Delivering value with BDD

RITESH MEHROTRA

© TECHTALKS, 2018

Hello!

RITESH MEHROTRA

DEVELOPER. AGILE CONSULTANT. SPEAKER

@riteshmehrotra

- Open knowledge sharing and learning community
- Tech sessions, Workshops and Code kata
- Blockchain, agile methodologies, JS frameworks, AI, ML, Big data & Analytics
- https://www.meetup.com/techtalkssg

Agenda

- The curious case of software development
- A gentle introduction to BDD
- BDD in practice
- Tools and Techniques
- Q & A

© TECHTALKS, 2018

© TECHTALKS, 2018

What if?

- Eliminate the ambiguity from specifications
- Preserve information at a single source of truth
- Develop a common language across business and project team
- Focus on building the most valuable features
- Visualize in real time the progress of product development and provide feedback

© TECHTALKS, 2018

Say Hello! to BDD

BEHAVIOR DRIVEN DEVELOPMENT

© TECHTALKS, 2018

Set of techniques and patterns

© TECHTALKS, 2018

Helps translating business knowledge to software in an iterative manner

© TECHTALKS, 2018

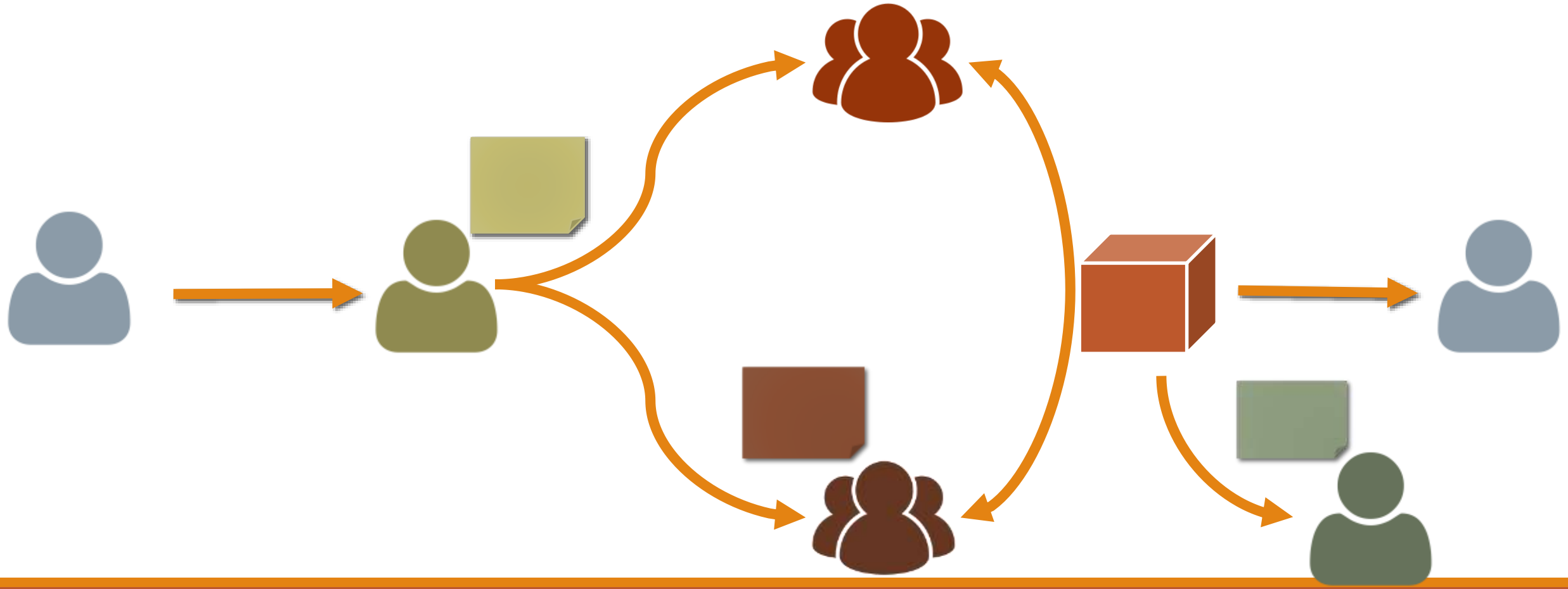
Focus on business value

© TECHTALKS, 2018

Achieved through continuous collaboration between business stakeholders & project teams

