

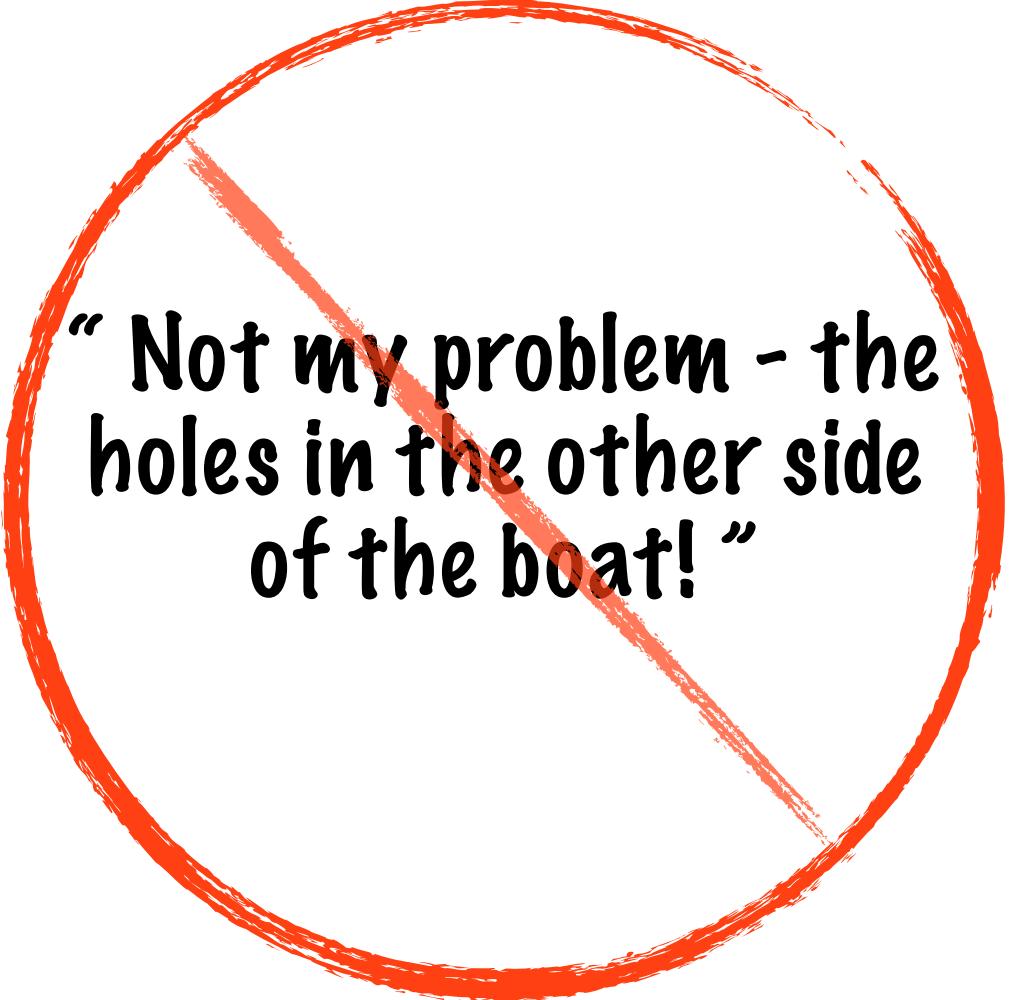
Agile testing with Test Condition Workshops

Ian Ross - ian.ross@clarus.co.nz





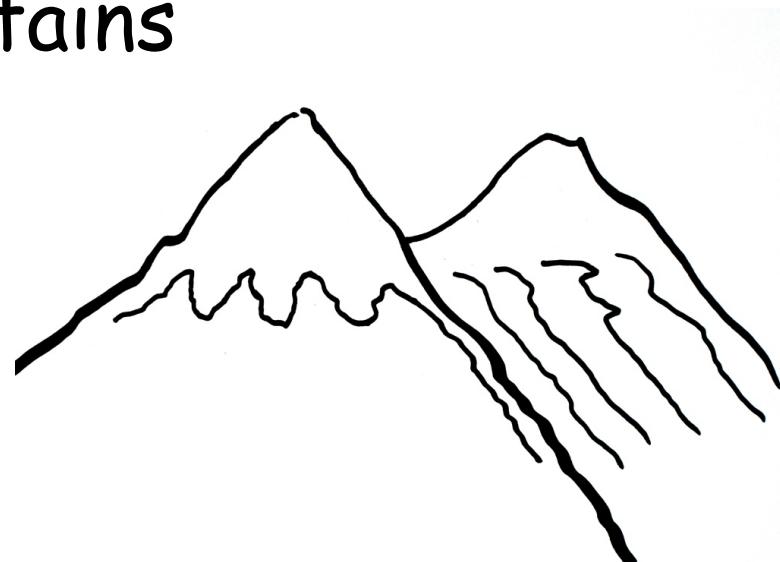
Ambush testing



**“Not my problem - the
holes in the other side
of the boat!”**

Ten years ago this year

Feb 11-13 2001 at
the Snowbird lodge
in the Wasatch
mountains



Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it .Through this work we have come to value:

- Individuals and interactions over processes and tools**
- Working software over comprehensive documentation**
- Customer collaboration over contract negotiation**
- Responding to change over following a plan**

That is, while there is value in the items on the right, we value the items on the left more.



Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it .Through this work we have come to value:

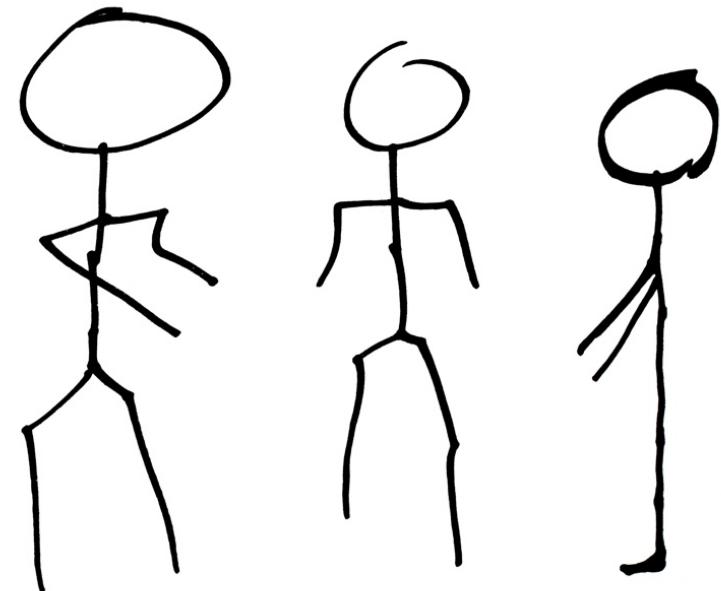
Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

