

# Testing in Agile Projects

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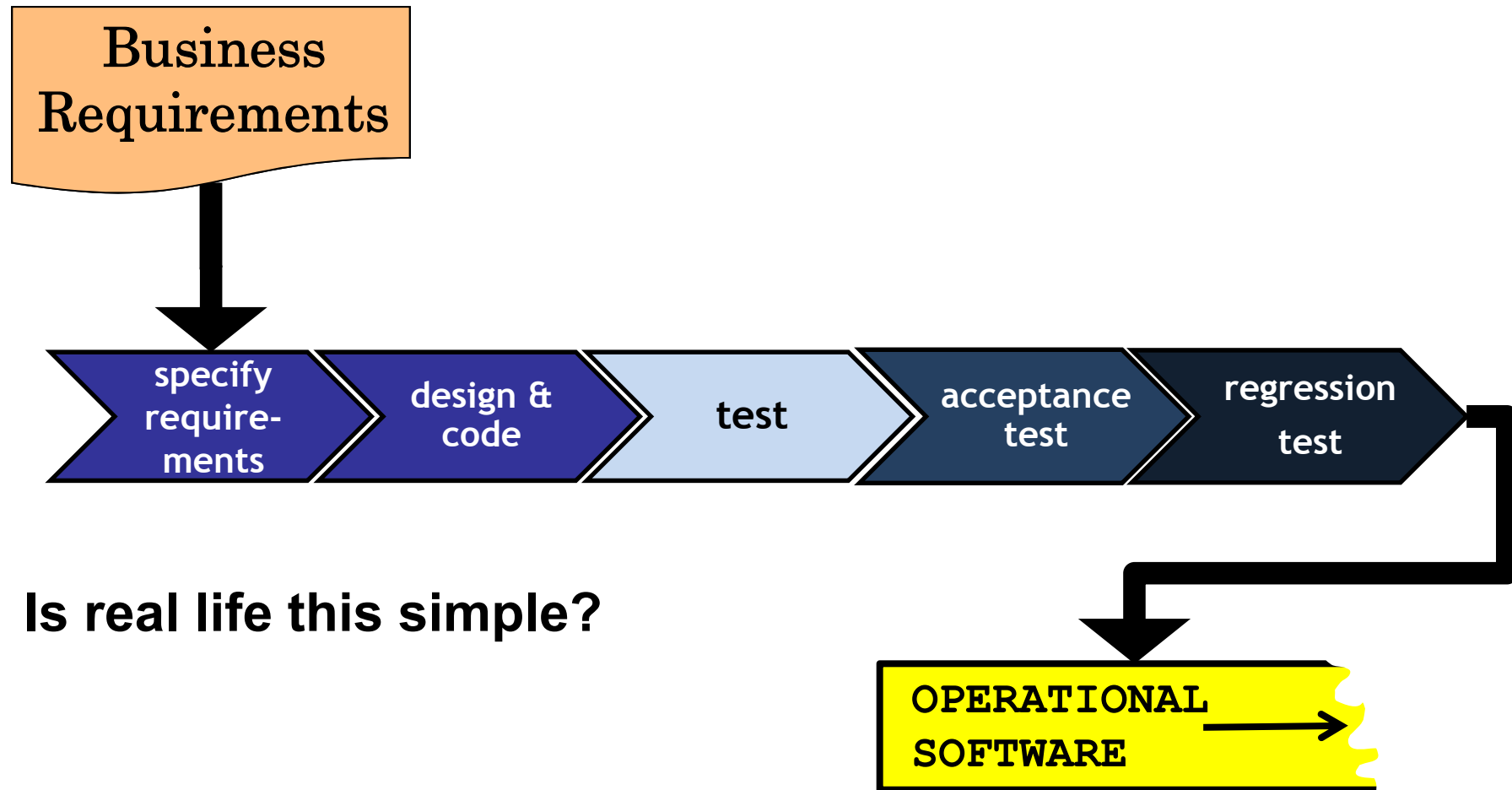
# Structure

