

Agile On The Beach 2015

*Bluefruit*<sup>®</sup>

# Quality

Paul Massey

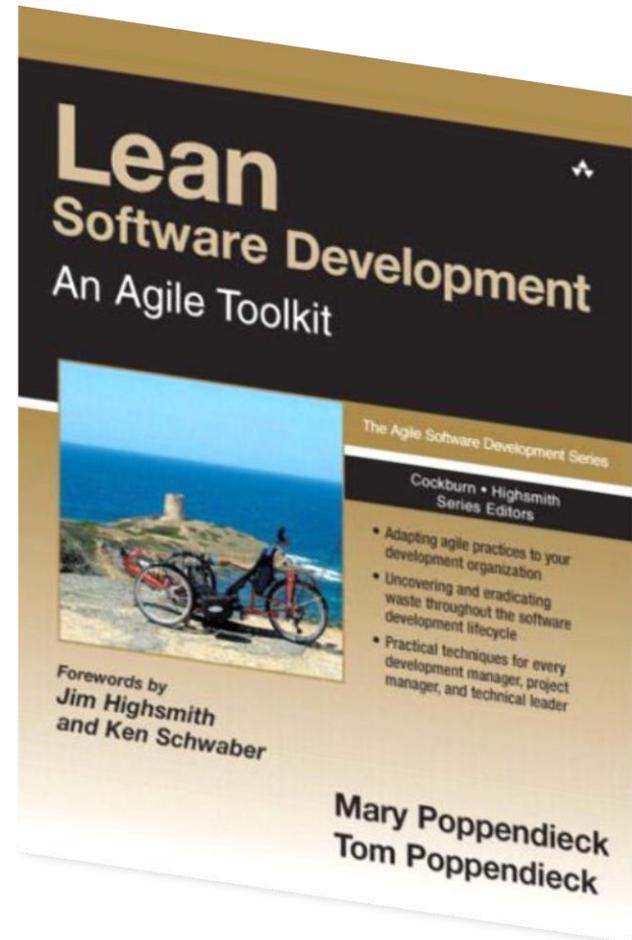
Founder and Director  
Bluefruit Software



# Agile On The Beach 2015



- Bluefruit established in 2000
- Embedded Software Specialists
- Clients in Automotive, Aerospace, Scientific Instruments, Consumer Goods etc.
- Strong Quality focus
- Agile since 2009
- Influenced by Lean-Agile



- **What** quality means to us
- **Why** we believe it is important
- **How** we have navigated the journey so far

# What Quality means to us

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# What Quality means to us

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Never goes wrong

Exactly what I was looking for

Great build quality

It just WORKS!

Really adds to the experience

Simple, yet effective

You almost forget its there!

Upgrades are seamless

Stunning to look at

Feels like part of your body

Completely intuitive

It has saved us a fortune

A real timesaver

Never ceases to impress me

Works first time, every time

Makes the job so much easier

Really helps to complete the task

Well architected

I wish I had thought of it!

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# What Quality means to us



How it  
"feels"

What it  
delivers

How it is  
built

# What Quality means to us



User  
Experience

We call what the user experiences  
'Perceived Integrity'\*.

How it is  
built

The way it is built is called  
'Conceptual Integrity'\*.

We believe these two  
concepts are what makes up  
and define the true meaning  
of quality in software.

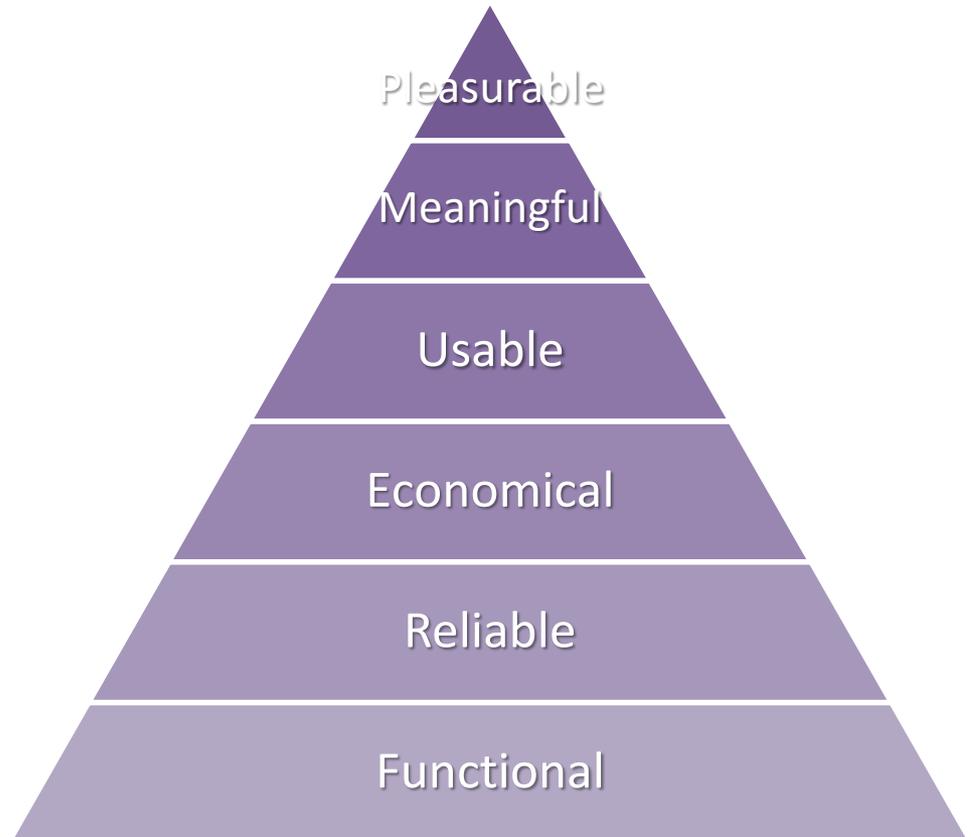
\*Mary Poppendeick's 'Lean Software  
Development: An Agile Toolkit'

