

LEVERAGING USER STORIES IN AGILE TRANSFORMATION

*A Value-Driven Approach to Documenting
Requirements for Agile Teams*

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INTERNSHIP PROJECTS

+ Connected Devices Project

- Requirements development and management for module titles and user interface access
- Document an end-to-end diagram for Connected Devices

+ Clinical Data Repository Tabular Project

- Requirements development and management to enable CDR support for password protected SAS and excel-based files

+ Process Improvement Project

- Best practices in creating user stories



“1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.”

Agile Manifesto

PRESENTATION OVERVIEW

- + Agile Philosophy on Customer Value
- + Documenting Customer Value with User Stories
- + Reinforcing Customer Value with Quality Attributes
- + Navigating Customer Value with the Inspect-Adapt Approach



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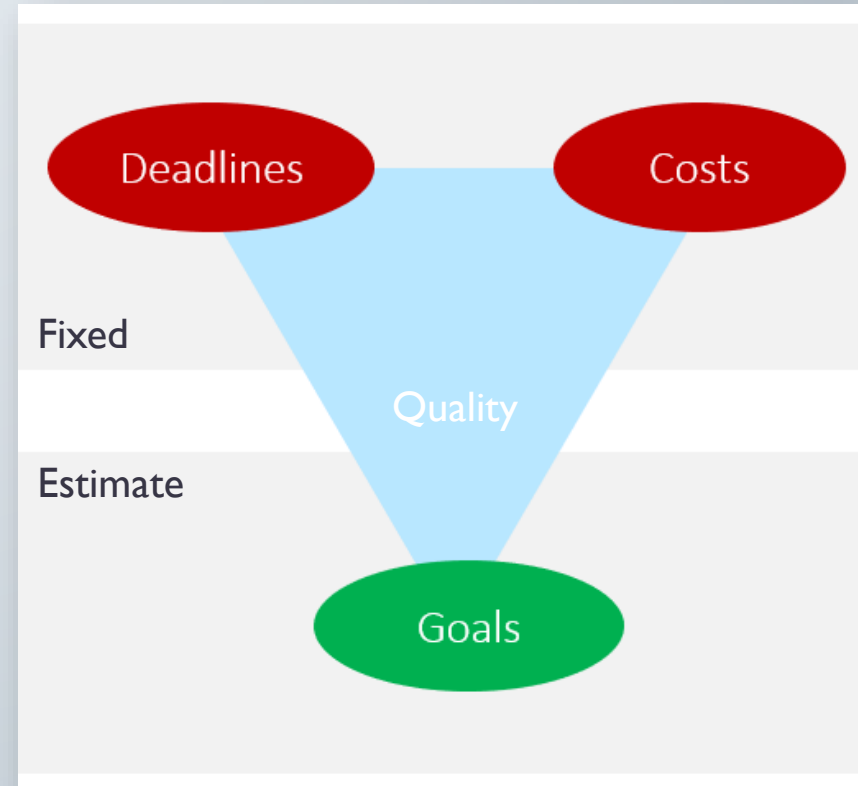


