

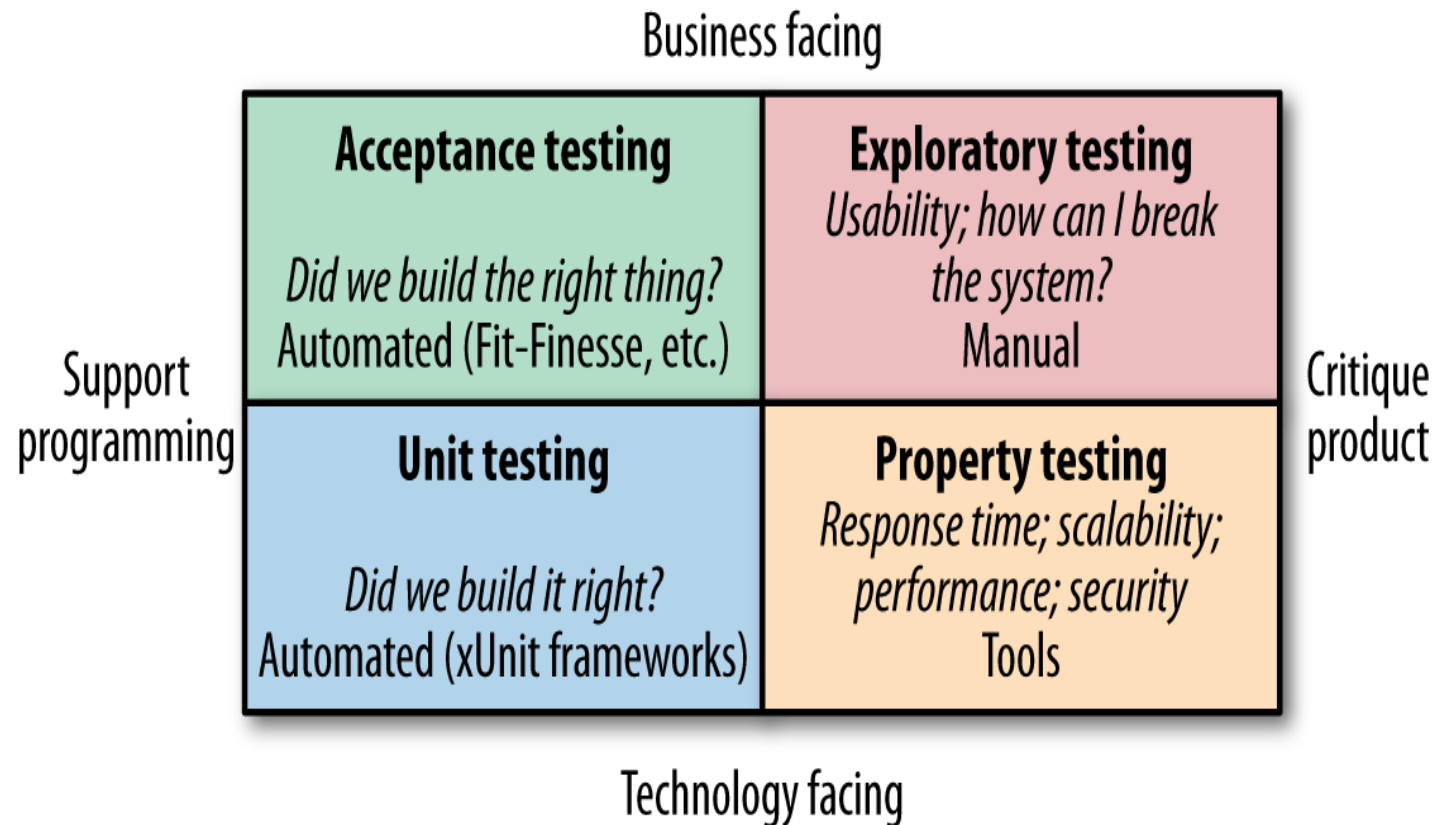
Test Automation Strategies and Frameworks in Agile Testing

Mahipal Singh Chouhan

Agenda

- Agile Testing Quadrants
- Test Automation Strategies
- Test Automation Framework Design Pattern
- Test Automation Governance