Drivers of approaches

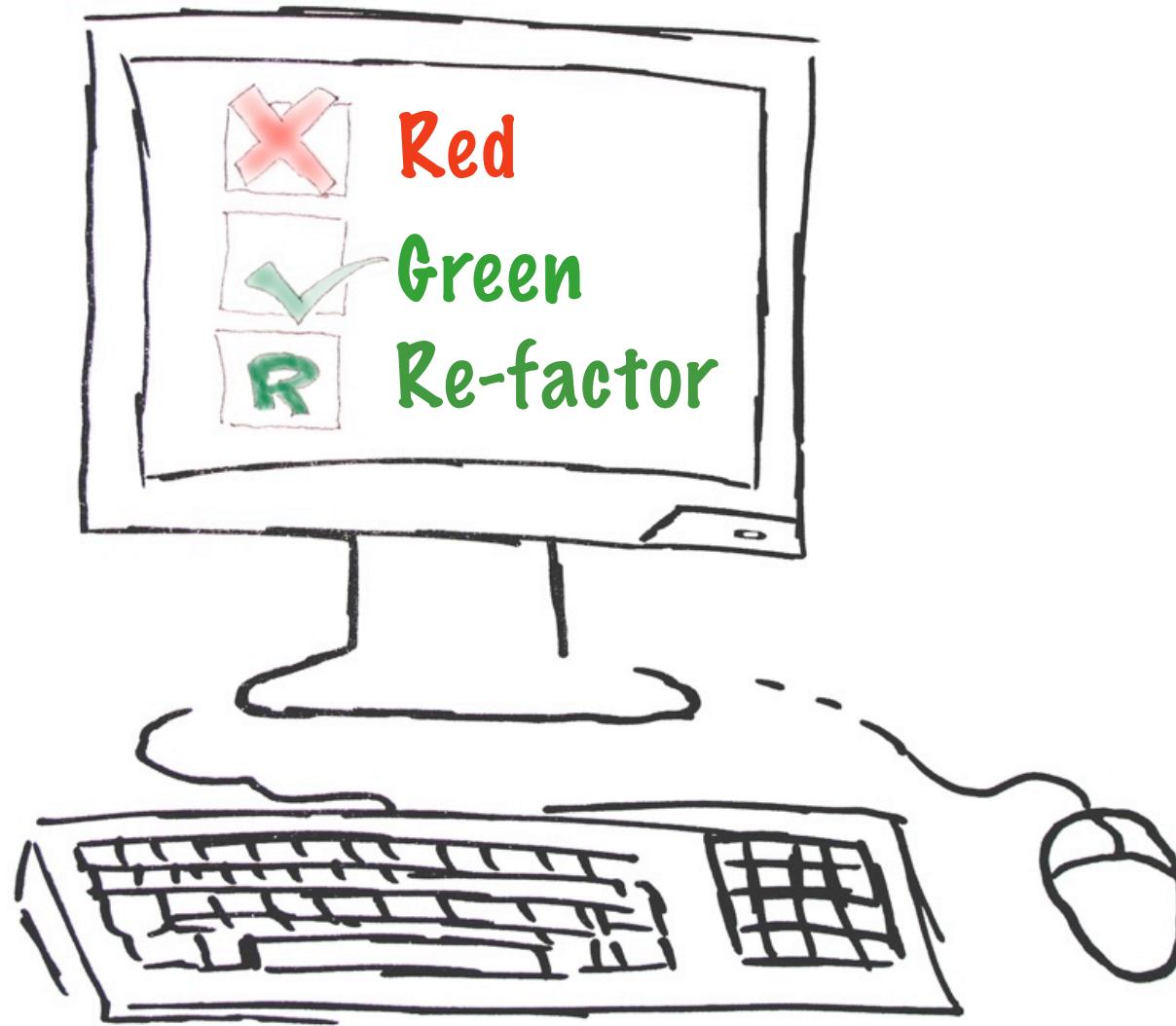


Technical

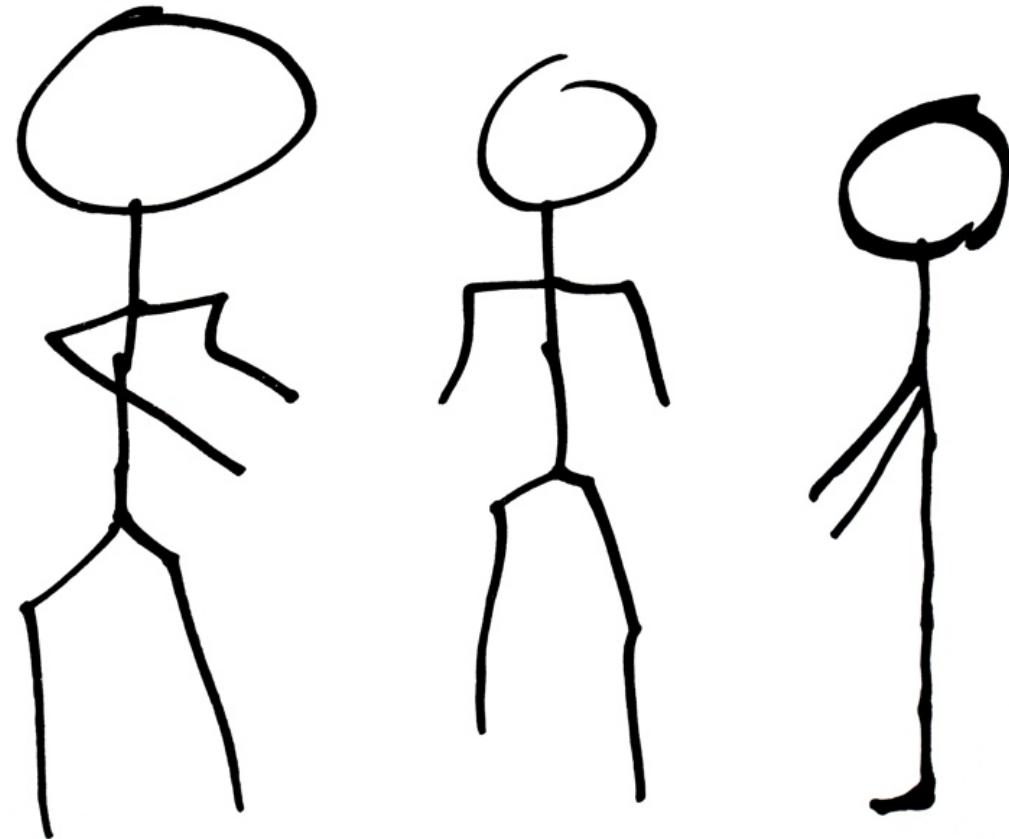


Social

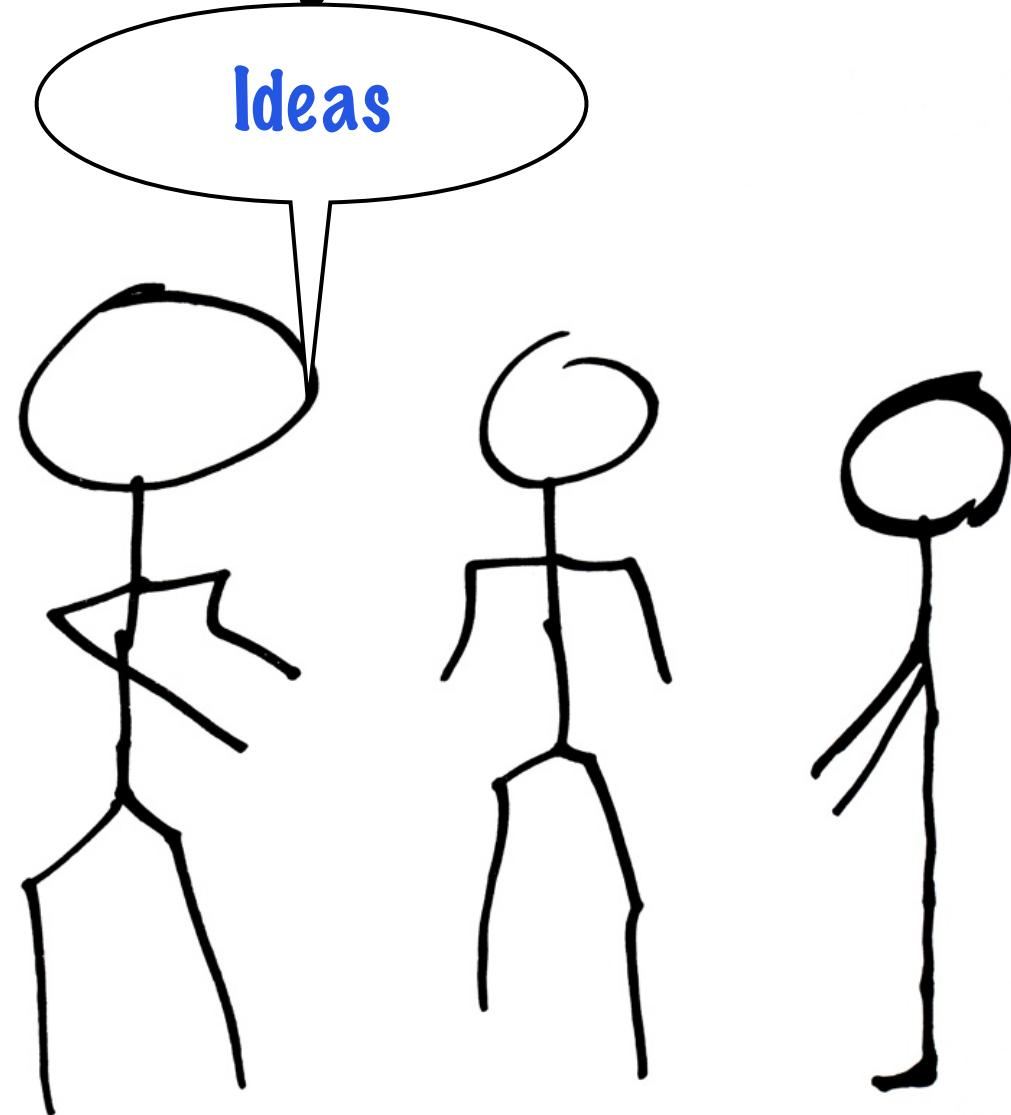
Technology Driven



People Driven

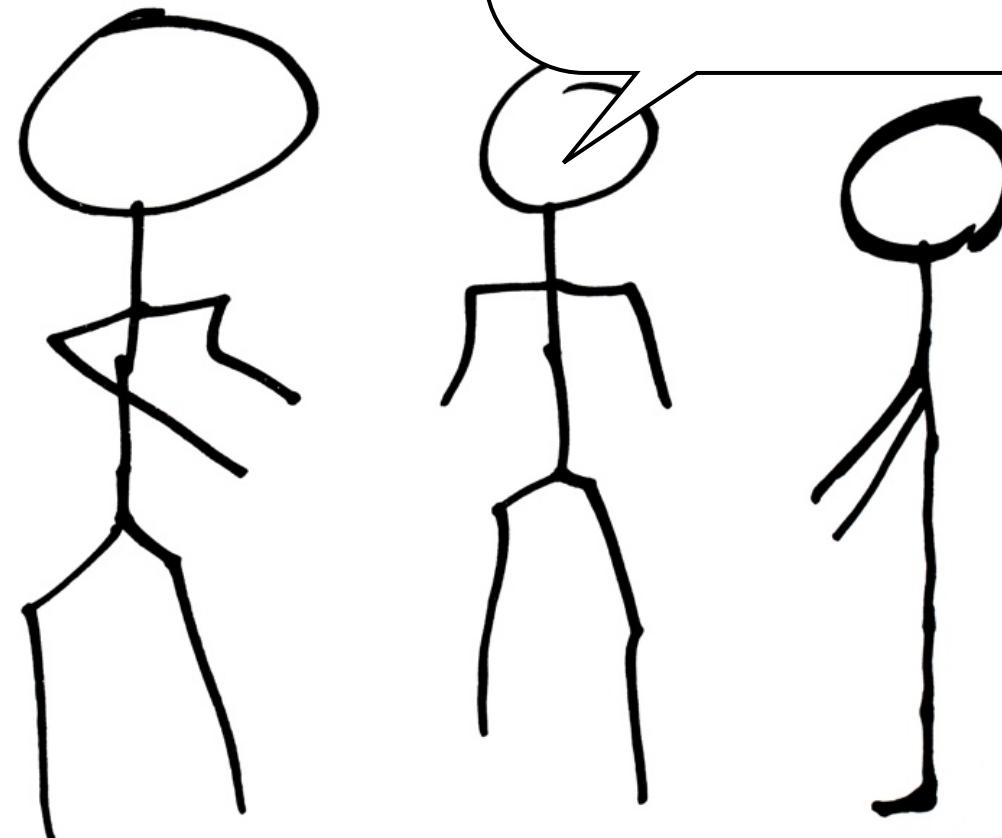


People Driven

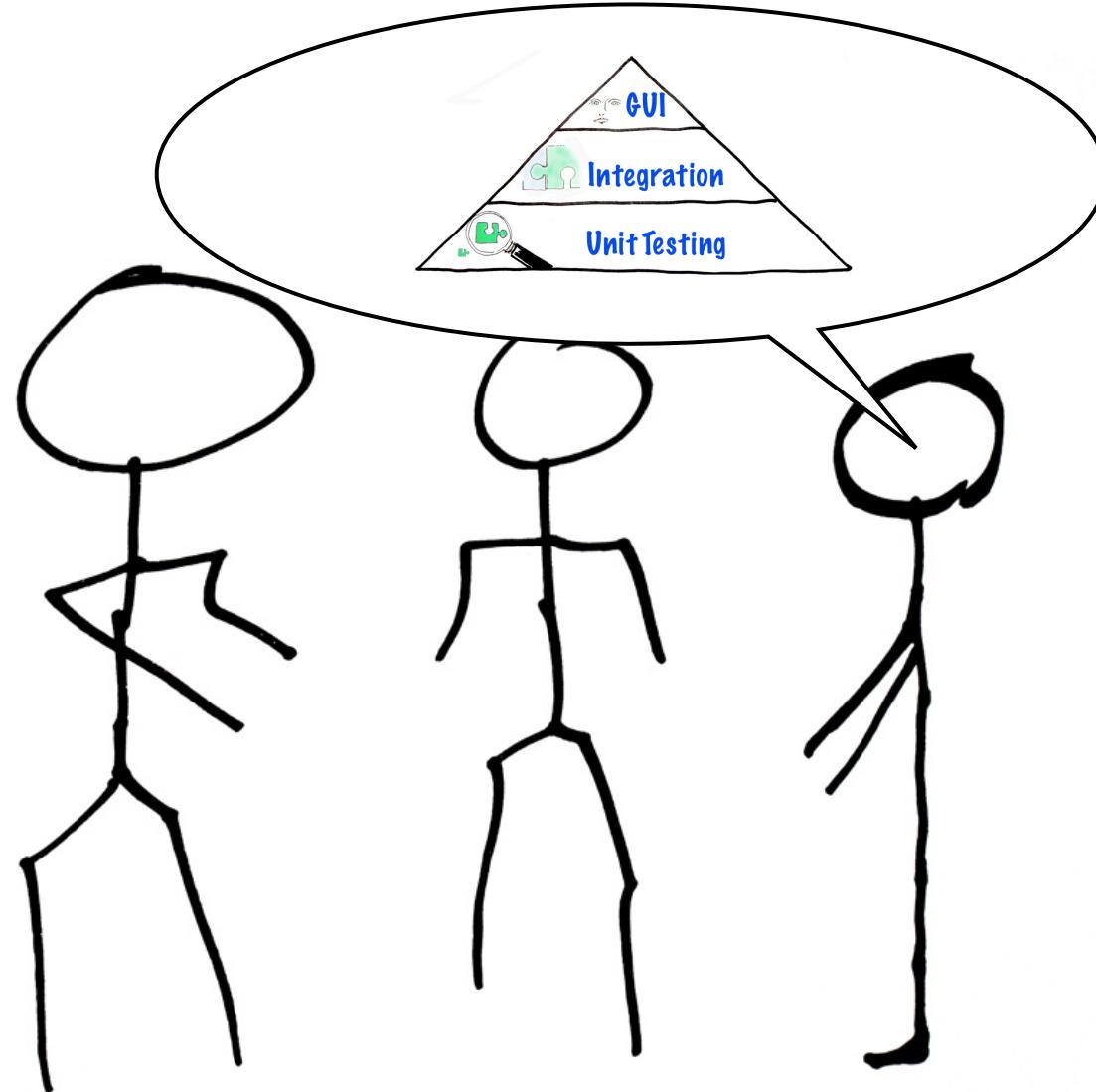


People Driven

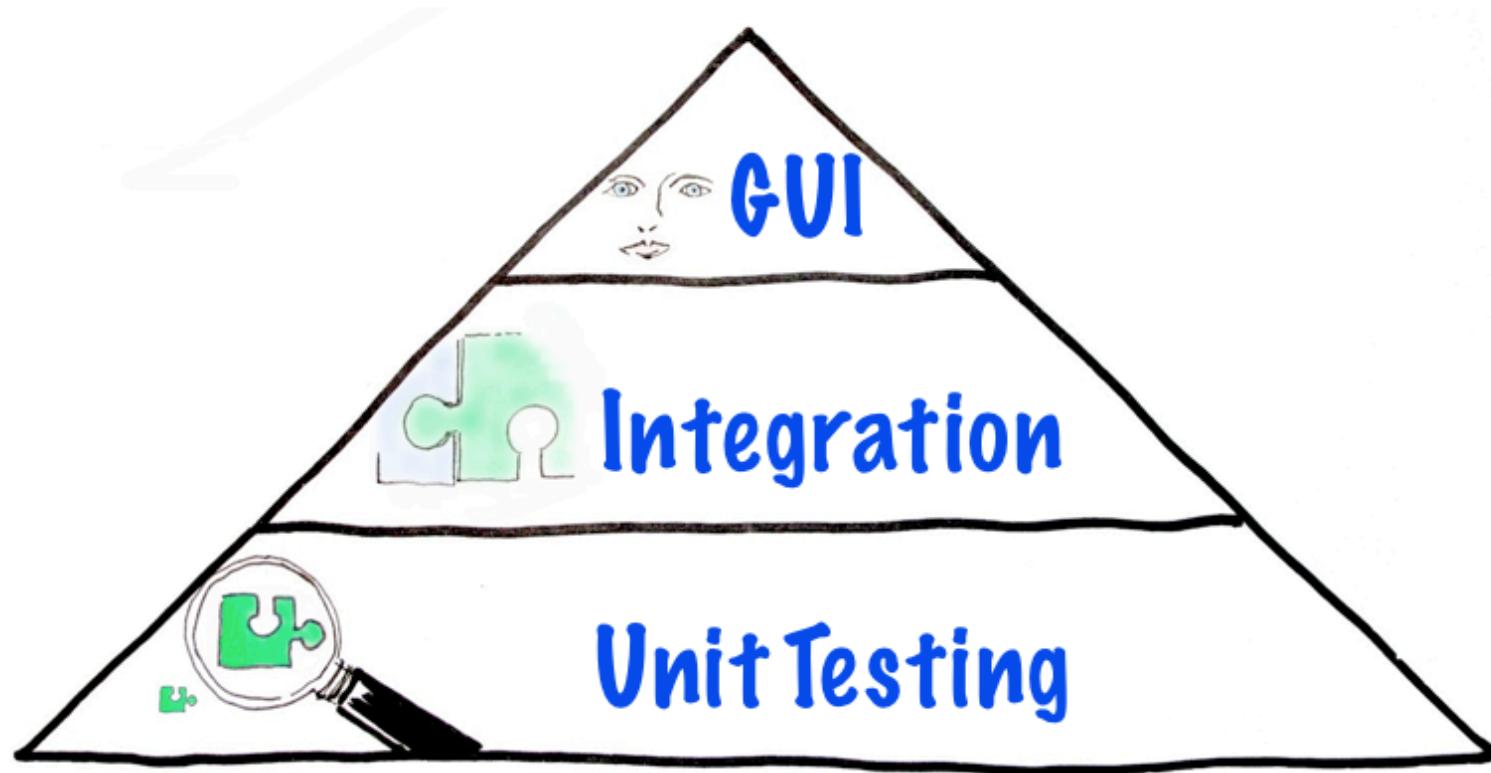
BDD, ATDD, Fitnesse



