



**Deloitte.**

## *S9 Plenary Session*

*Actuarial model developments: How to implement change successfully*

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***Waves of Reforms...Oceans of Opportunities***

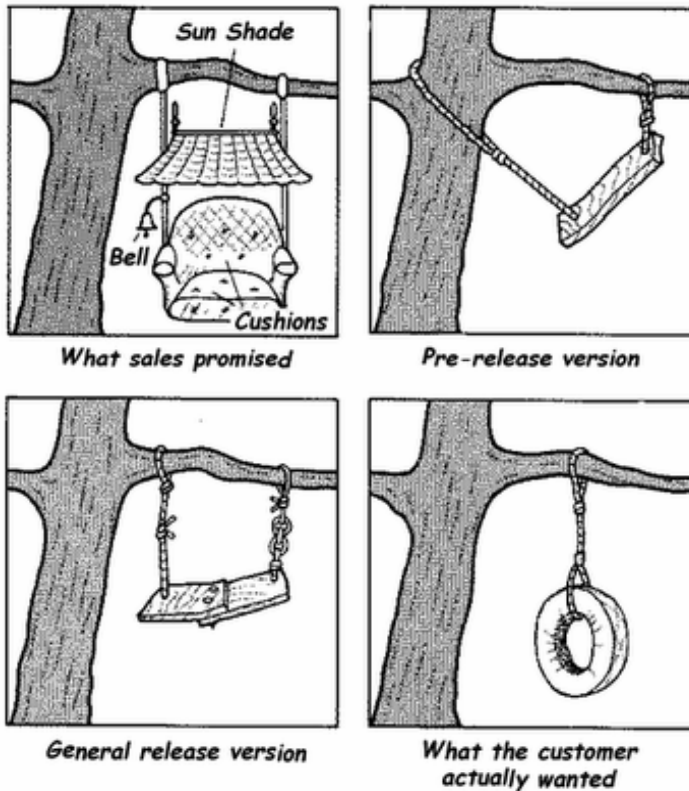
***2013 AGFA & 15<sup>th</sup> Global Conference of Actuaries***

17<sup>th</sup> – 19<sup>th</sup> Feb, 2013 | Mumbai,  
India

# Industry observations

“Talent wins games, but teamwork and intelligence wins championships.”

**Michael Jordan**



Actuarial modelling requires appropriately trained modellers. To be successful a delivery will require more than actuarial modelling talent.

Delivering successfully will require effective teaming and intelligence to be put into the development process.

