# FROM WATERFALL TO AGILE AND BACK AGAIN

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THIS IS THE STORY OF A TEST TEAM'S UNEXPECTED JOURNEY



### The Story of a Test Team

- From waterfall to agile and a few steps back
- From diminishing to rising up again
- Lost in agile translation finding a new ID through DAD
- My story how I almost lost my job, turned out a dream come true for every Test Manager
- Answering the mother of questions:
  - Ounited or Decoupled?
  - o Agile or Waterfall?

### The Story of a Test Team

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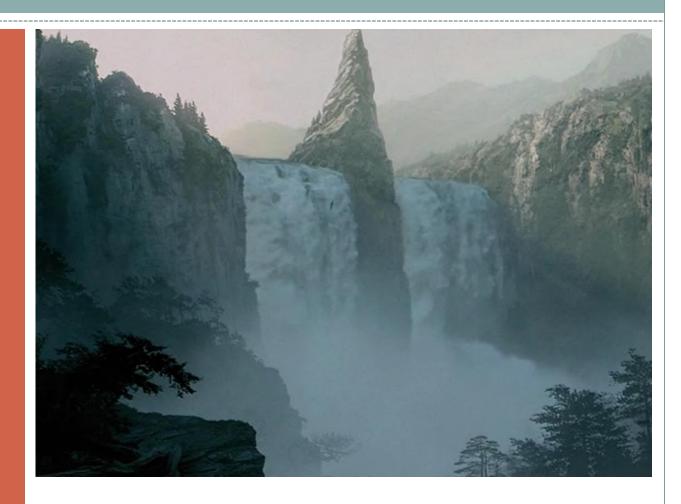
- The true story of a test team?
  - It is TRUE
  - It is a STORY
  - o Granted deviation They all lived happily ever after?

#### **DISCLAIMER:**

a story that has nothing to do with my current employer!



- V-Model for all
- Analysis, Dev & Test three different functions and groups
- Output of one input for the next
- Production line processes

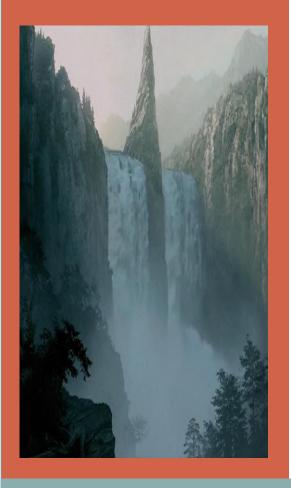


Once upon a time ...

... there was waterfall



## Waterfall Pros & Cons



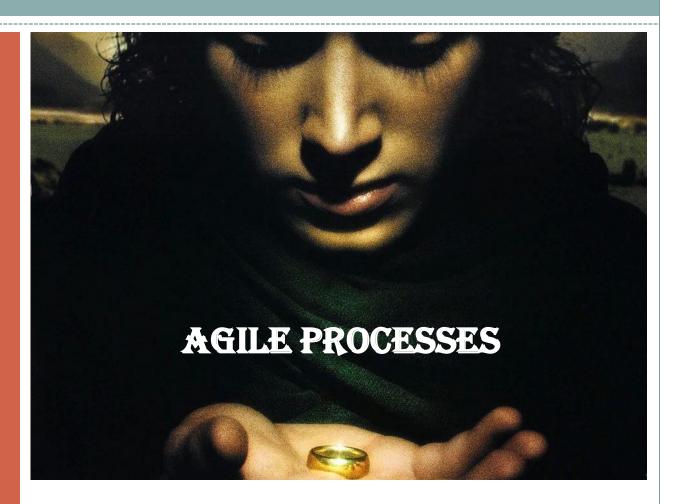
- Delivering on Time & with Quality
- Bureaucracy cannot cope up with changes
- Well structured projects. Yes!
- Agile projects = Fragile results. No!
- Suitable for large frameworks and National Administrations
- Expensive operations High costs
  - Small Contribution margins



- Came in with an announcement
- Unmanaged change
- Uncalculated risks

#### **Bearer Promised:**

- Adaptability
- Flexibility
- Dealing with unforeseen changes



One day ...

