

# SAFe® 4.6 build in quality

SPECIALIST IN DE TESTDISCIPLINE



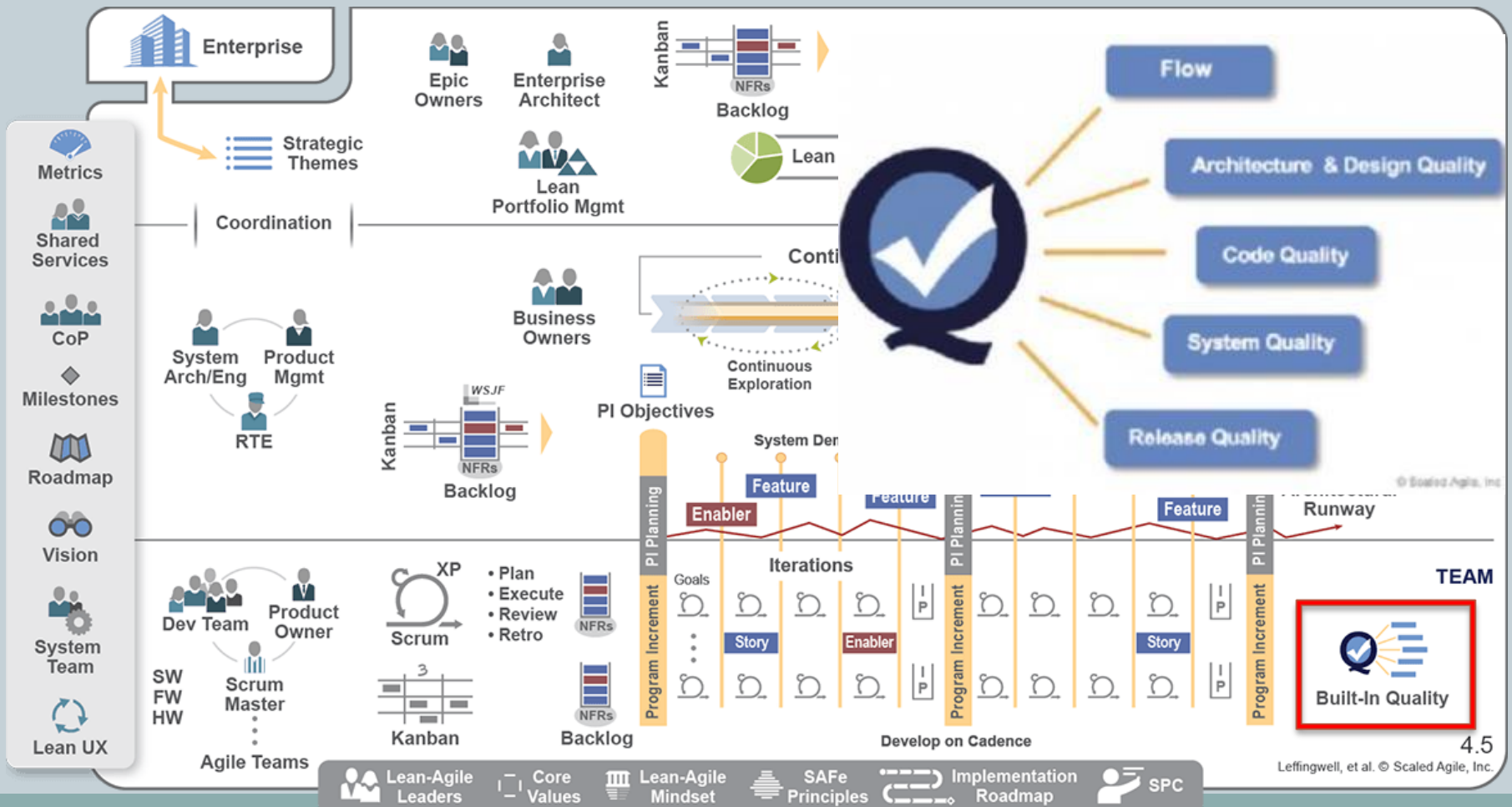
[WWW.INFOCON.NL](http://WWW.INFOCON.NL)

