

0	1	0	100	10	010	0	00	10	10
01	10	1	011	01	001	1	11	10	10
1	0	00	010	00	101	1	1	10	10
0	0	0	10	10	011	0	10	10	10
1	0	0	10	10	101	01	10	10	10
1	1	1	01	01	010	1	01	10	10
0	0	0	01	10	010	0	01	10	10
0	0	1	11	01	101	0	11	10	10
1	1	1	11	01	011	1	11	10	10
0	1	0	11	10	0011	0	1	10	10
0	1	0	00	10	01	1	0	10	10
1	010	1	1	1	11	01	0	1	10
1	01	0	10	00	10	0	0	1	10
0	00	0	10	1	1	1	0	1	10
1	101	0	010	1	01	1	0	1	10

Part 20. Testing

Testing in Agile

- In Agile, the primary purpose of testing is **feedback**.
- The goal of the tester is to make sure the customer is receiving the value and the quality they need.
- We test as early, as often, and as much as possible.
- Quality is the responsibility of the Team, not the Tester.

Agile Testing

Why do we test?

Support The
Team
Critique the
Product

What forces drive our testing?

Business
Technology

Agile Testing

Why do we test?

Support The
Team
Critique the
Product

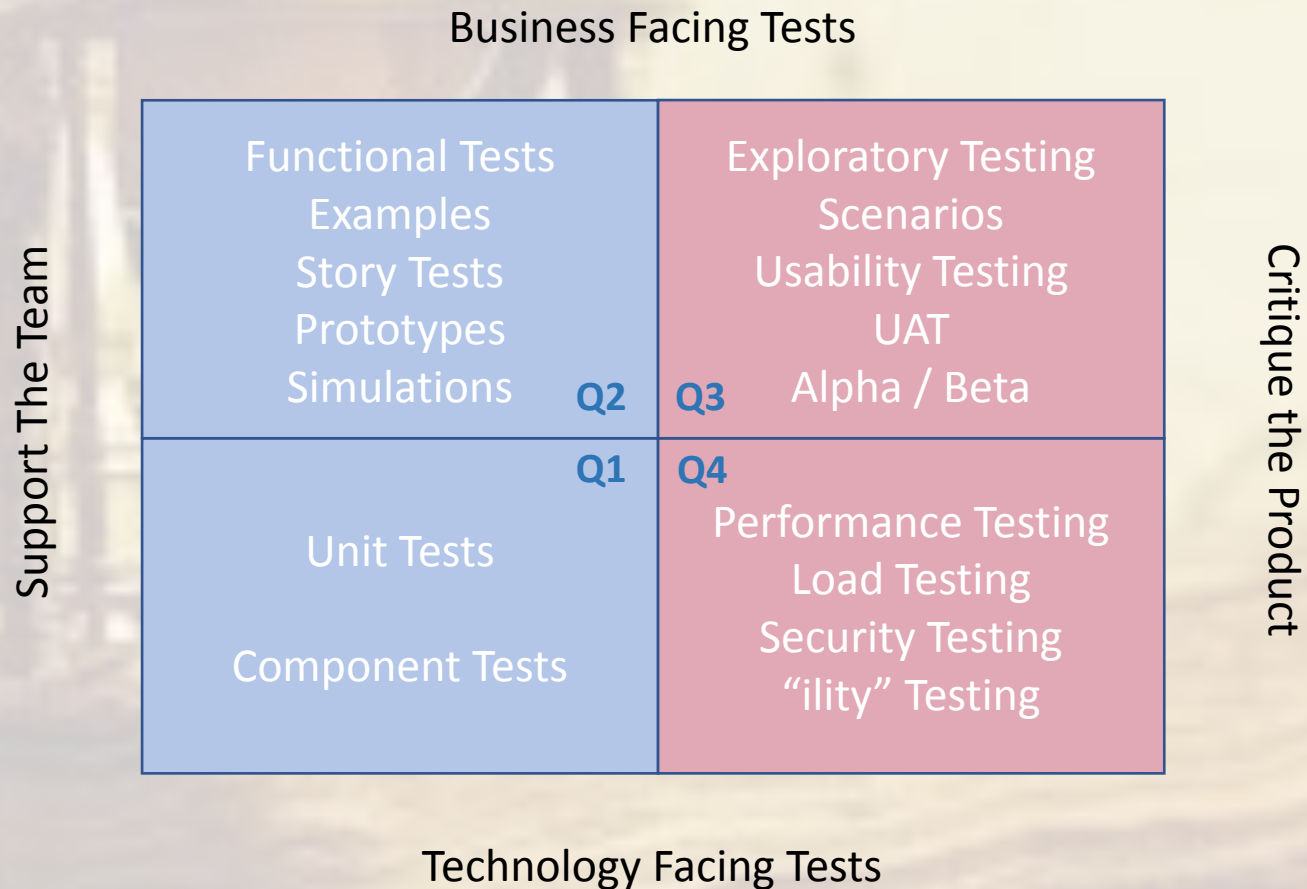
What forces drive
our testing?