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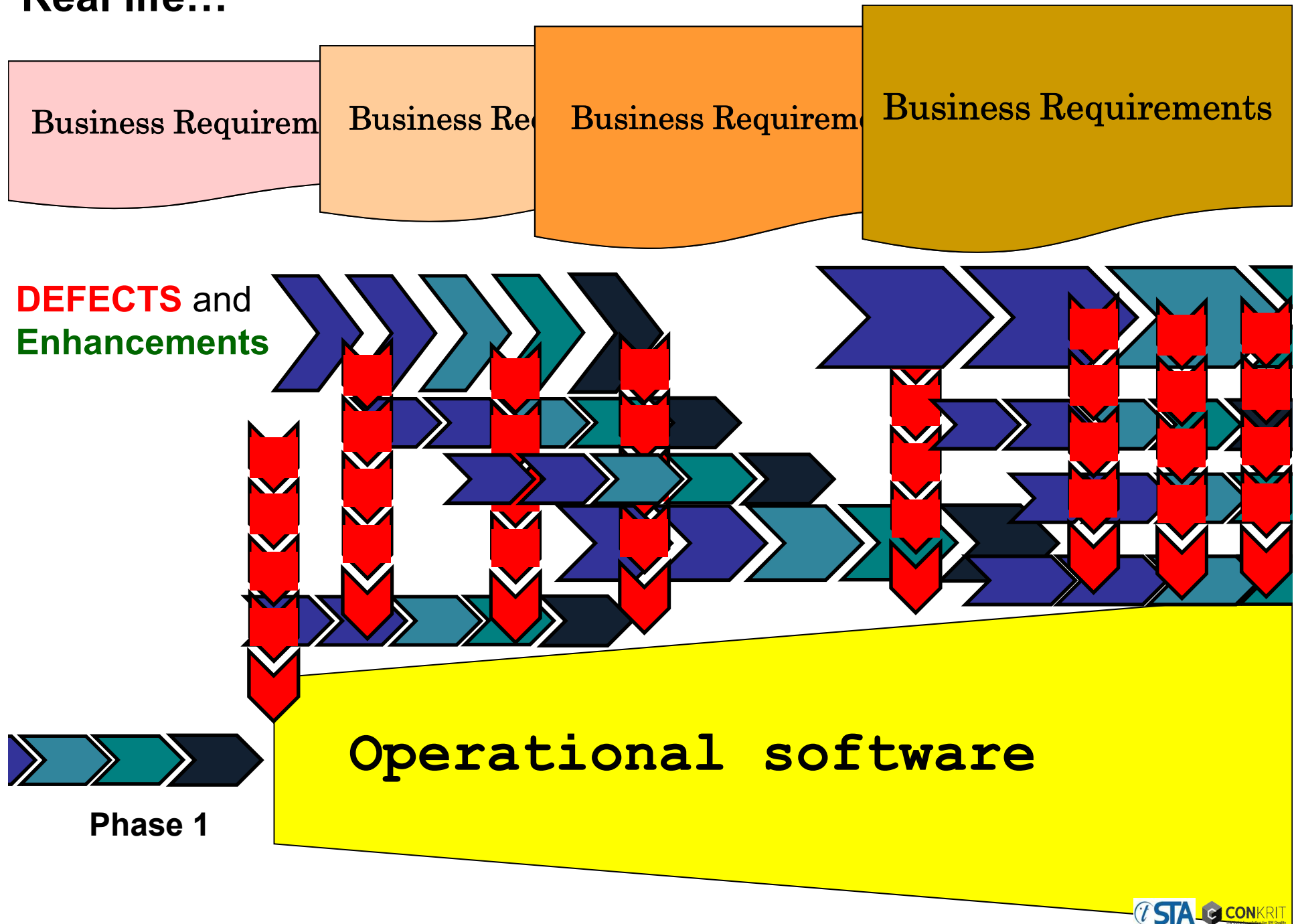
- Introduction to agile
- Agile processes and testing
- The ideal Scrum sprint
- Agile teams
- Agile benefits
- Questions?

# Why go agile when we could use a simple generic development & Test Process?

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## Real life...



