

Using spreadsheets for risk management – a disaster in waiting!

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It would appear to be a no-brainer – we need a risk register, so let's use a spreadsheet. After all, it's just a list of risks and associated information, so it should be easy, shouldn't it?

I have lost count of the number of times that I have had to pick up the pieces of this approach. This is usually at the stage that everyone involved has found that the resultant spreadsheet doesn't meet the needs of the project/programme/operation/strategic vision.

What has happened?

Problem 1 – The Quicksand

It is remarkably easy to put something together in a spreadsheet that looks reasonable. That initial ease of development seems to act like a quicksand since, as the life of the spreadsheet progresses, different reports are requested, sucking in ever-increasing spreadsheet development. Spreadsheets impose a two-dimensional matrix data representation, and many aspects of risk management do not fit onto that model. I have come across some large organisations with whole teams engaged in just programming and manipulating spreadsheets to overcome this, rather than concentrating on risk management.

Problem 2 – Spreadsheets are NOT free

Unfortunately a common fallacy is that using spreadsheets is free. Well I am sorry to say that they are not - even if we overlook the small licence fee you may have paid for Excel as part of Microsoft Office. To build up your spreadsheet in the first place, someone will spend many hours planning, programming, testing and then – hopefully - documenting and training. Even if they only put in one month's worth of effort to do this, their time will still cost the organisation many thousands of pounds. Feedback from contacts then suggest they spend at least 2 days a month maintaining the spreadsheet when things break, requirements change or a new report is required. Even at modest employment costs (including overheads) at £300 a day this is costing £7200 a year for one person doing this. Even if they are an expert on risk and spreadsheet programming and maths then the month they took to develop and test it initially (costing £6000) simply can't compete with the level of quality, accuracy and functionality that a tool can provide after tens of man-years development effort.

Problem 3 – Bad Maths

Sadly, I have yet to see a risk management spreadsheet that gets the maths right! I have seen hundreds, almost all with very simplistic calculations. Yes, we should all know that risk severity = risk impact x risk chance, but even here there is confusion. The calculations of the effects of actions (controls) on risks is where the trouble really starts, with a misunderstanding of the differing effects of actions that a) try to reduce the chance of a risk occurring, or b) those that limit the damage if it occurs. What does that do for accounting for the action impacts? You don't know?

Problem 4 – Spreadsheets don't share

A spreadsheet is just a file, so shouldn't it be easy to just let everyone get at it? The problem is that multi-user access to spreadsheets depends very much on type of spreadsheet, and how and where it is stored - something the user is frequently unaware of. Even then, true multiuser integrity in

complex spreadsheets may not be guaranteed. So it is necessary to either have a procedure for managing sequential access to the sheet, or constraining access to specific areas, or running the risk that it may not be reliably accurate.

Risk management tends to be driven by risk reviews, when everyone involved is trying to modify information at the same time. If access to the spreadsheet is sequential, or someone is collecting everyone's changes and then inputting them, this will slow the whole process down to single user access. If simultaneous access is allowed, are you sure that integrity is being maintained?

Problem 5 – What differences?

It is really important to understand what has changed at each review. Spotting changes between spreadsheets is a tedious and time-consuming job, and remarkably difficult to automate. Asking everyone involved to highlight their changes is one thing, but ensuring that they have done so is difficult. So inevitably, changes get missed, especially small changes that may be early indicators of a growing problem.

Problem 6 - Spreadsheet variations

Changing a spreadsheet is easy – in fact too easy! I know of one large UK organisation whose risk manager decided to have two types of risk management spreadsheets: One for each project/programme/operational centre, and one to aggregate the results of the first type. These were released into the organisation for use in all UK projects and operations. Within two years there were 40 different versions of the first spreadsheet type, and 6 versions of the second type – all incompatible! Every spreadsheet had been “tweaked” as various users thought that they could do better, changing calculations, adding fields, changing assessment criteria etc. That risk manager was spending 50% of his time manually cutting and pasting between sheets each month to get to a consistent result – a total waste of his expertise and time.

Problem 7 – Presenting the information

Spreadsheets are great for showing columns of figures and graphs. They are not so good at showing information in ways that we can easily assimilate – priority matrices (heat maps), inter-relationships, summaries. Yes, I know that such displays can be produced with either a substantial programming effort or a lot of cut & paste, but those offer plenty of room for error and are labour-intensive.

Strangely, I have also noticed a number of large organisations exporting information from some risk management tools to spreadsheets, and then trying to produce complex dashboards in Excel. The labour needed to achieve this is immense. It is an indictment on those specific tools, but begs the question – why not use risk management tools that have these facilities built in?

Problem 8 – Audit trail?

I have yet to see a spreadsheet solution that manages any sensible form of audit trail. Historical and audit information is very useful for:

1. Spotting trends – seeing how an assessment, risk (or action) has changed over time
2. Seeing who has changed what, when and why – and also who hasn't done anything?
3. Having a historical record of decision-making, to understand why a situation arose or how a risk was eliminated – of vital importance in the event of disputes.

Achieving this reliably with spreadsheets is virtually impossible.

Problem 9 – Spreadsheet Security

This is a contradiction in terms! Spreadsheet passwords can be circumvented easily – and no, I’m not about to tell you how! Spreadsheets are also files, and files can be copied, leaving no trace. Risks are, by their very nature, commercially sensitive, and thus of value to the business, and possibly to others. So storing sensitive information in a format that is easily replicable without trace is not such a bright idea, is it?

The Solution – Use the right tools for the job

The solution by this stage should be obvious. Select a risk management tool that supports your projects/programmes/operations/strategic vision. Things to look for should be:

- **Multi-user**, encouraging collaboration and capable of supporting any number of users simultaneously
- **Availability** – accessible wherever your users are, preferably on any device that they might be using i.e. PC, Mac, Chromebook, tablet or even phone
- **Security** – secure storage, secure transmission links, user security, security of each assessment and update security should all be catered for by default
- **Ease of Use** – most users will be using the RM tool occasionally, so it must be easy and intuitive to use
- **Instant reports and displays** – no waiting for long complex calculations or queries, and a full range of instant reports that can be customised to the users’ needs, to ensure that each user gets the relevant information for him/her, and is not swamped with irrelevant information.
- **Consistent calculation** – all calculations handled consistently by the RM tool.
- **Configurability** – the ability to configure the RM tool to use the risk classifications, assessment criteria, impact ranges and chance ranges that are used in your organisation or by your client.
- **Dashboard facilities**, if required. However you may find that the tool’s standard displays are sufficient
- **Excellent support**, including seamless upgrades (meaning that you don’t have to change any data for an upgrade), prompt help-desk support and customisation services if needed.

And finally:


- Ability to make sense of your spreadsheets, import what you have done so far, and knock your risk assessments into shape!

After all, you wouldn’t plan a project with a spreadsheet, would you?

Visit our website at www.riskaid.co.uk to find out more about our RiskAid approach.

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