**HOW you do what you do is as important as WHAT you are trying to do**

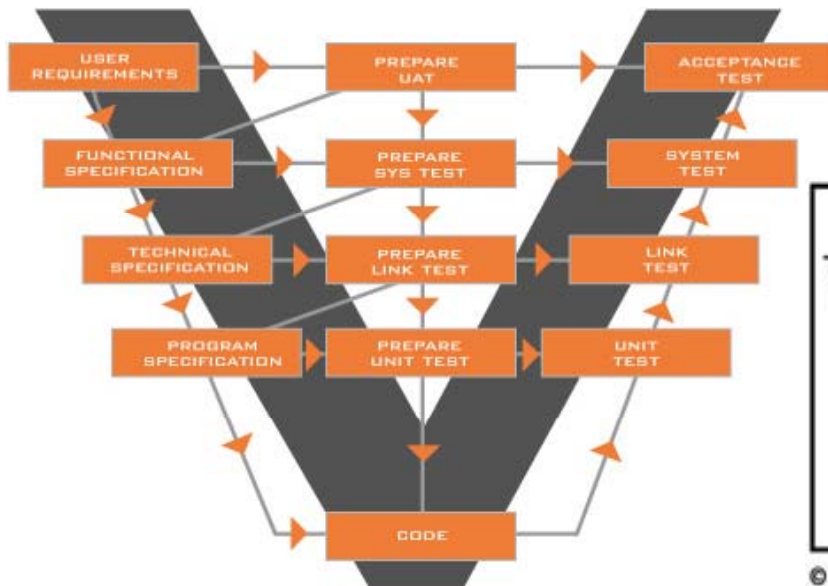
# Development processes



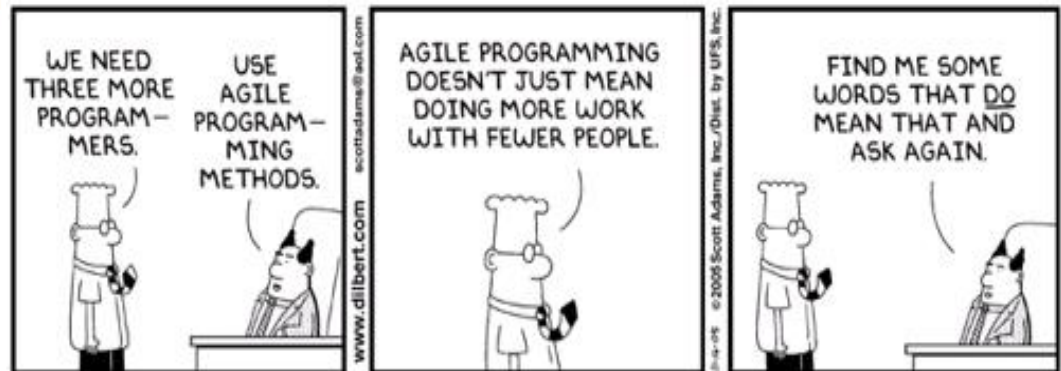
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“If you cannot describe what you are doing as a process, you don't know what you are doing.”

## THE V MODEL

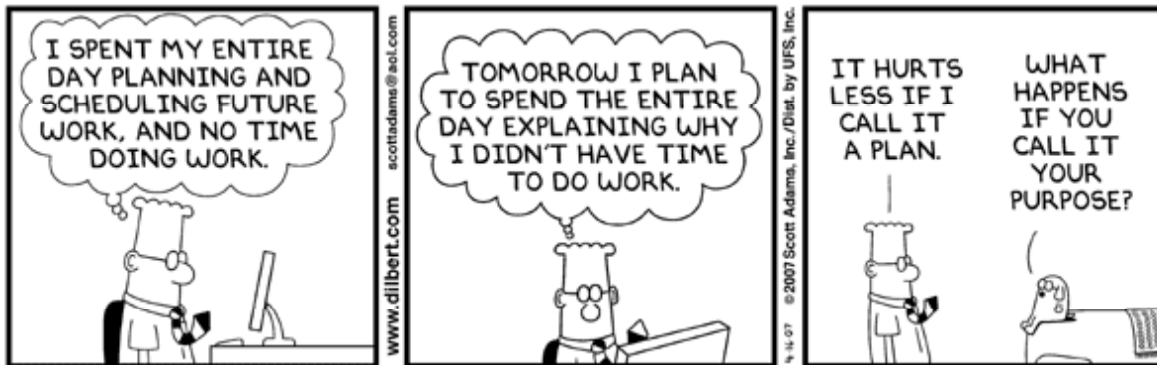


“Good design adds value faster than it adds cost.”



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# Managing the development



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**“Trying to manage a project without project management is like trying to play a football game without a game plan”**

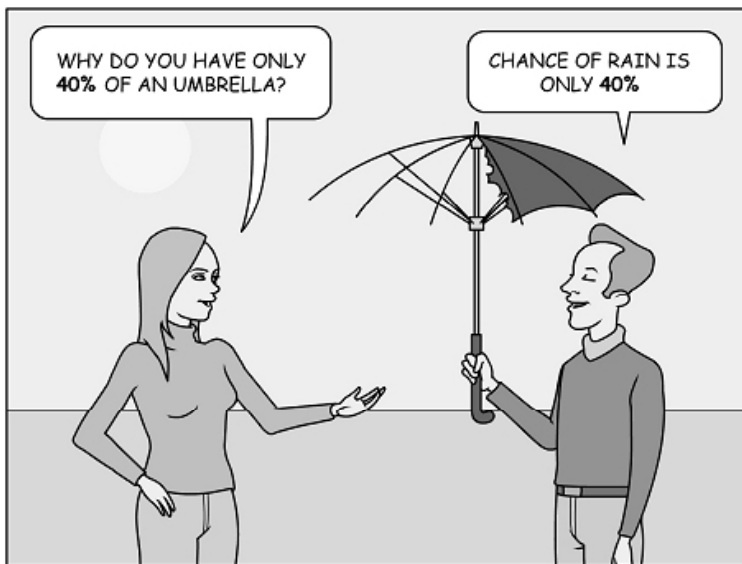
**“The single best payoff in terms of project success comes from having good project definition early.”**

**“Duration estimates are just that, estimates. The activities will occur in the future and there are no facts about the future”**

