if I need to add account numbers I simply point and click and Synoptix does the rest. Not only this, but I don't have to waste time doing research for other departments any more because, with Synoptix' security features, managers can access the information they need on their own. The time savings overall have been phenomenal.”



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Conclusion

In the end, with a MIND infused spreadsheet cell users have the best of BI tools with their ability to track and analyze data, and the best of spreadsheets with their intuitive format - without the traditional drawbacks of either. MIND technology has successfully bred the power of a database with the spreadsheet format, enabling users for the first time to create and maintain reports with the ease of spreadsheets, but also with database functionality at the heart of each and every cell. Companies are able to maintain the flexibility with formatting they seem to appreciate, but are relieved of 75% of the serious errors afflicting the majority of spreadsheets.

For a free demonstration of ReportsPro, contact us at (801) 253-9522, or by email at sales@reportspro.com.