AGILE TRANSFORMATION

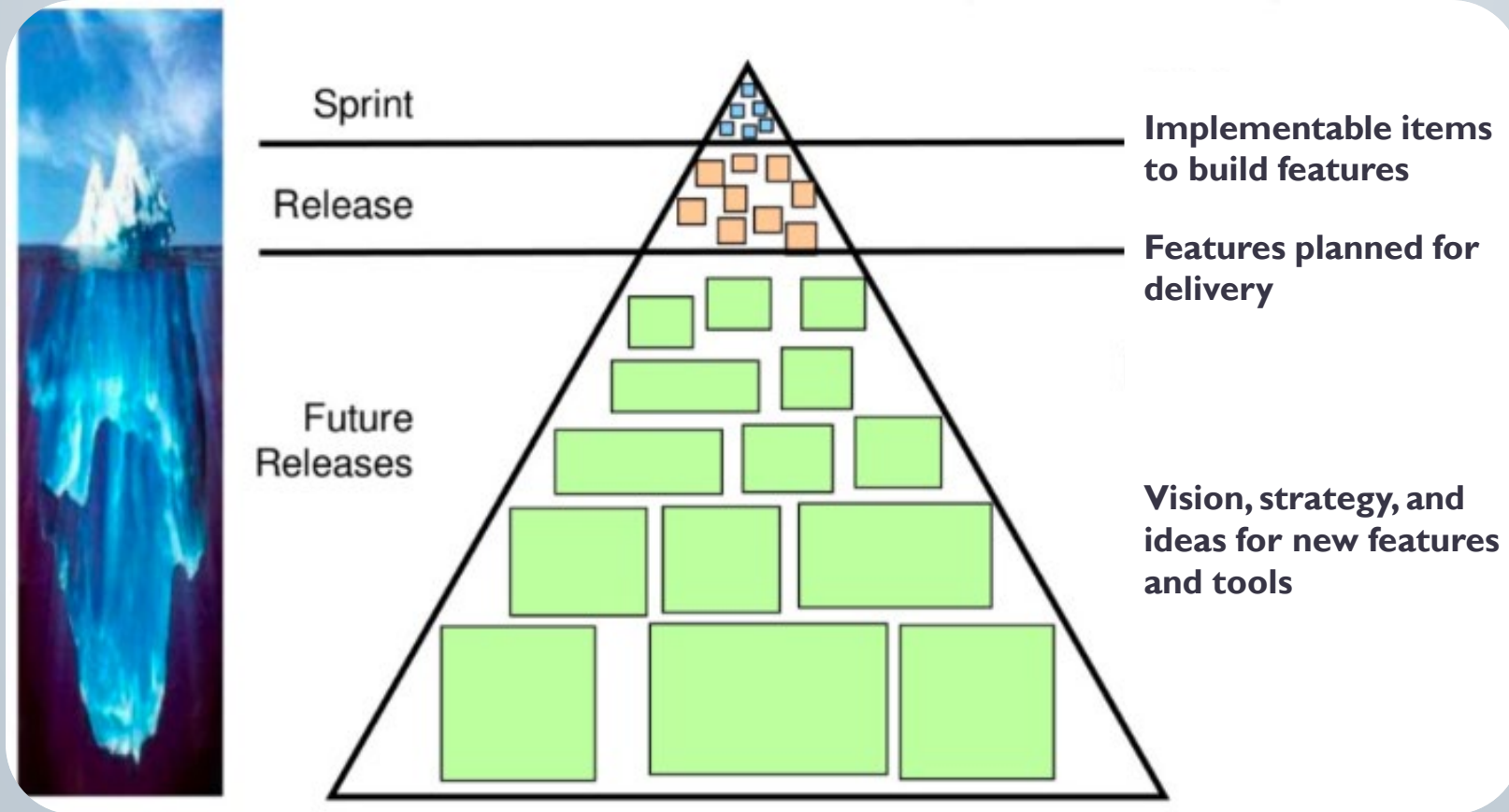
- **Capterra states that 71% of companies are implementing Agile.**
- **VersionOne reveals that Agile adoption has helped out 98% of companies.**
- **Harvard Business Review declares that 60% of companies experience revenue growth and profits increase after using an Agile approach.**
- **Standish Group Chaos Study reports that Agile success rate is 42%, as compared to Waterfall success rate of 26%. This means Agile is 1.5x more successful than Waterfall model.**

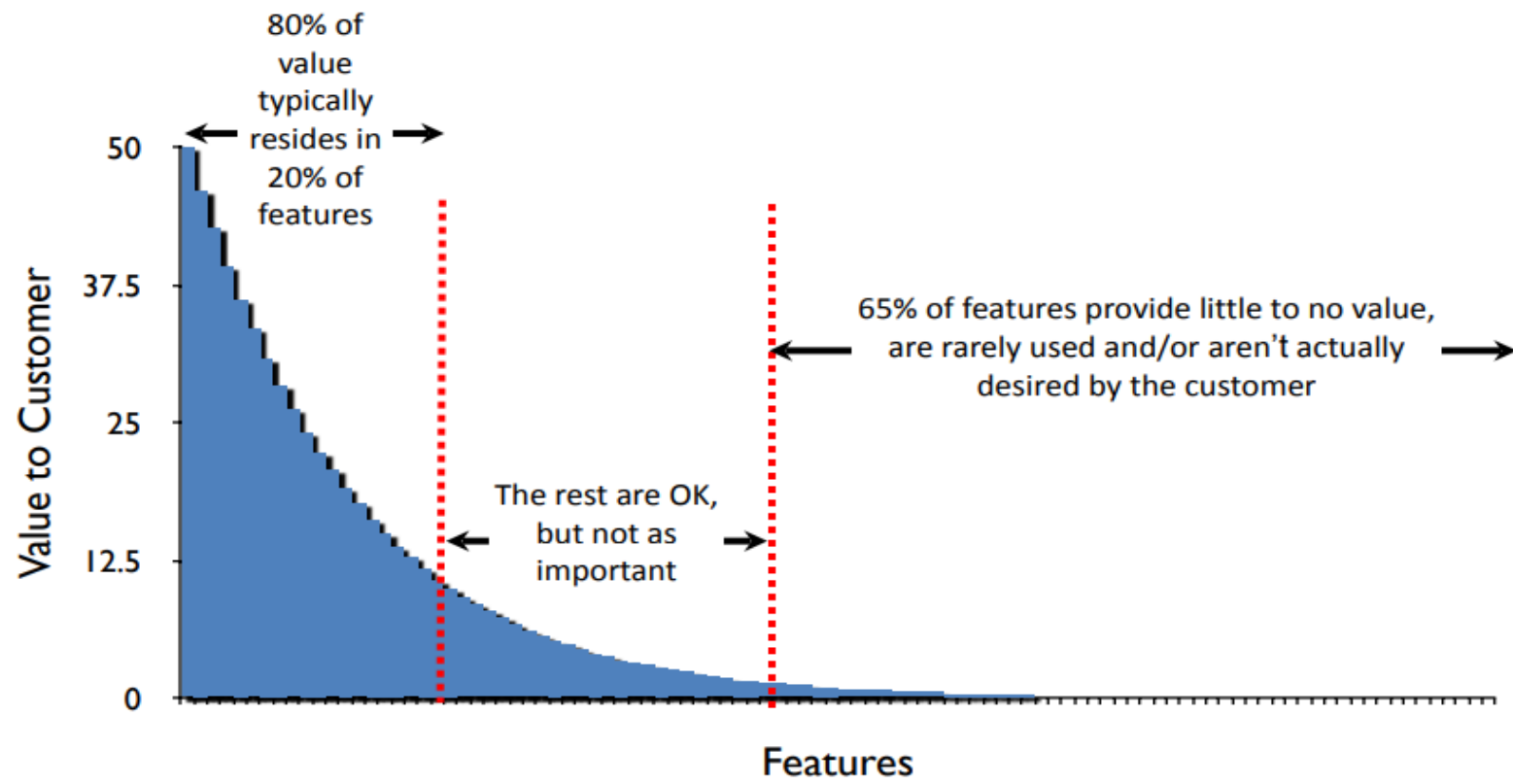
AGILE IS WAY OF THINKING.