Agile Testing Quadrants

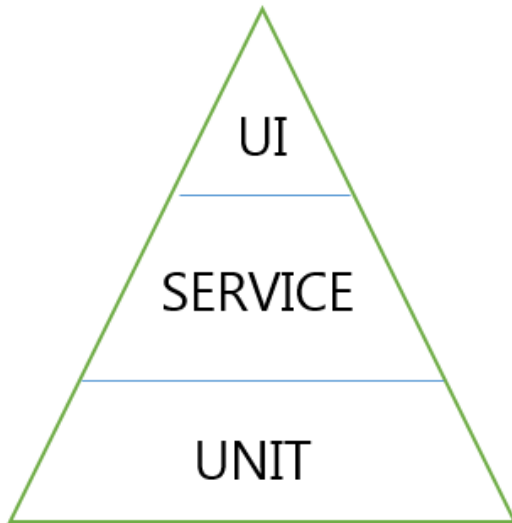


Brian Marick's Testing Quadrants

Test Automation Strategies

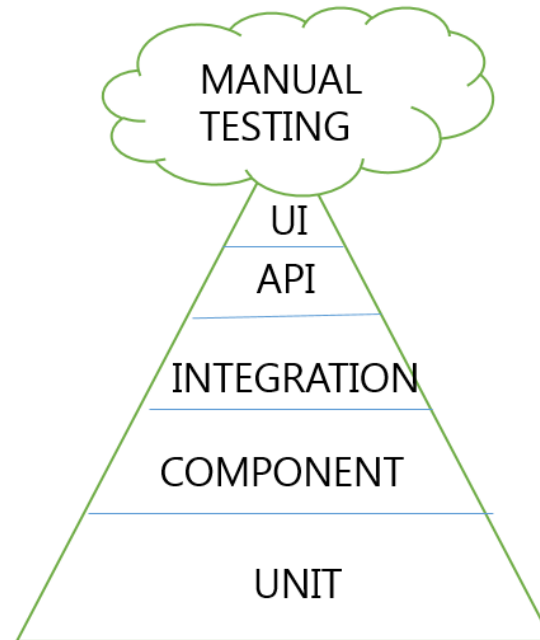
- What to automate? When to automate?