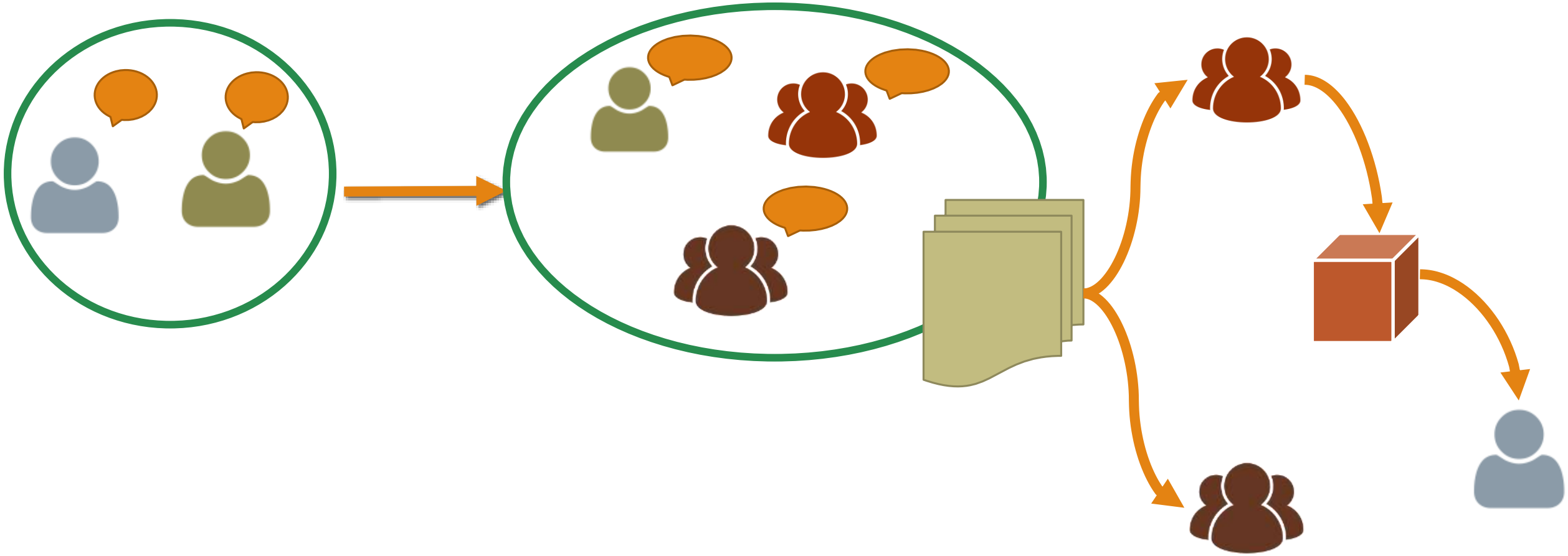
© TECHTALKS, 2018

Traditional workflow



© TECHTALKS, 2018

BDD workflow



Expressed with Gherkin

© TECHTALKS, 2018

Gherkin specification

Feature: <>

Scenario: <>

Given : < >
And/But : < >
When : < >
And/But : < >
Then : < >
And/But : < >

© TECHTALKS, 2018

Gherkin specification

Feature: Recording a session

Narrative: In order to replay it later for audience who could not attend, as a speaker, I want to record this session

Scenario: Start the recording

Given: I am a speaker at this session

And: I have placed a camera in the room

When: I start the recording

Then: The session should get recorded

© TECHTALKS, 2018

Let’s code

Code sample: https://github.com/riteshmehrotra/BDD

© TECHTALKS, 2018

BDD deep dive

© TECHTALKS, 2018

Whose behavior?