- Not everything needs to be figured out right away.
- Get feedback early and often.
- Anticipate and quickly adapt to change.
- **Focus on bringing value to customers.**



THE PRODUCT BACKLOG (SCRUM)

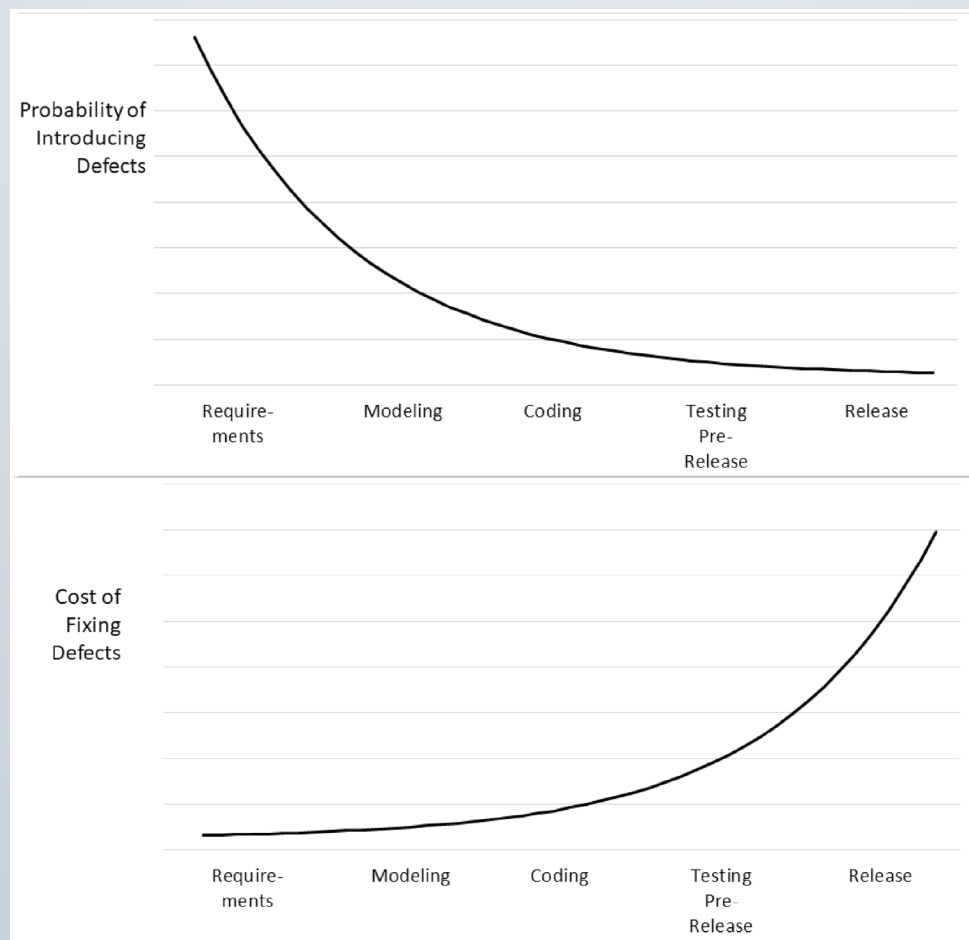




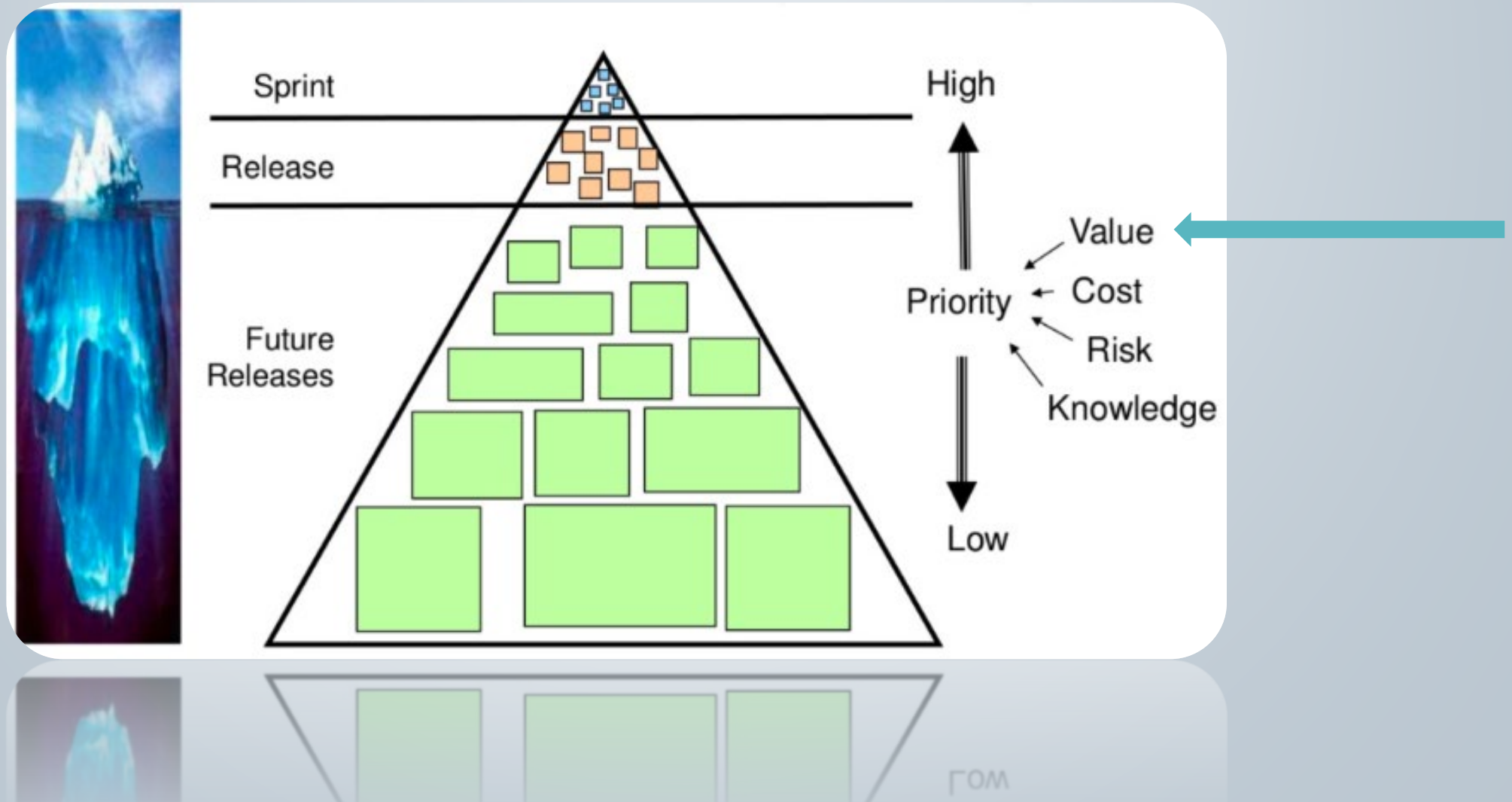
FEATURES




0

FIGURE 1. THE DECREASING PROBABILITY OF INTRODUCING DEFECTS DURING THE DEVELOPMENT LIFE CYCLE (TOP PANEL) AND THE ...



THE PRODUCT BACKLOG (SCRUM)



	User Story	Use Case	SRS IEEE 830	Task
Documents the value the software brings to the customer				
Lightweight				
A promise for a conversation				



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As a <user role>

I want <goal>

so that <benefit>.

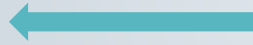
Who benefits from
the **value** the product
feature offers

What a product should
be able to do

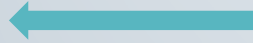
How the product
feature adds **value**

USER STORY EXAMPLE

Summary



Canonical
template



Condition of
Satisfaction



Sign Up - Driver
in list Sprint 1 - Due Date Dec 31st

LABELS

Backend

Frontend

ACTIONS

Share

Description

As a restaurant owner, I want to be able to register on Romy'sHungry so that I can begin taking orders

Attachments

upload 12/22/2016 at 2:48:36 PM.png

Added Dec 22, 2016 at 5:56 PM

☒

Acceptance Criteria

0%

☐

User should be able to register with FB

☐

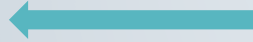
User should be able to register with Email + Password + Picture + Car details - Make plus License Number + Phone Number