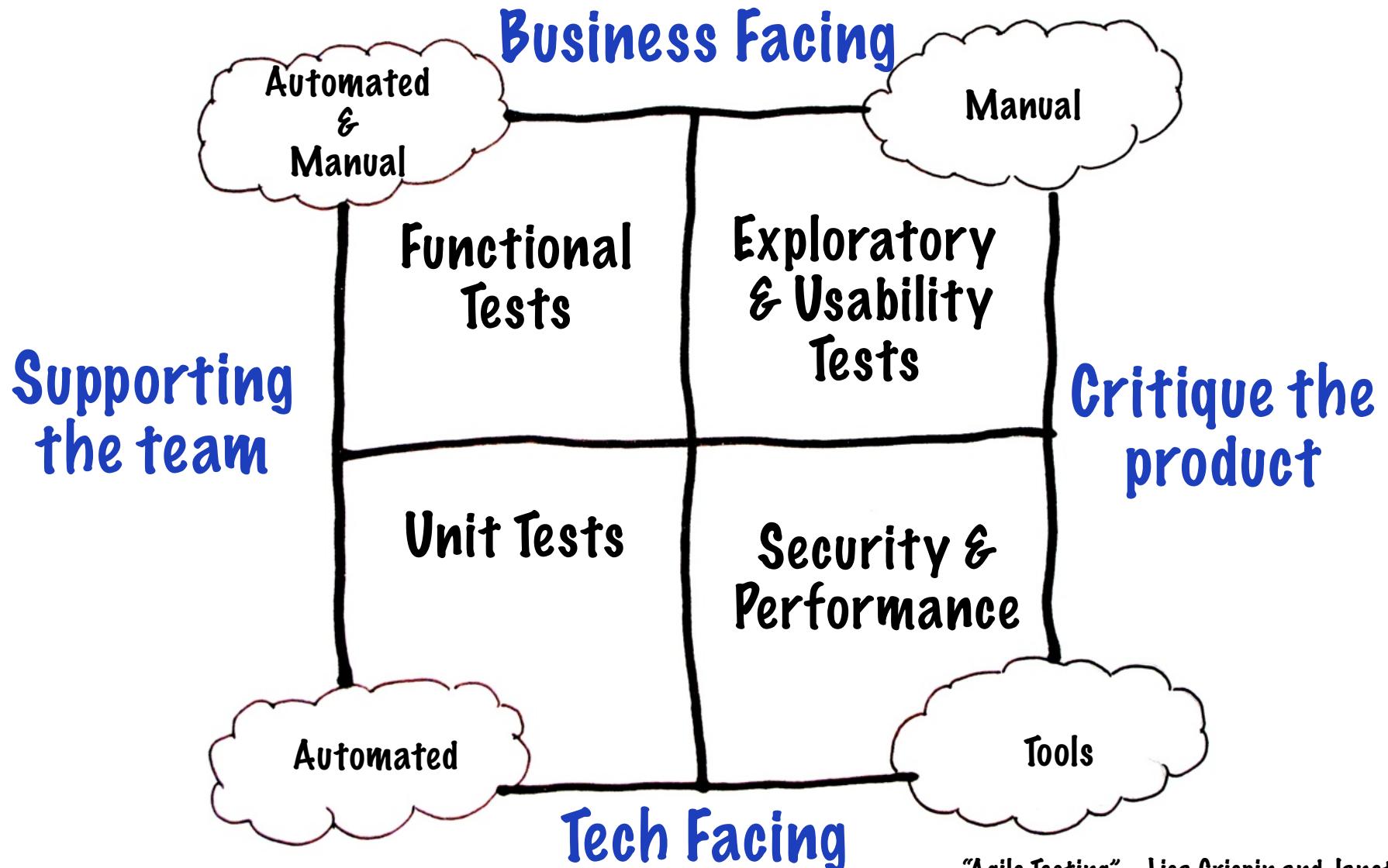
People Driven



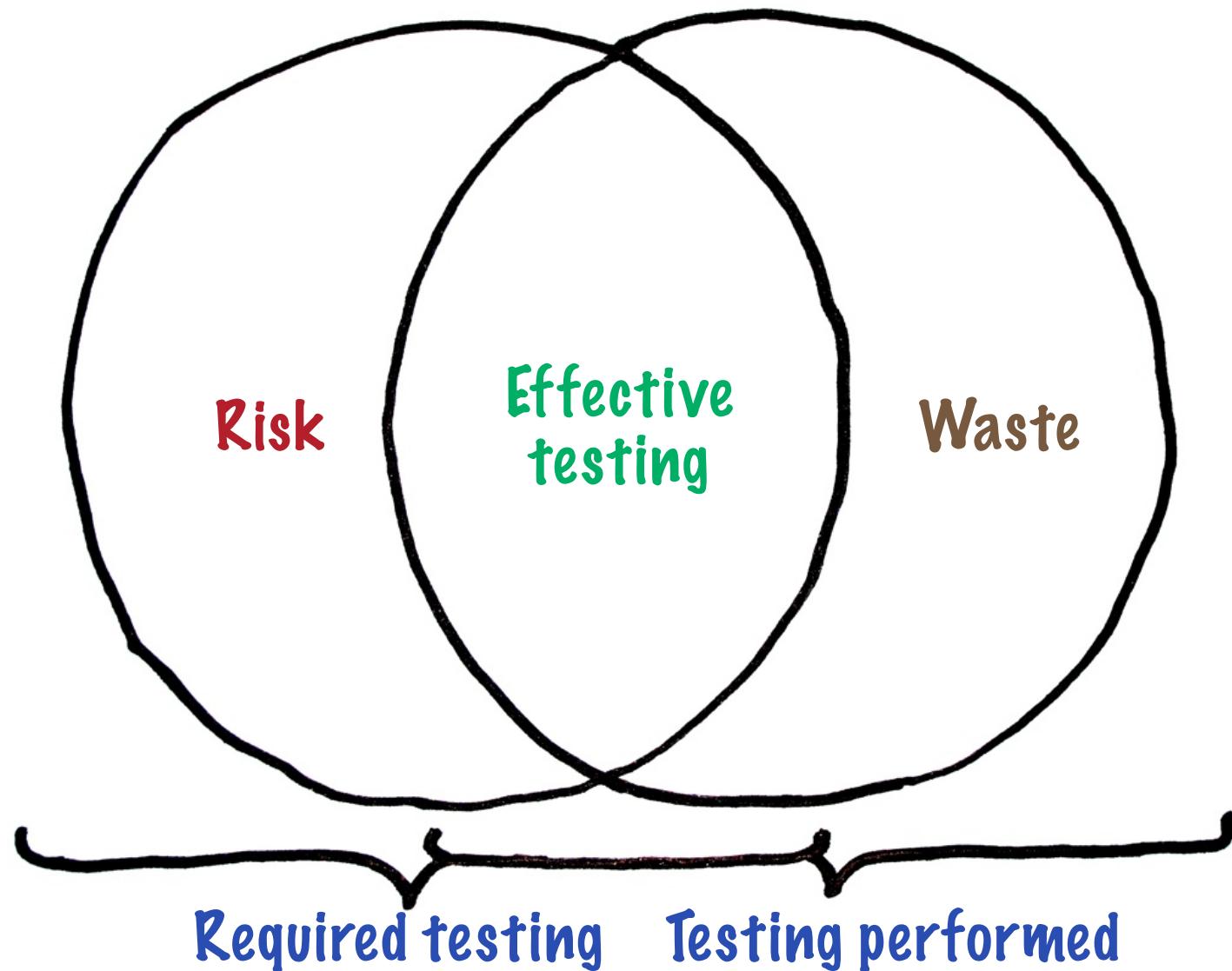
Integrating Approaches



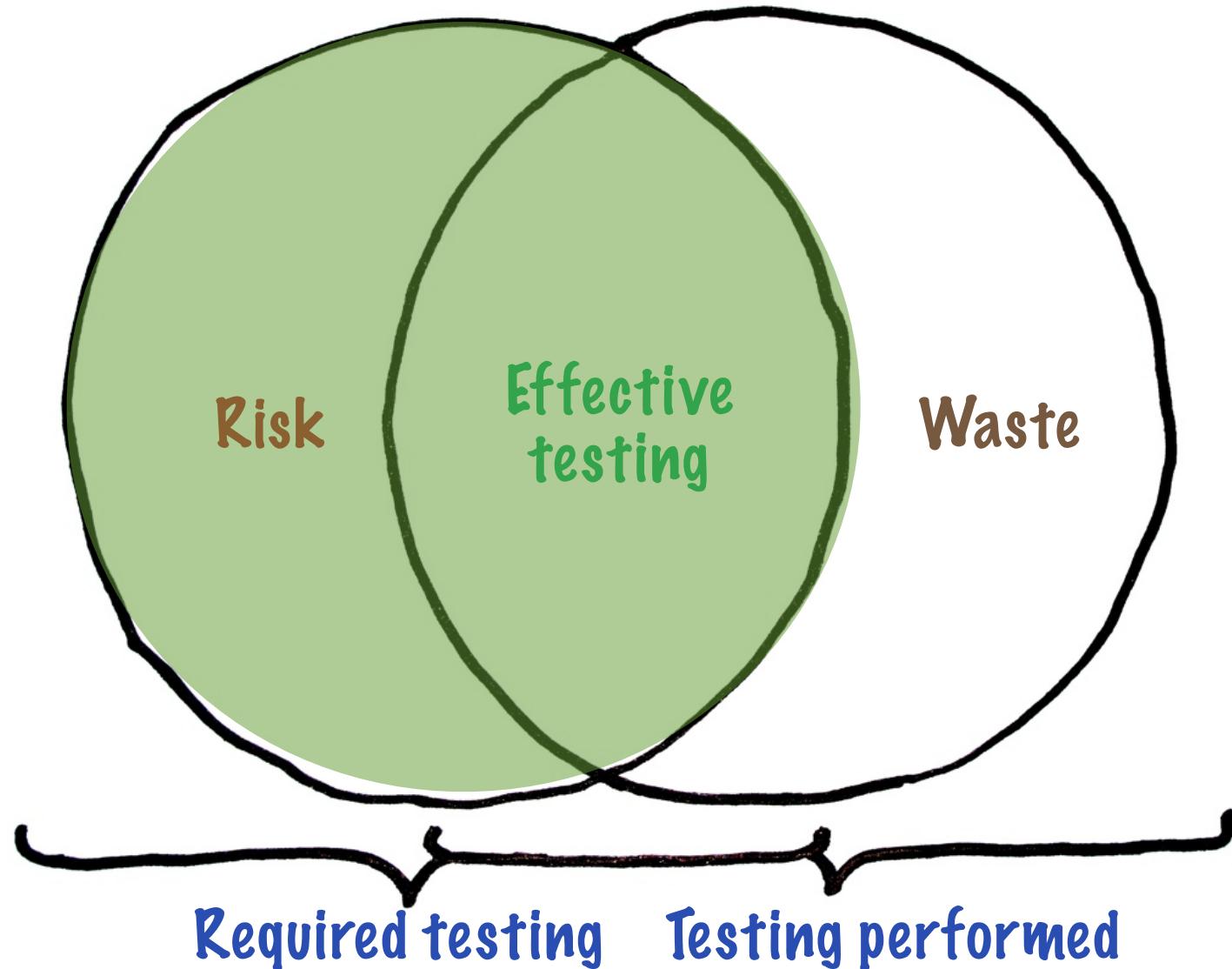
Quadrant model



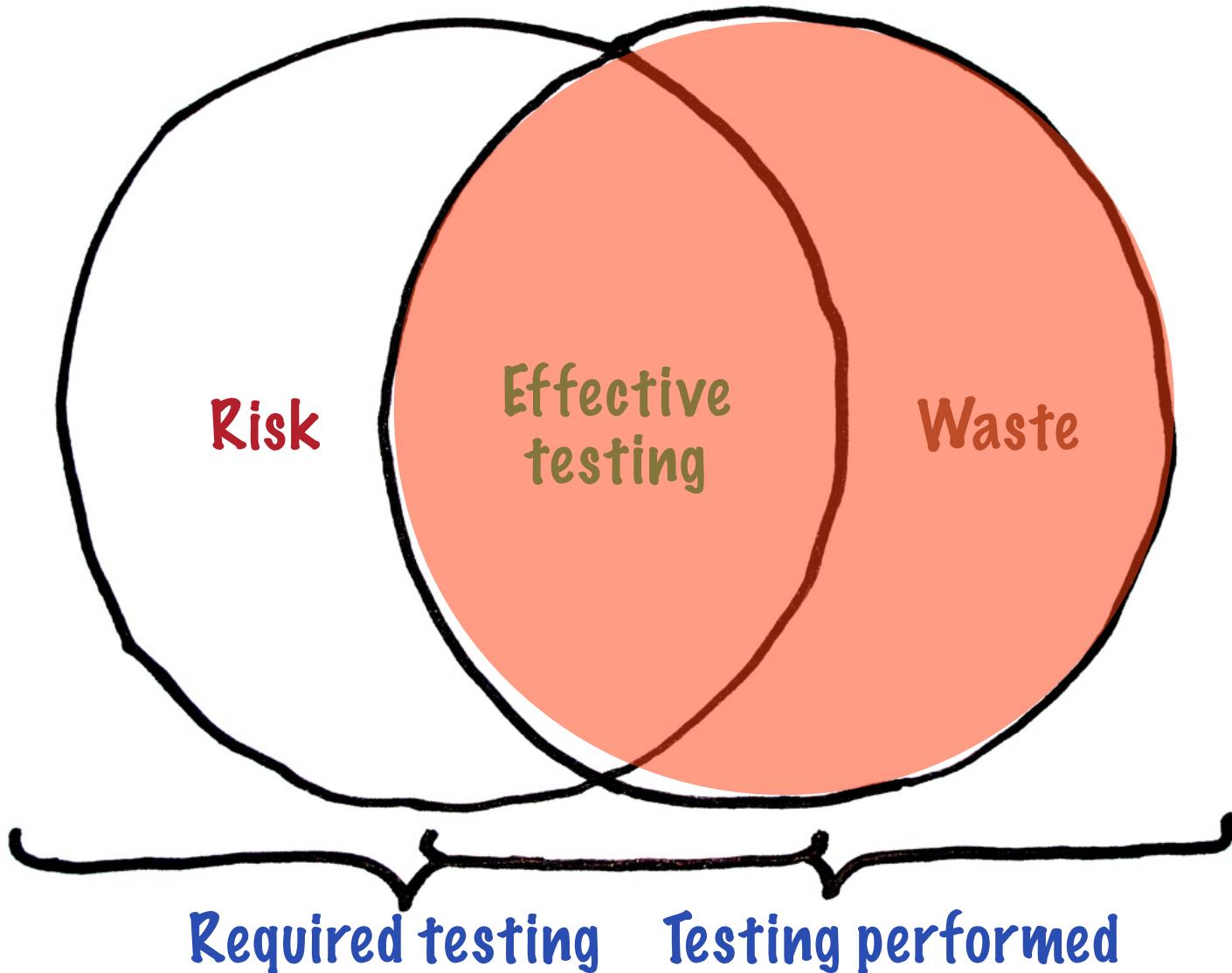
What should be tested?



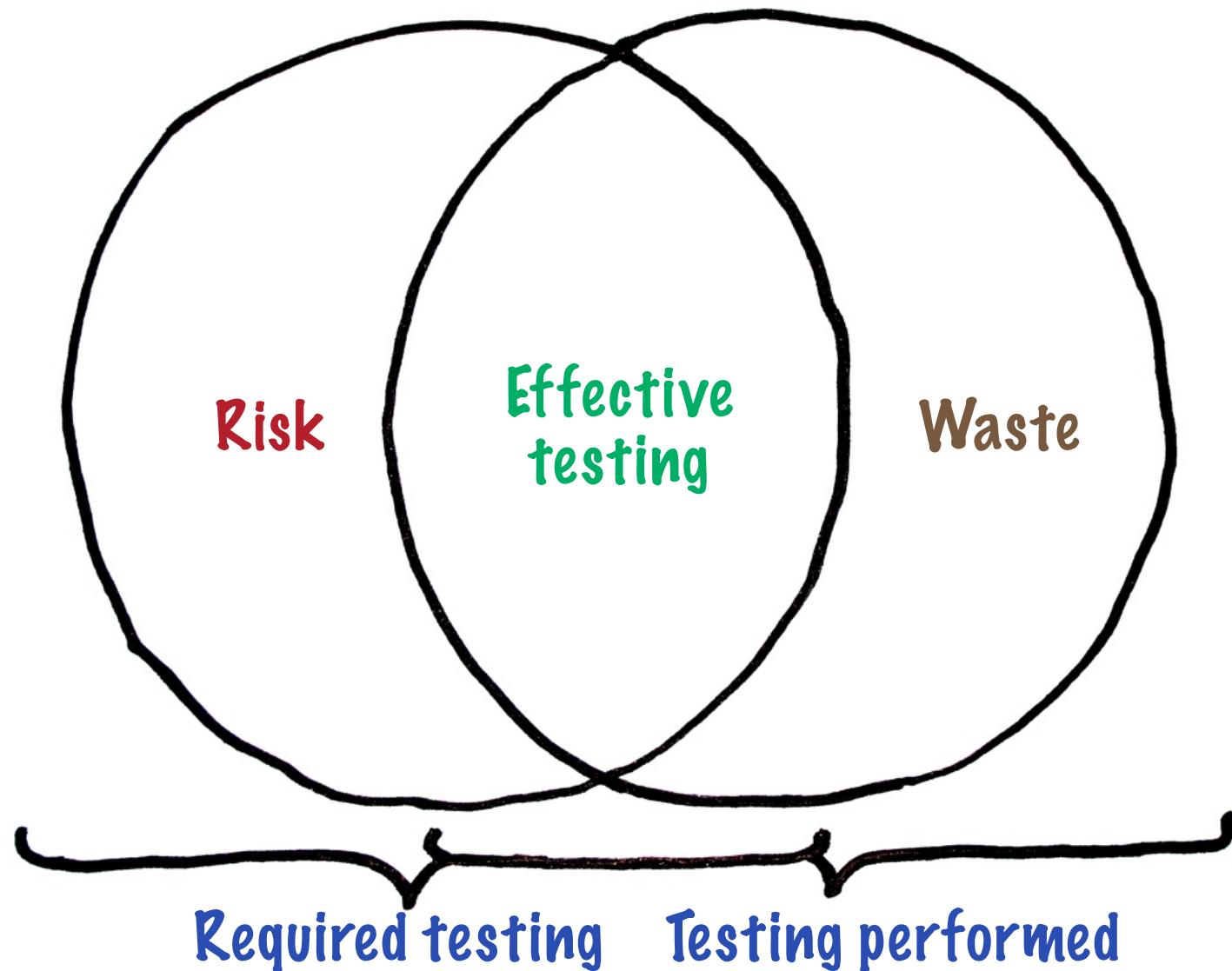
What should be tested?



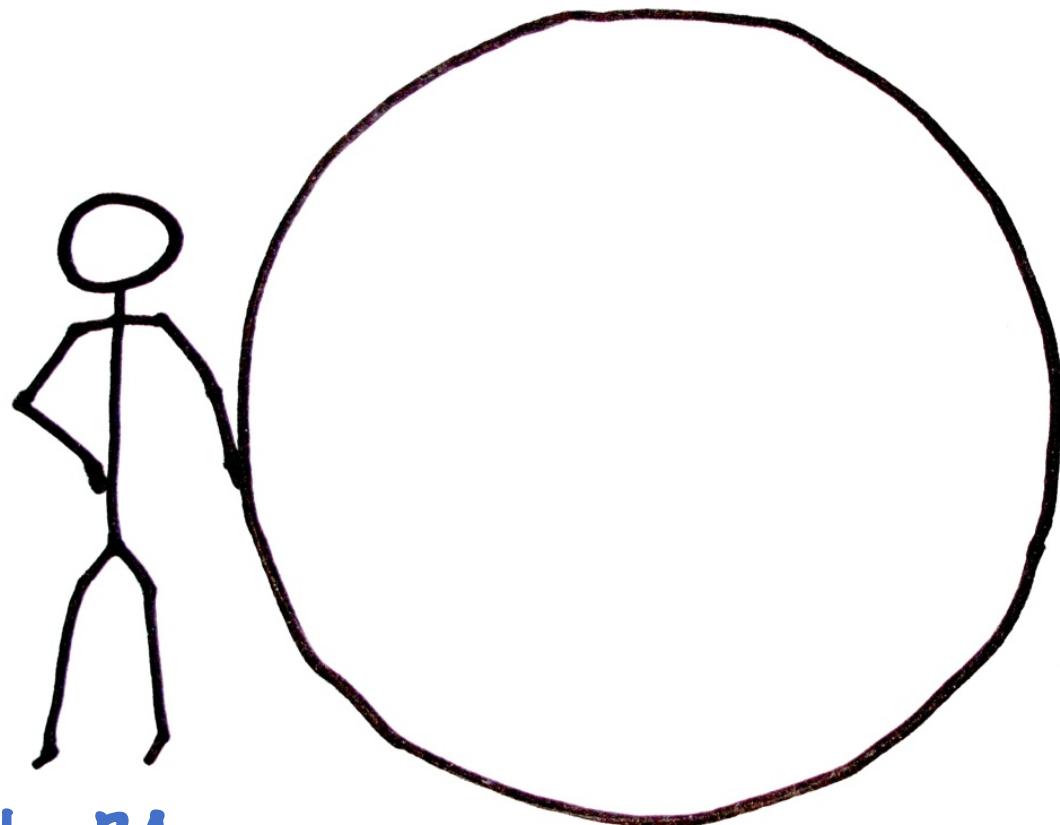
What should be tested?