Test Automation Pyramid



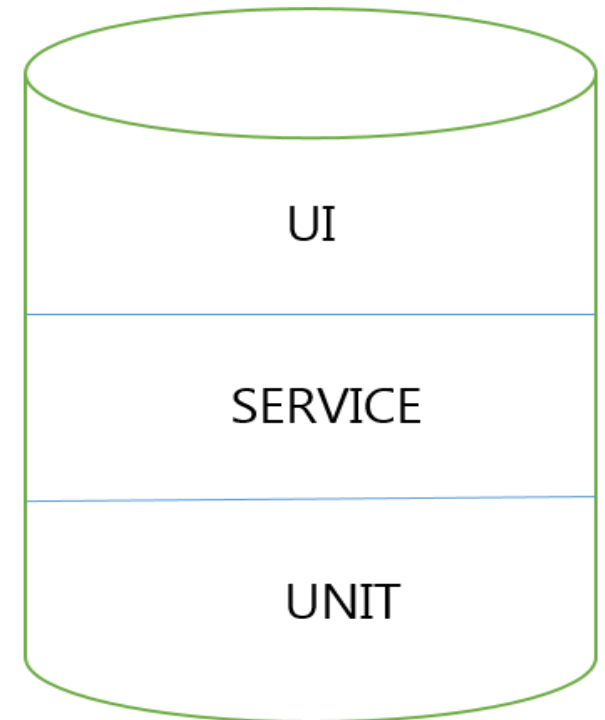
Mike Cohn

Test Pyramid



Alister Scott

Test Automation Cylinder



Test Automation Strategies

➤ Test Data Strategy



Unique Test Data



Create and Delete
Test Data

Test Automation Strategies

➤ Locator Strategy

Poor location Strategy

Target
Page object moves

New page objects
added/deleted

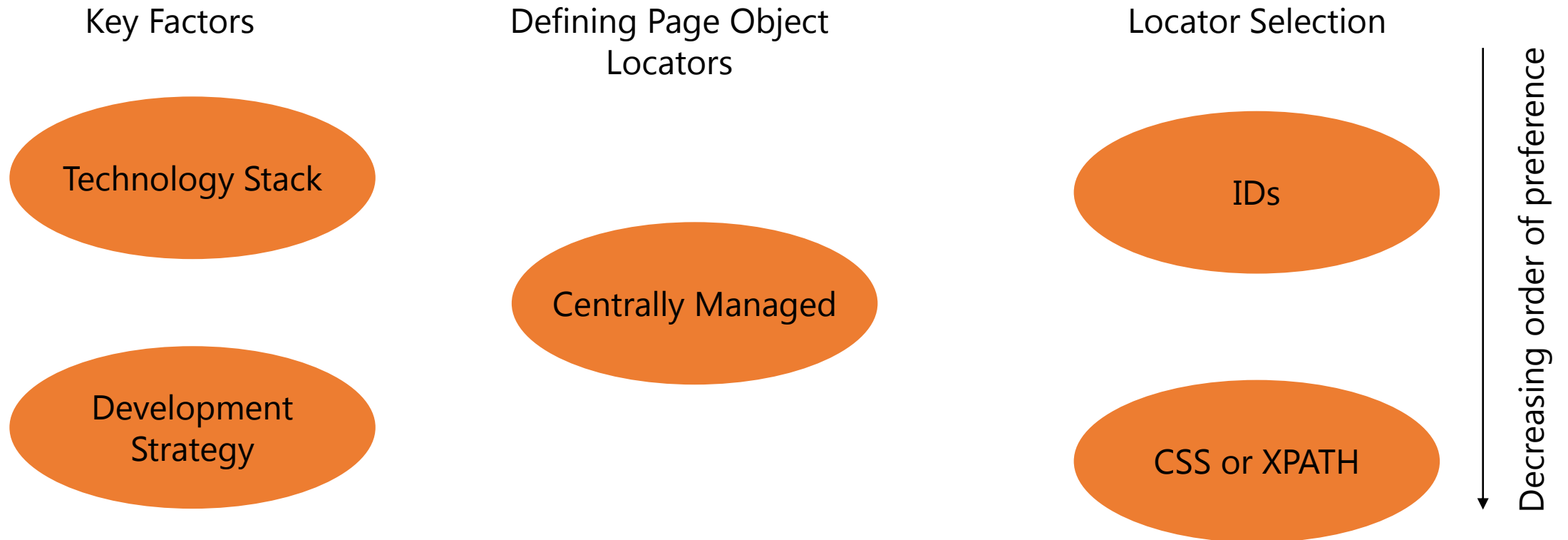
Changes in
hardcoded locator
data

Dynamically
generated page
objects

Changes in sort
order due to
addition/removal of
test data

Test Automation Strategies

➤ Locator Strategy



Test Automation Strategies

➤ Wait Strategy



Hard Sleeps



Implicit Waits



Explicit Waits

Test Automation Strategies