# The Agile Manifesto

***"In AGILE we value..."***

*Individuals & 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."***

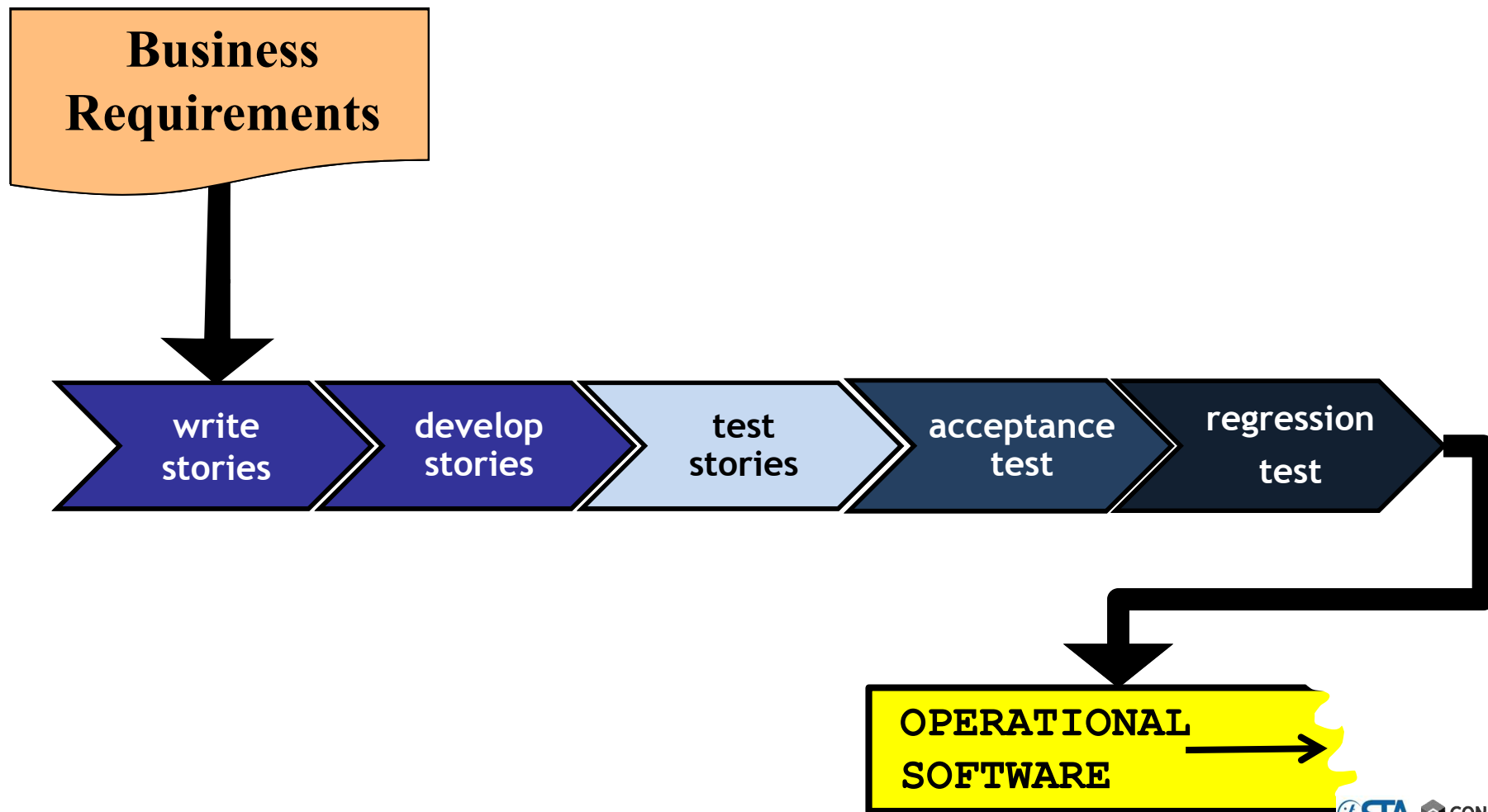
# Industry adoption – US/Europe but Korea?