# What - Perceived Integrity

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User  
Experience

How it is  
built



# What - Conceptual Integrity



User  
Experience

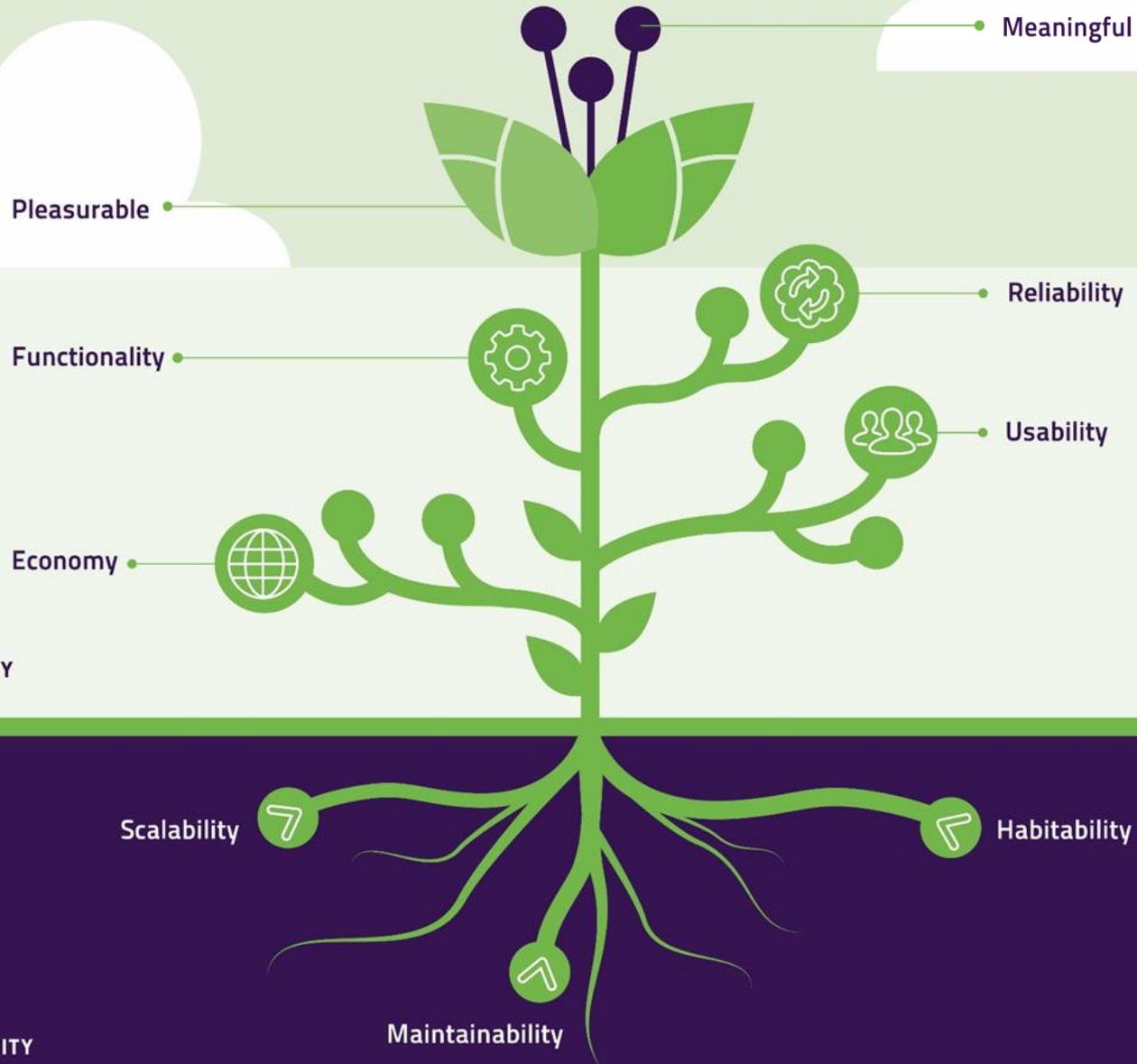
Conceptual Integrity includes the elements that are going on beneath the User Experience, but also include things that the end user will never see or engage with.

How it is  
built



# What – Cultivating Quality

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# Why is Quality Important?

