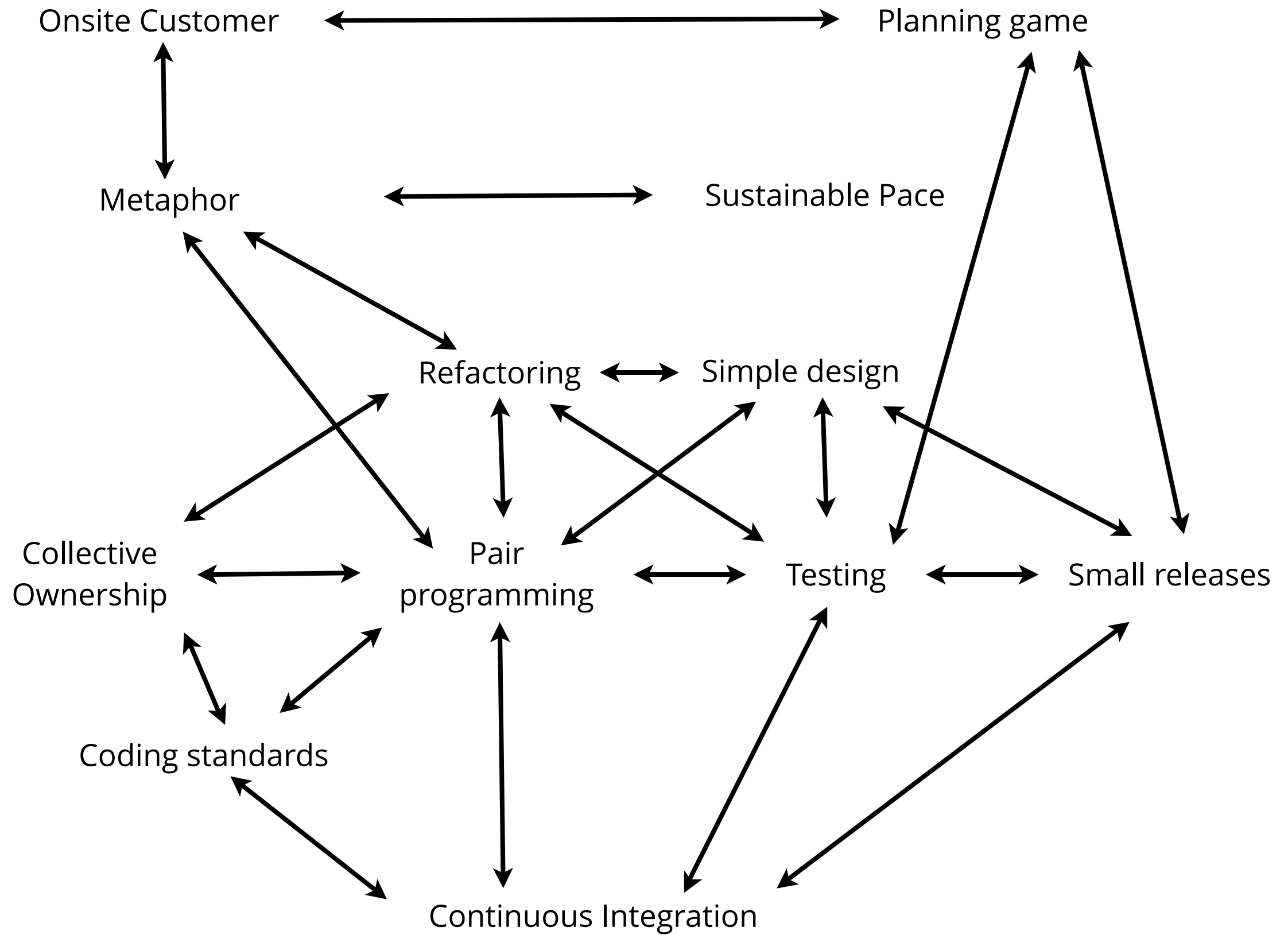