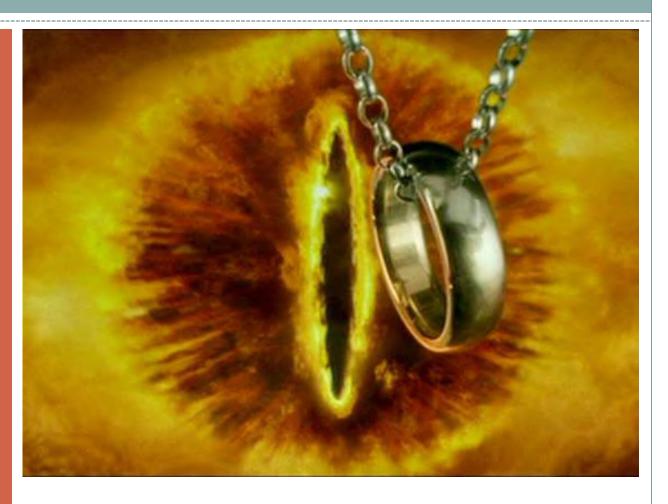
... an organizational transformation



Working processes treated as cursed

Waterfall transformed to the scapegoat of all issues

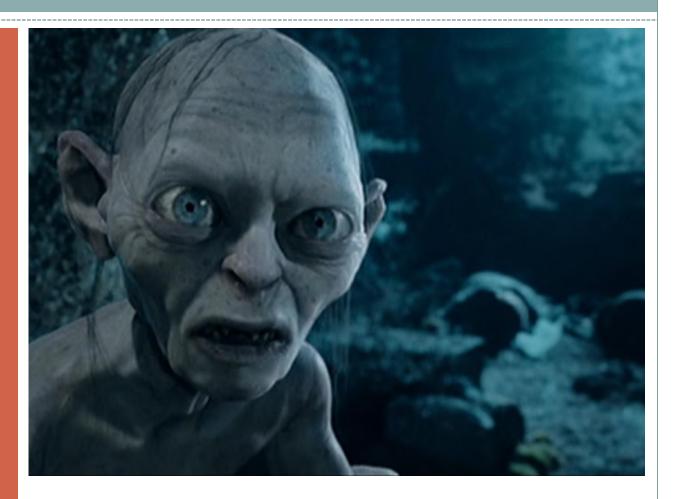
Reservations and fighting back for a decision already taken is a battle already lost



Consequences of the organizational transformation



- We choose our customers and customers choose us
- -Customer choice is for what we deliver but also for how we work, act and talk.
- We prefer the ones who have same look and feel with us (even though we think of them as Gollums if the partnership is not going well)
- Customers skeptical for the organizational change



An unforeseen ally ...
... the customer



#### AGILE but ...

#### a proprietary solution was needed



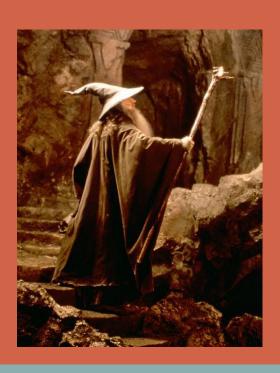
 Organization transformation envisioned as a project with the following requirements and constraints

- An agile or agile-like set of processes for SDLC was to be found or created.
- Any imposed change should not affect current work and ongoing services
- Any change should be transparent towards existing customers leaving business intact.



## Our Agile process ...

#### a proprietary solution was created



- An agile-like proprietary solution was created which was based on the following observations and consensual understandings
  - Agile methodologies and specifically SCRUM seems to provide better level of flexibility in development level
  - Agile methodologies do not provide a solid framework for end-to-end provision of services.
  - In order to frame the whole end-to-end process an encapsulation of the dev process is needed to ensure intact service provision.