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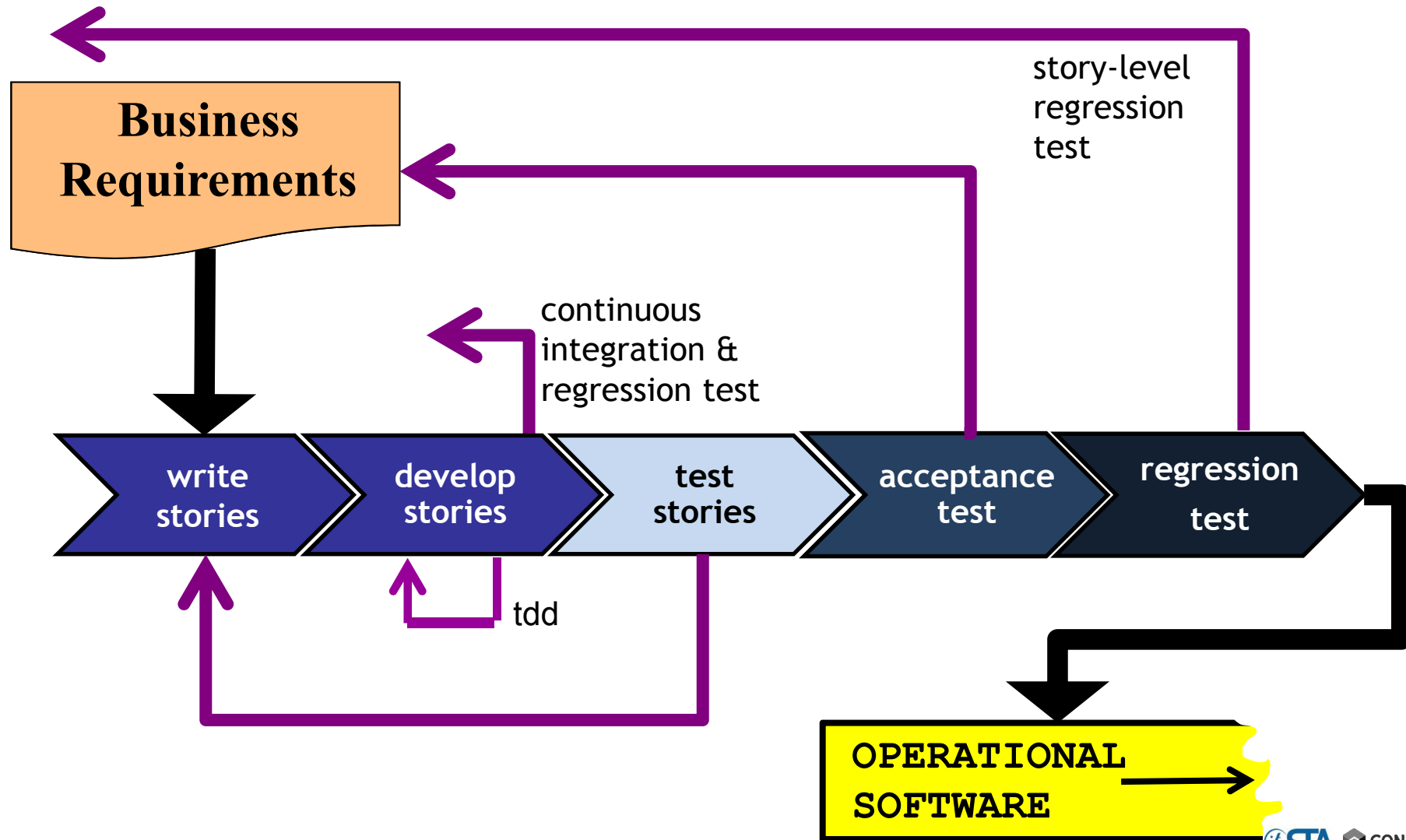
- **Agile development is now ‘mainstream’:**
  - 94% ‘practising agile’ - VersionOne [2015]
  - 36% of testing is done in agile projects (WQR) [2015]
  - 28% - Reid & Murnane - Tester Motivation Survey [2013]
- **US DoD**
  - all defense contracts must include agile development [2013]
- **Take up is often partial**
  - Not all “agile” teams are doing all the practices (“Scrumbut”)
  - Some organisations are blending waterfall and agile