Business
Technology

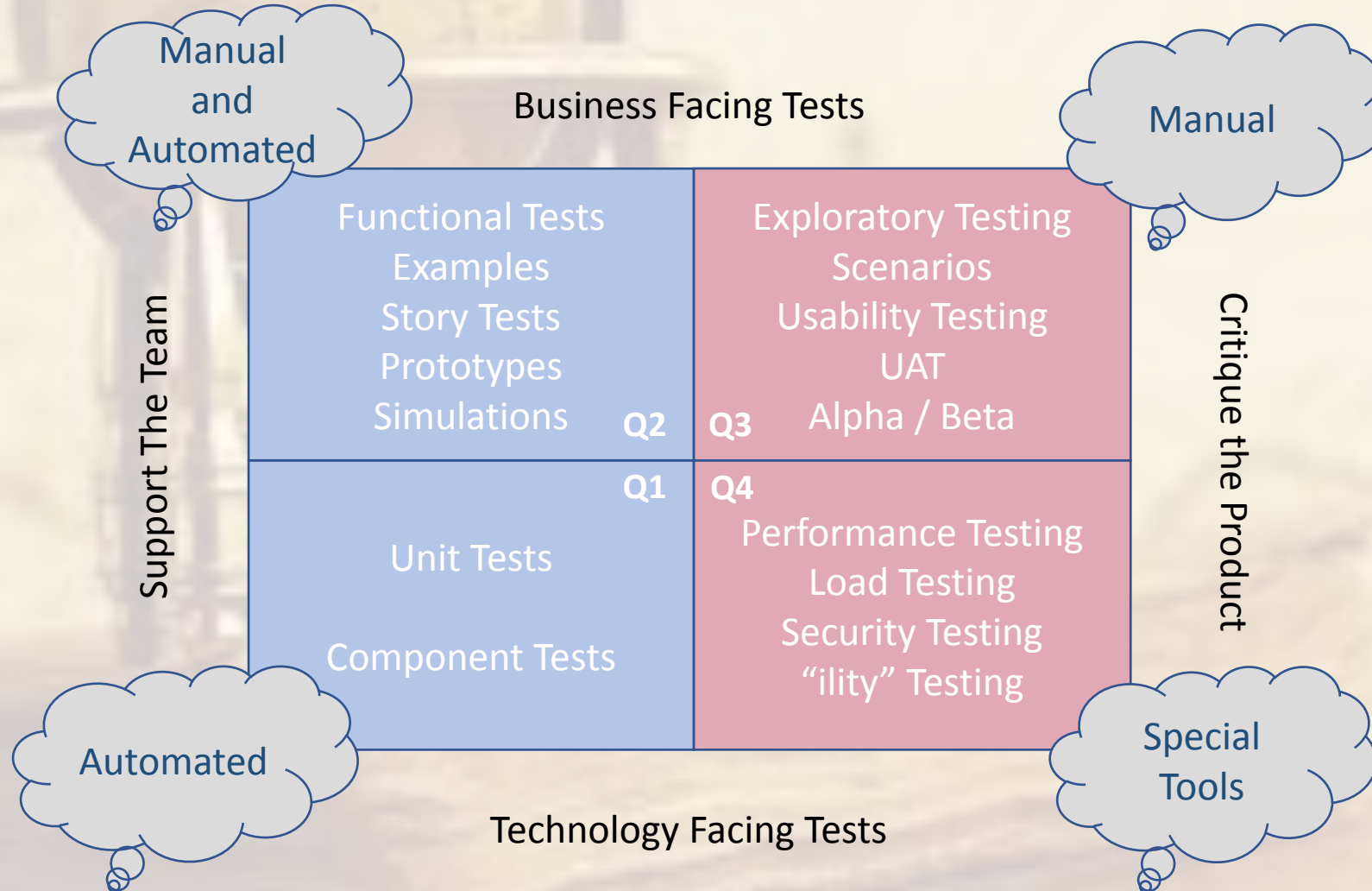
Support The
Team

Business Facing Tests		Critique the Product
Are we building the right thing?	What do our users think of what we're building?	
Support The Team	Are we building the thing right?	Everything else!
	Technology Facing Tests	