What should be tested?

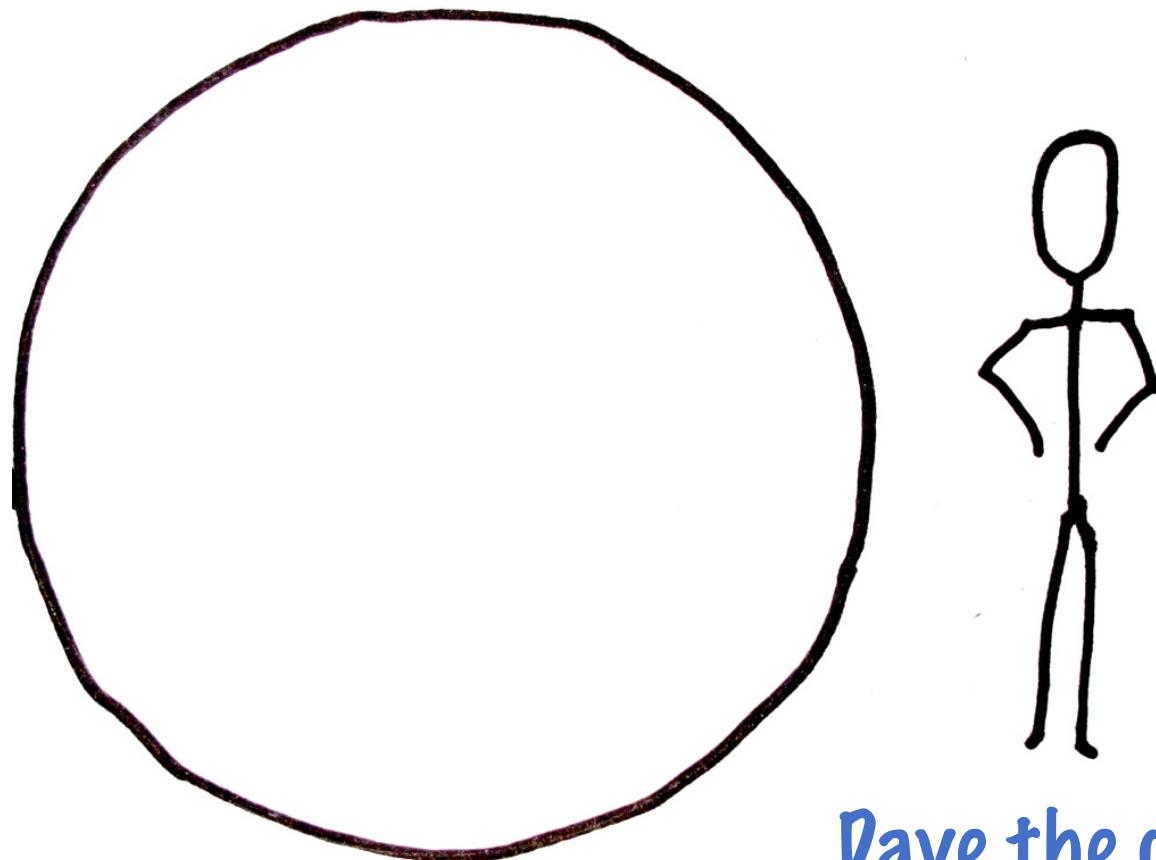


Different views



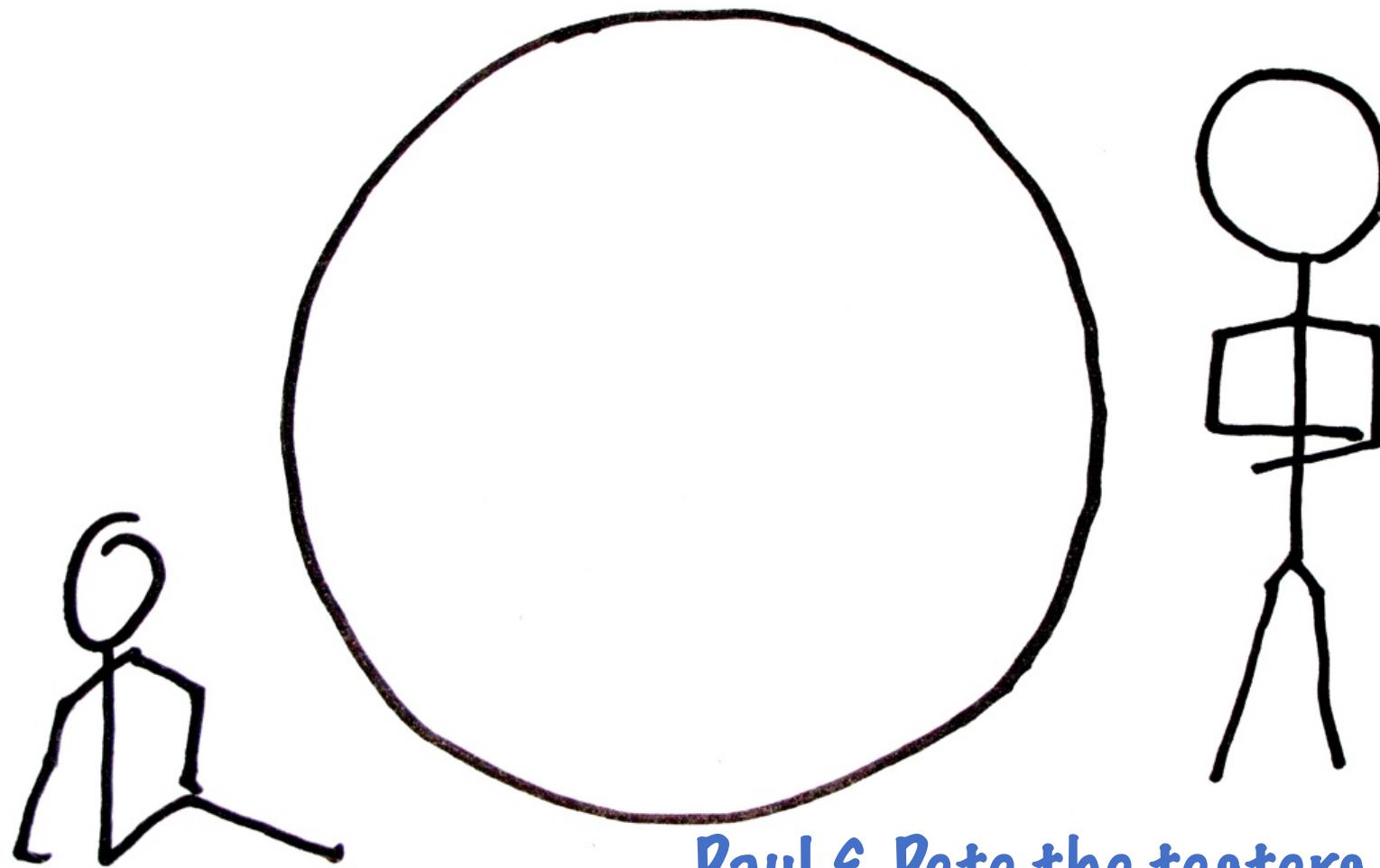
Bob the BA

Different views



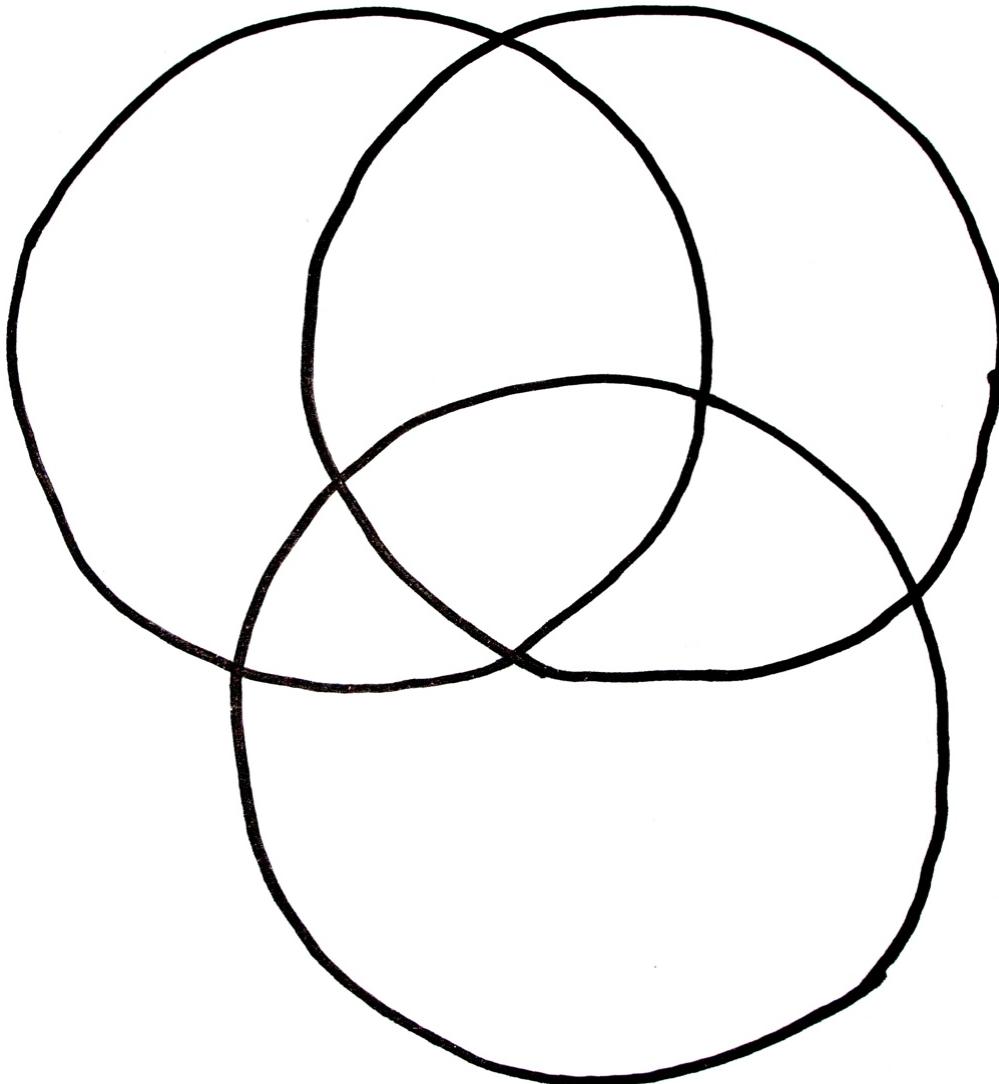
Dave the dev

Different views

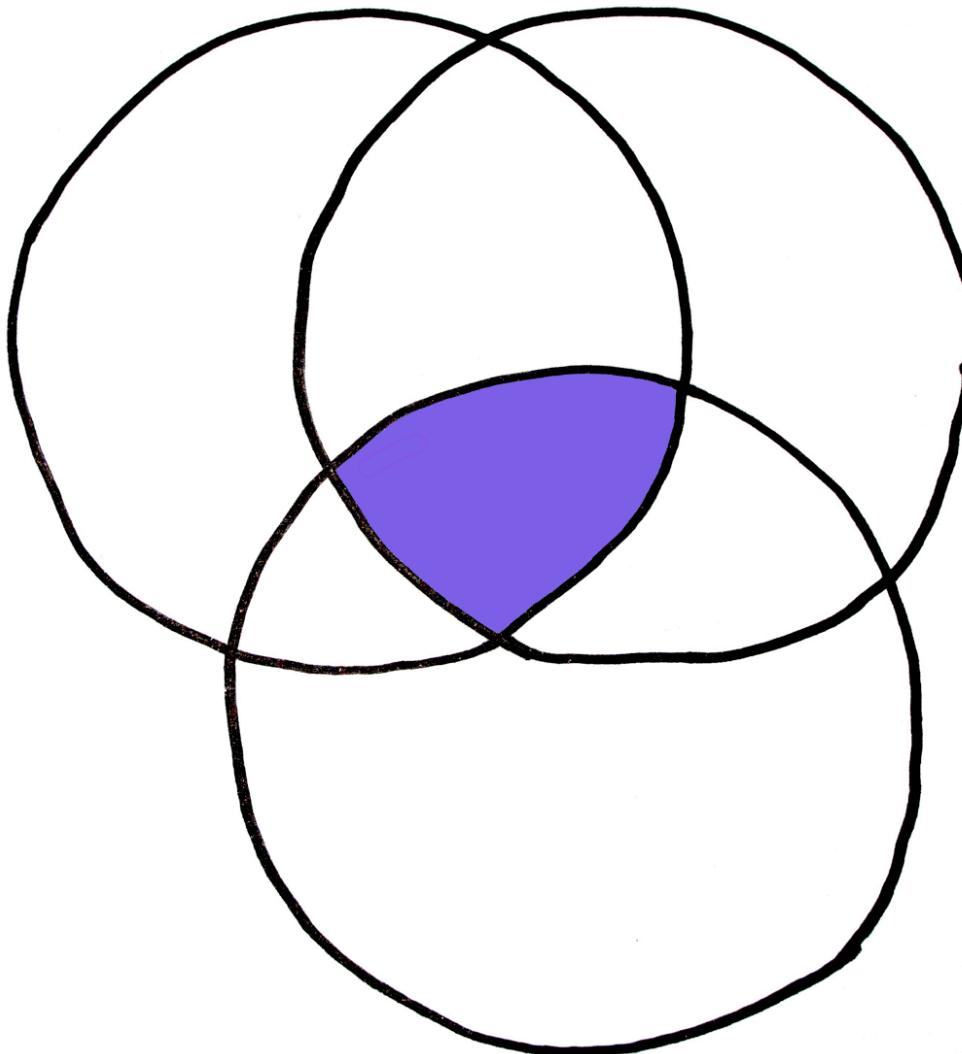


Paul & Pete the testers

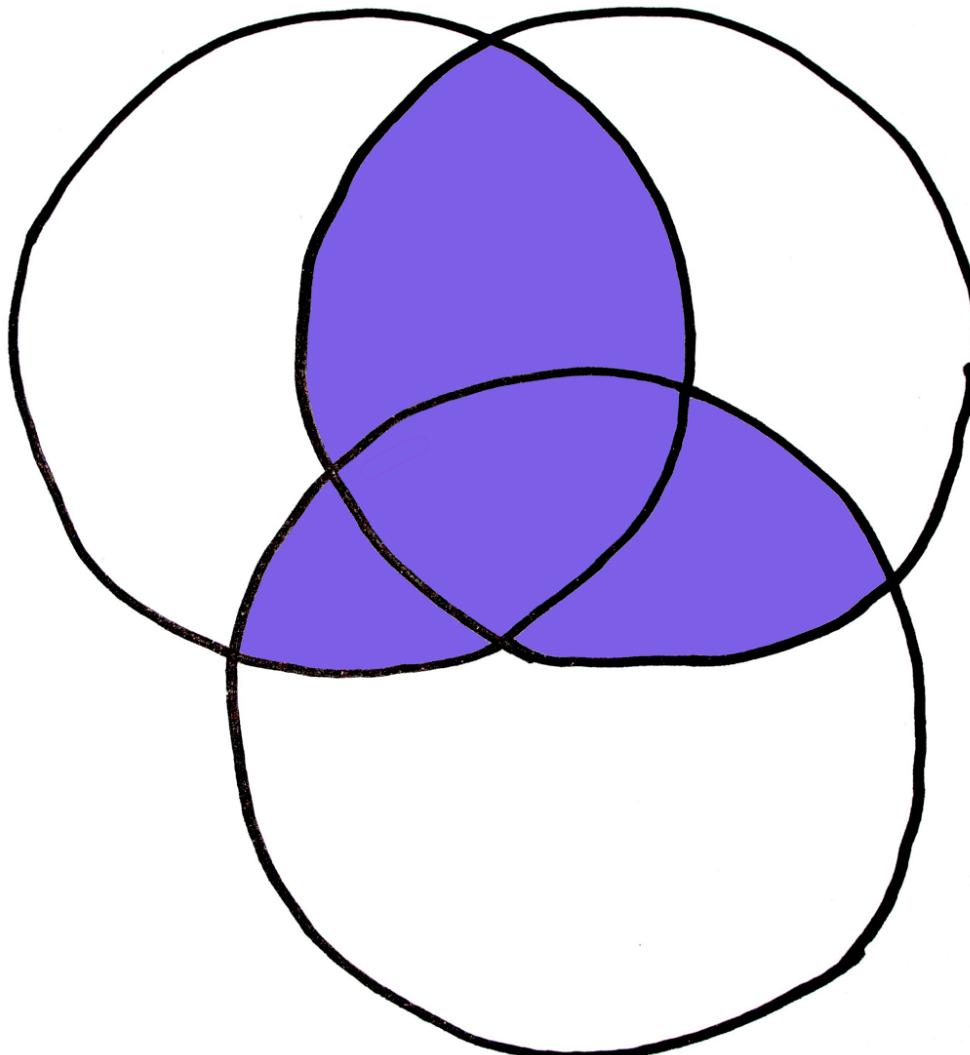
Different views



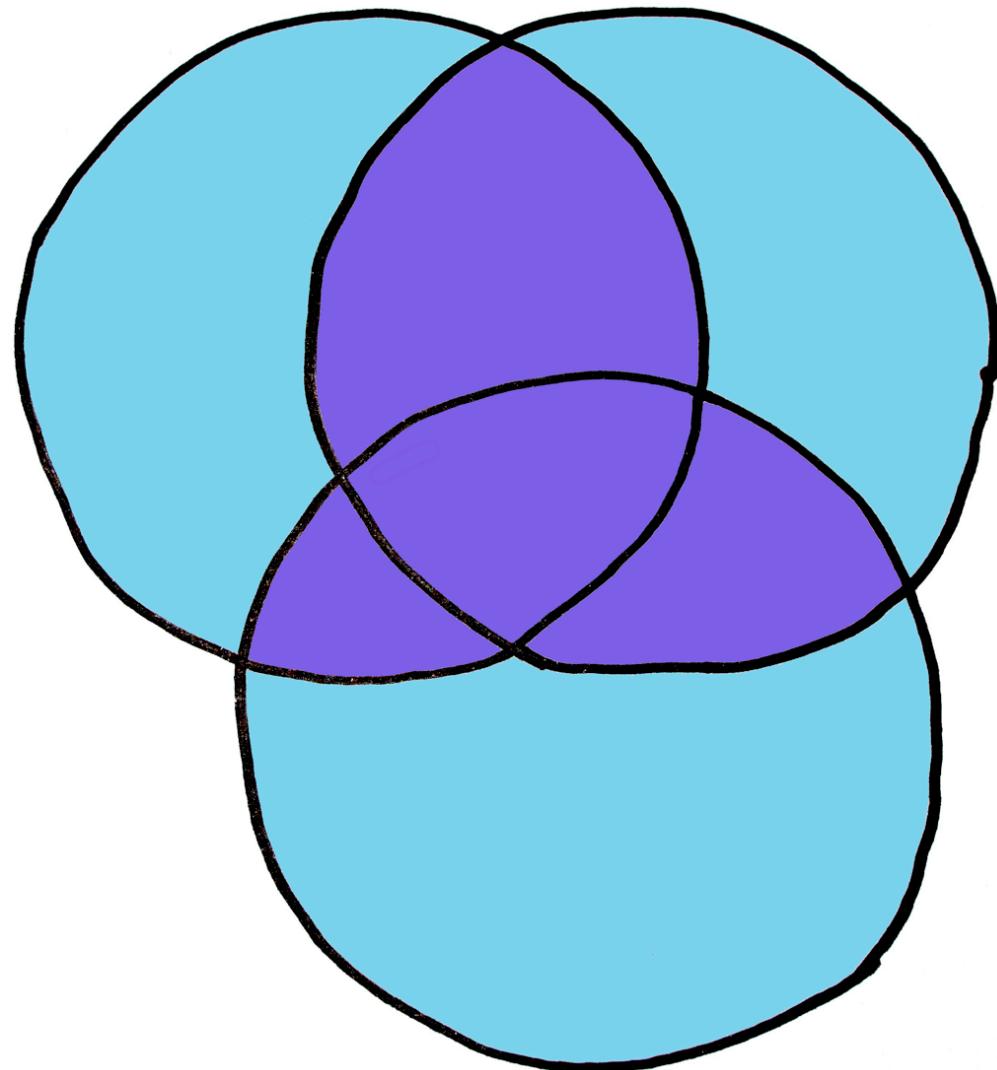
Different views



Different views



