



# Actuaries Out of the Box

Our Roles in Implementing New Reporting Regimes

**Chris Murphy**

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# Some things I have learned from working on large projects

1. Practice the new process early and often
2. IT being “done” is not the same as valuation being ready
3. Avoid mega releases
4. Updating calculations is “easy”, managing data is difficult
5. Agile needs to be customized for your project and organization
6. Small focused groups help you get momentum
7. Sometimes you have to use technology that is not ready

# 1. Practice New Process Early and Often

Sometimes your only choice is to fail fast or fail slowly

- Split the IT build from understanding the numbers
- Reduces some implementation risk since you have a demonstrated way of producing results even if you do not have all your IT build complete
- You learn something that impacts policy decisions and build every time you produce results
- Allows you to show progress in a way that management understands
- With LDTI and IFRS 17, it has been a relatively popular approach with the valuation teams as it allows them a good way to get engaged with the implementation
- There are many challenges associated with the early results, but as long as that is well understood, it provides an opportunity for everyone to learn before it all goes “live”
- [https://www.ted.com/talks/tom\\_wujec\\_build\\_a\\_tower\\_build\\_a\\_team](https://www.ted.com/talks/tom_wujec_build_a_tower_build_a_team)

# Engineering Design Process

## Rock Skipping Robot by Mark Rober

**01** Research

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**02** Build a Prototype

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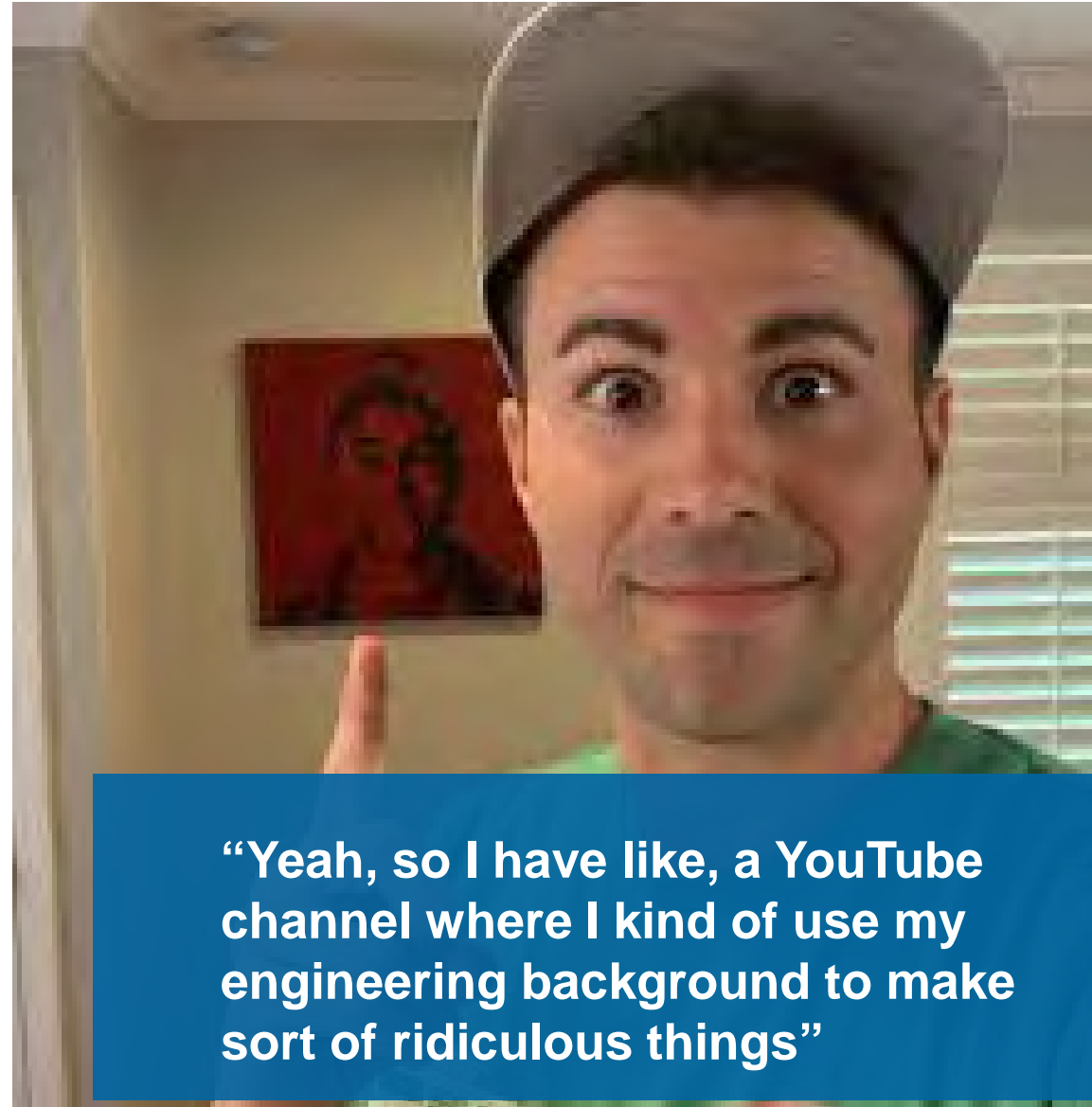
**03** Sensitivity Analysis – what really matters

