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Efficient Reserving: What is Excel Best Practice?


Paul Fox and Philippa King, Ageas Insurance



20 June 2018

Agenda

1. What was wrong
2. What we did
3. How we did it




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1. What was wrong

Apertise
Sponsorship
Thought leadership
Progress
Community
Sessional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Support

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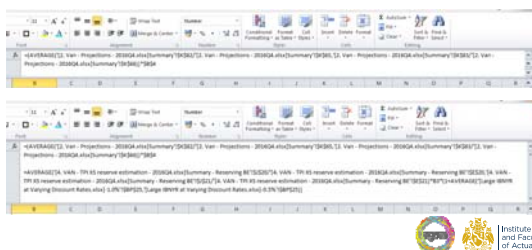
Organic growth of models



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"I was just doing it quickly"



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"Why did that number change?"



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“Why doesn’t this reconcile?”

2 + 2 = 4 | 0 | OK



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“What does this number mean?”



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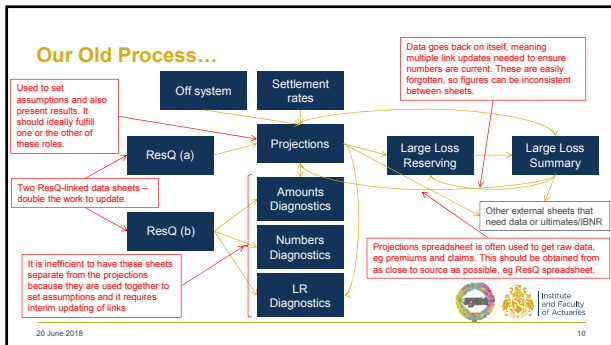
8

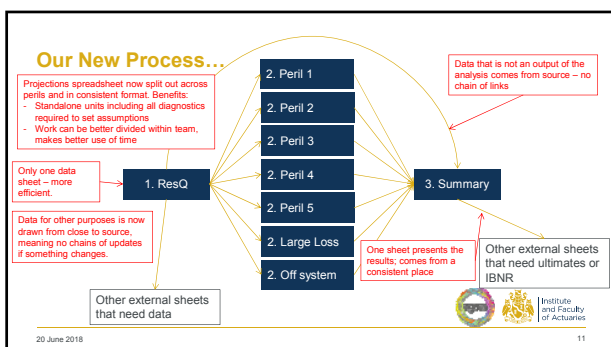


2. What we did

Sponsorship
 Thought leadership
 Progress
 Community
 Seasonal Meetings
 Education
 Working parties
 Volunteering
 Research
 Shaping the future
 Networking
 Professional support
 Enterprise and risk
 Learned society
 Opportunity
 International profile
 Journals
 Support

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3. How we did it



Expertise
Sponsorship
Thought leadership
Progress
Community
Seasonal Meetings
Education
Working parties
Volunteering
Research
Shaping the future
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Why?

- Saves time
- Makes work less error prone
- Easier to check
- Faster to change or extend things
- Easier for someone else to pick up
- Unexpected errors/surprises less likely

Free up time to do the interesting stuff

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Why not?

“It’s just a quick calculation”

“There’s no point because this is unlikely to be used again”

“It’s hard to standardise”

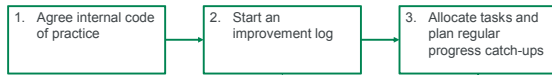
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What then?

[illegible]

Questions

Comments

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Appendices

Do

- Keep external links on separate tabs
- Keep all parameters and assumptions on their own tab
- Use named ranges for parameters and assumptions so it's easy to see what a formula is referring to throughout the sheets, rather than "Inputs(B)" someone looking at it will see "Long_run_LR_Gross"
- Break up complex formulae; add extra columns or even tabs if needed to achieve this
- Use groups on columns and rows that do not need to be visible not hide
- Design formulae that can be dragged across and down, wherever possible
- Put in simple formulae checks, eg if drawing in data, does the total calculated from the data drawn in match the total of the original sheet, eg $\sum \text{Gross} = \sum \text{Net} + \sum \text{RI}$
- Label checks with what they do, or what they're meant to show
- Initial and date your notes
- Write notes next to any recons that don't reconcile but you have investigated and are ok
 - State what is wrong and why you are ok with it
- Delete old notes that are no longer relevant
- Use index match
- Include a colour key on the control sheet.
- Enable content and check all links are relevant and working when you open a spreadsheet. Remove unnecessary hidden tabs
- Draw data (eg premiums) from as close as possible to the source, rather than just any sheet you know has it in (this avoids having to follow chains of links, which may not get updated)
- Use a left to right progression of tabs, i.e. Data, Manipulation of Data, Results, graphs etc
- Colour tabs consistently depending on what they contain



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Don't

- Don't put external links in any formula except for fully labelled checks.
- Don't put any hard coded values into cells. Put them on the parameters sheet and use a named range to draw on them.
- Don't use unnecessary colour
- Don't use whole columns in formulae (eg A:A), this adds lots of processing time to calculations. Choose a large number of rows like 10,000 if you want to make sure your formula always captures however much data goes in.
- Don't highlight an entire sheet and colour all cells white. This makes the sheet massive, and the same appearance can be achieved by hiding gridlines.
- Don't Use large array formulae, they are error prone and process intensive. Instead of $\text{sum}(if)$ arrays you can use a $\text{SUMIFS}(\text{match})$ to do square sums.
- Don't leave live ResQ links in workbooks. This will crash someone's excel if they unwittingly open it without a dongle.
- Don't use pivot tables in the middle of calculations, can be used at the summary stage only.
- Don't Consider "ad hoc" work less worthy of excel best practise



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