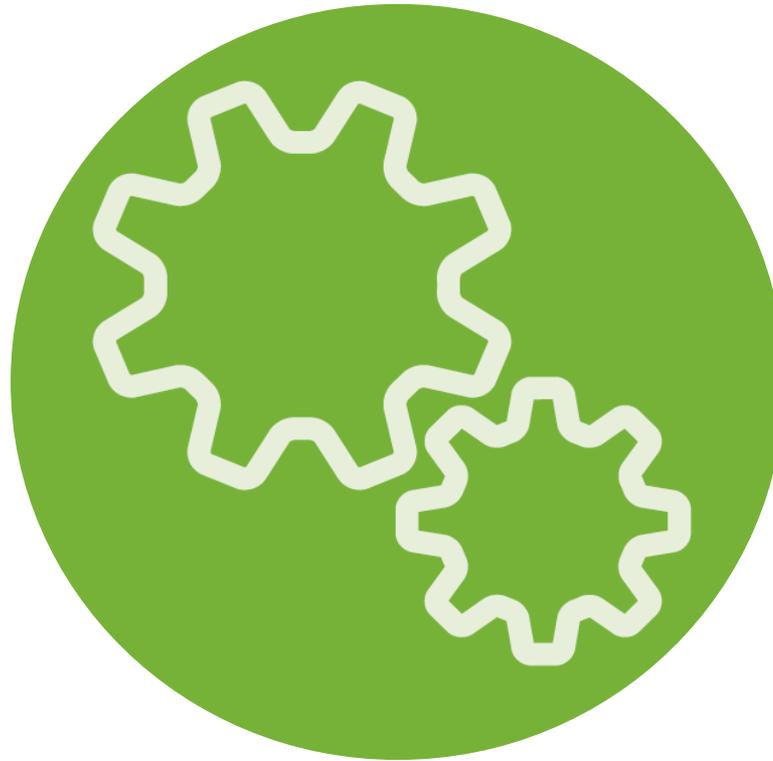


- Our vision:
  - Happy Customers
  - Happy Workforce
  - Successful Projects
- Quality is not just for free...
- ... it pays

# Why – Quality Pays



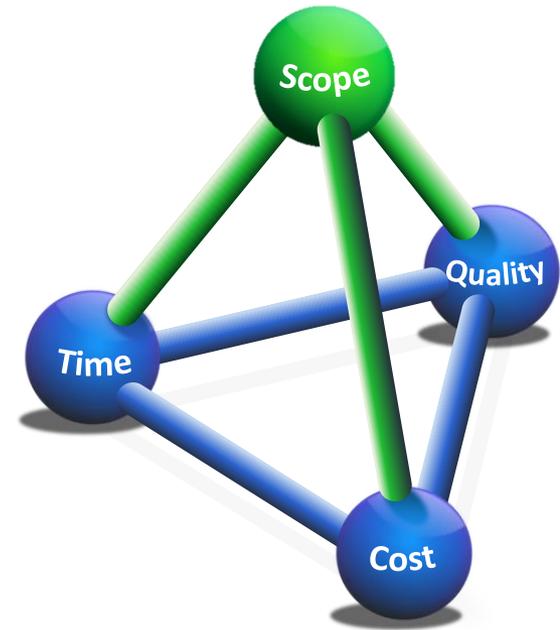
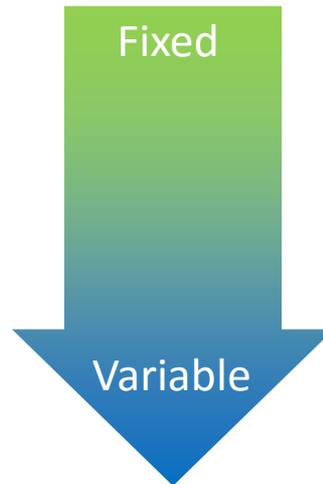
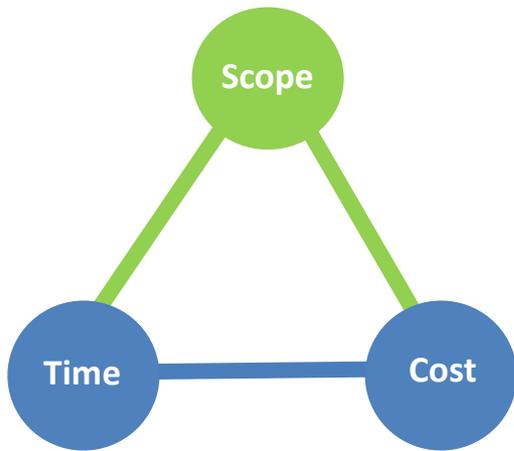
Quality is a Strategy, NOT a tactic.....



# Why – Successful Projects



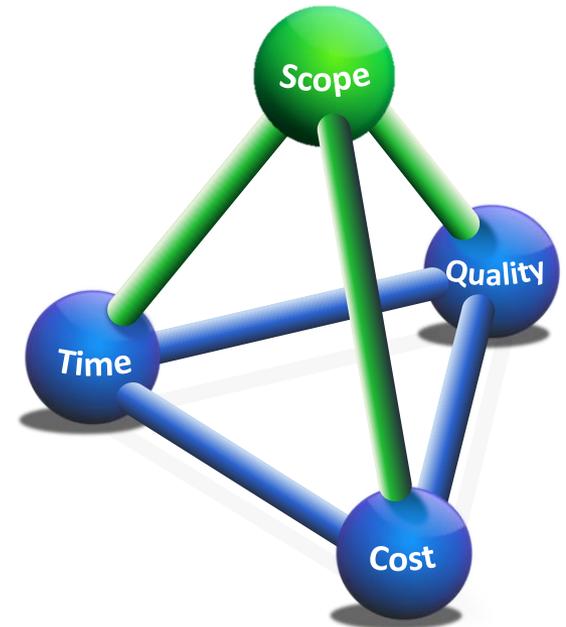
Traditional “Iron Triangle”



Quality is the hidden variable in the “iron triangle”. It is often the first to be compromised, followed by deadlines and then budget.