**“In poorly run projects, problems can go undetected until the project fails. It's like the drip...drip...drip of an leaky underground pipe. Money is being lost, but you don't see it until there is an explosion.”**

# Managing risks

**“One test is worth a thousand expert opinions.”**



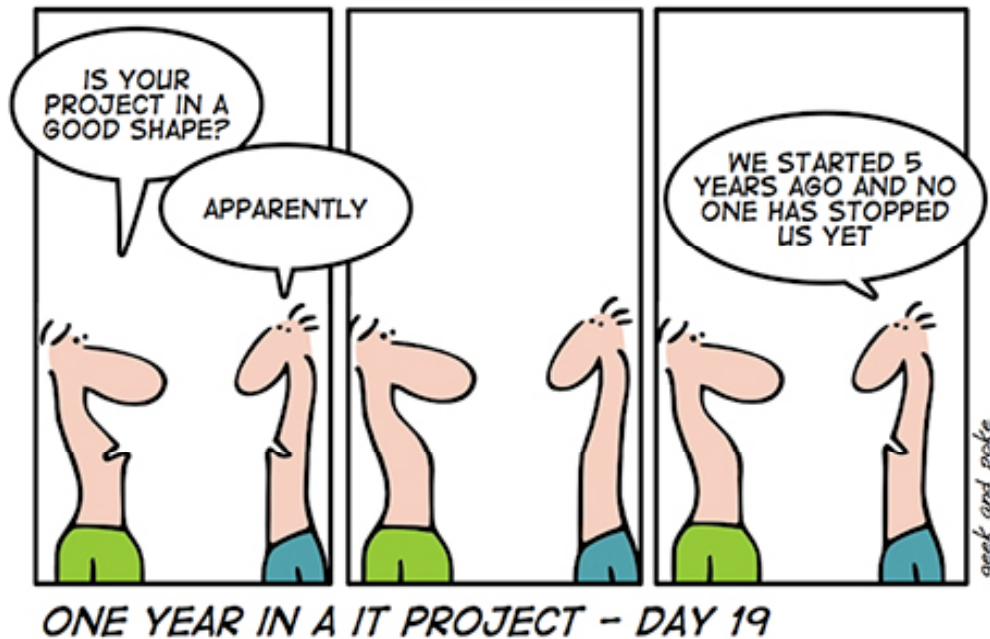
**“When end users get involved in the final stages of testing, light bulbs go on, and they often have an "aha" moment. Unfortunately, that is often too late.”**

**“Project proposals, business cases or cost benefit analyses are probably being massaged (either by underestimating costs or timeframes or by being very optimistic about the benefits) so projects will be approved.”**

**“Event management is the same as for any project - the project plan needs to include an appropriate change control process”**



# Practicality



**“Planning without action is futile, action without planning is fatal”**

“Survey respondents estimated that if 100% of defects were addressed and remediated prior to production, they would experience a 32% cost savings.”

## *Some insights...*

- **Analysis and design stages** are critical to deliver successfully
- **Scope and Technical Specifications** need to be well defined
- **Flexible resource model** to optimise the resources used
- **Agree the standards** to ensure consistent quality and processes
- **Good governance and project management** is essential to ensure the development is well tracked including the management of risks, assumptions and dependencies which will impact the deliverables
- **Good collaboration** between the stakeholders ensures good estimates and work plans are drawn up
- **Forward planning** is essential to manage the future supply and demand of resources and to ensure plans are efficiently managed
- **Regular updates and risk management** with stakeholders to understand the project status as scope, plans, and estimates change

# Industry trends

Actuarial modelling as a function is progressively spanning the Finance (Actuarial) function and the IT and Change functions. Companies are at different points on their journey but I am beginning to see clear industry trends around the processes which are becoming more professional and industrialised as IT style approaches are adopted.

I have seen a number industry trends for actuarial model development including:

- **Clearer separation** between R&D, development, production and reporting processes
- **Embracing IT methodology** to development e.g. proper development life cycles
- **End to end model development processes** incl. development of requirements & specifications
- Clearer **business acceptance and sign off** processes including **full traceability**
- **Utilising professional project managers** for actuarial model builds with well defined plans
- **More regular and standardised** project reporting
- **Improved governance and management** of issues, risks and dependencies
- More **granular work packages** and associated tasks
- **Improved workload balancing** which is more consistent with **change demand**

**Actuarial development processes need to transition to ways of working which are more professional and industrialised - consistent with IT best in breed.**