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**04** Final Build

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[https://www.youtube.com/watch?v=M0\\_U1FHwACk](https://www.youtube.com/watch?v=M0_U1FHwACk)



**“Yeah, so I have like, a YouTube channel where I kind of use my engineering background to make sort of ridiculous things”**

## 2. IT being “done” is not the same as valuation being ready

### Allow plenty of time for testing

- Our experience is that it usually takes around one year from the time IT has finished development to full adoption by valuation teams globally
- Start with “Is it really done?” Centralized and automated testing as much as possible
- But full adoption requires testing by all valuation teams across multiple uses and also against competing priorities
- Controls and audit testing also needs to be built into the plan
- Define success criteria, but also expect to refine

### 3. Avoid mega releases

Regular smaller releases is usually easier to manage

- Managing backlogs and integration with existing processes is almost impossible with large changes to production
- Generally RGA uses planned monthly releases to introduce new functionality, with some off-cycle releases for urgent or smaller updates. Ideally our planned releases would be more frequent
- Release management is a critical and commonly underestimated part of the process. It is very easy to end up with very large backlogs and long delays between wanting to fix something and being able to fix it

## 4. Valuation projects are usually about managing data better

Calculations are usually complicated but easier to manage

- Third party software companies generally provide high quality calculation logic
- Integration with other software components (admin, finance etc) can be challenging
- Understand the volumes of data you will be managing now and the near future – how will the tools scale
- Data science trends and tools

## 5. Choose the flavor of Agile that works for you

There is no perfect project management methodology

- The basic concepts of agile work well, including continuous assessment of where are you really and what do you have left to do
- Grooming can get out of control
- Don't lose the big picture
- Control meetings, but demonstration meetings provide important control points
- Some waterfall concepts still work well, including working through steps required for adoption of any new technologies



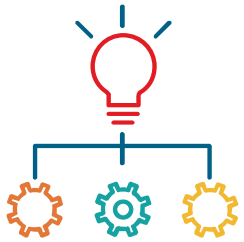
## 6. Small focused groups help you get momentum

Add people when you have clear activities for them to do

- Early on, even with very large projects, the overhead of managing additional people almost certainly outweighs the benefit
- Start with throw away prototypes to help prove and demonstrate concepts
- As a general rule: Have small groups develop a proposal and then share and improve that proposal with large groups
- Engaging with large groups early can cause paralysis due “What aboutism”
- Use the right partners at the right time

## 6. Small focused groups help you get momentum

Change occurs naturally over project timeline



### Start Here

- Flexible
- Small Groups
- Agile
- Fast



### Finish Here

- Constrained
- Input from many groups
- Waterfall/Checklist
- Slower



**Different people may need to be involved at different stages based on their skills**

## 6. Small focused groups help you get momentum

### Quotes from smart people



"It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them."

- Steve Jobs



[WWW.COLLECTIVECAMP.US](http://WWW.COLLECTIVECAMP.US)

## 7. Sometimes you have to use technology that is not ready

But will the technology you choose be obsolete when you finish project

- Decision to move to data lake a few years ago seemed leading (bleeding?) edge when we started – now not so much
- Similar discussions around calculations in the cloud
- Risks – but there are also risk with staying with current technologies
- No better time to investigate new technology than when you are already being disrupted

**Final Takeaway - Understand project cost accounting**

# RGGA

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