# Why – Successful Projects

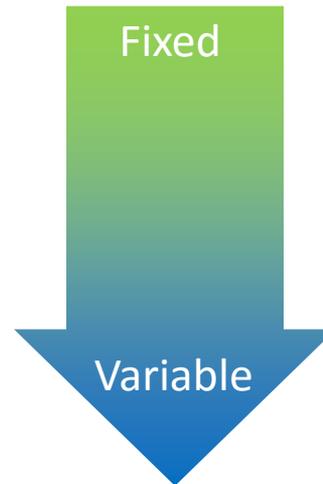
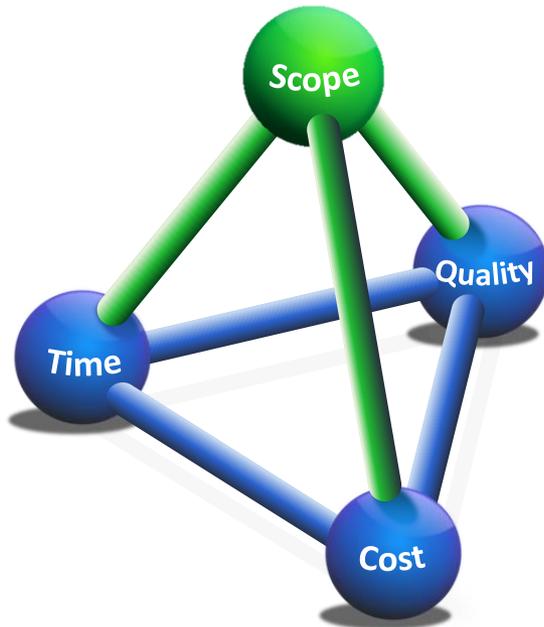
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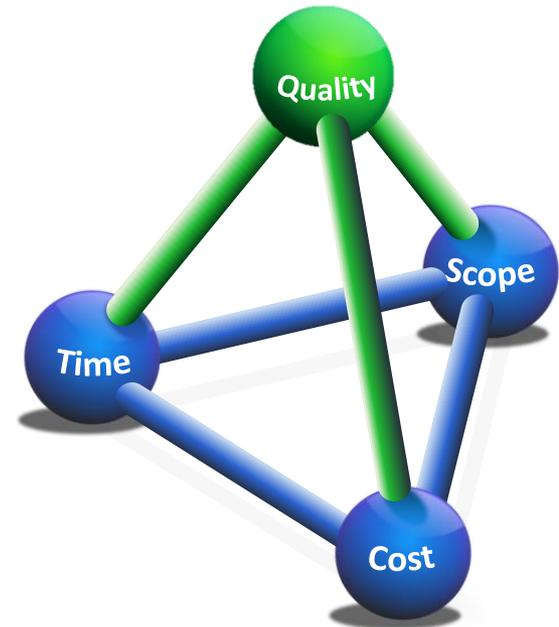
# Why – Successful Projects



Traditional



Agile

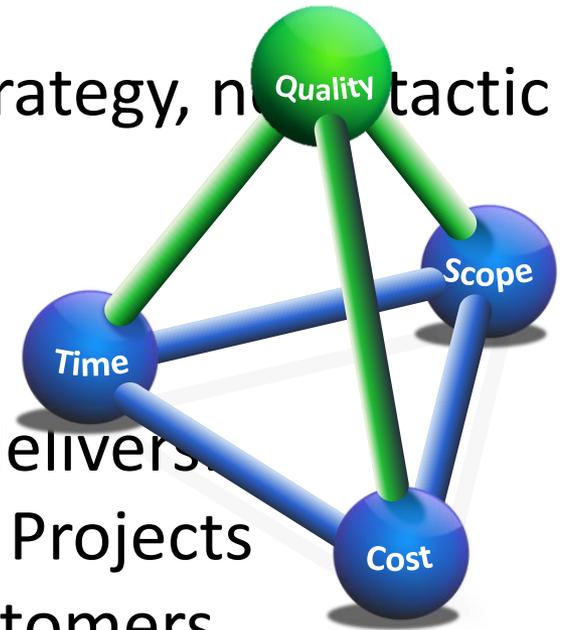


By placing Quality First and constantly prioritising scope (alongside budget and deadlines), we deliver the best probability of project success.

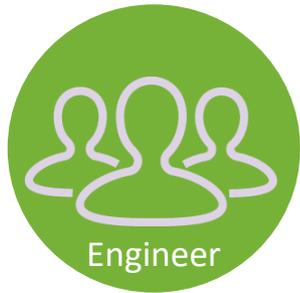
# Why is Quality Important?



- Quality is a strategy, not a tactic
- Quality Pays
- Quality First delivers
  - Successful Projects
  - Happy Customers
  - Happy Workforce



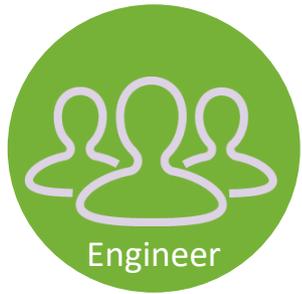
# How is Quality achieved?