The 4 Quadrants of Agile Testing



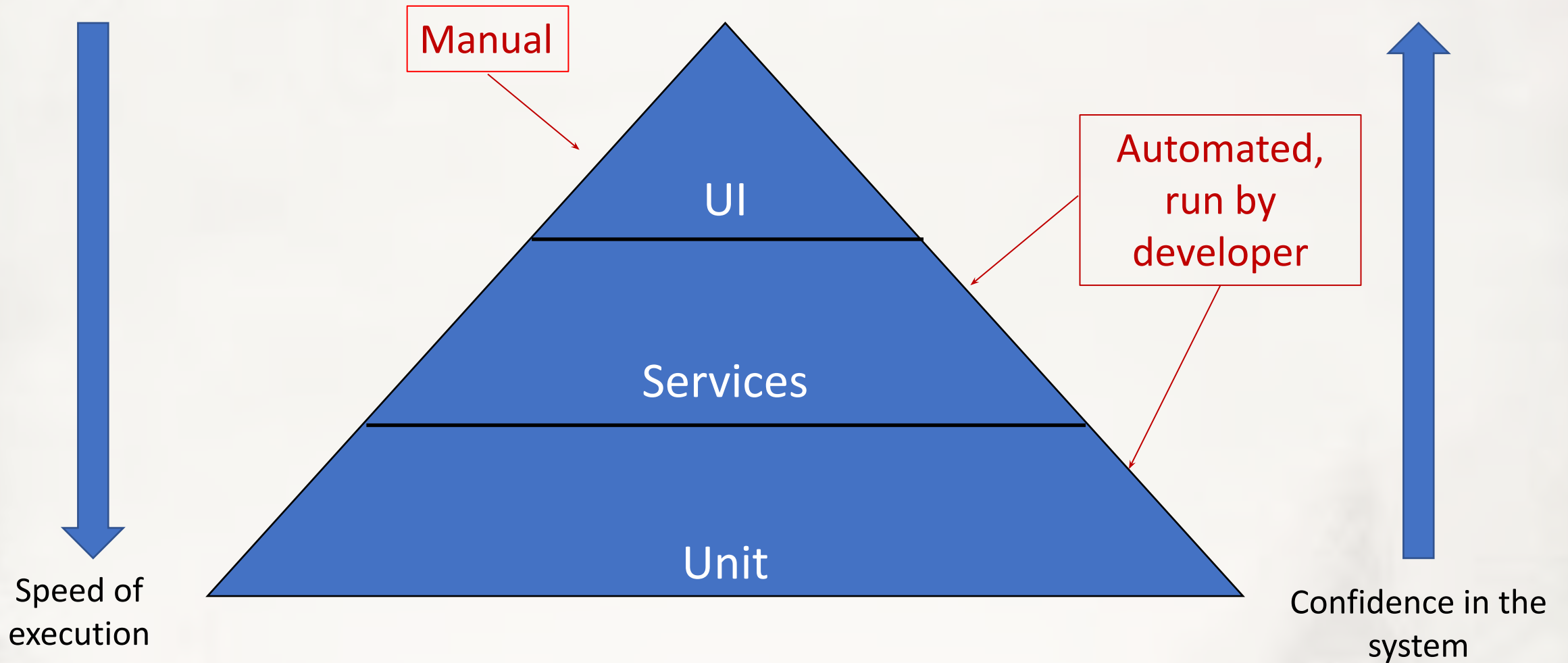
Testing Tools and Automation



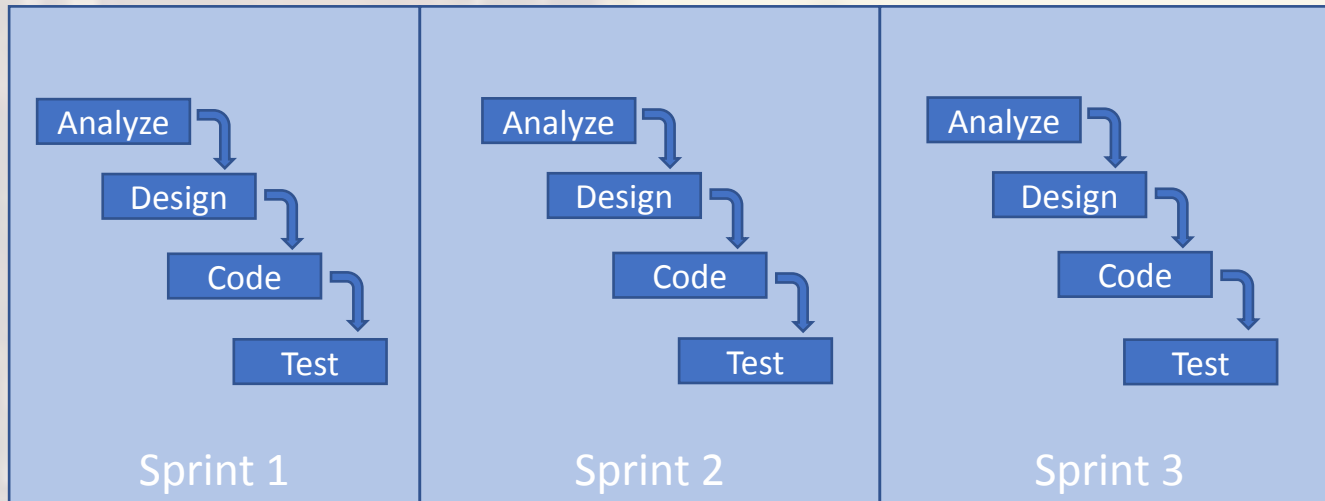
A Good Test Plan has Tests from All Four Quadrants

Q1	1	Are we building it right?
Q2	2	Are we building the right thing?
Q3	3	Does our customer like it?
Q4	4	What else?