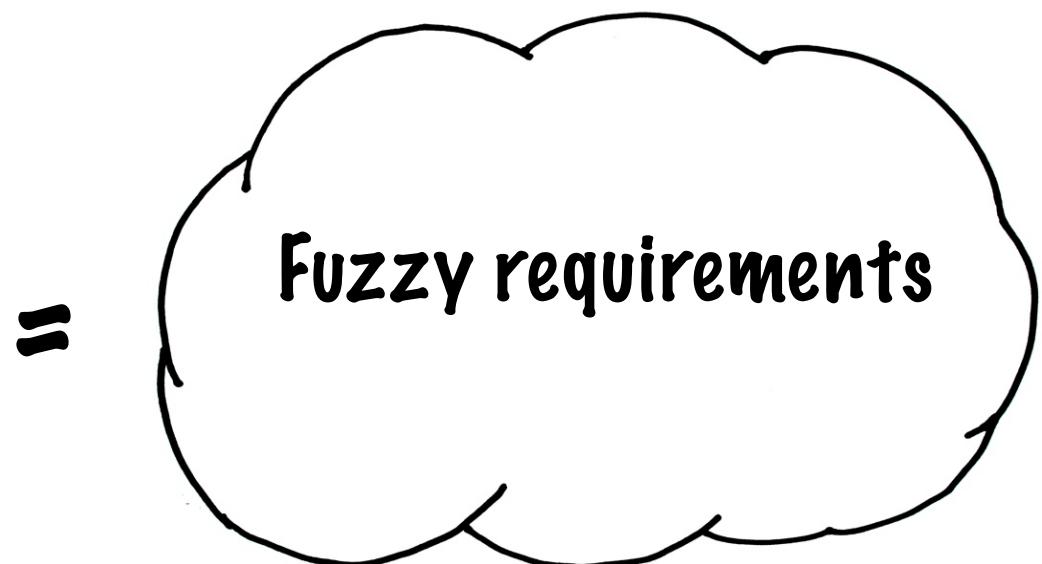
Different views



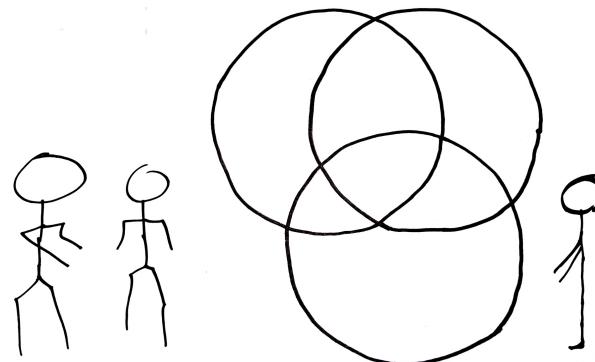
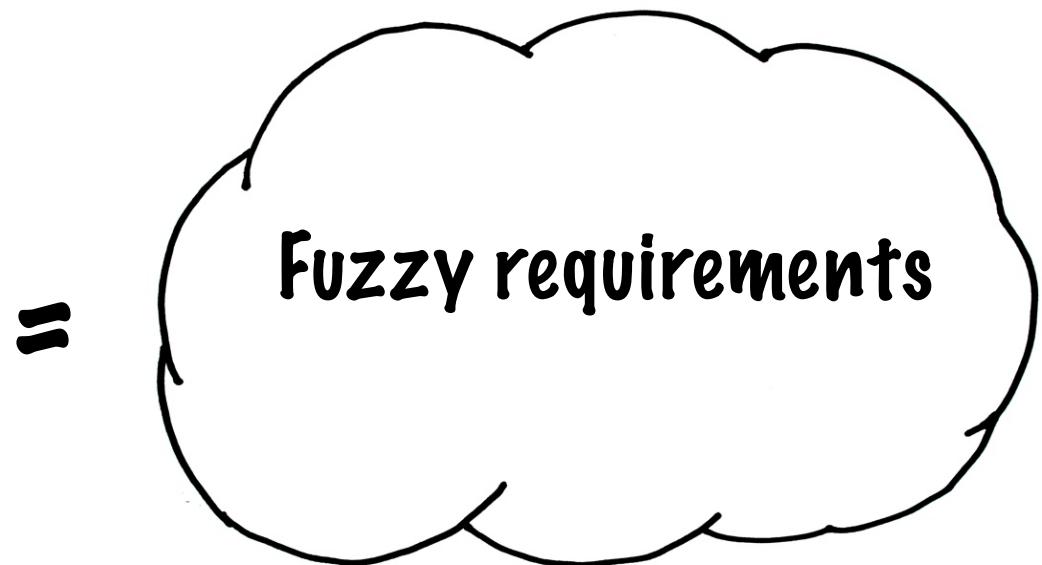
Agile makes some things harder



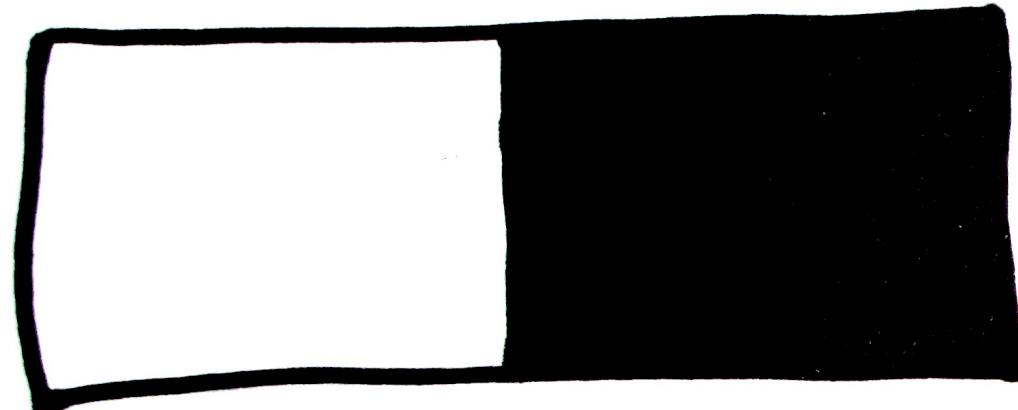
Less defined Requirements ...



Less defined Requirements ...

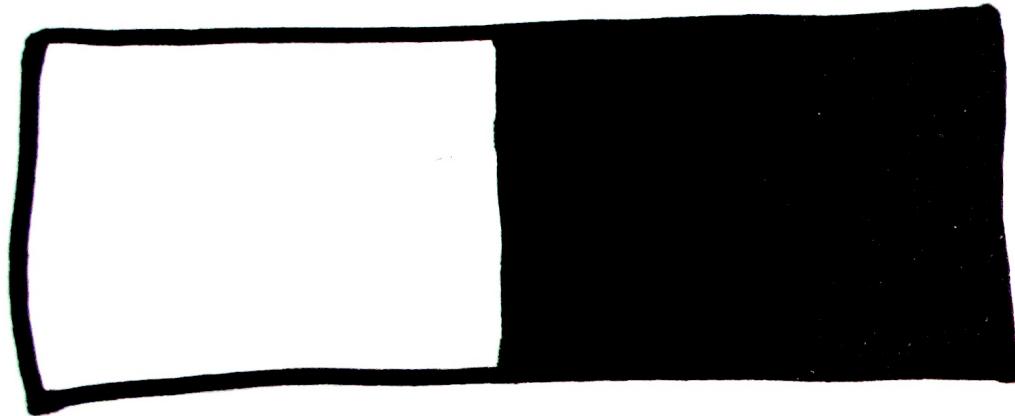


But tests must be objective

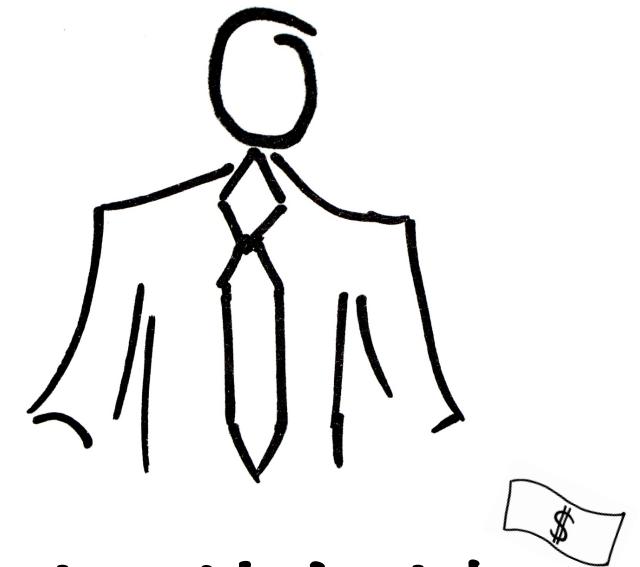


Tests

So they can provide...