# Agenda

- 1. TEAM LAYER**
- 2. PROGRAM LAYER**
- 3. TEST STRATEGIE**
- 4. AFSLUITING**

# 1. Team layer

- Streef naar een continue stroom van geïntegreerde kwaliteitsoplossingen



# 1. Team layer

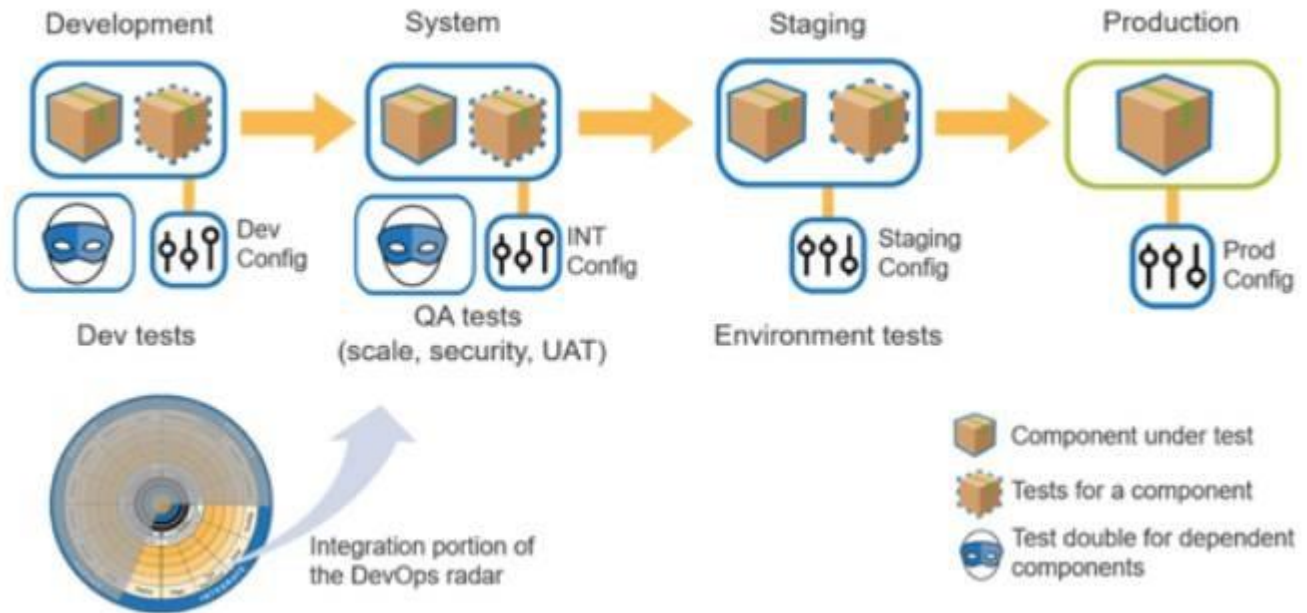
- SAFe practises: focus op CI/CD SAFe 4.6



Richtlijn in SAFe	Practises
Collectief eigenaarschap	Zorg er voor, dat iedereen de code kan adopteren en refactoring, dat de code begrijpelijk voor iedereen is en dat kwaliteit een collectieve verantwoordelijkheid is
Unit testing en test-first benadering	Zorg voor pilot en draag bij aan TDD, ATDD en BDD
'Paarsgewijs' werken	Koppel bijv. gebruikers, ontwikkelaars, PO aan elkaar
Automatiseer	CI/CD