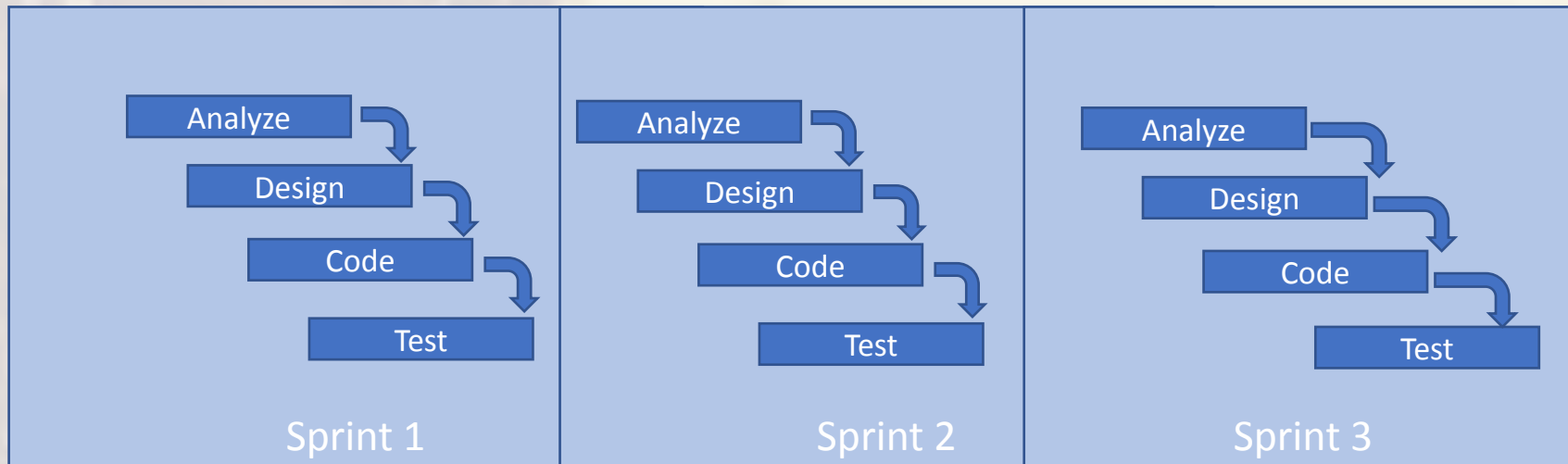
The Testing Pyramid



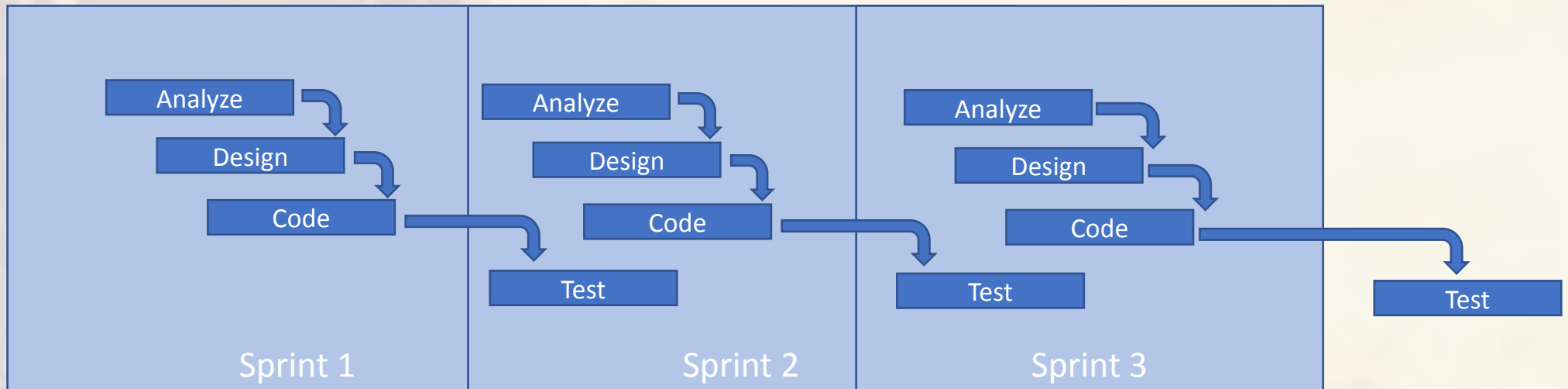
What Scrum Isn't ...