- Business
- Consumer
  - Customers/Beneficiaries
  - Staff
  - Govt. Agencies/Regulatory/Audit

© TECHTALKS, 2018

What is value?

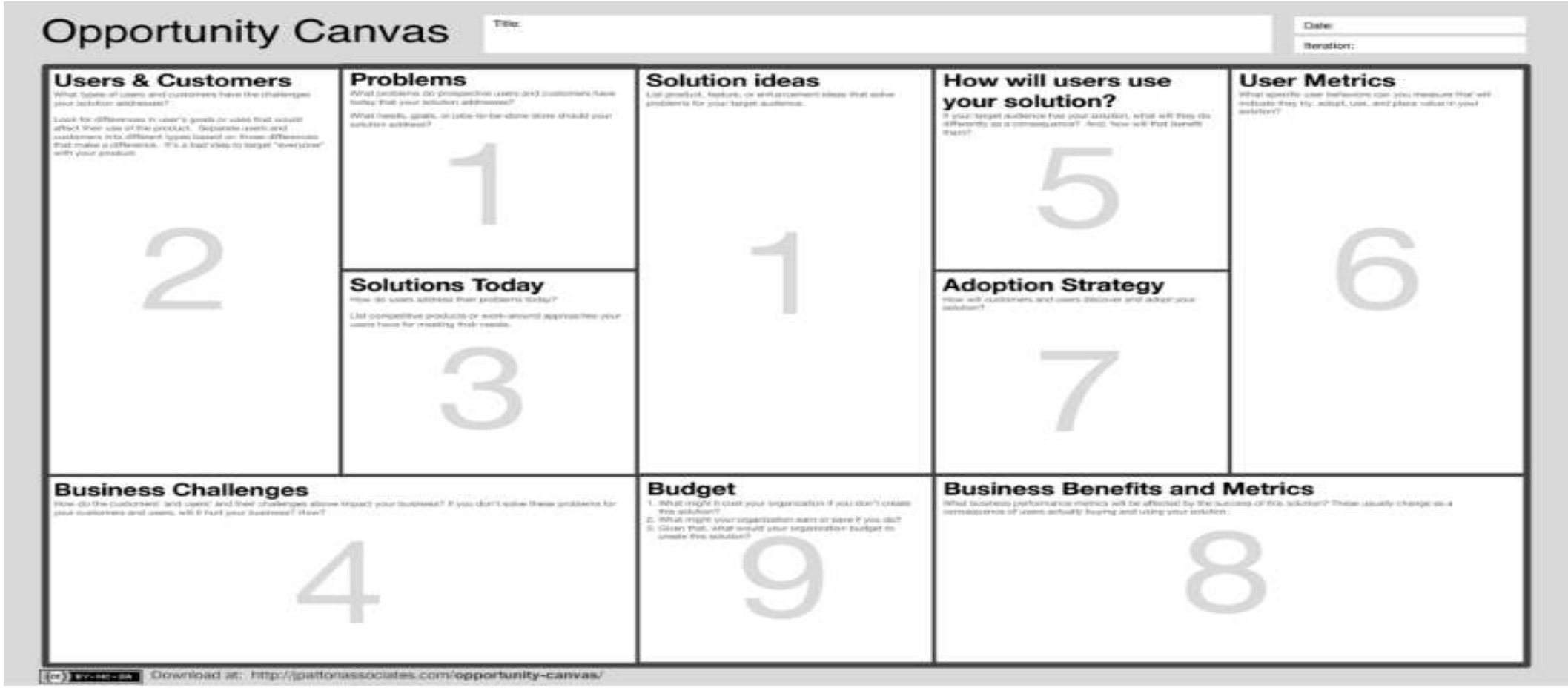
- Increase profit
- Protect profit
- Reduce cost
- Avoid future cost

© TECHTALKS, 2018

Where is value?