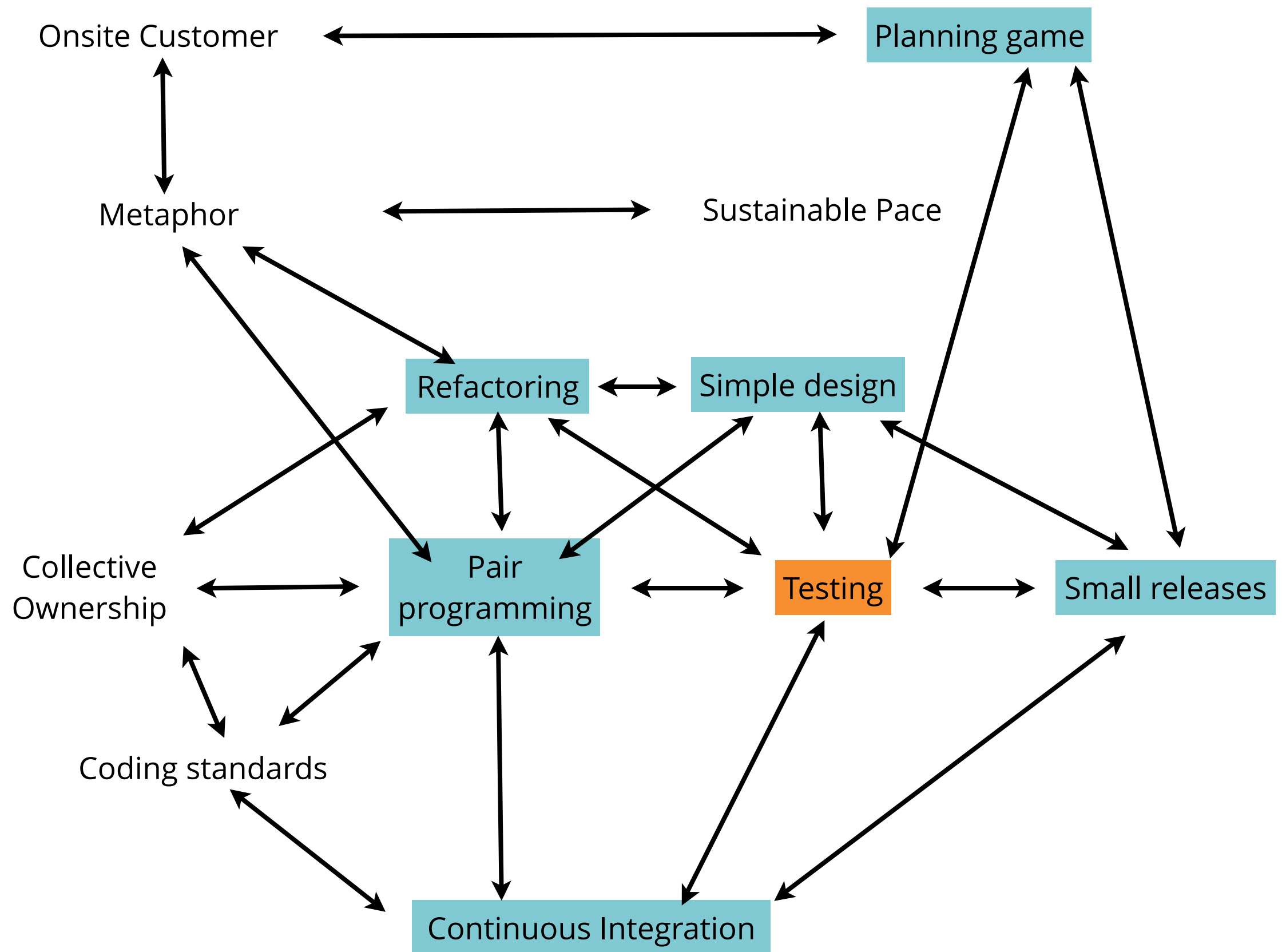