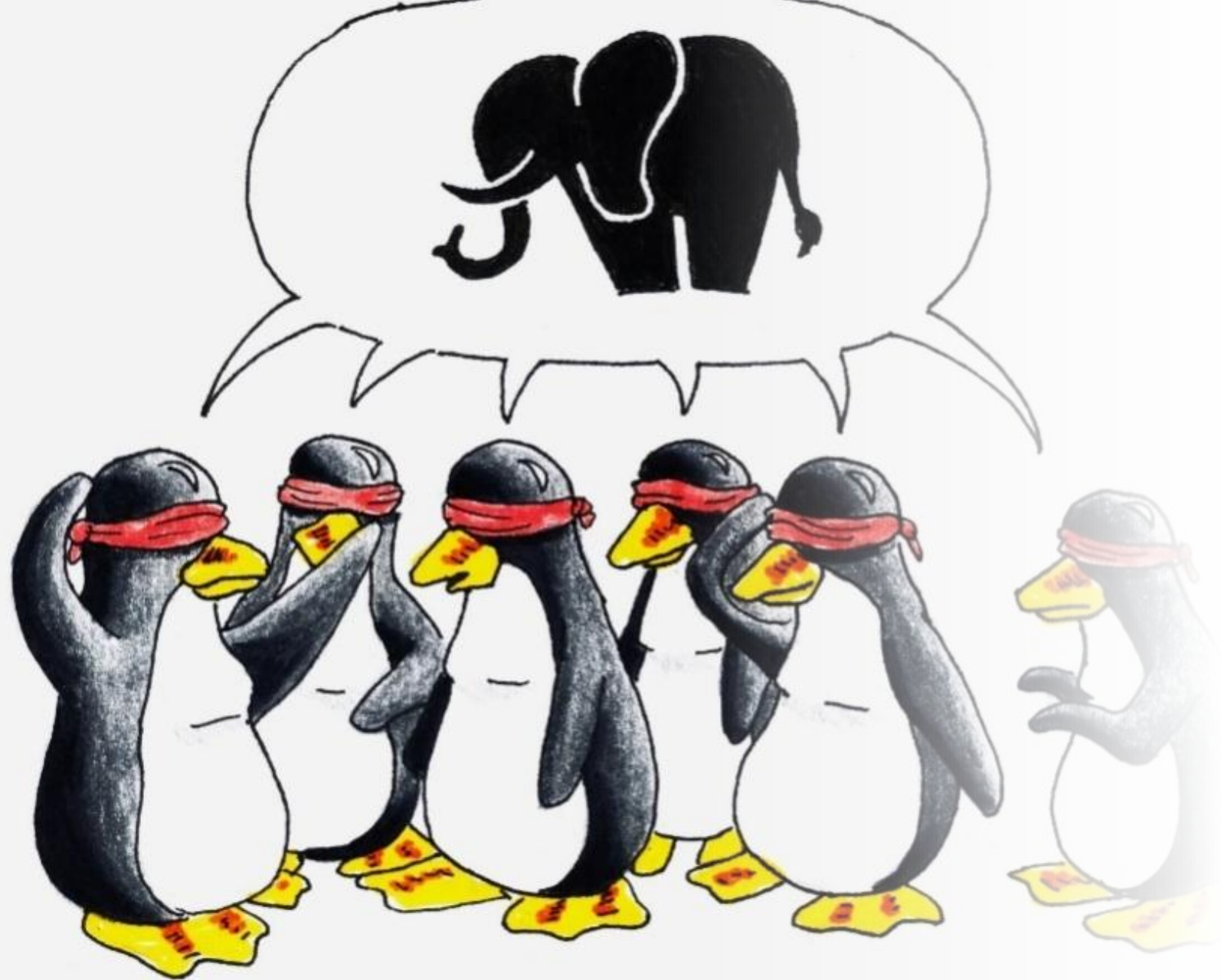


“Solution” 1: Lengthen the Sprint



“Solution” 2: Move Testing to the Next Sprint





The goal of **REFINING** is to develop a **shared understanding**

- What is needed?
- Why is it needed
- How big is it?

Why is it Needed?