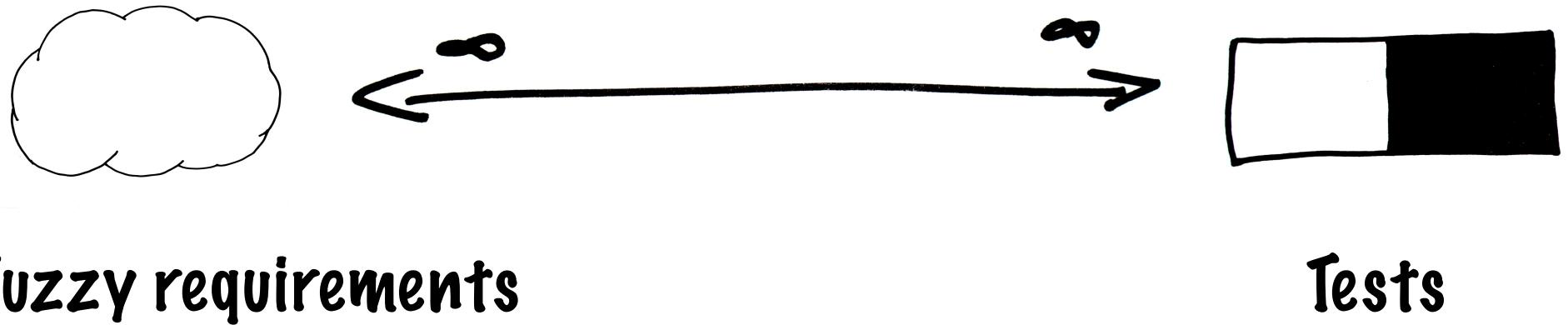


Tests



Actionable Insight

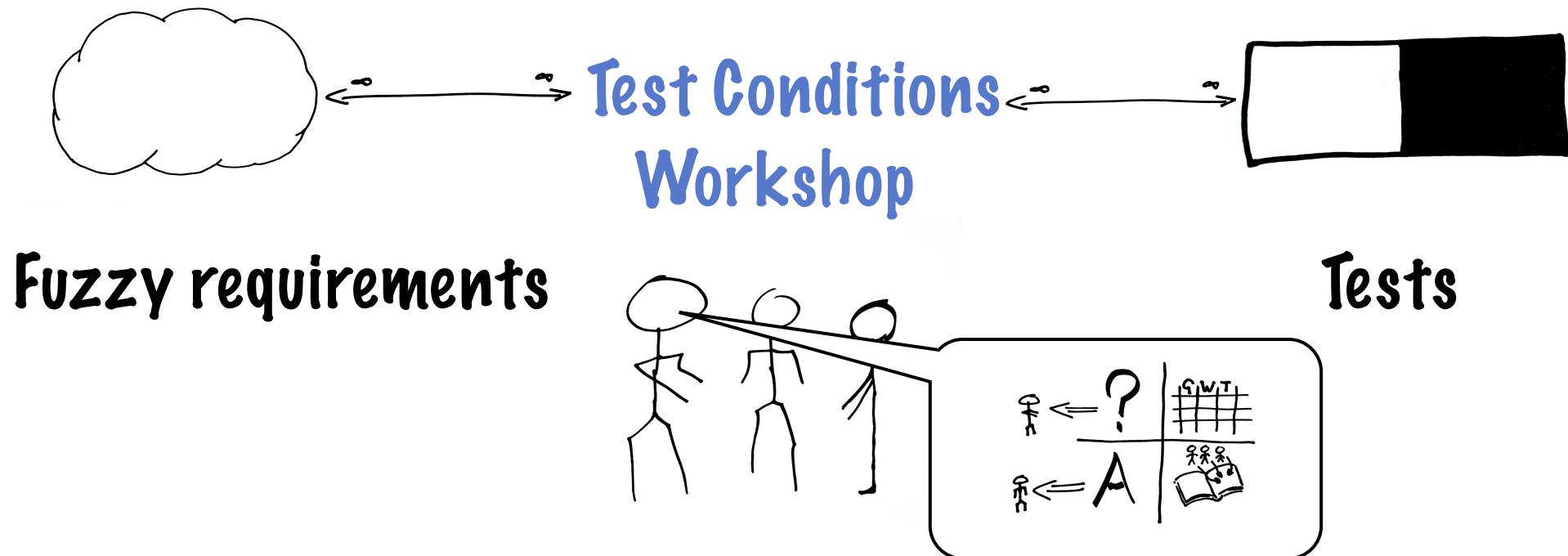
Big gap between

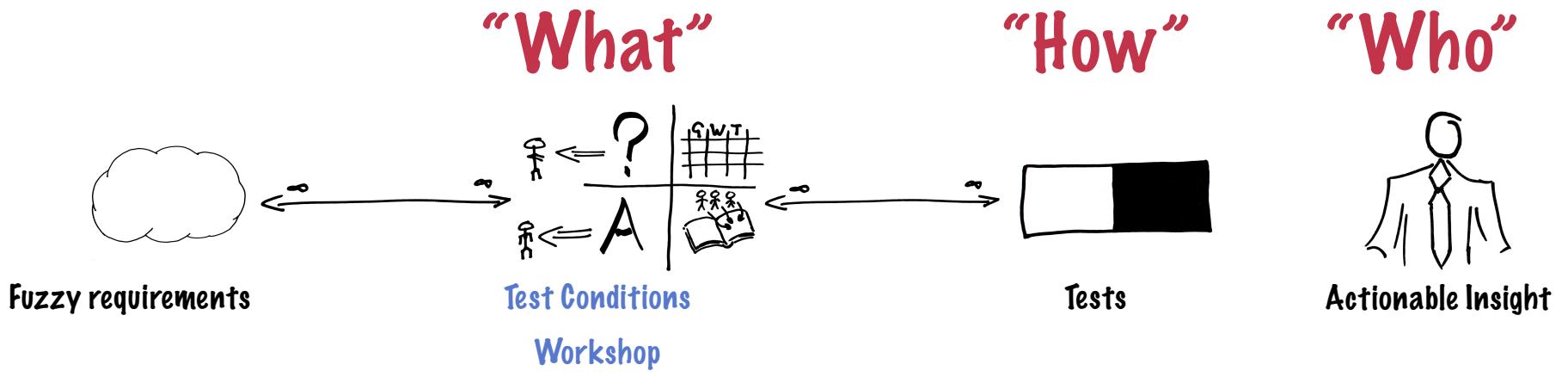


Test Conditions

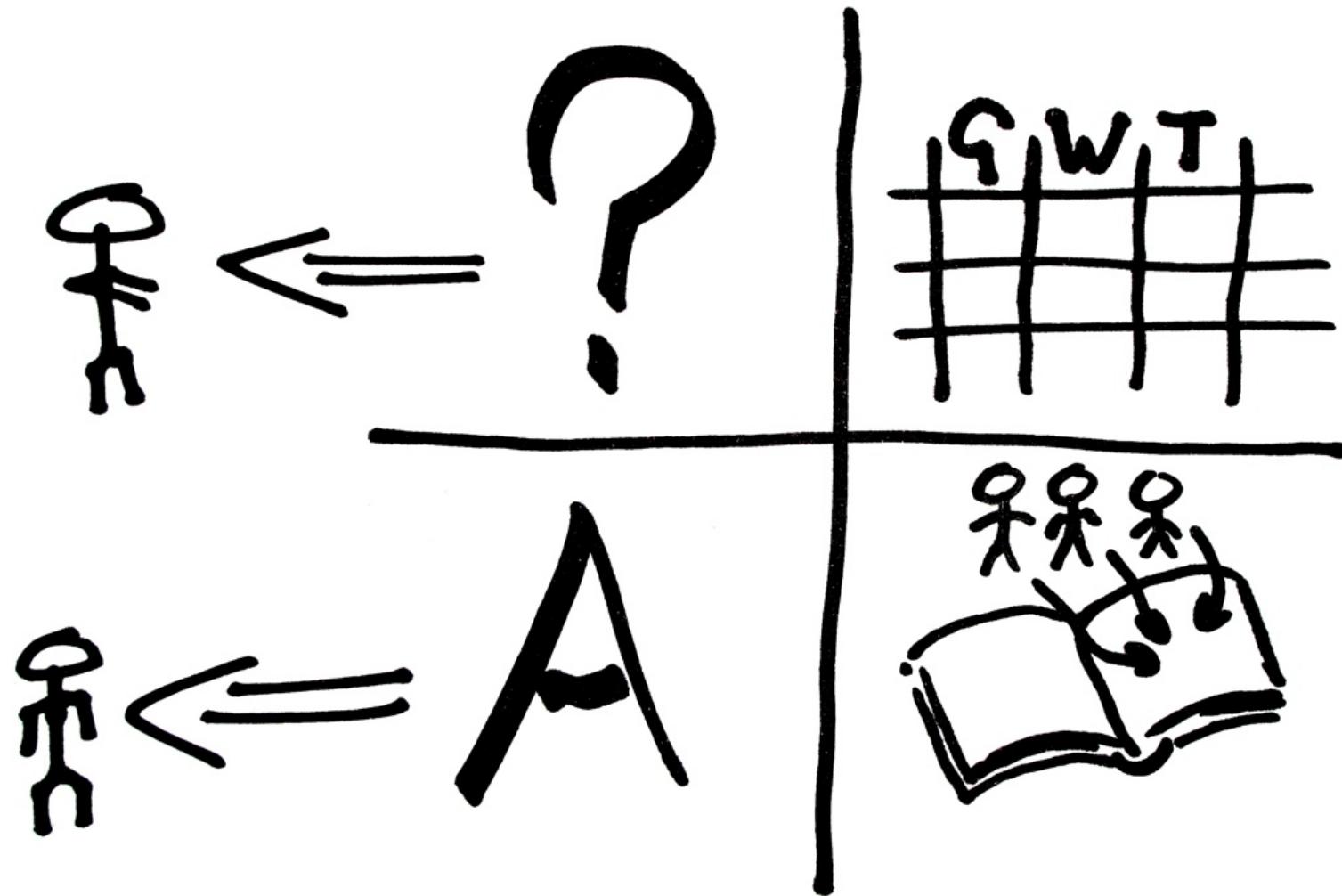


Test Conditions

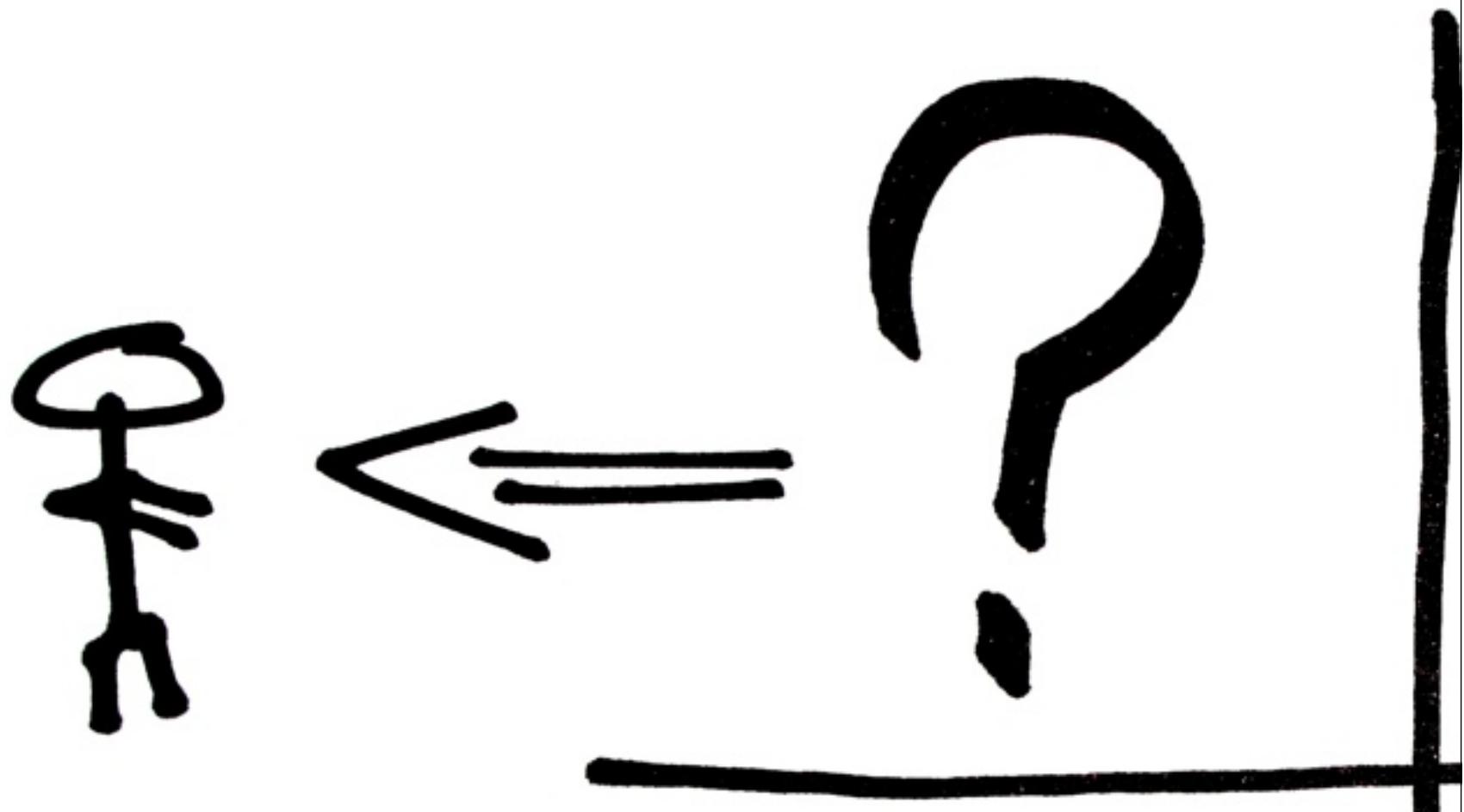




Test Conditions



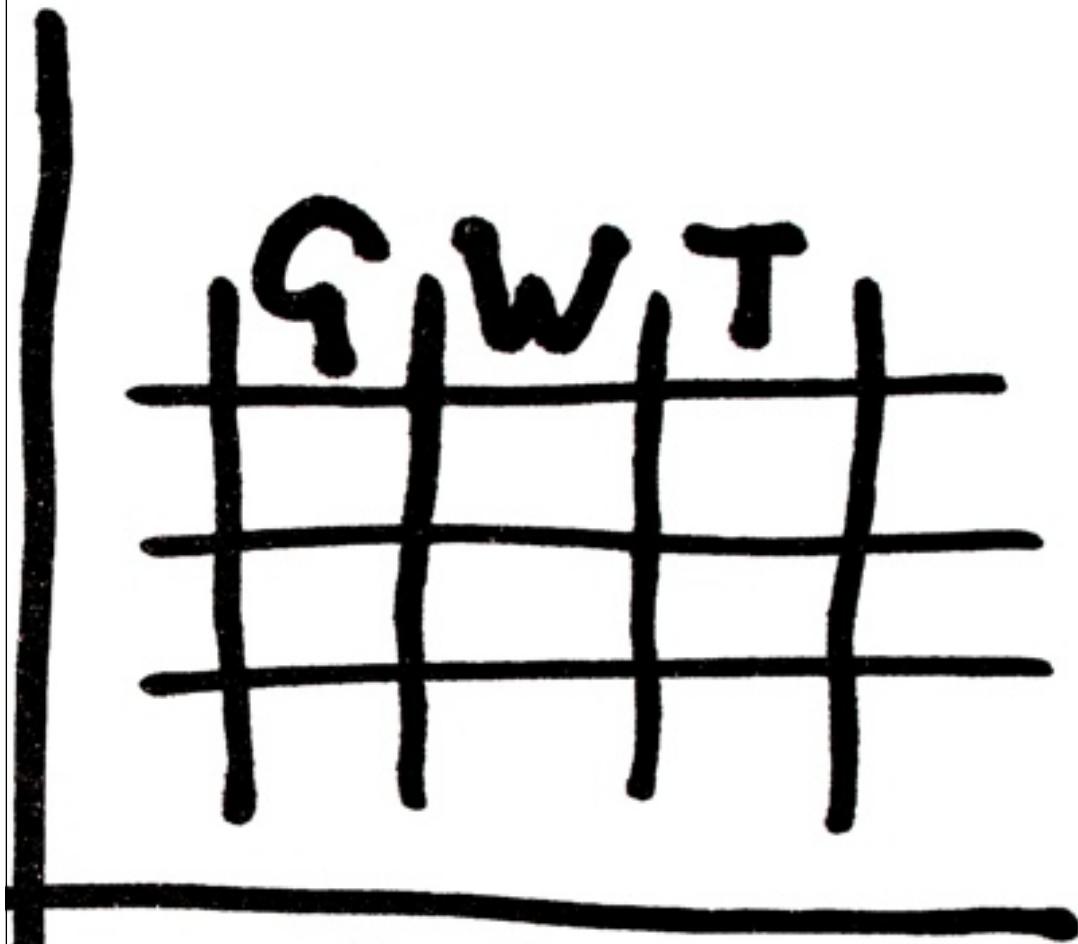
Questions



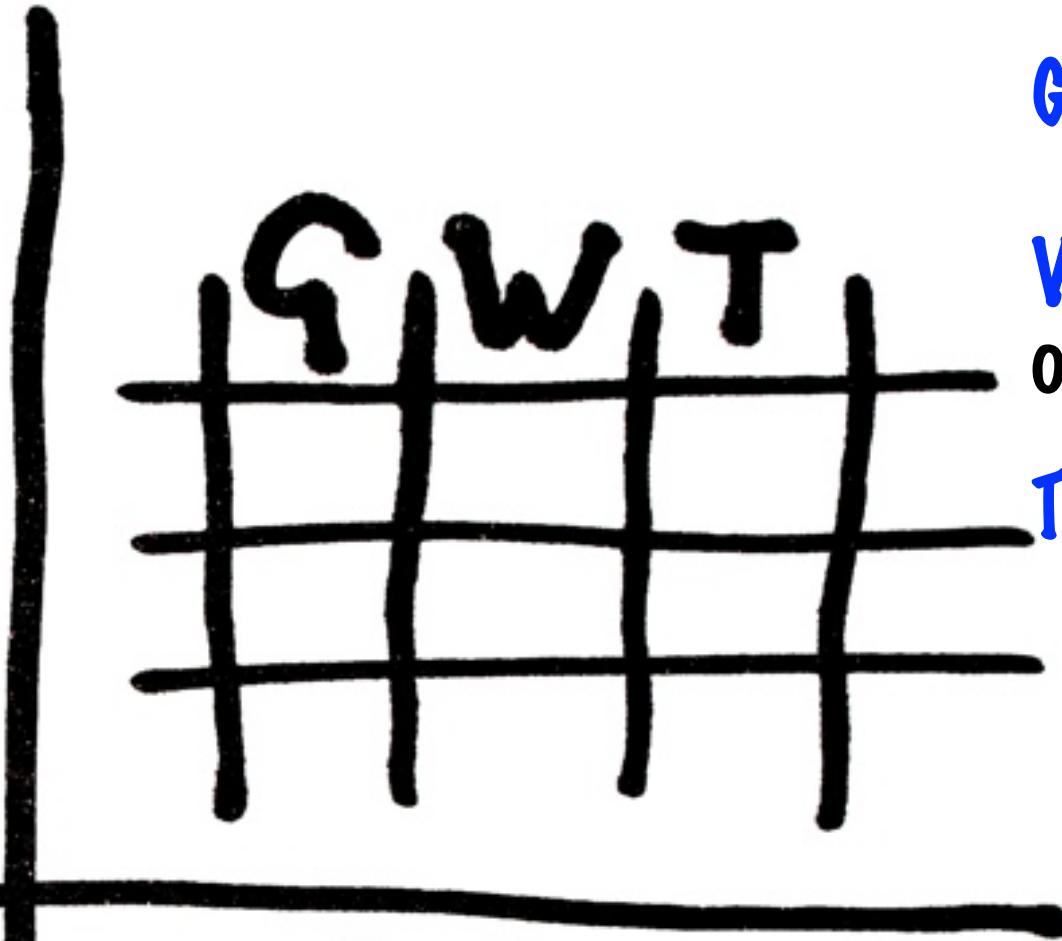


Assumptions

T/C's Given-When-Then



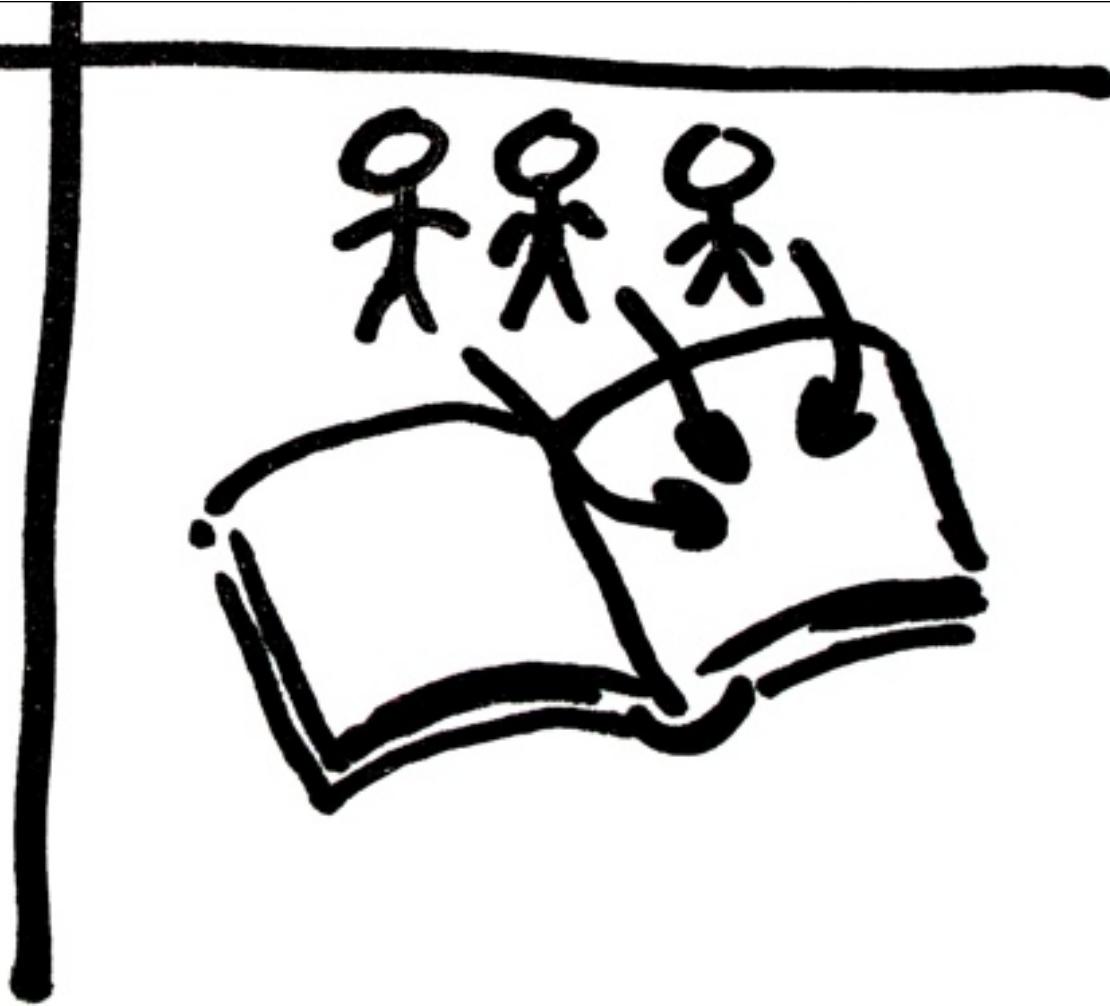