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QUALITY





WHAT IS QUALITY?

- Provide confidence in a product's suitability
- Determined by intended users
- Product quality vs Quality product

WHO OWNS QUALITY?

PM



Product owner



Quality
Analysts



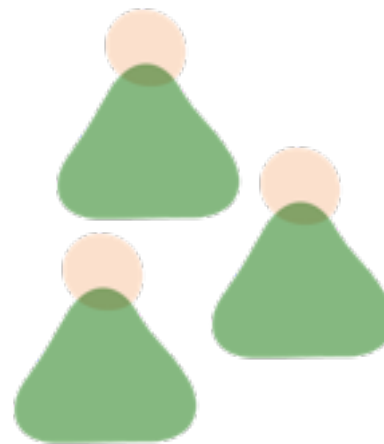
End users



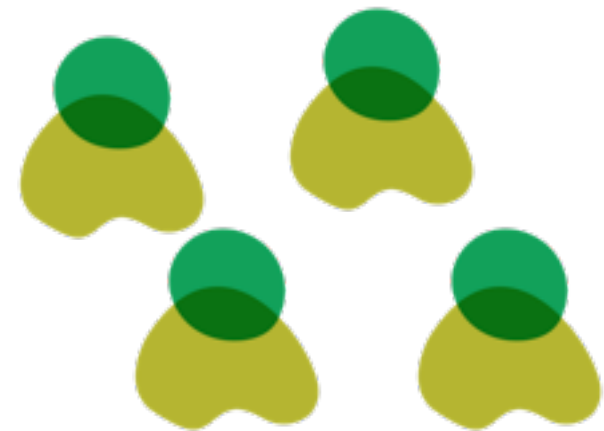
Business, SMEs



Business
Analysts



Developers



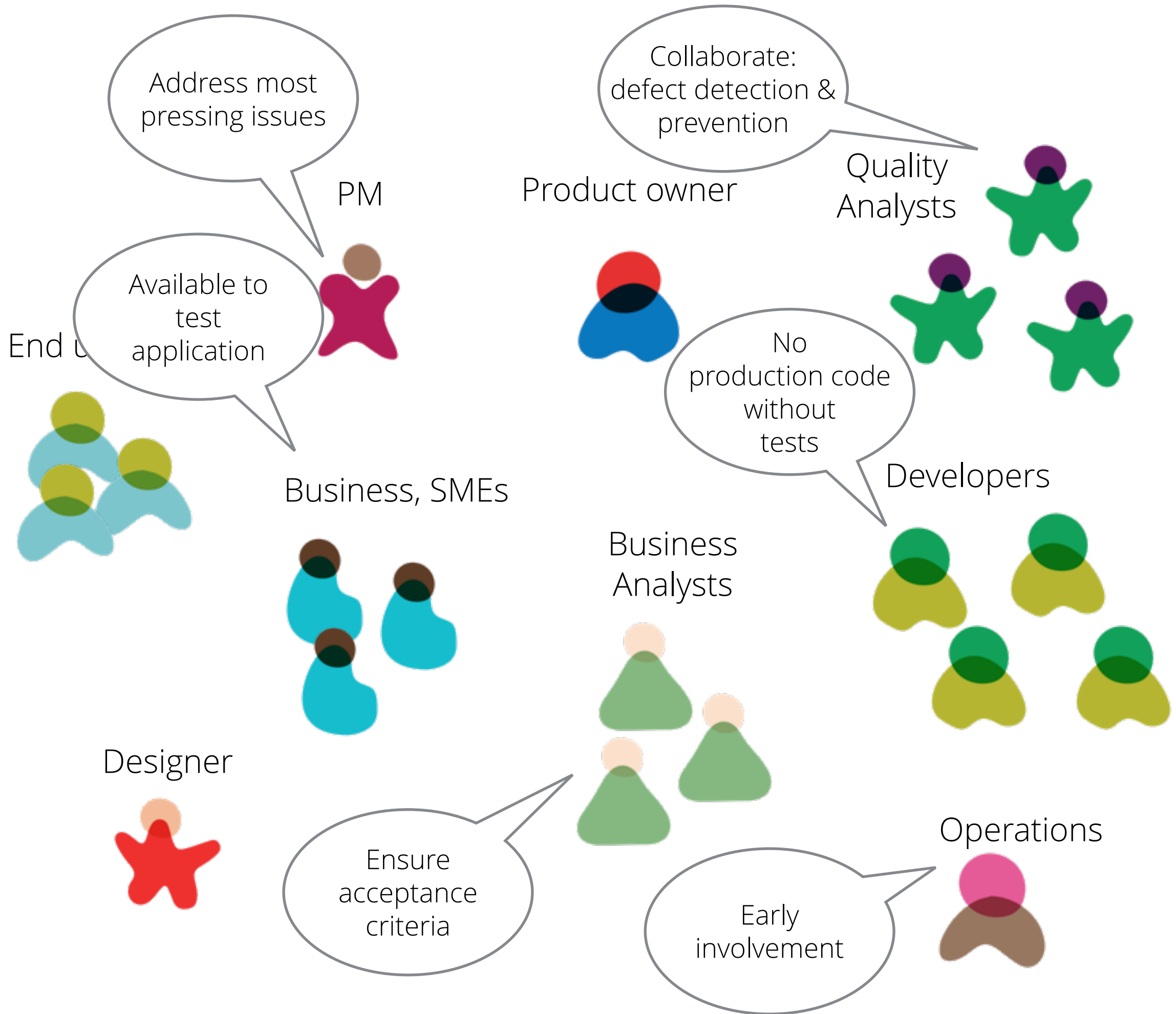
Designer



Operations



HOW WE FOCUS ON QUALITY



THE AGILE QA MANIFESTO

Testing for risk

Manual testing

Detecting defects

Informing

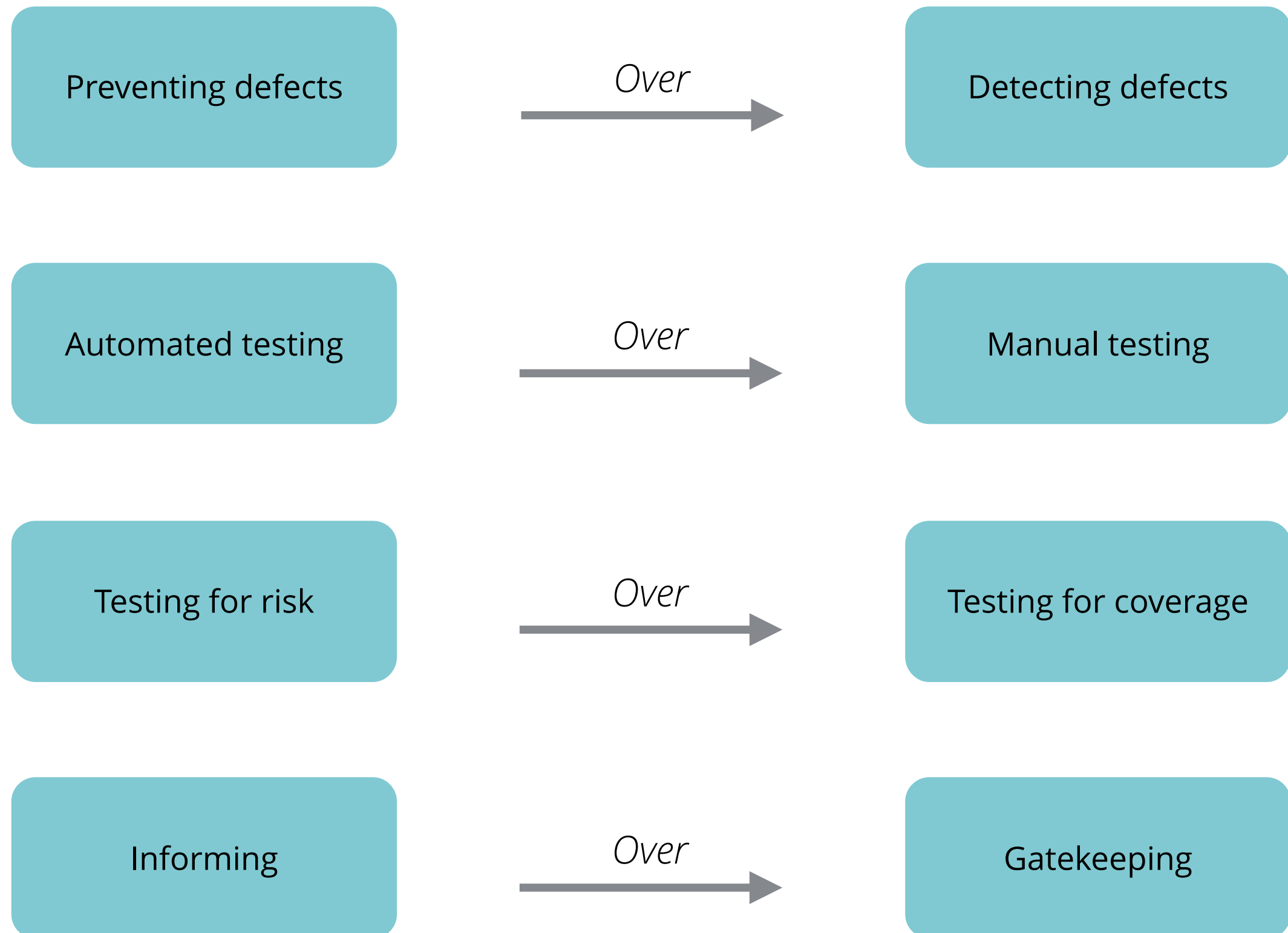
Preventing defects

Testing for coverage

Gatekeeping

Automated testing

THE AGILE QA MANIFESTO



INFORMING OVER GATEKEEPING

QUALITY IS A PART OF EVERYTHING

- Business analysts write acceptance tests
- Developers write unit and integration tests
- Testers automate acceptance tests
- Regression suite run as part of every build

QA HIGHLIGHTS RISK

DEFECT PREVENTION

CREATING ACCEPTANCE CRITERIA



Specific

Explicitly defined, definite



Measurable

Can observe, quantify



Achievable

Can be done



Relevant

Connected to the story



Timely

When is outcome observed?

WRITING ACCEPTANCE CRITERIA

ACCEPTANCE CRITERIA

ThoughtWorks

As an **Internet Banking**
customer

I want to **see the list of my**
accounts

so that **I can choose to see more**
details of a particular account

Alternate path

Alternate path

Bad path

Given the customer has one transaction account and one credit account

When they have completed logging in

Then the screen should show the names and numbers of the two accounts sorted in account number order

Given the customer has just one transaction account

When they have completed logging in

Then the screen should show the name and number of the account

Given the customer has no accounts

When they have completed logging in

Then the screen should show a message stating that no accounts are available

Given the customer has more than 20 accounts

When they have completed logging in

Then the screen should show the first 20 accounts (in account number order) only

Given the customer has some accounts

And they have completed logging in

When the system cannot retrieve the account details

Then the screen should show an error message with associated code and details to contact for support

AM I DONE?

THE WHOLE TEAM APPROACH

POTENTIAL ISSUES

Lack of face to face communication?