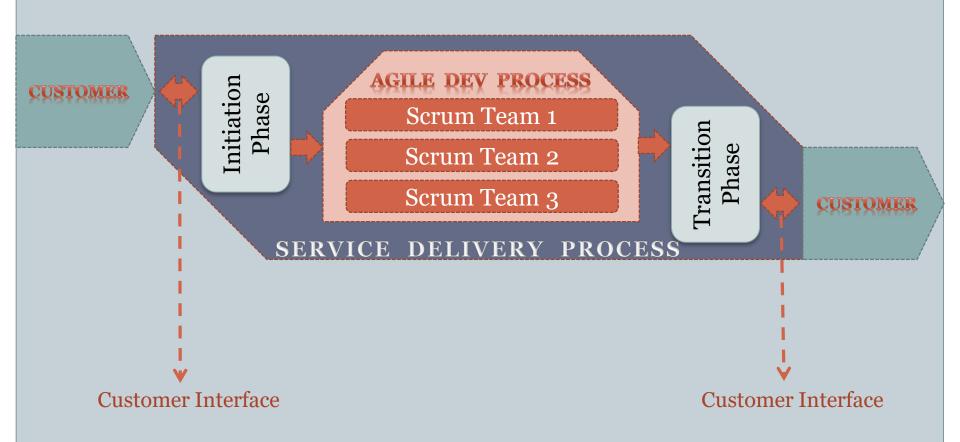
## Hybrid Agile – Proprietary process



- Hybrid schema
- SCRUM was selected for pure Development activities
- SCRUM was encapsulated in an overall Service process creating a hybrid schema
- Service Delivery process was introducing roles, responsibilities, process and tools to ensure:
  - Efficient client facing activities and communication
  - Smooth transition towards delivery
  - Scaling of SCRUM for large projects through forking a project to several SCRUM Teams

## Hybrid Agile – Proprietary process





## Hybrid Agile – Proprietary process (??)

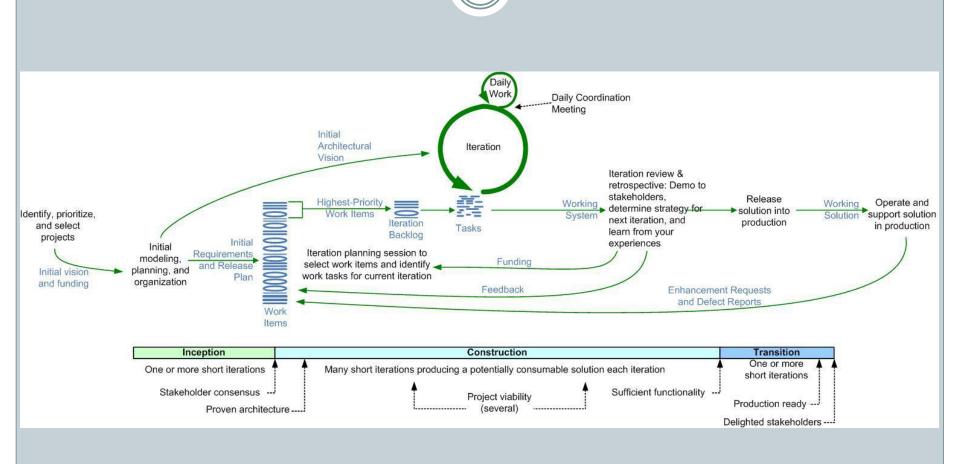


#### DAD – Discipline Agile Delivery

- Ambler Scott, 2012 "DAD, A Practitioner's Guide to Agile Software Delivery in the Enterprise"
- Inception phase Construction phase (1<sup>st</sup> gen. agile) –
   Transition phase along with ongoing goals
- Full delivery lifecycle Unlike first generation agile methods that typically focus on the construction aspects of the lifecycle, the DAD lifecycle addresses the entire project from the point of initiation all the way to production and postdelivery production activities.

Source: http://en.wikipedia.org/wiki/Disciplined\_agile\_delivery

## Discipline Agile Delivery



## What Hybrid process meant for Test Team

#### Testing in Waterfall

- Performed explicitly by a different functional Team
- Conceived as a separate phase of a project

#### Testing in Agile

- Continuous activity in parallel with the rest
- Governed by processes that all should follow