☐

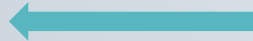
User should be able to Login

USER STORY EXAMPLE

Auxiliary
Information



Condition of
Satisfaction



Auxiliary
Information



Attachments



upload 12/22/2016 at 2:48:36 PM.png ↗

Added Dec 22, 2016 at 5:56 PM



Acceptance Criteria

0%



User should be able to register with FB



User should be able to register with Email + Password + Picture + Car details - Make plus License Number + Phone Number



User should be able to Login



User should be able to Logout



User must check off the TERMS AND CONDITION to create account



User should be able to retrieve password according to design flow



Driver Account

0%



Must upload Driver's License



Must go through a manual check - verification



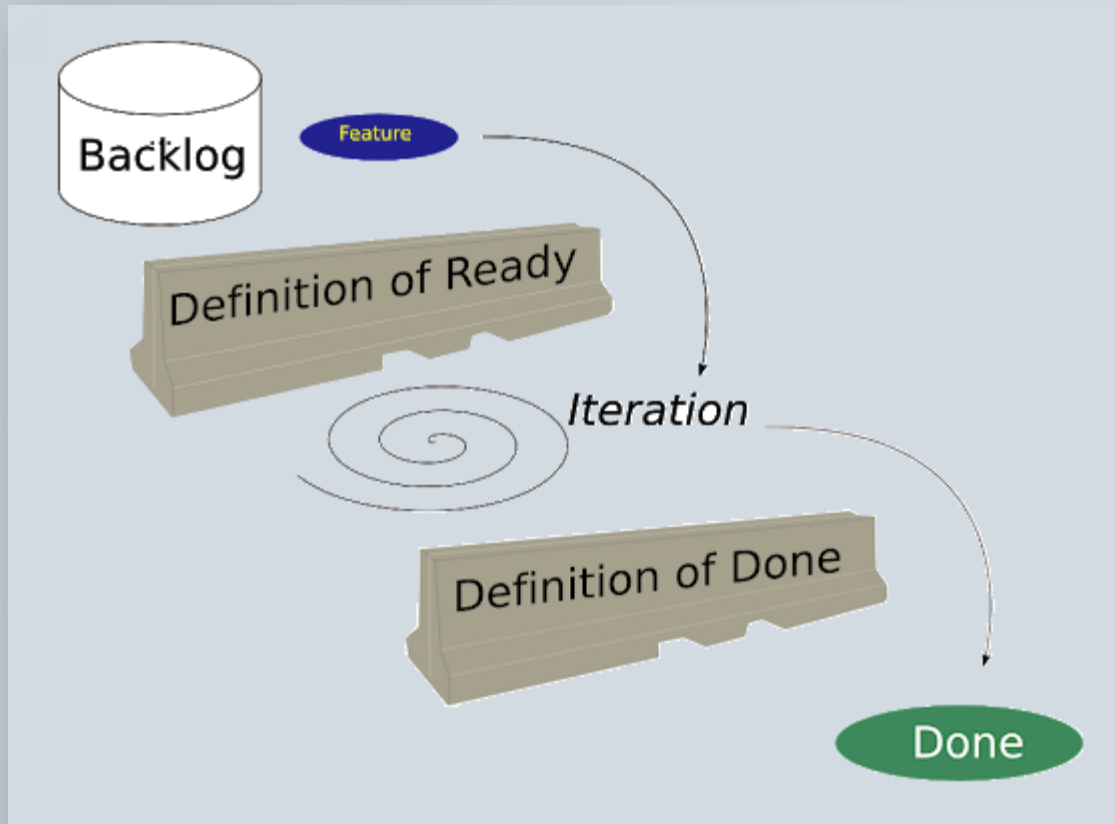
Must be approved by admin



Need to update hours they can work



Location



Avoid traveling stories by defining “ready” and “done”.

- ✓ Is the user story valuable?
- ✓ Is the user story actionable?
- ✓ Is the user story feasible?