T/C's Given-When-Then



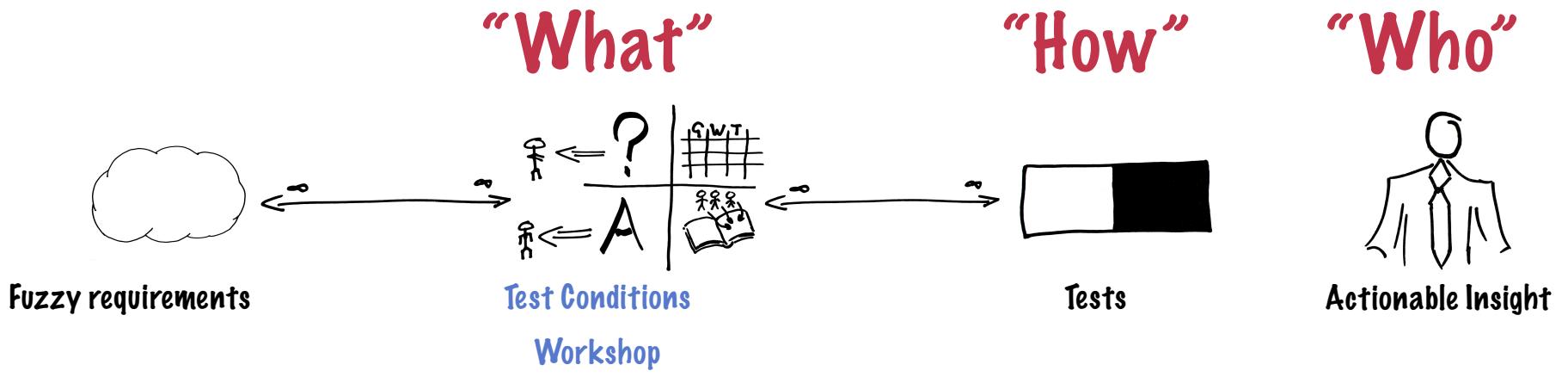
Given - Some preconditions

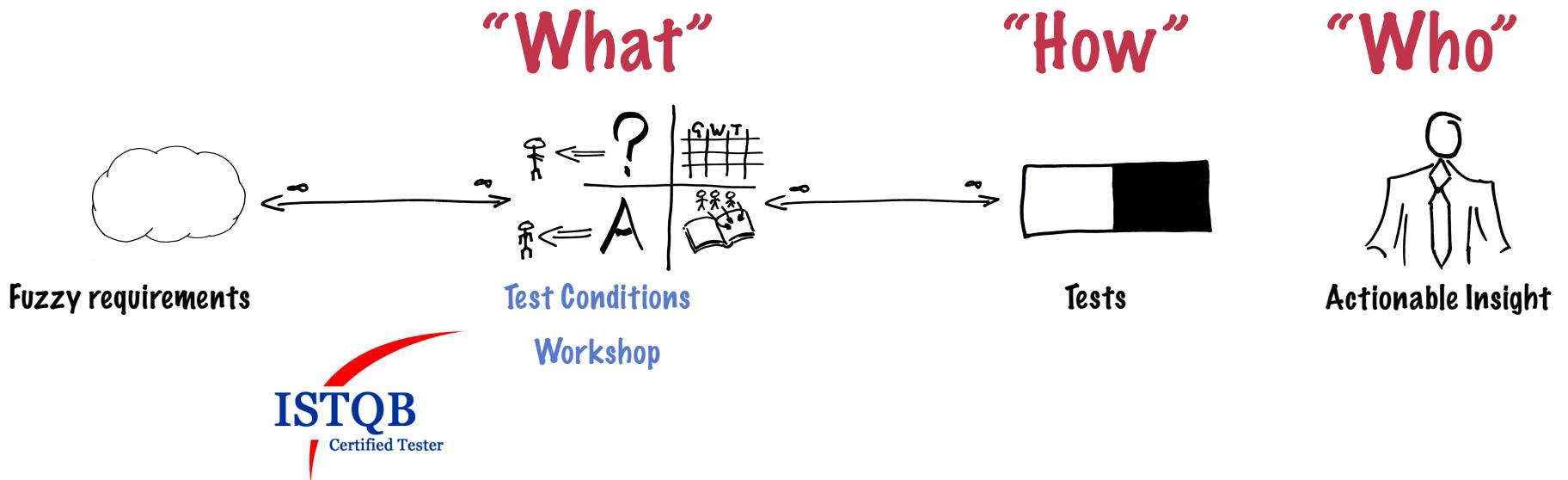
When - the Trigger event
occurs

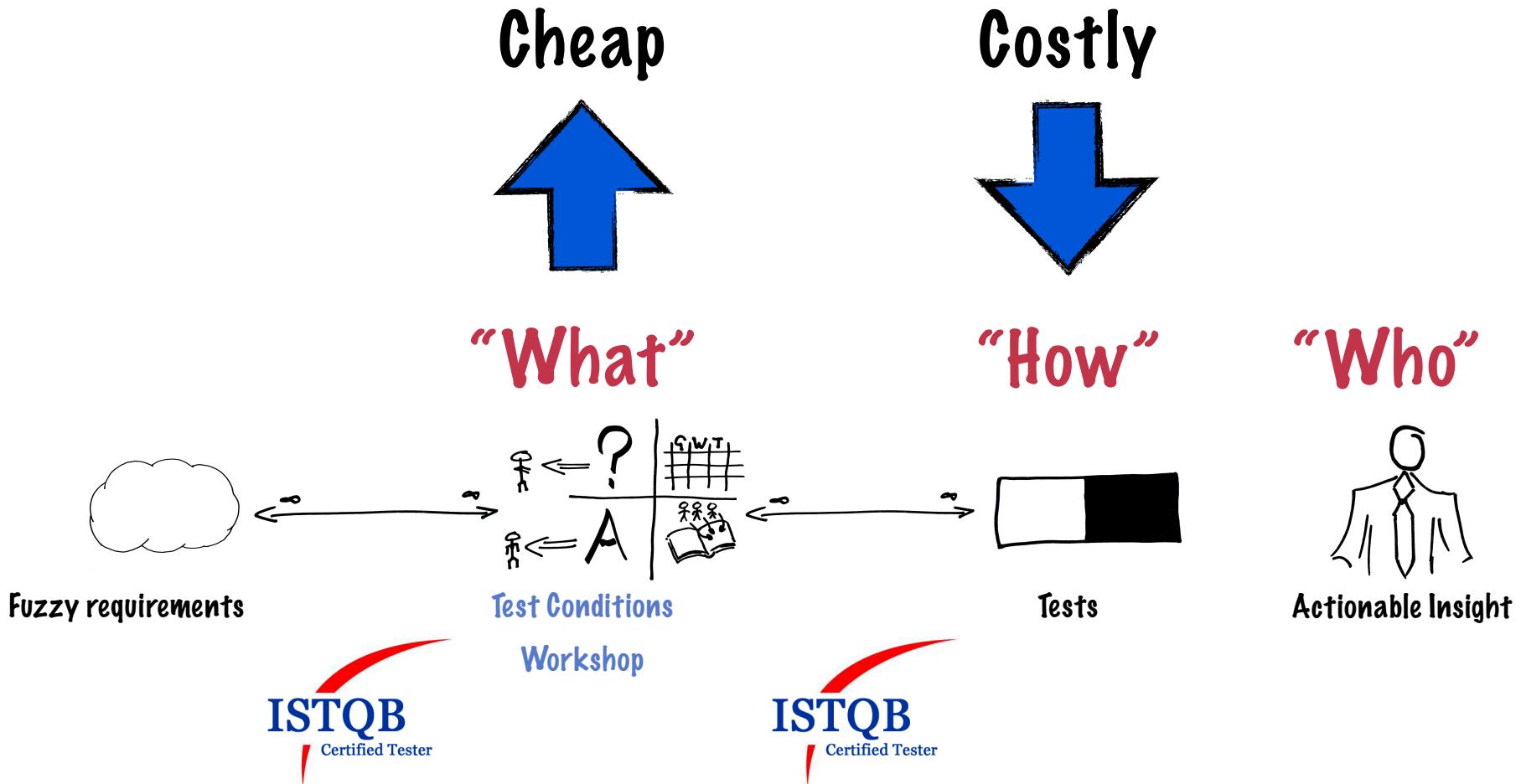
Then - the expected outcome



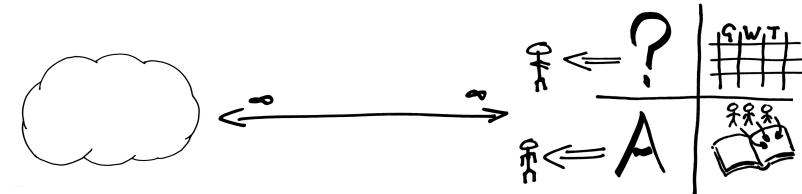
On the same page







“What”



Fuzzy requirements

“How”

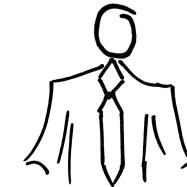


Test Conditions

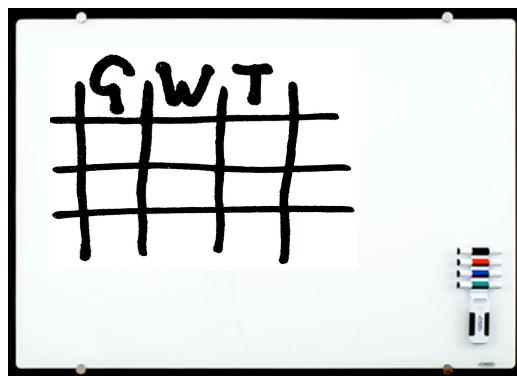
Workshop

Tests

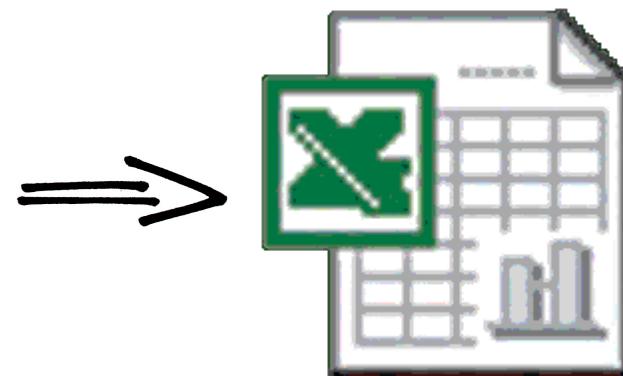
“Who”