Colocation

*No shared responsibility towards
quality?*

*Testing everywhere: acceptance criteria,
developer testing, automated testing*

Misaligned metrics

Measure throughput

Timing of testing / schedule pressure

Testing in parallel with development

THE TESTERS BILL OF RIGHTS

- Ask questions of customers and developers
- Bring up quality process issues any time
- Ask for, and receive help from anyone
- The tools needed to do the job

TIPS FOR COLLABORATION

- Not us vs. them
- No excuses
- Testing is not just for testers!

TESTING IS NOT JUST FOR TESTERS

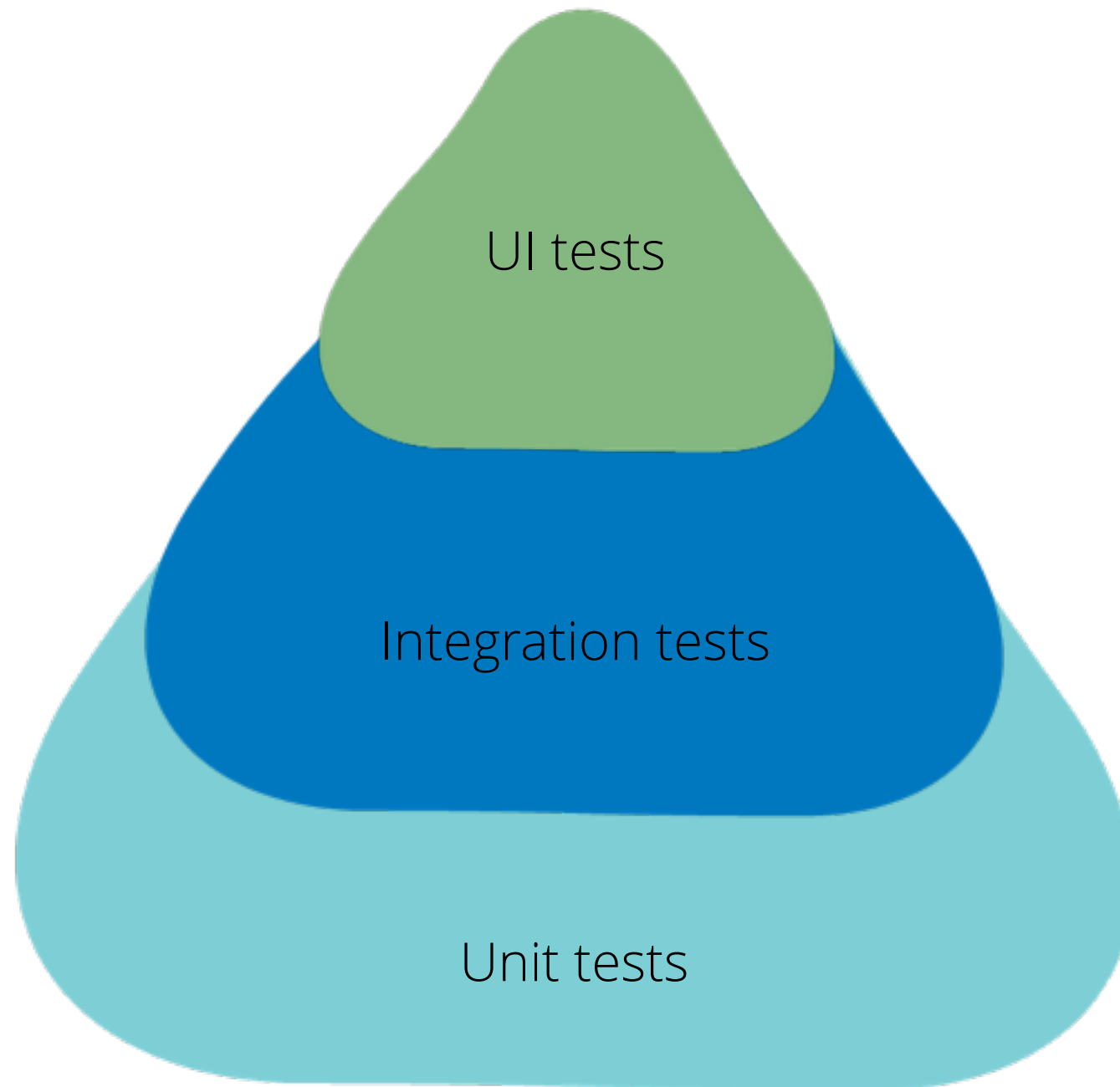
- Automation support
- Environment setup
- Management support
- End-to-end scenario creation