# A (simplified) (Agile) Development & Test Process

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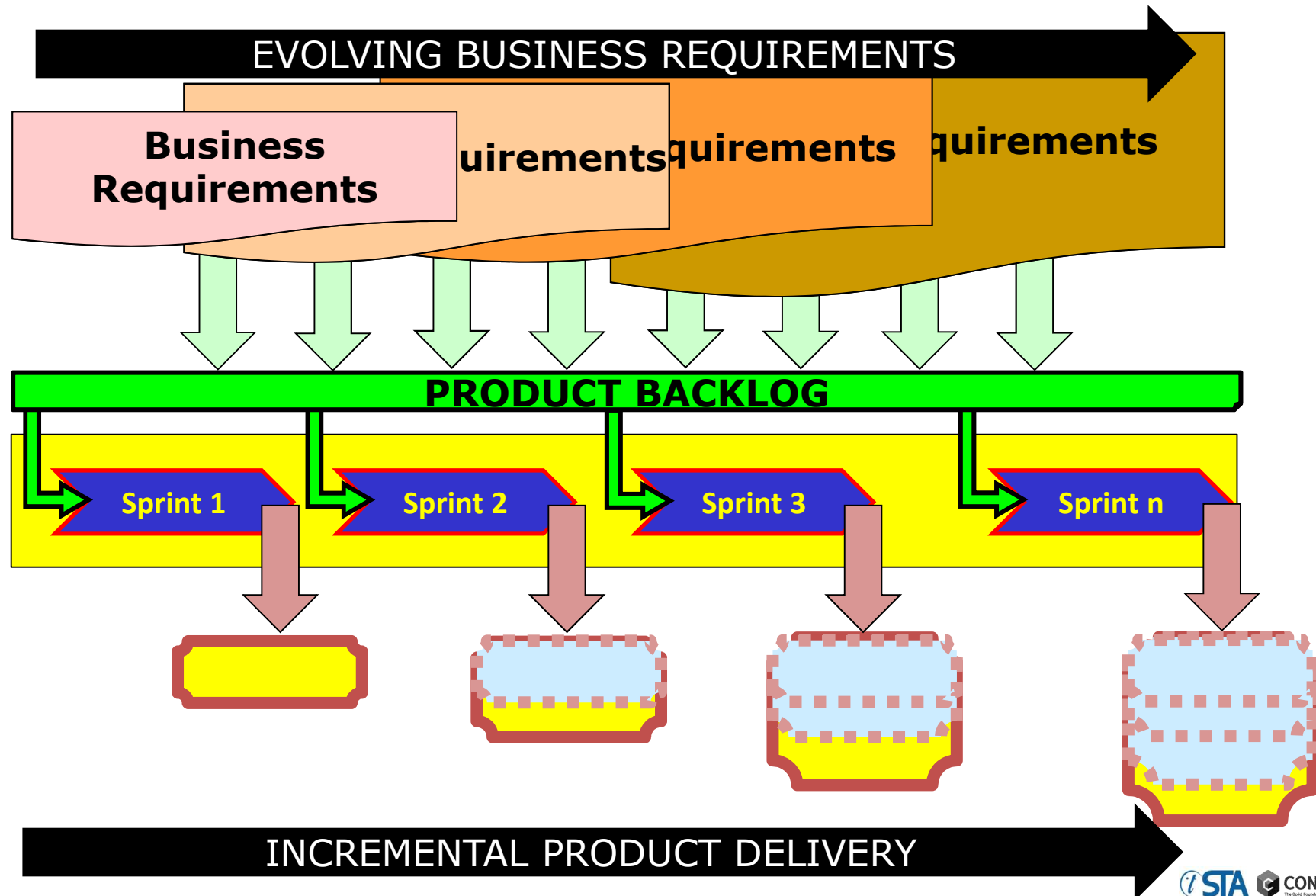