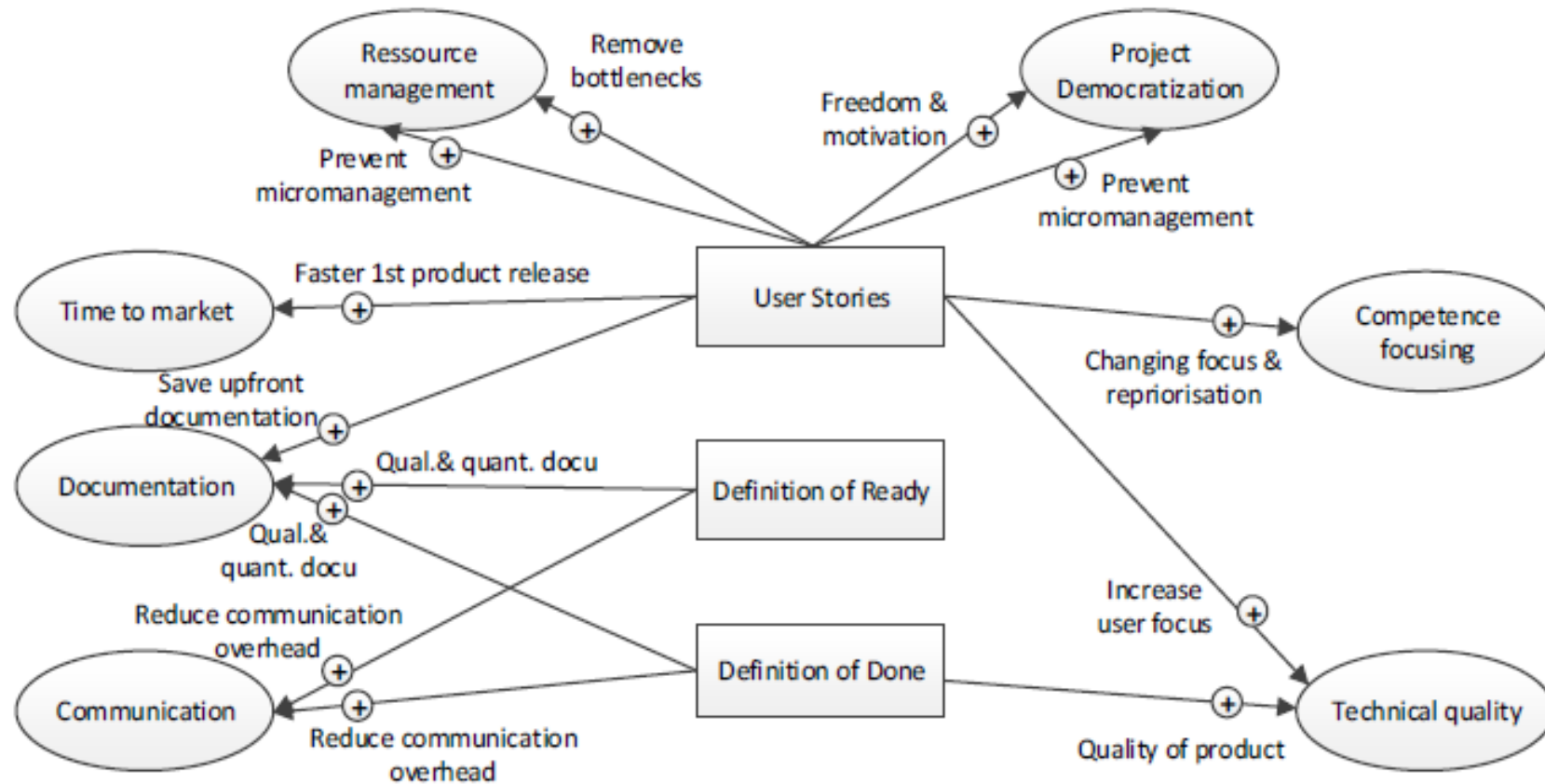









Figure 2. Impacts of User Stories, Definition of Ready and Definition of Done, modeled using the Agile Practice Impact Model [20]

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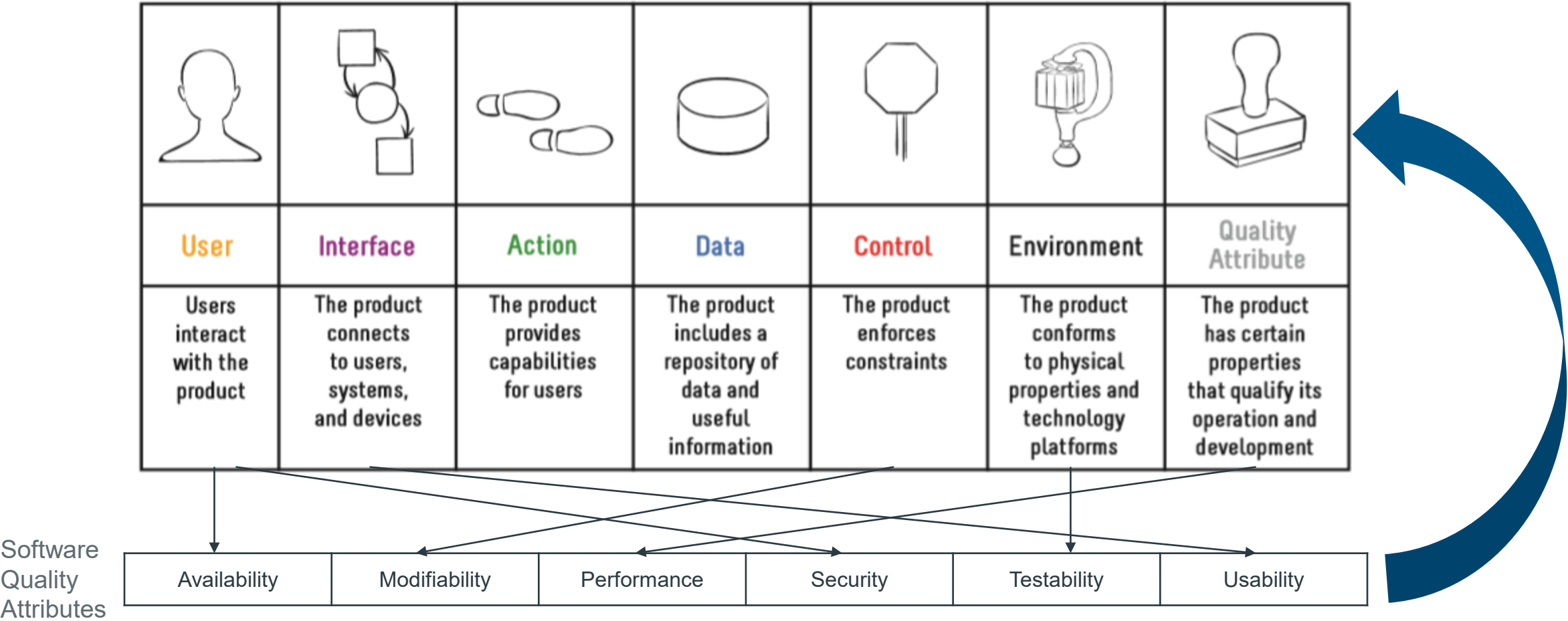