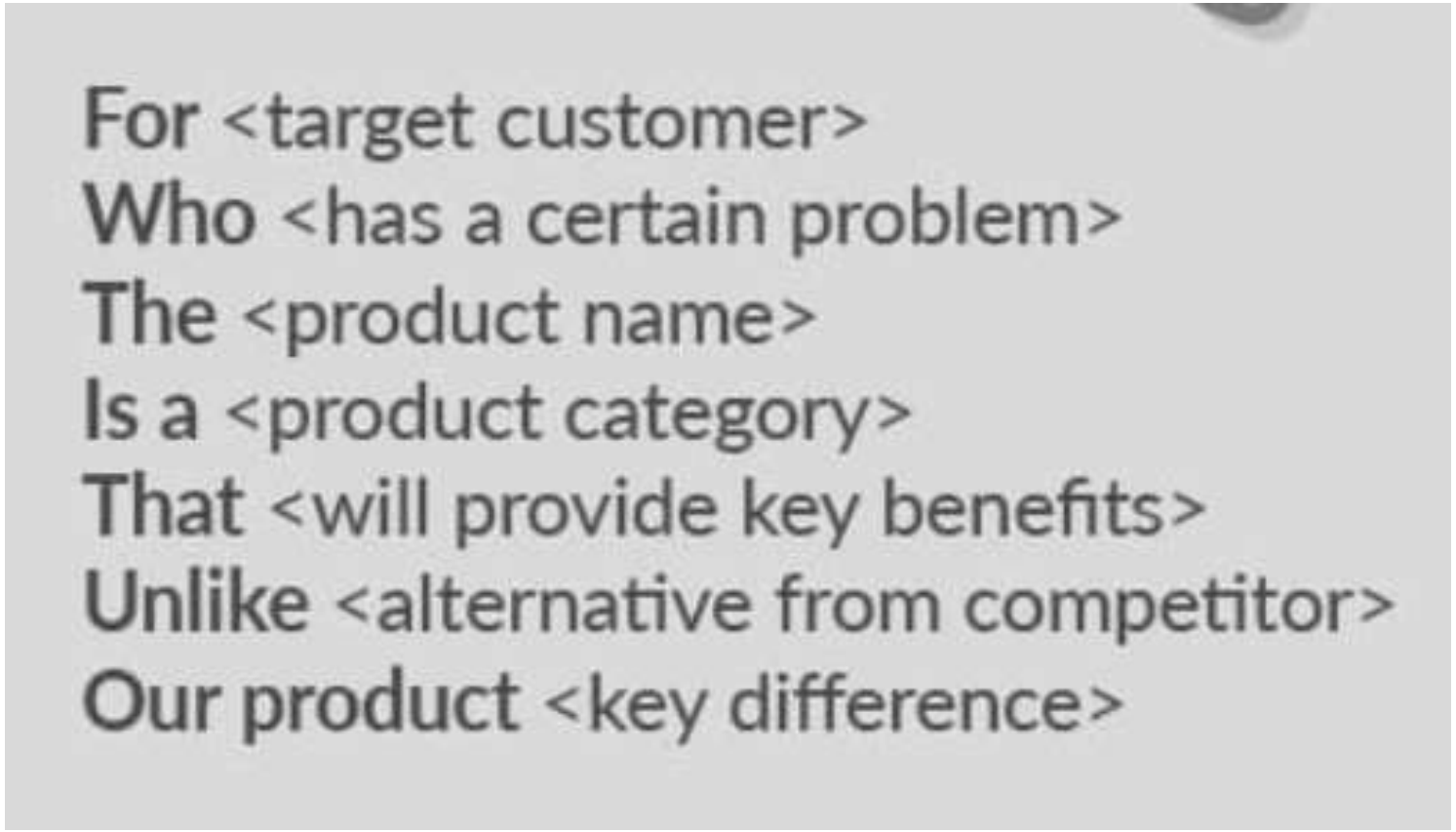
© TECHTALKS, 2018

Opportunity canvas



© TECHTALKS, 2018

Vision statement



© TECHTALKS, 2018

Feature injection

© TECHTALKS, 2018

Hunt the value

© TECHTALKS, 2018

(Why?) * 5

© TECHTALKS, 2018

RCA example

The system is currently down

Why?