# (Simple) Agile Development & Test

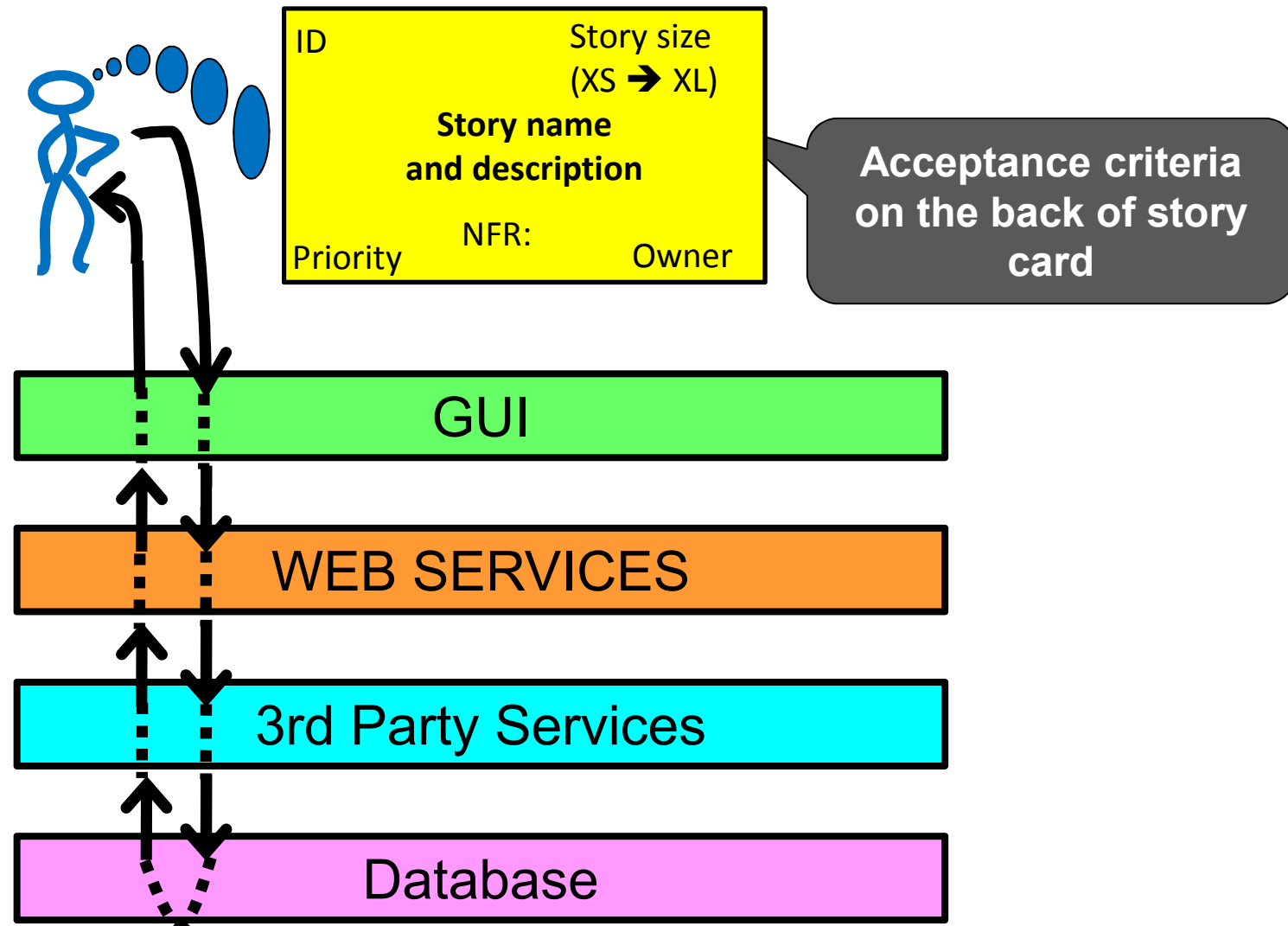




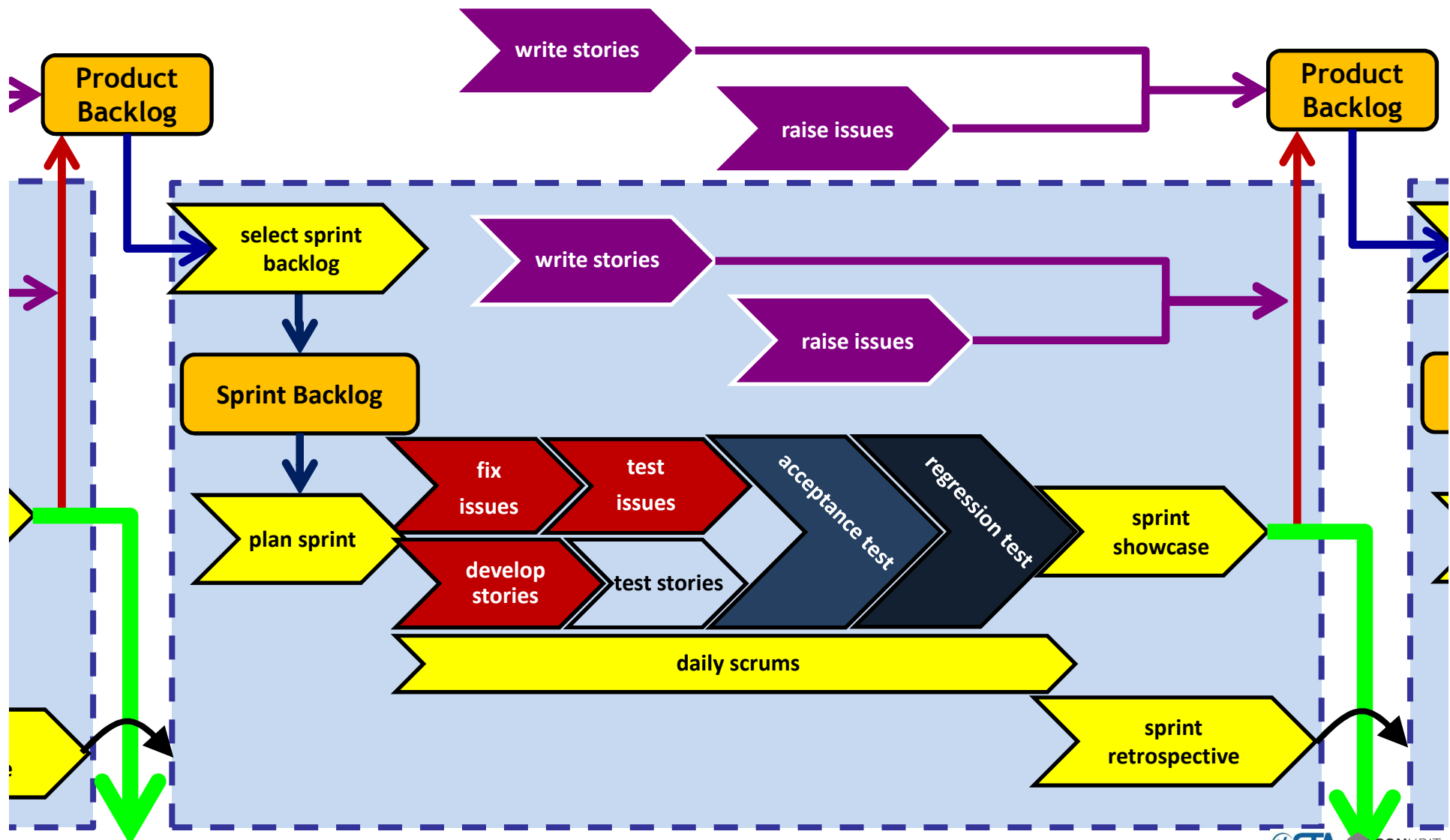
# An Agile Approach



# User Stories – no integration testing

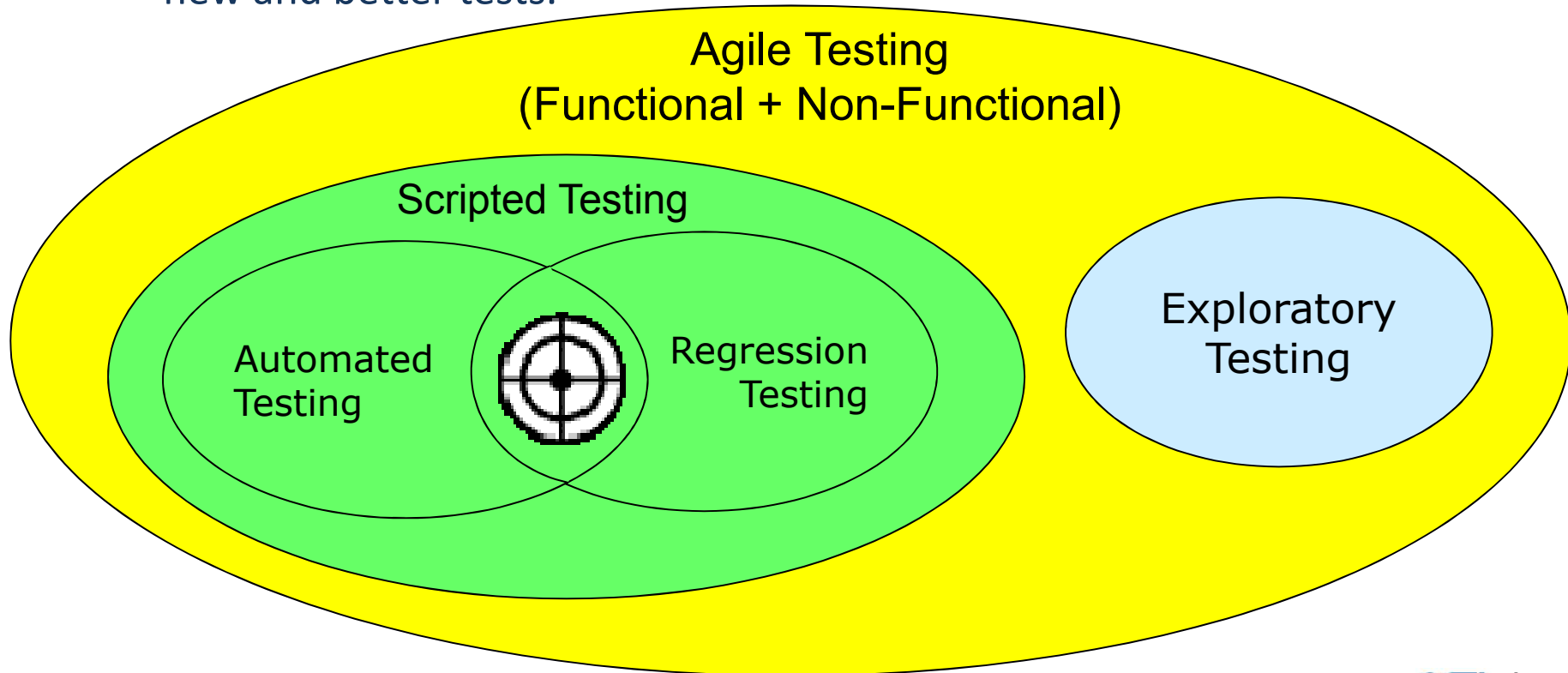


# Ideal Agile using Scrum



# AGILE TESTING ≠ EXPLORATORY TESTING

- **Exploratory testing is simultaneous learning, test design, and test execution.**
  - testing where the tester actively controls the design of the tests as those tests are performed and uses information gained while testing to design new and better tests.