The 7 Product Dimensions

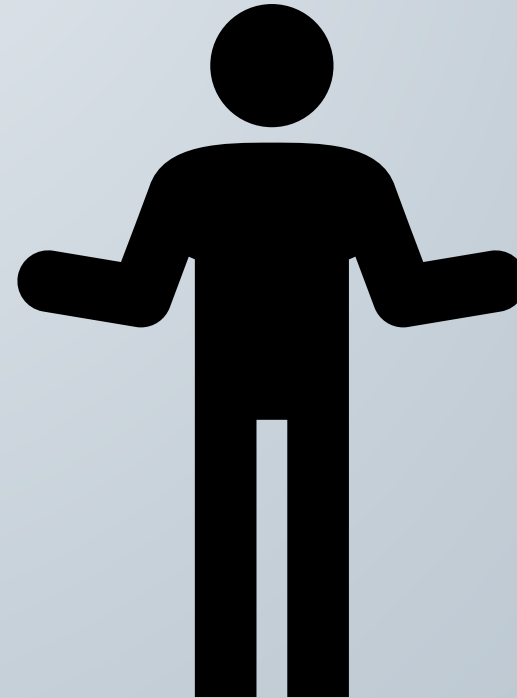
						
User	Interface	Action	Data	Control	Environment	Quality Attribute
Users interact with the product	The product connects to users, systems, and devices	The product provides capabilities for users	The product includes a repository of data and useful information	The product enforces constraints	The product conforms to physical properties and technology platforms	The product has certain properties that qualify its operation and development

Non-functional

The 7 Product Dimensions



“You built what I
asked for, but its not
what I need”

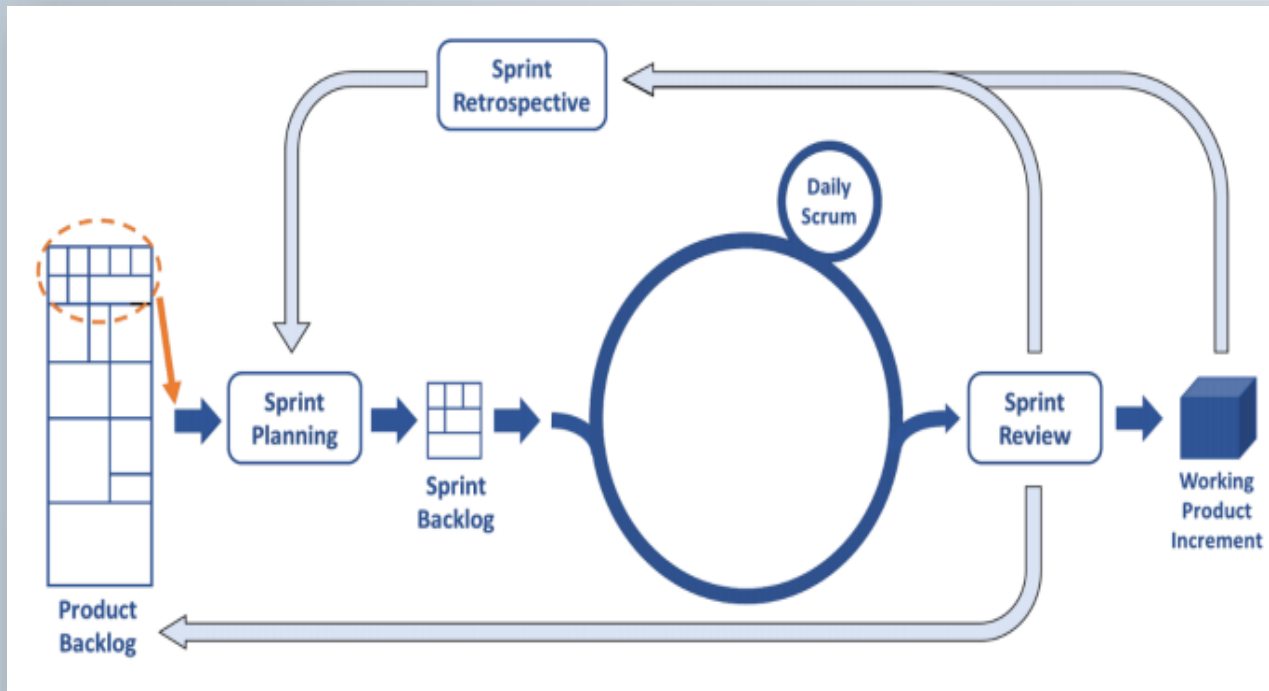


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Scrum offers multiple opportunities for feedback.