The underlying authentication service is failing so we cannot log in

Why?

The authentication service cannot connect to repository

Why?

The connection parameters are incorrect

Why?

There was a change in database host name which was not updated in authentication service

© TECHTALKS, 2018

Applied to goal discovery

We want to offer $ 25 cashback for customers who do less than 10 withdrawals a month?

Why do you offer that?

A promotion will encourage more customers to do lesser withdrawals

Why do you want to encourage them?

By means of that, we want to promote cashless transactions

Why so?

Because we want to reduce usage of ATM

Why?

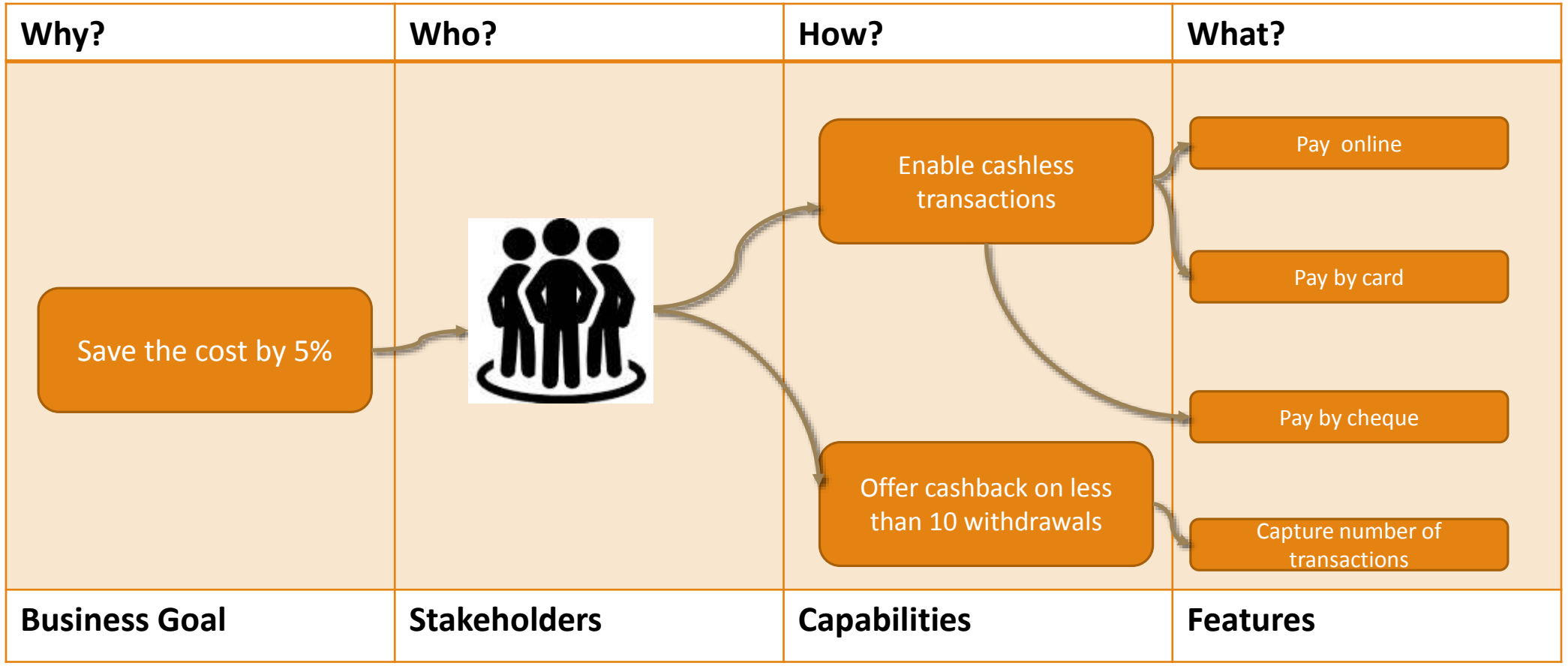
Maintaining the ATMs is an additional cost, and our analysis suggests that we will be able to save cost by 5% by reducing usage

© TECHTALKS, 2018

Injecting a feature

© TECHTALKS, 2018

Impact map



© TECHTALKS, 2018

Seek examples

© TECHTALKS, 2018

Seek example

“Can you give me an example?”