- There are three key constituents in the creation of Quality
- The Customer
- The Engineering team
- The product itself
- We use the Agile Toolkit to create feedback loops

# How is Quality achieved?

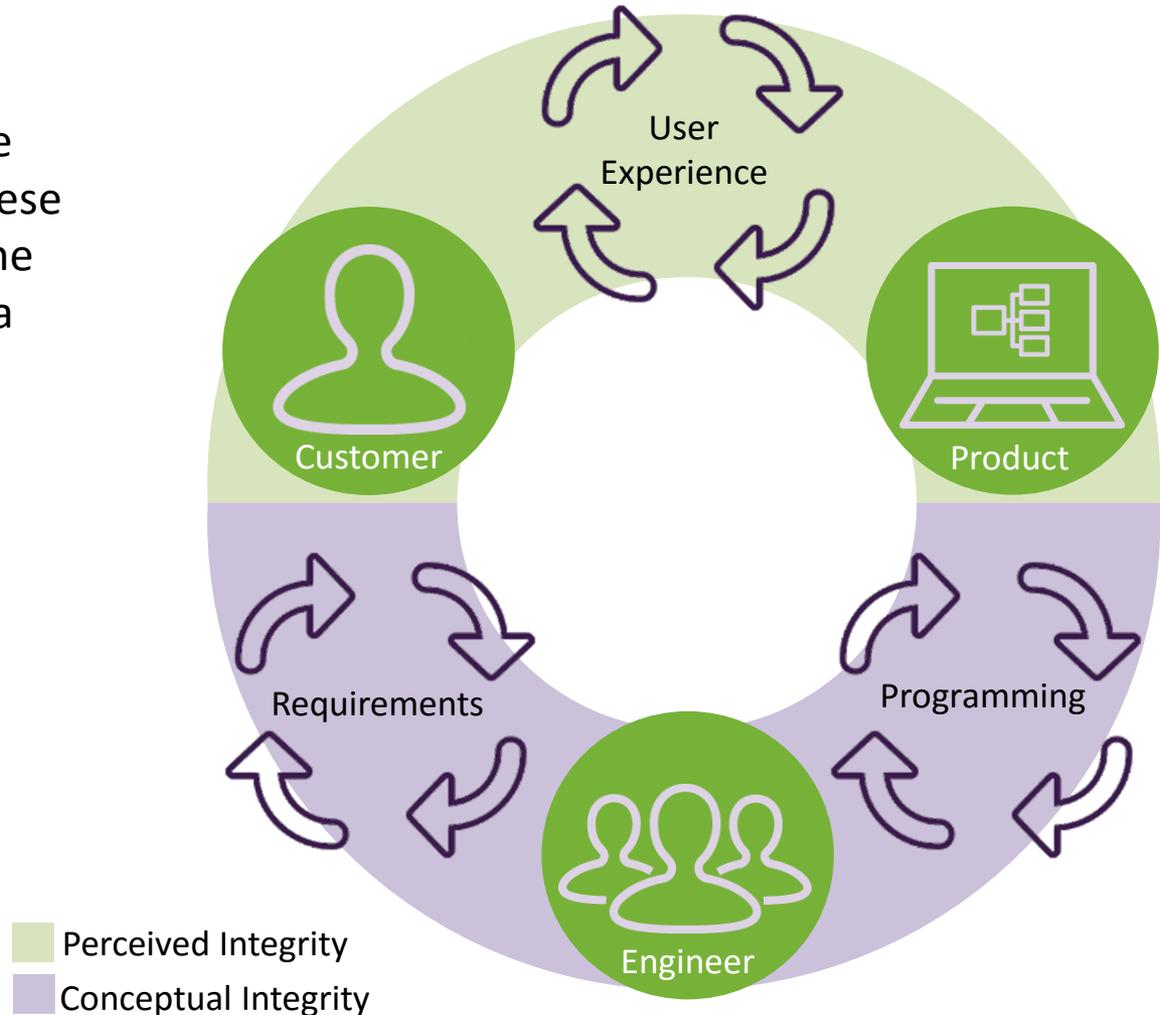
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# How - The Quality Wheel