- ✓ Short development cycles
- ✓ Customers and business stakeholders are involved throughout the lifecycle
- ✓ Make informed decisions on regarding prioritization and planning for the next cycle

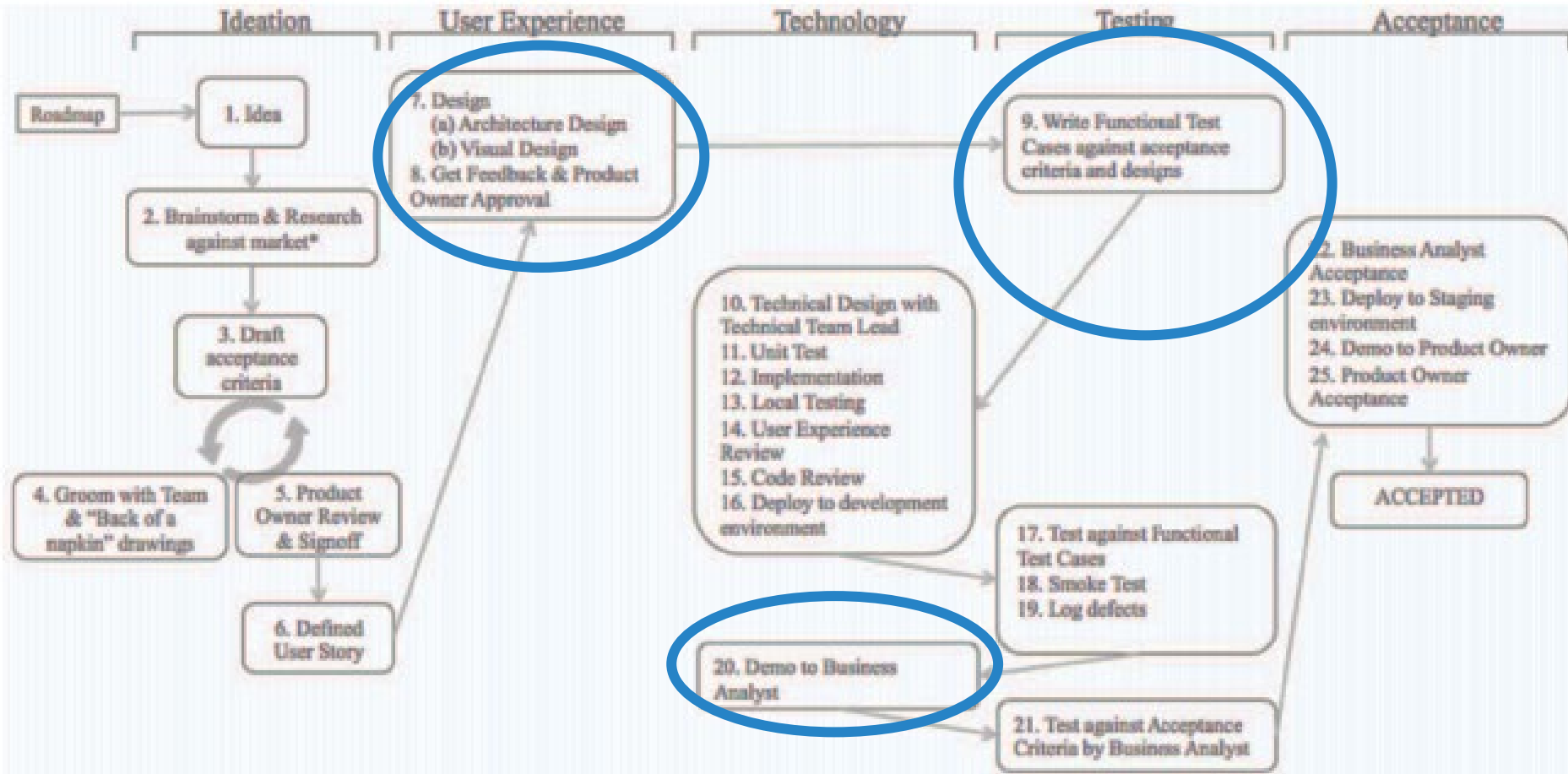


Figure 1. The life cycle of a user story: from ideation to acceptance.



“It’s not about achieving Agile for Agile’s sake. It’s about delivering customer value and achieving better business outcomes.”

Mario Moreira

The Agile Enterprise: Building and Running Agile Organizations

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