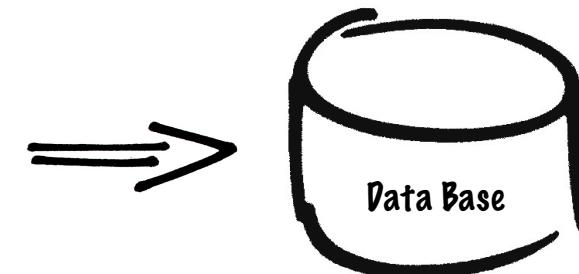
Actionable Insight



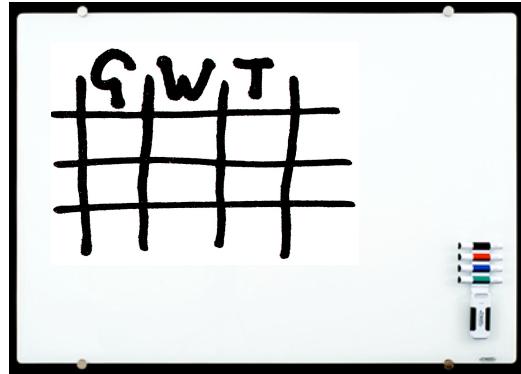
Whiteboard



Typed into Excel



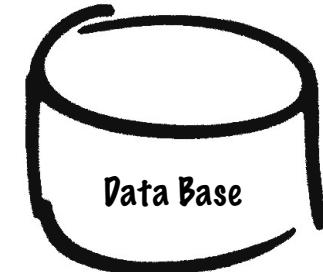
Later teams move to using a DB



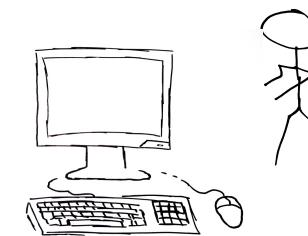
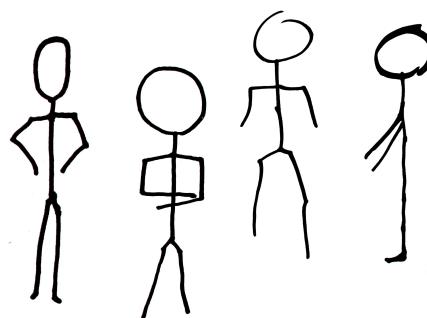
Whiteboard



Typed into Excel



Later teams move to using a DB



Given	When	Then	
There are no items in the shopping cart “	Customer clicks “Purchase” button for a book which is in stock	1x Book is add to shopping cart. Book is held - prevent selling it twice.	Do we need to test card/DB interface with the ‘Sticky session’ load balancing ?
	Customer clicks “Purchase” button for a book which is in stock	Dialog with “out of stock” message and offering customer option of putting book on back order.	Expire ‘held’ books after 20 minutes 

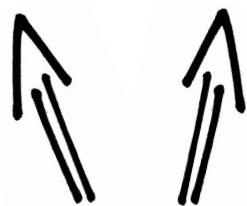


10

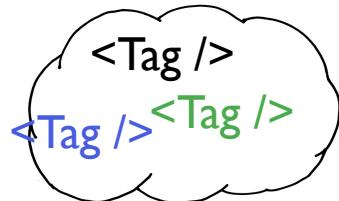
	A	B	C	D	E	F	G
1	ID	Area of App	Workflow	Given	When	Then	Test ID(s)
2	1	Cart	Product selection	There are no items in the shopping cart	Customer clicks "Purchase" button for a book which is in stock	1x Book is add to shopping cart. Book is held - prevent selling it twice.	102,54,55
3	2	Cart	Product selection	There are no items in the shopping cart	Customer clicks "Purchase" button for a book which is in stock	Dialog with "out of stock" message and offering customer option of putting book on back order.	103,104
4							

Indexes

	A	B	C	D	E	F	G
1	ID	Area of App	Workflow	Given	When	Then	Test ID(s)
1	1	Cart	Product selection	There are no items in the shopping cart	Customer clicks "Purchase" button for a book which is in stock	1x Book is added to shopping cart. Book is held - prevent selling it twice.	102,54,55
2	2	Cart	Product selection	There are no items in the shopping cart	Customer clicks "Purchase" button for a book which is in stock	Dialog with "out of stock" message and offering customer option of putting book on back order.	103,104
3							
4							

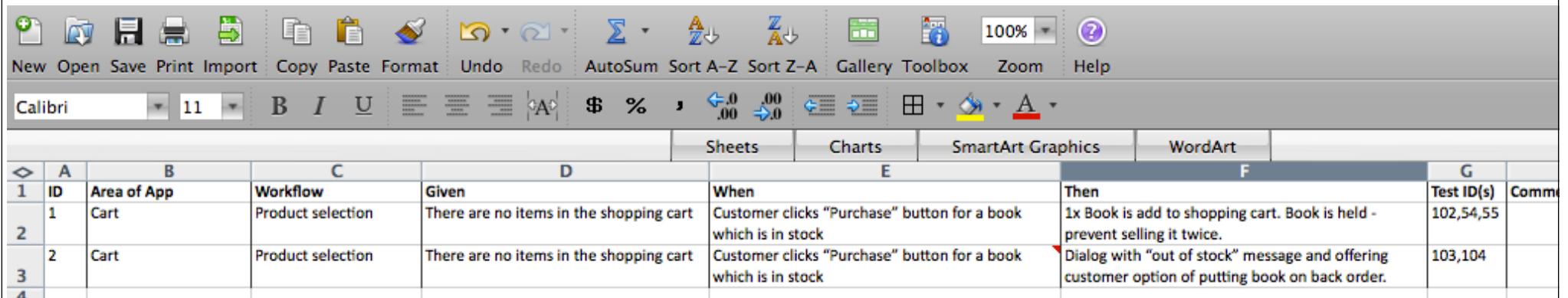


Indexes



	A	B	C	D	E	F	G
1	ID	Area of App	Workflow	Given	When	Then	Test ID(s)
1	1	Cart	Product selection	There are no items in the shopping cart	Customer clicks "Purchase" button for a book which is in stock	1x Book is add to shopping cart. Book is held - prevent selling it twice.	102,54,55
2	2	Cart	Product selection	There are no items in the shopping cart	Customer clicks "Purchase" button for a book which is in stock	Dialog with "out of stock" message and offering customer option of putting book on back order.	103,104
3							
4							

G-W-T

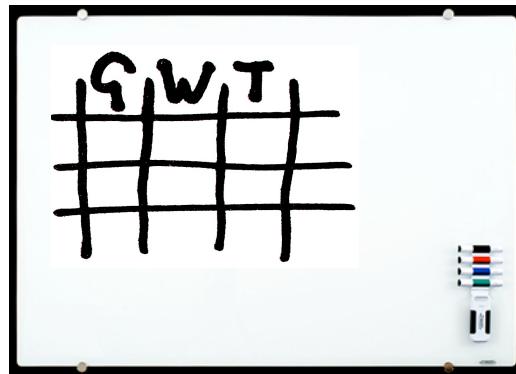


The screenshot shows a Microsoft Excel spreadsheet with a table containing test cases. The table has columns labeled A through G. Column A is for ID, B for Area of App, C for Workflow, D for Given, E for When, F for Then, G for Test ID(s), and H for Comments. Row 1 contains the column headers. Rows 2 and 3 contain data points, and row 4 is empty.

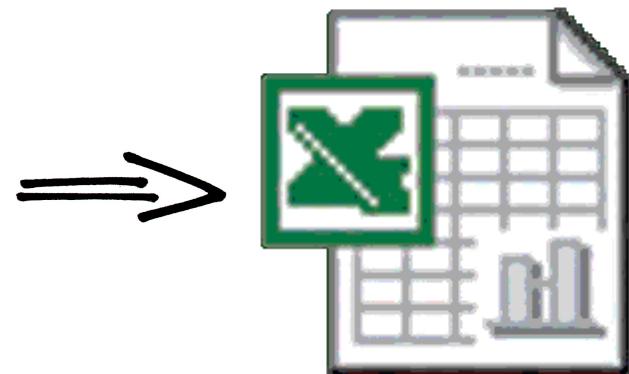
	A	B	C	D	E	F	G	H
1	ID	Area of App	Workflow	Given	When	Then	Test ID(s)	Comments
2	1	Cart	Product selection	There are no items in the shopping cart	Customer clicks "Purchase" button for a book which is in stock	1x Book is add to shopping cart. Book is held - prevent selling it twice.	102,54,55	
3	2	Cart	Product selection	There are no items in the shopping cart	Customer clicks "Purchase" button for a book which is in stock	Dialog with "out of stock" message and offering customer option of putting book on back order.	103,104	
4								



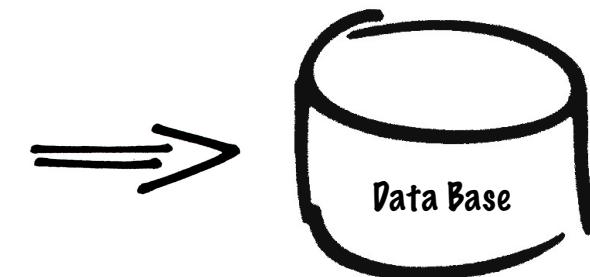
Link to Tests



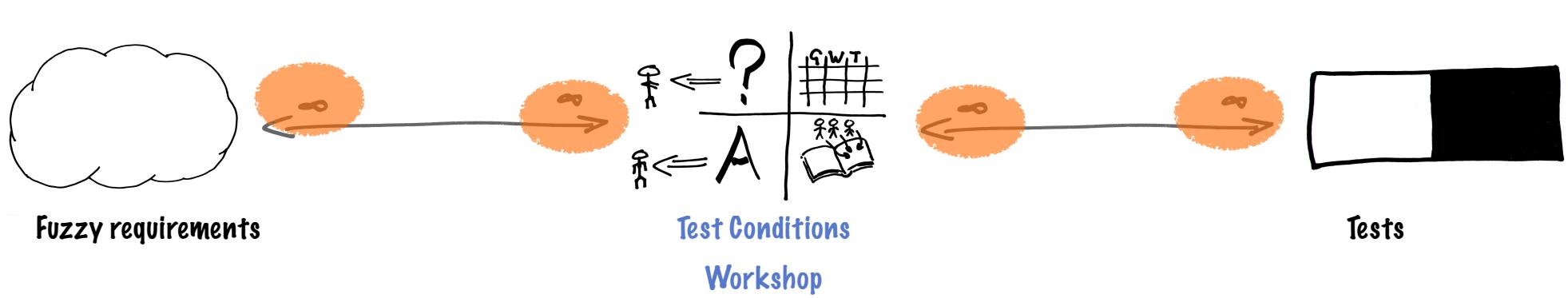
Whiteboard

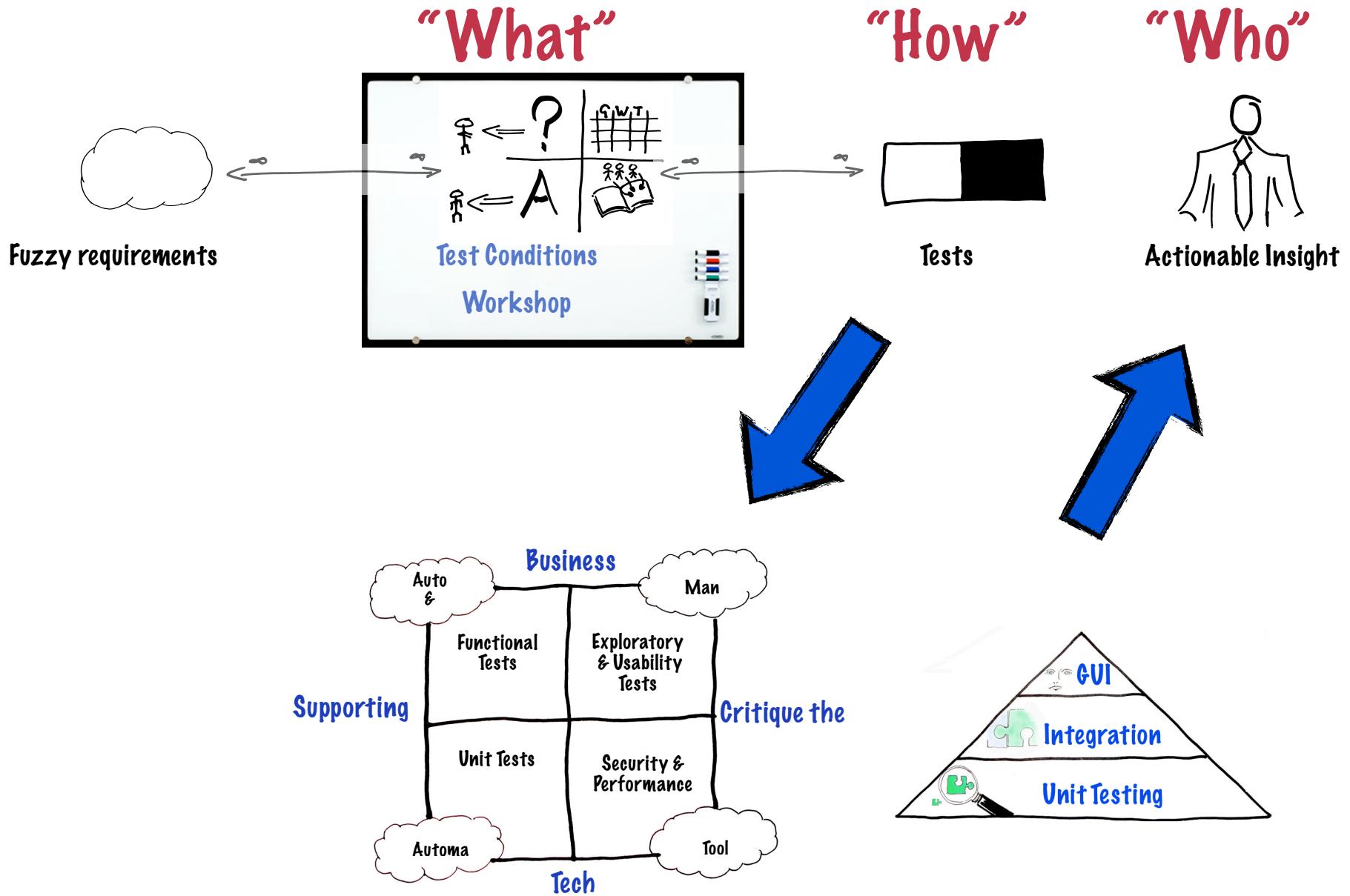


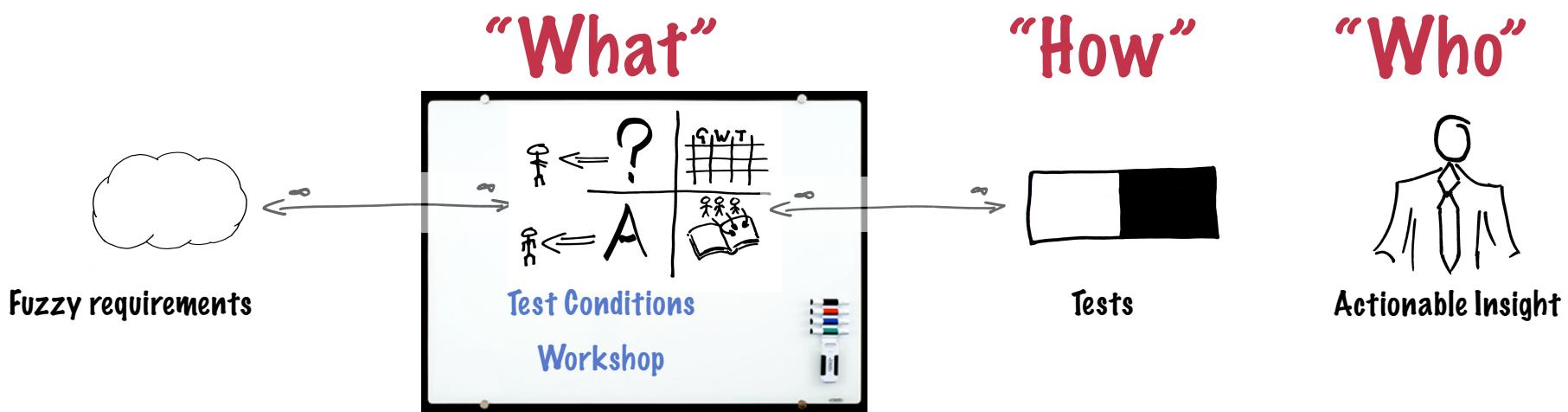
Typed into Excel



Later teams move to using a DB







Questions?

Thank you!