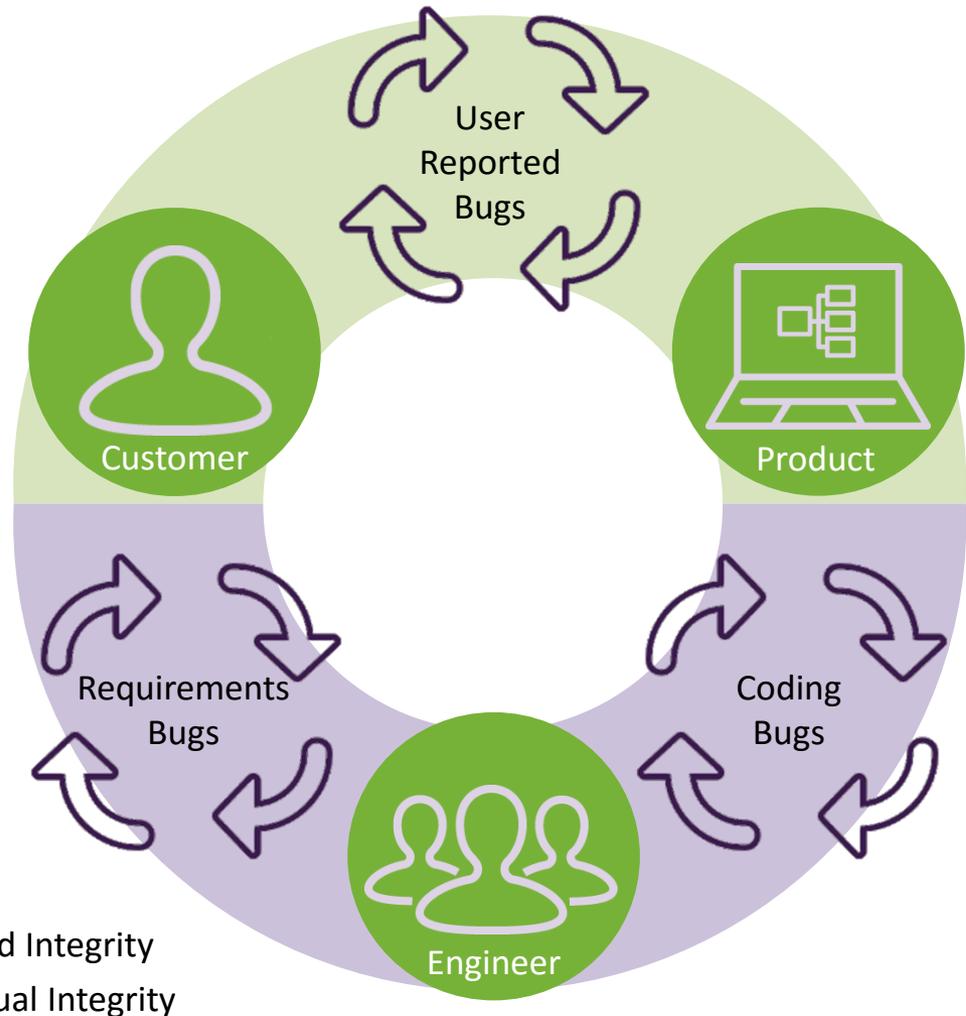
- The effectiveness of the interaction between these constituents is key to the successful outcome of a Quality Solution



# How - The Quality Wheel



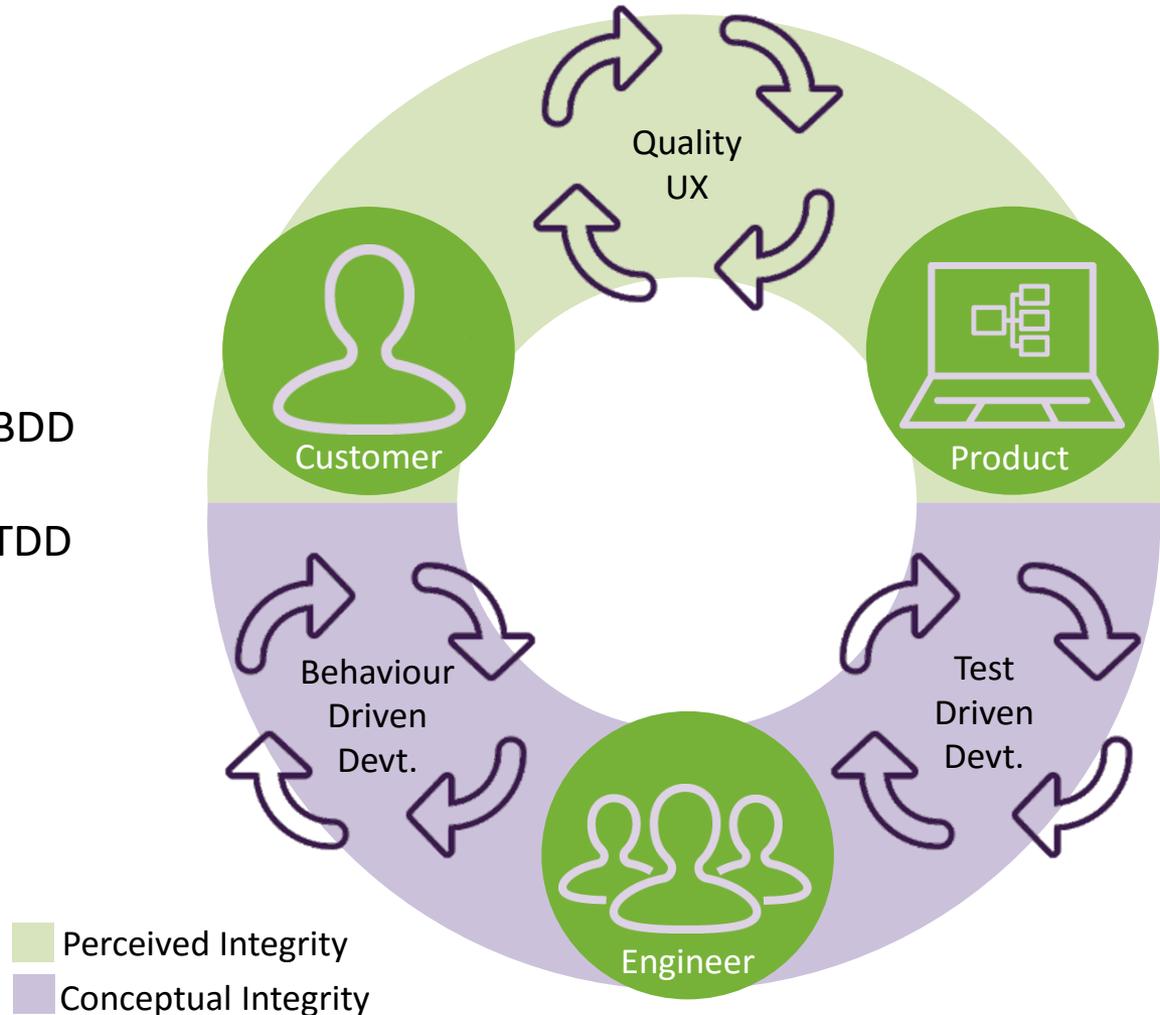
- But what about bugs?!!
- The software doesn't do what the Customer expects it to do
- Sometimes this is because the Engineer has made a mistake in the coding
- Often, in our experience, it is because the requirements don't accurately describe what the Customer expects