➤ Test Environment



Increased Stress



Complete Solution

Test Automation Strategies

➤ Design for Scalability



Test Infrastructure



Modular and
Independent Tests

Test Automation Strategies

➤ Test Execution

Integration with CD

Faster Feedback

Important considerations for Test Automation Strategy



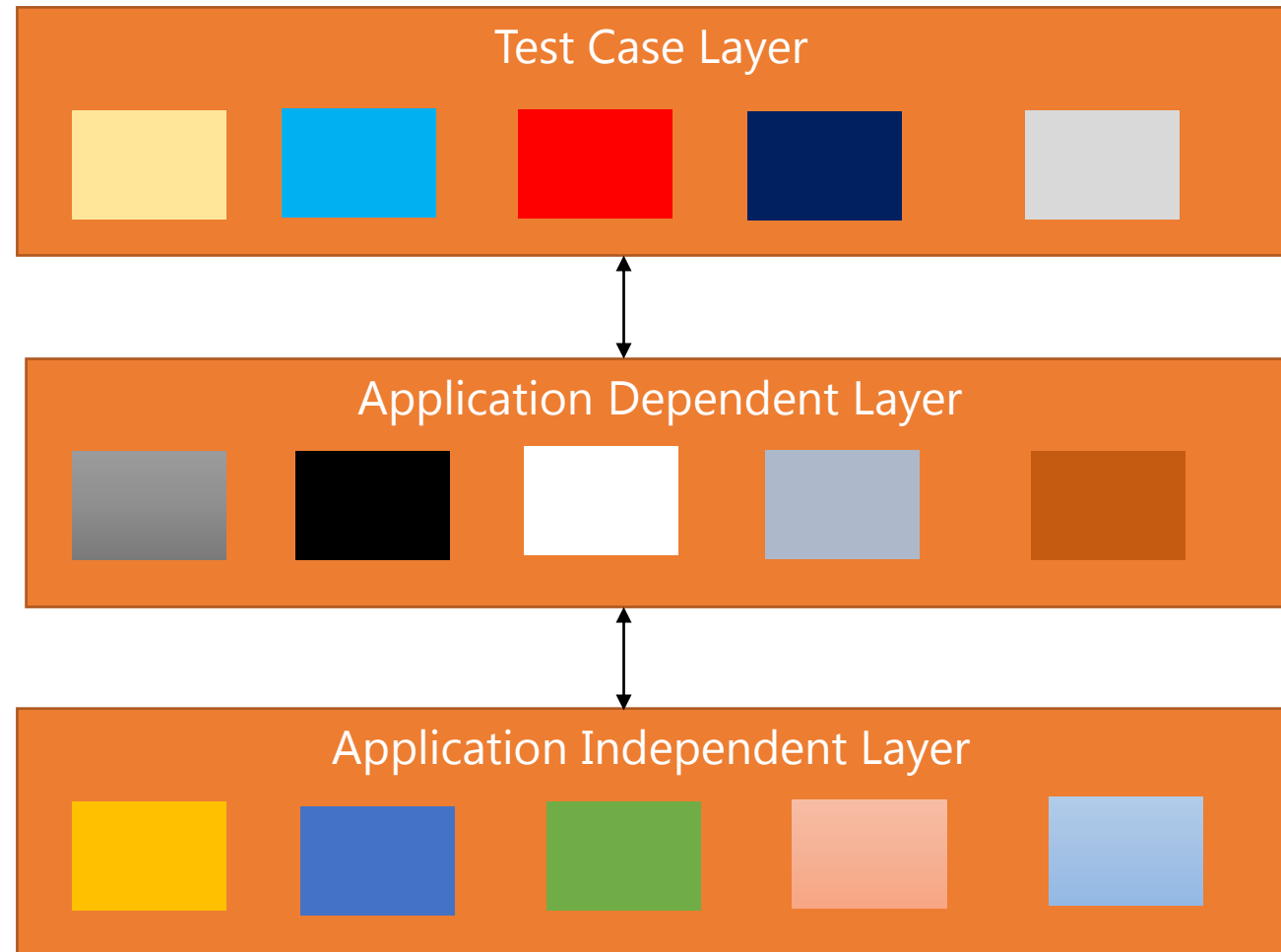
Culture



People

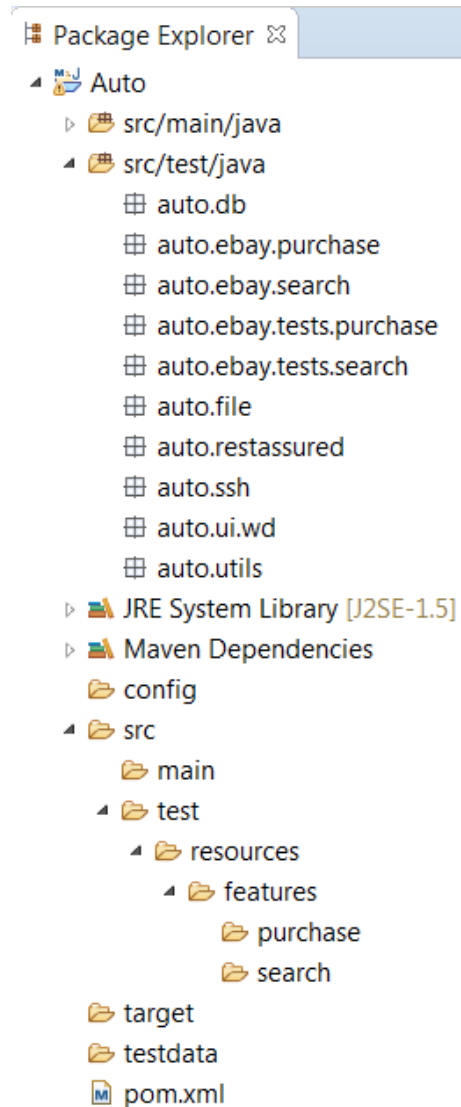
Test Automation Framework Design Pattern

Test Automation Framework

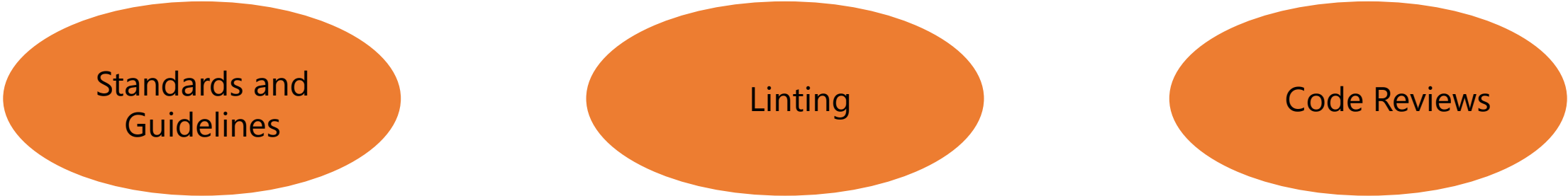


Test Automation Strategies

➤ Folder Structure



Test Automation Governance



Standards and
Guidelines

Linting

Code Reviews

Test Automation Strategies

Thank You