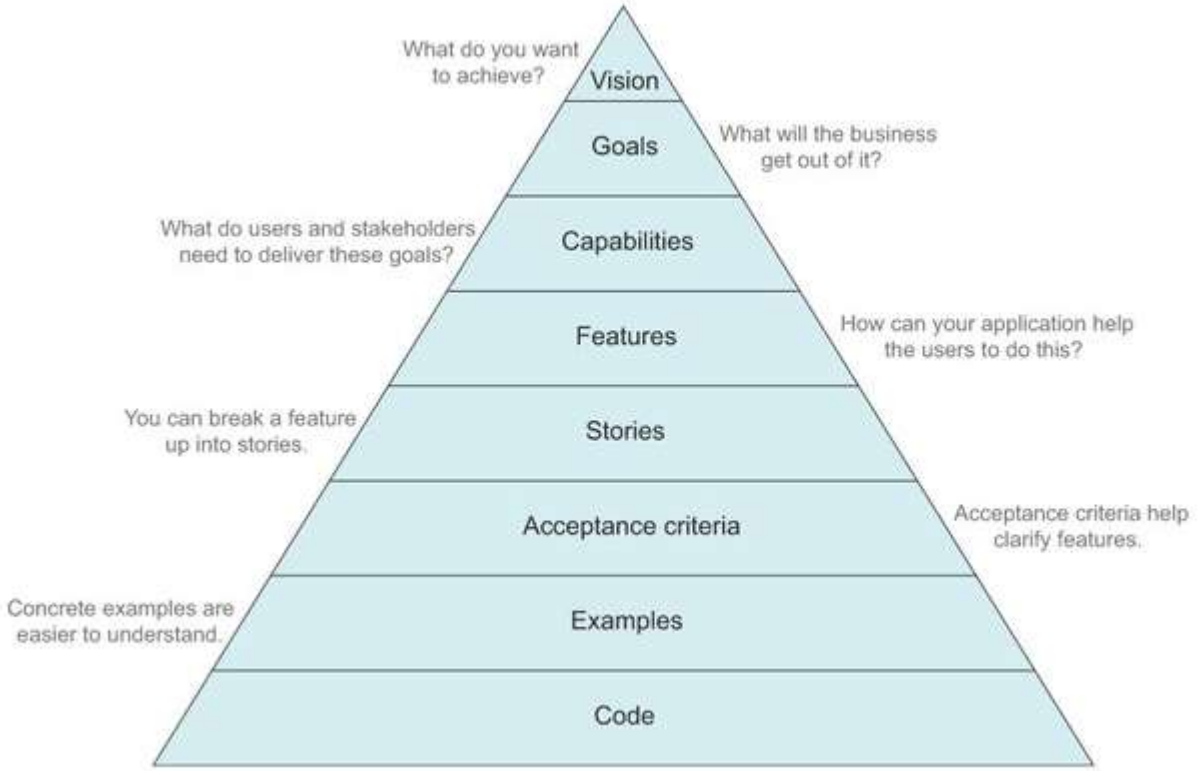
Precise specifications so delivery teams avoid rework caused by ambiguity

Objective way to measure when work is complete

Described in book “Specification by Example” by Gojko Adzic

© TECHTALKS, 2018

Approach



Source: BDD in action

© TECHTALKS, 2018

Recap

- Enhanced business - IT collaboration
- Aligned to the business value
- A single source of truth – equally understood by business and development teams

© TECHTALKS, 2018

References

BDD in action – James Smart Fergusen

Specification by example – Gozko Adzic

© TECHTALKS, 2018

Meetup TECHTALKS

© TECHTALKS, 2018