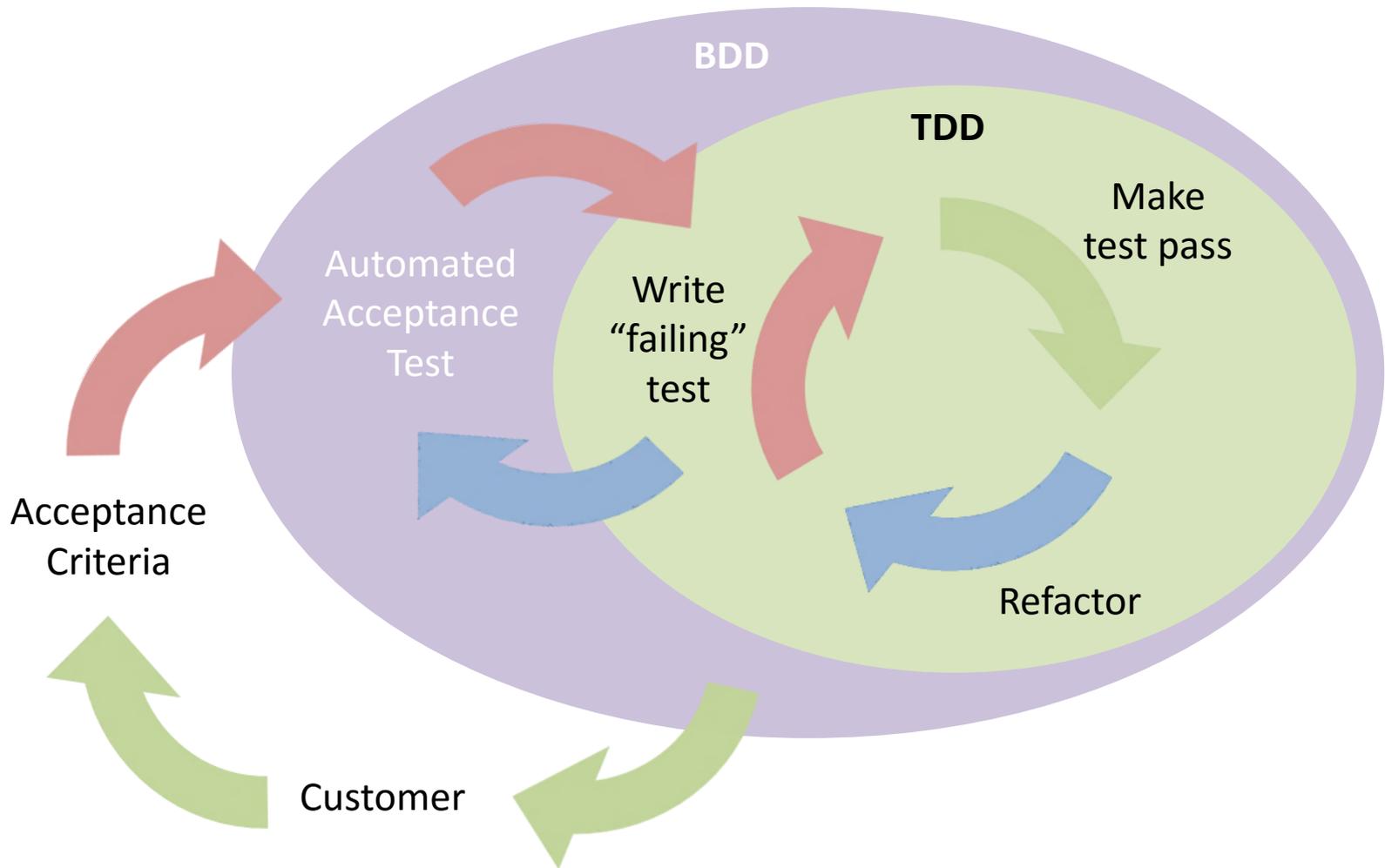
# How - The Quality Wheel



- How Agile Helps
- Goal: A Quality User Experience
- Build the Right Thing - BDD
- Build the Thing Right - TDD