AUTOMATED TESTING AND THE CENTRAL ROLE OF QUALITY

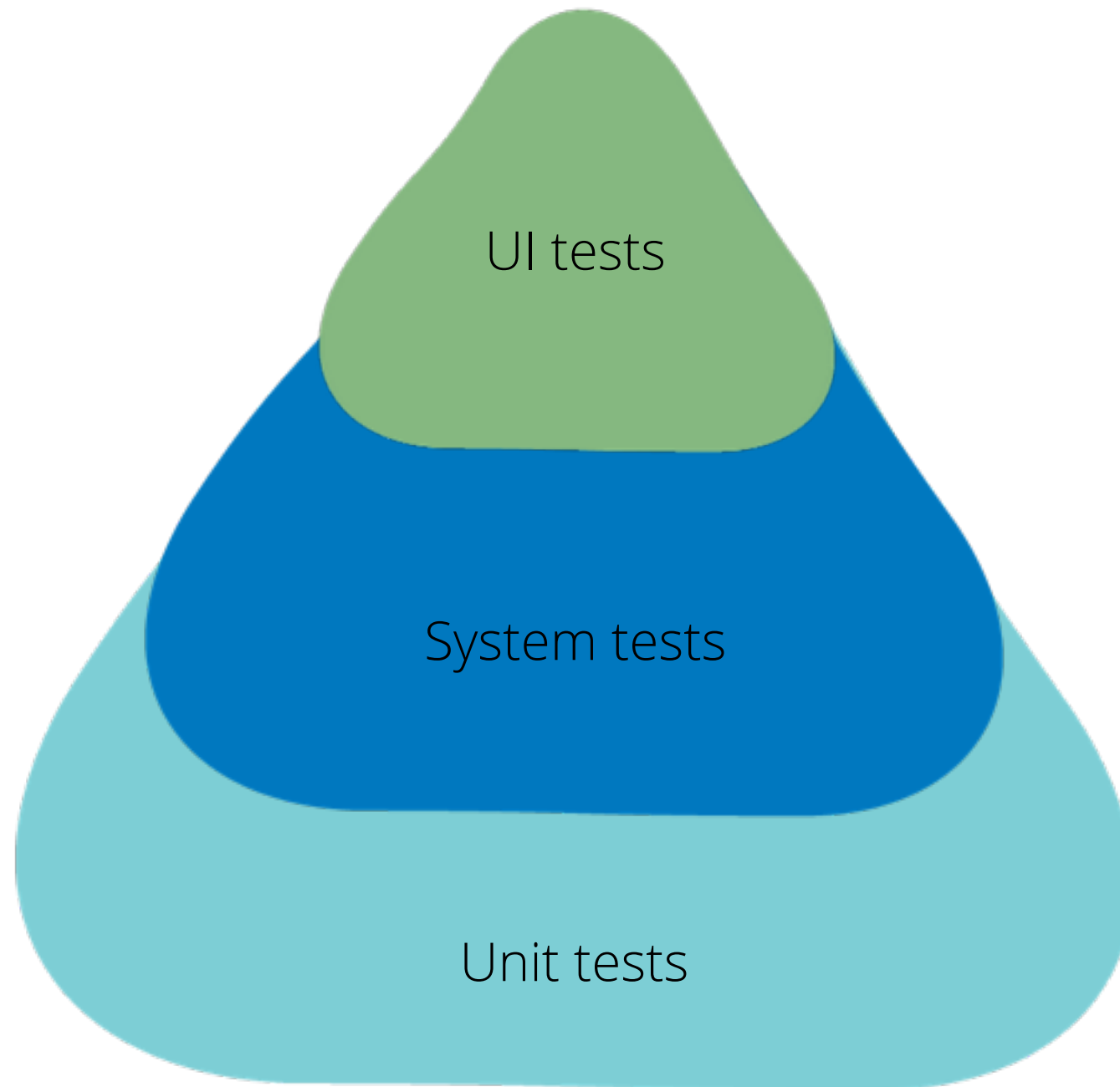
AUTOMATION

HOW MUCH SHOULD YOU AUTOMATE?