Bank accounts

Account 

BUSINESSSELECT CHKG



BUSINESS SAVINGS



My Checking Acct



Tori Checking Acct



My Savings Account



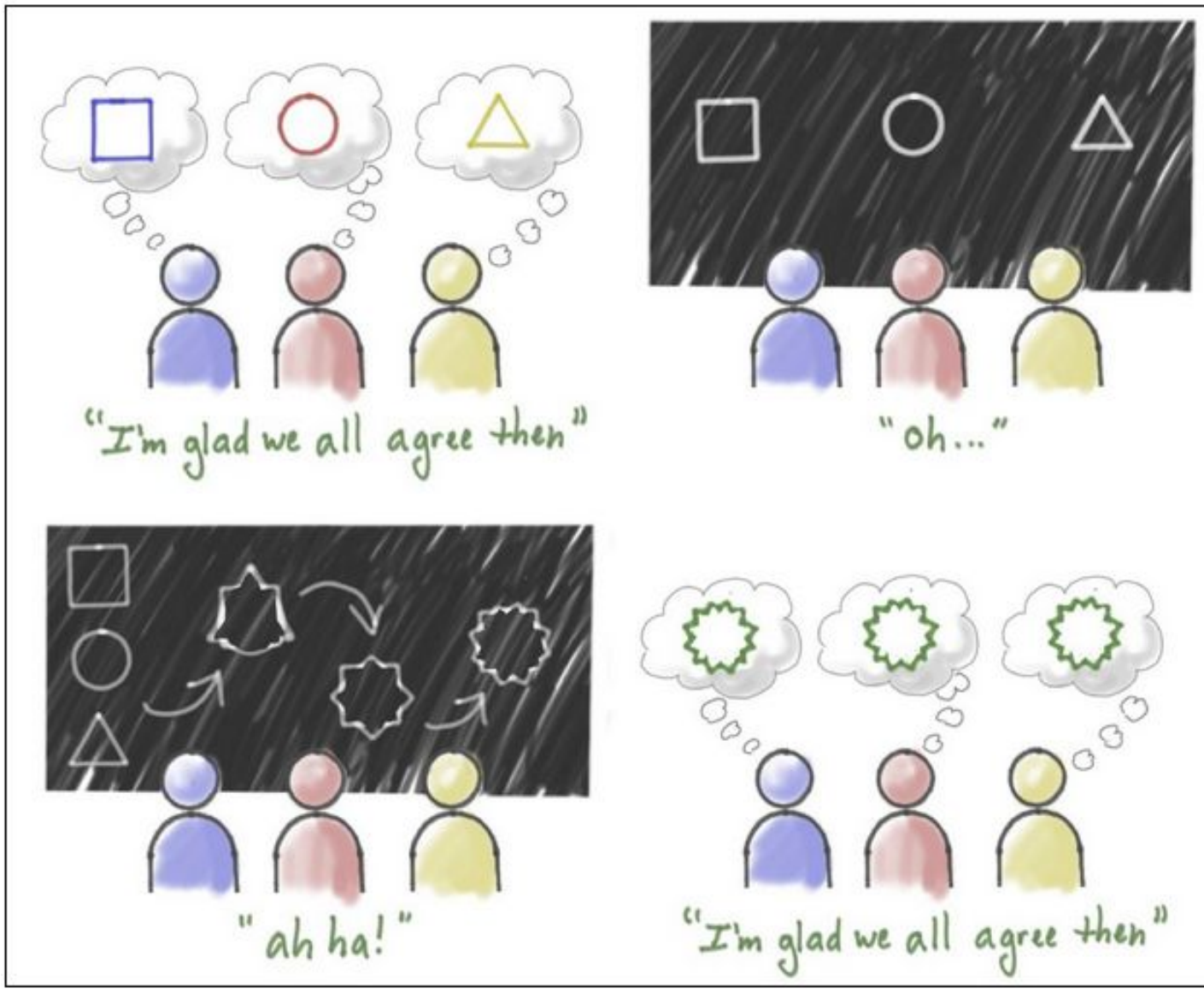
Will Savings



Tori Savings Acct



Account Number: 1234
Routing Number: AB - CD



We don't need a better document.

We need a shared understanding

Credit for this illustration goes to ThoughtWorks' Luke

Barret. Jeff Paton drew these illustrations based on Luke's.


```
if (typeof console.markTimeline === undefined) {  
  module.verbose('Mark timeline not available, normalizing events');  
  window.console.markTimeline = function() {};  
}  
  
1. consoleClear: function() {  
  module.debug('Disabling programmatic console clearing');  
  window.console.clear = function() {};  
},  
  
requestAnimationFrame: function() {  
  module.debug('Normalizing requestAnimationFrame');  
  if(window.requestAnimationFrame === undefined) {  
    module.debug('RequestAnimationFrame not available, normalizing event');  
    window.requestAnimationFrame = window.requestAnimationFrame ||  
    window.mozRequestAnimationFrame ||  
    window.webkitRequestAnimationFrame ||  
    window.msRequestAnimationFrame ||  
    function(callback) { setTimeout(callback, 0); }  
  };  
},  
  
moduleExists: function(name) {  
  return ($[name] != undefined || $.fn[name] != undefined);  
}
```



Walkthrough 1: ArrayList



Activity 1: Movie Stars

Create an ArrayList of the team's favorite movie stars

When the list is complete, print it

Restriction

1. All input is to be from the console
2. Output is to be one name per line

Bonus: Is there a simple way to print the names in alphabetical order?

Testing

