

# HOW SPREADSHEETS INCREASE YOUR REPORTING RISK

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WHITEPAPER

BY KEVIN BRADY, ARMTECH, AUGUST 2010

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## HOW SPREADSHEETS INCREASE YOUR REPORTING RISK

### ABSTRACT

Companies rely heavily upon spreadsheets to close their books and meet the disclosure requirements under GAAP. Data is taken from various parts of the financial reporting system and is then analyzed offline. This creates reconciliation and security issues. The use of subledgers, which are embedded within the financial reporting system, directly addresses these issues and provides a collaborative environment for problem solving.

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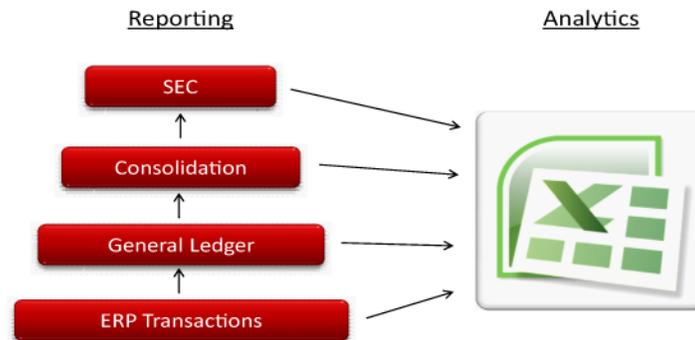
There is little doubt that spreadsheets are the killer application of our time. They are everywhere and are used to manage tasks, both large and small. Easy and inexpensive to use, spreadsheets began in finance and quickly moved to other fields as the de facto solution for any computation. But every success overreaches itself and spreadsheets are no exception.

Spreadsheets are now used to handle extremely complex calculations. What might have started as a simple exercise often grows to encompass many new functions and calculations not originally anticipated. Maintenance of cell references and formulas across many thousands of rows and columns becomes a task in itself. All this distracts from the original purpose of the spreadsheet, because the dependencies multiply exponentially, and require a good deal of attention to ensure their internal integrity. Higher volumes of data exacerbate the problem, increasing the consequences and likelihood of error.

In financial reporting, spreadsheets are often used outside of the accounting systems to deal with one-off calculations and analysis. The results are then passed back into the system as journal entries or supplemental disclosure. See below for an illustration of this process.

## ANALYTICS WITH EXCEL

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While convenient, the use of offline spreadsheets creates many reconciliation issues. For example, transactional data taken from ERP systems and used to support disclosure at the consolidated level must be continuously reconciled. This presents a risk that late entries at the consolidated level will be missed, resulting in the misstatement of disclosures.

Spreadsheets can also increase risk in financial reporting due to their lack of consistency. Reasonable minds can differ about the best way to make a given disclosure. Spreadsheets do not provide a clear audit trail as to decisions taken or changes made. The lack of transparency can lead to inconsistency, even among the same users.

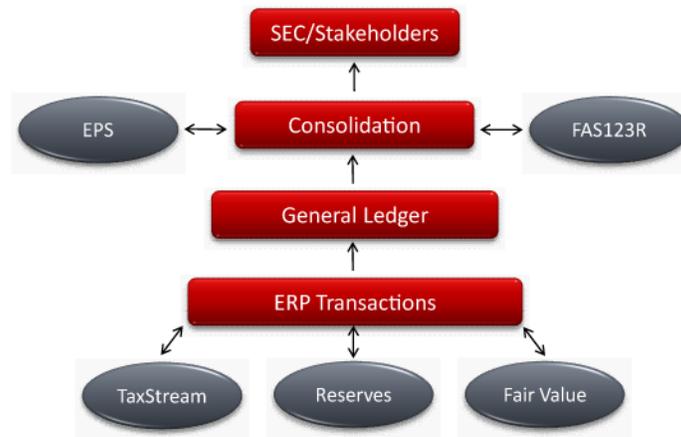
While spreadsheets are inexpensive, there are many hidden costs such as the effort of auditing them. In order to verify accounting calculations, auditors must check individual cell references and versioning. It is difficult to achieve efficiencies by sampling because the spreadsheets are not structured databases and can be changed at any time by their authors. This increases the cost of audit and review. The cost of replacing a spreadsheet when someone leaves can also be quite high, as the new employee often takes a different approach the analysis, and prior work must be re-created.

Lastly, spreadsheets can present a serious security risk to the financial reporting process. Many sensitive calculations are attached to e-mails and distributed widely throughout the company. A common example is earnings per share, probably the most critical number that the company releases each quarter, which is often passed around in e-mails days before the earnings release. A leak could have serious, even criminal, repercussions for management.

There are a number of ways to replace or improve the use of spreadsheets in the financial reporting process. Structured sub-ledgers, which are embedded within the financial reporting system, provide an alternative to offline analytics. See below for an illustration.

## ANALYTICS EMBEDDED WITHIN REPORTING

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A structured subledger is a system that is dedicated to given reporting function, such as the tax provision (TaxStream) or equity compensation expense (EquiLink). Each subledger contains standard calculations and functions needed to complete that disclosure.

Out-of-the-box reports ensure that all that tables and rollforward schedules necessary for footnote disclosure are automatically generated. A common import engine enables the mass loading of data from multiple sources, including offline. This significantly reduces the number of reconciliations for the following reasons:

- Transparent audit trails for all data loaded into the subledger
- Standardized calculations eliminate the need for constant monitoring
- Reports form the basis of journal entries that are booked to the accounts of record

Each subledger is both collaborative and secure, with users having restricted access to the system. For example, auditors can be granted read-only access to reports, so that they can review without having to disrupt management.

Spreadsheets can be brought into the financial reporting system using a number of new technologies that are available on the market. These technologies combine the flexibility of spreadsheets with the scalability and security of a structured database. It works like this. Data is collected in the subledger and is selectively pushed out to a spreadsheet template. The spreadsheet returns new values to the subledger, where they are stored and can be used to populate reports. The solution is scalable in the sense that a single template can be used many times. For example, key datapoints of a loan or investment portfolio can be pushed from the subledger to a single template that performs an amortization calculation for each asset in the portfolio. The results are then pushed back to the subledger for analysis and reporting, combining the flexibility of spreadsheets with a structured database.

Subledgers can be web-enabled, allowing off-site users to enter the information that is needed for the close. For example, a company that needs certain details from a remote branch or an outside consultant, can gather the data from webscreens that are selectively and securely exposed. This becomes a permanent part of the subledger where it supports the ultimate disclosure.

## SUMMARY

In conclusion, we are living in a post-spreadsheet world, where dedicated subledgers can replace or incorporate analytical and reporting tasks that have traditionally be done off-line.

The use of embedded subledgers can bring the following advantages to financial reporting:

- Reduced number of reconciliations
- Automated data import
- Permanent process improvements
- Standardized calculations
- Out of the box reporting and disclosure
- Reduced reporting risk

### **About the Author**

Kevin Brady is the CEO and Founder of ARMtech. He is the lead director of Annaly (NLY), currently traded on the New York Stock Exchange with a market capitalization of \$ 10 billion, and has served as the chair of the audit committee for 12 years. Previously, Kevin was the CEO and founder of TaxStream, which was sold to Thomson Reuters in 2008. He can be reached at (201) 238-2900 x 0237 or [kbrady@armtechnology.com](mailto:kbrady@armtechnology.com).

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