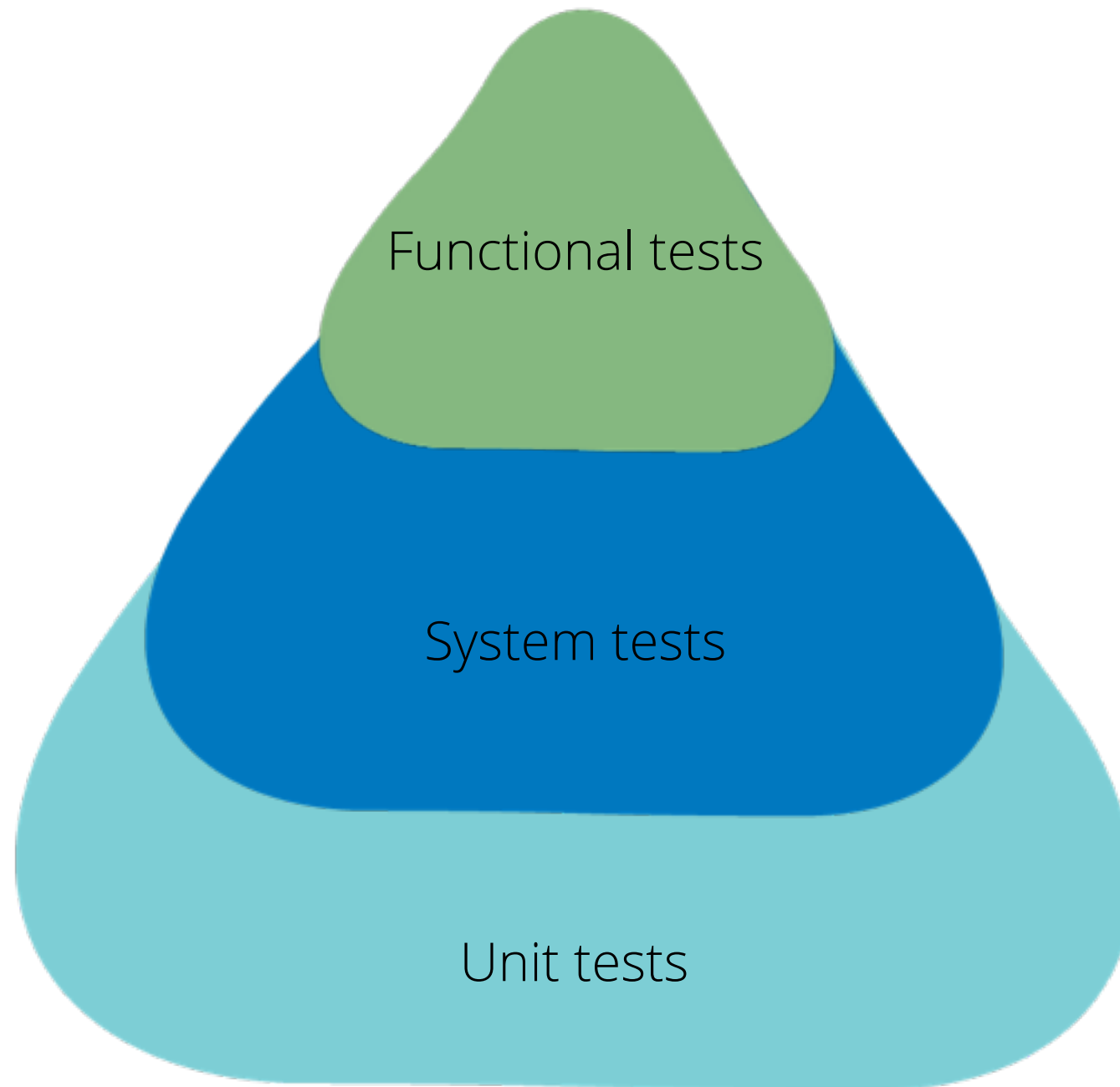
THE TESTING PYRAMID



THE TESTING PYRAMID



THE TESTING PYRAMID



UNIT TESTING / TDD

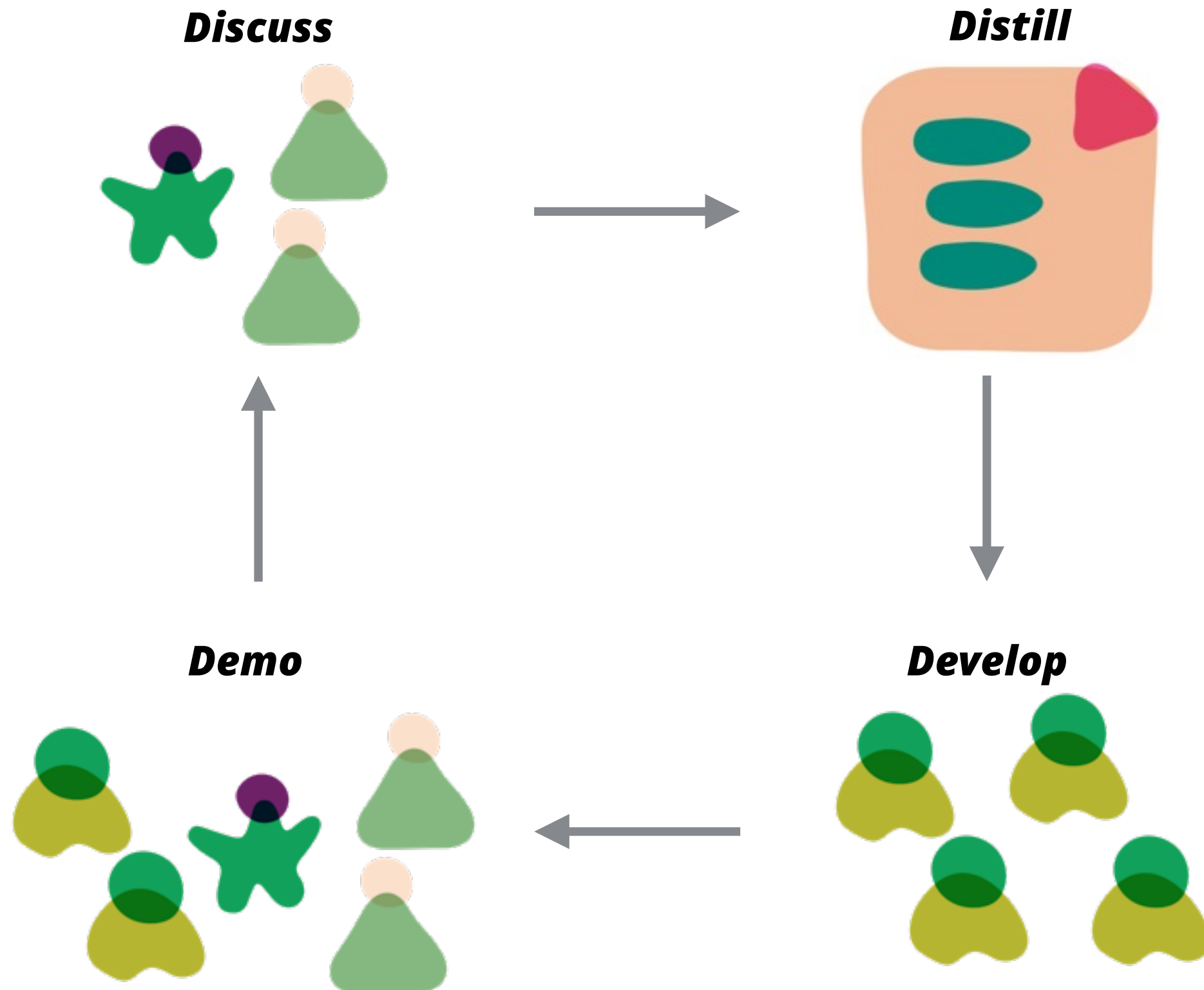
FUNCTIONAL TESTING

USER ACCEPTANCE TESTING

REGRESSION TESTING

SYSTEM INTEGRATION TESTING

ACCEPTANCE TEST DRIVEN DEVELOPMENT



AGILE AUTOMATION

WHY IS AUTOMATION IMPORTANT?

- Fast feedback
- Confidence to the development team
- Almost impossible to manually test a rapidly changing system



Release 1



Release 2



Release 3

AUTOMATION IN AN AGILE TEAM

- Automation in parallel with development
- Automated acceptance tests
- Automated tests add to a regression suite
- Test executed as part of continuous integration

WHEN DOES AUTOMATION FAIL?

- Overengineering test scripts
- Testing everything through functional tests
- Wrong choice of tools

WHAT IS WRONG WITH TRADITIONAL TOOLS?

- Test-last workflow does not fit in with the agile way
- Tools tend to encourage record & play
- Needs test automation specialist
- Tools do not encourage collaboration

DEFECTS

WHEN TO RAISE A DEFECT

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Ready

ThoughtWorks®

In Dev

ThoughtWorks®

Dev complete

ThoughtWorks®

Testing

ThoughtWorks®

Done

ThoughtWorks®

As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...

ThoughtWorks®

Ready

ThoughtWorks®

In Dev

ThoughtWorks®

Dev complete

ThoughtWorks®


Testing

ThoughtWorks®

Done

ThoughtWorks®

As a ... I want to ...
so that ...



We will be done when ...

Given ... When ... Then ...

ThoughtWorks®

Ready

ThoughtWorks®

In Dev

ThoughtWorks®

Dev complete

ThoughtWorks®

Testing

ThoughtWorks®

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ThoughtWorks®

Ready

ThoughtWorks®

In Dev

ThoughtWorks®

Dev complete

ThoughtWorks®


Testing

ThoughtWorks®

Done

ThoughtWorks®

Rendering bug




ThoughtWorks®

As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...



DEFECTS MANAGEMENT

ThoughtWorks®


As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...

ThoughtWorks®

Rendering bug



ThoughtWorks®

As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...

ThoughtWorks®

As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...

ThoughtWorks®

Rendering bug



Should this

ThoughtWorks®

As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...

ThoughtWorks®

As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...

ThoughtWorks®

As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...

ThoughtWorks®

As a ... I want to ...
so that .

We will be done when

Given ... When ... Then ...

COMMON TESTING ISSUES / SMELLS

Is it really a defect?

Bouncing defects

Automation failures

Accepting stories, then raising defects

Business logic in tests

QUESTIONS?