# Agile teams

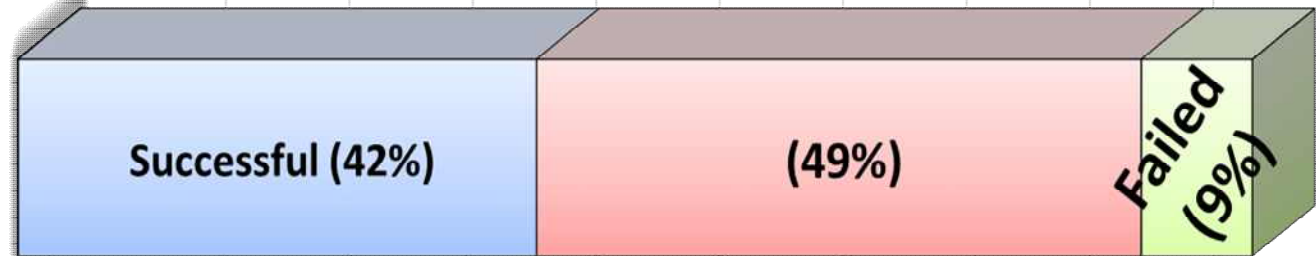
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- **The whole agile team takes responsibility for the decisions they make (and ultimately the deliverables)**
  - self-organizing/optimizing (and so adaptable)
  - communal ownership (not hierarchical)
- **Benefits**
  - teams react well to being given responsibility
    - more motivated
    - more adventurous/innovative – will try things that may fail
