Reducing the risks

Following last month's article on the need for scepticism when it comes to spreadsheets, **David Macey** looks at how you can manage and minimise the dangers of using them

In the current economic downturn the consequences of spreadsheet misuse, whether fraudulent or not, could impact a business's operation more severely than in earlier, more comfortable, economic times. It may be that banks went into the current crisis with business and spreadsheet models ill-equipped to handle stresses of the severity encountered. If it can happen at corporate level, what chance for smaller enterprises? The consequent threat posed to businesses by such powerful 'end user' spreadsheet applications – mainly in the hands of untrained users – is immense.

So, what can be done? First, we need to recognise that models can weaken over time if badly used. Following initiation, they usually produce useful results. However, as changes and amendments are made through time, errors can be innocuously introduced, thus changing model functionality and results. It is fundamental for an organisation to maintain control of its spreadsheets and to have clear policies and procedures for vetting, sanctioning and recording any amendments. Adequate control processes, carried out correctly, can maintain the integrity, credibility, transparency and usefulness of the model and extend its lifespan.

Managing spreadsheet risk is vital. This may require new procedures, which staff will need to accept as a necessary part of good practice. Spreadsheet control processes should be auditable and the integrity of all key spreadsheet results evidenced to levels of reasonable assurance. This can be broken down into three main areas:

*1. SPREADSHEET INVENTORY

Are you aware which spreadsheets are critical to your business? Do you know where the critical spreadsheets are located? A major aim of an inventory is to identify business-critical spreadsheets, noting their purpose in the organisation and their owner. It should be clear what sensitivity and significance is attached to each spreadsheet. Spreadsheets that are not business-critical should be noted as such and separated from those that are.

Finding all the spreadsheets on your network can seem like a daunting task, but there are specialist tools and software packages that can help with this process. The real magnitude of the task will become apparent when the audit reveals the number and location of files stored. Searching the folders on the network may reveal potentially key spreadsheets hiding in surprising places.

Weaknesses in auditing and revision control could result in different versions of the same base file. Consequently, the risk of errors increases when it is not possible to track, isolate and test changes. The 'last modified' date may be an indication of when the file was last used, but this does not indicate who last used it and if any changes were made.

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Managing risk in the downturn

It is for the senior management team to decide how they assess risk during the current economic climate.

Nevertheless, stricter financial regulatory measures are likely to avert a crisis. Review of internal risk associated with spreadsheets is an area that has received scant attention. Applying simple controls should be regarded as money well spent when set against the consequences of inaction.

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*2. MAINTAIN MODEL STANDARD

Models need to be tolerant to change throughout the lifecycle of a business. It is easy to mix up old and new models if versions are not monitored. The result can be that (assumed) raw data is input to an old version, manipulated in accordance with incorrect formulae, delivering outputs that are wide of the mark.

Defining what a spreadsheet should do and how is fundamental in the discipline of spreadsheet risk management. The model specification should be written in development, ensuring that all those involved in the process have had the opportunity to understand, discuss and challenge what the model will do.

A specification document or user guide should be maintained and would be more reliable than picking the brains of the designer or a colleague. If the documents are not available, the reliability of the spreadsheet can be in doubt. Proper management of spreadsheet risk should include completion of one or both of these documents.

In addition to the specification document, version control details should be maintained. All modifications to the model, the business drivers for them, testing completion date and the person responsible for the work should be noted.

*3. ACCESS CONTROL

Good practice tells us that organisations need to establish a hierarchy of control over their spreadsheets based on the degree of risk posed. Lack of security, combined with the lack of auditing, can make it easy for someone to commit fraud. Generally, if someone has permission to open a spreadsheet, they will be able to modify any part of it. Controls can protect specific cells, a worksheet or a workbook. Worksheet protection restricts the user from attempting to edit a protected cell. Workbook protection is used to avert the user from performing structural changes to the spreadsheet. Folder access restrictions may be advisable too.

It may be necessary to set up a password for the user to open or modify the spreadsheet. If a spreadsheet template is to be accessed only by approved users, the file should be stored in a protected folder on the network. Periodic reviews of folder permissions should be performed.