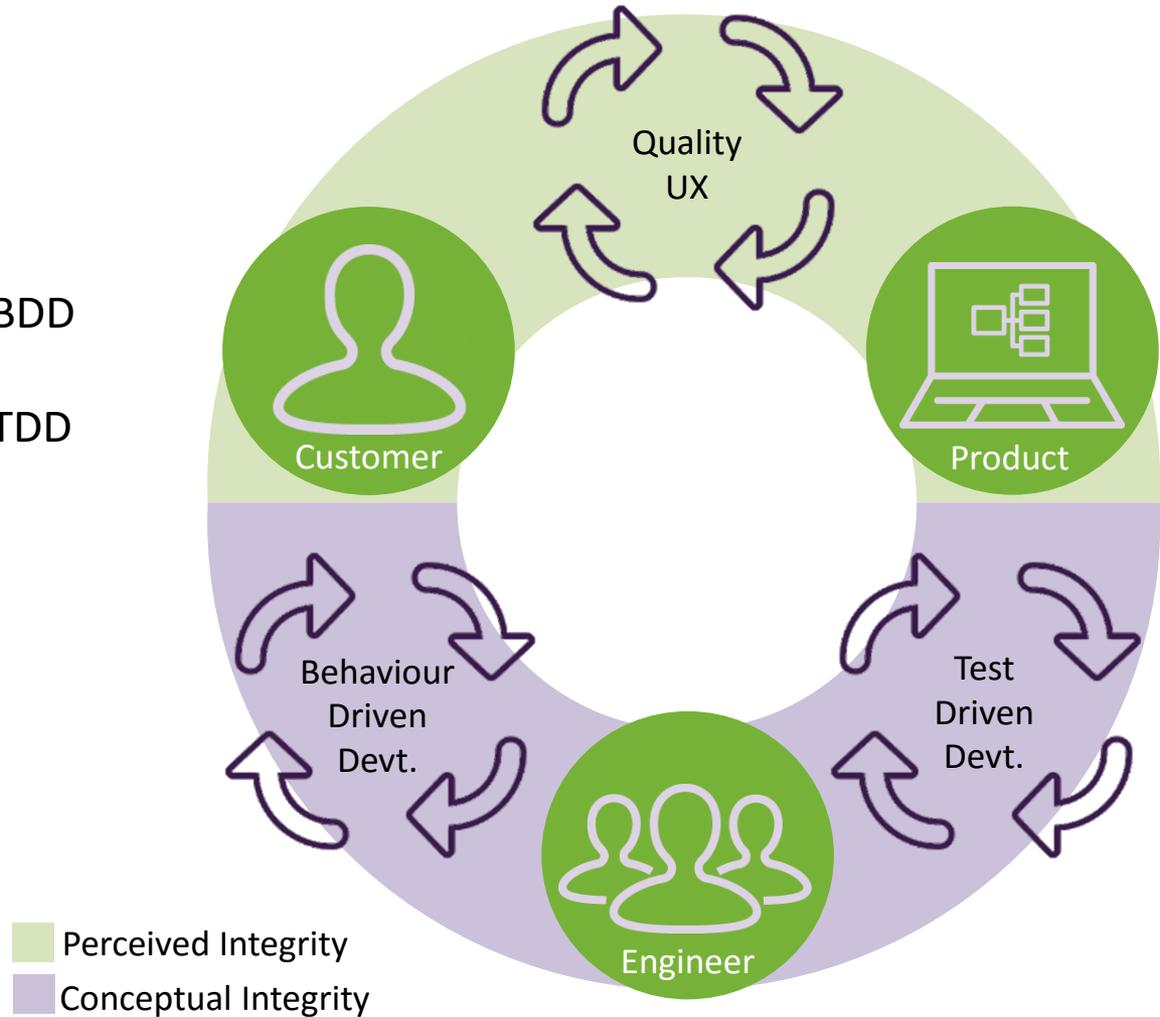
# How - TDD and BDD



# How - The Quality Wheel



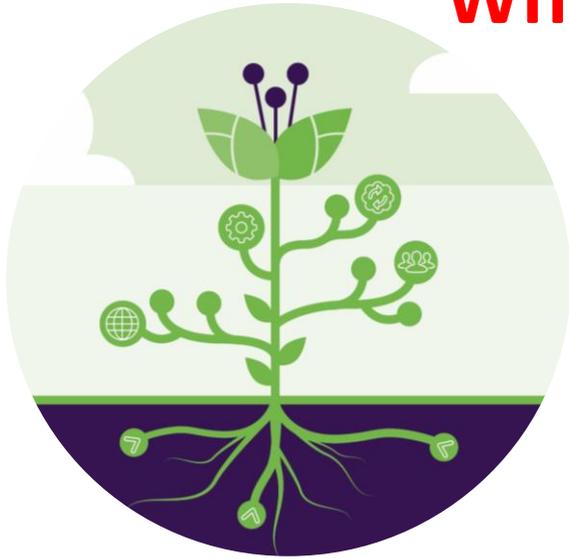
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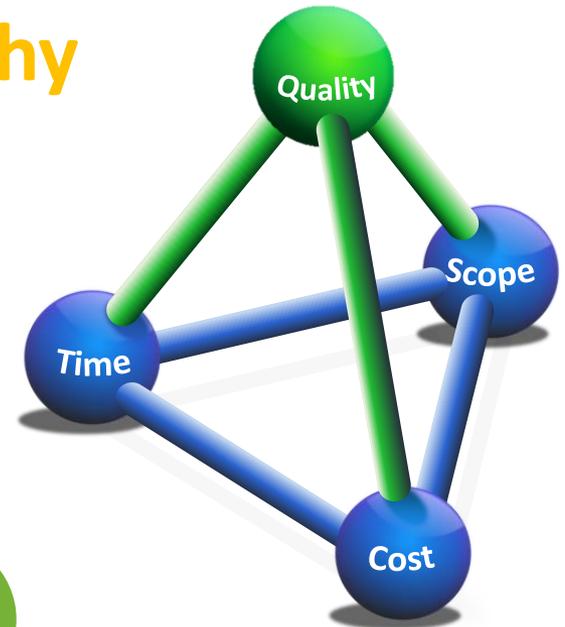
# Bringing it all together

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**What**



**Why**



**How**