- **Challenges**
  - individuals need to take responsibility
  - management find it hard to ‘let go’

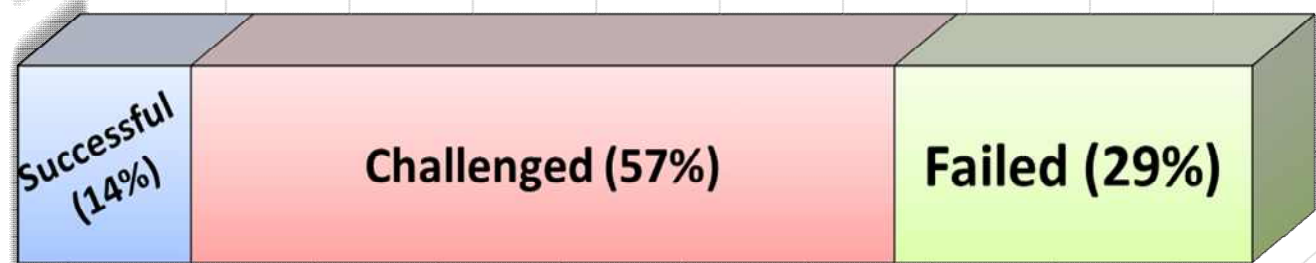
# Major Differences / Advantages

- Faster time to market (77%)
- Ability to manage changing priorities (87%)
- Team productivity (84%)

**AGILE**



**WATERFALL**



# Summary

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**Thank you for listening**

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**Any Questions?**