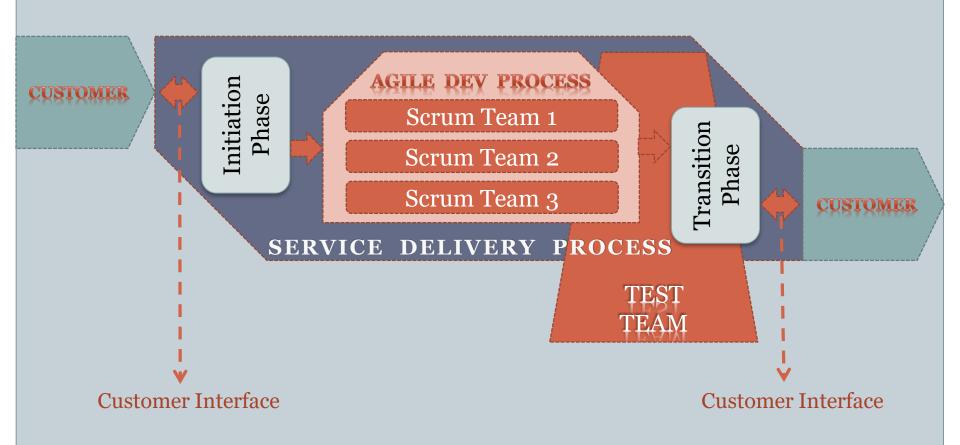
#### Testing in the Hybrid model

How the above contradictory notions can be merged?

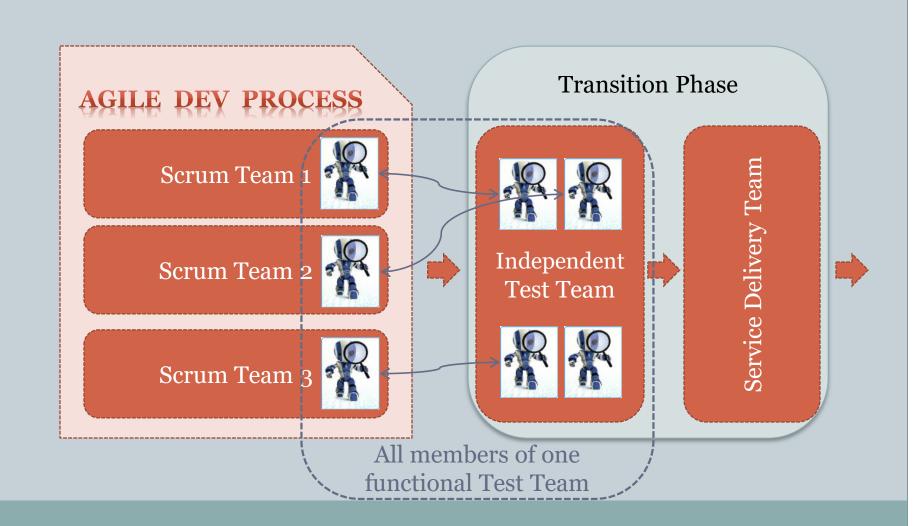
A Test Team acting as a center of competence for testing which provides services of test consultation, tools, methodologies and engineers capable to work either as an independent team or within a cross functional team.

## Hybrid Agile and Test Team





## Test Team – Two operational models



## Hybrid model – Results for Testing

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#### Added value to project

- Smoother internal transition from DEV to TEST
- Less risks Minimization of delays No surprises
- Greater consensus of testing practices to all engineers

#### Added value to test team

- Better visibility of the incoming package to test
- Better technical awareness of activities before testing
- o Greater variety of test positions and "flavoring" of testing



#### Hiccups up to now:

- Testers unwilling to change hats and work as cross functional engineers in a scrum team
- Scrum teams want to keep their cross functional tester ... forever!
- Reporting authorities in two directions for testers in scrums . TM / scrum master relationship is harder than TM / PM



A happy ending?
... in reality things are
constantly moving and reshaping

#### Lessons Learned



- Go with the flow but beware ...
  - o Trends may wash you and your business away
  - Processes follow the cycle: Born Hyped Used Misused –
     Fought Burnt after that; they can be actually evaluated!
- Do not re-invent the wheel but ...
  - There is no of-the-self product that can take care custom needs
  - The right answer is rarely absolute black or white. In most of the cases it is the perfect shade of grey which you should find
- Enforcement comes in a top-down direction but commitment is gained only in a bottom-up engagement

## ... and we all continue finding critical bugs in every delivery ever after!!



## **QUESTIONS?**



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