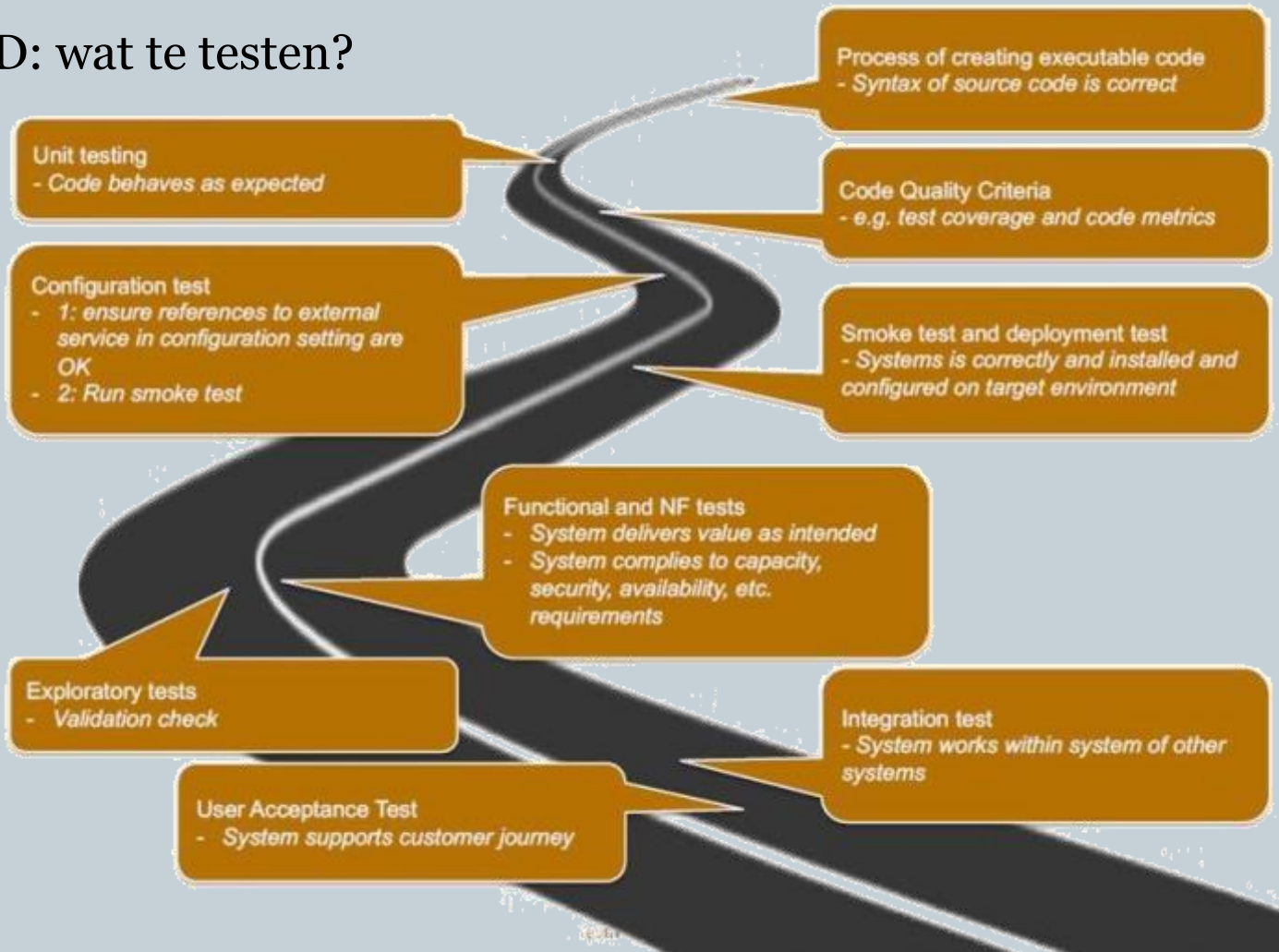
# 1. Team layer

- SAFe practises: focus op CI/CD in SAFe 4.6



# 1. Team layer

- CI/CD: wat te testen?



# 1. Team layer

- Of meer praktisch...

## Review de DoD

- Definieer kwaliteitsmetingen
- Identificeer tests buiten de sprint
- Cross-team alignment



Team Increment	System Increment	Solution Increment	Release
<ul style="list-style-type: none"><li>• Stories satisfy acceptance criteria</li><li>• Acceptance tests passed (automated where practical)</li><li>• Unit and component tests coded, passed, and included in the BVT</li><li>• Cumulative unit tests passed</li><li>• Assets are under version control</li><li>• Engineering standards followed</li><li>• NFRs met</li><li>• No must-fix defects</li><li>• Stories accepted by Product Owner</li></ul>	<ul style="list-style-type: none"><li>• Stories completed by all teams in the ART and integrated</li><li>• Completed features meet acceptance criteria</li><li>• NFRs met</li><li>• No must-fix defects</li><li>• Verification and validation of key scenarios</li><li>• Included in build definition and deployment process</li><li>• Increment demonstrated, feedback achieved</li><li>• Accepted by Product Management</li></ul>	<ul style="list-style-type: none"><li>• Capabilities completed by all teams and meet acceptance criteria</li><li>• Deployed/installed in the staging environment</li><li>• NFRs met</li><li>• System end-to-end integration, verification, and validation done</li><li>• No must-fix defects</li><li>• Included in build definition and deployment/transition process</li><li>• Documentation updated</li><li>• Solution demonstrated, feedback achieved</li><li>• Accepted by Solution Management</li></ul>	<ul style="list-style-type: none"><li>• All capabilities done and meet acceptance criteria</li><li>• End-to-end integration and solution Y&amp;V done</li><li>• Regression testing done</li><li>• NFRs met</li><li>• No must-fix defects</li><li>• Release documentation complete</li><li>• All standards met</li><li>• Approved by Solution and Release Management</li></ul>

© Scaled Agile, Inc.

# 1. Team layer

- Of meer praktisch...

Feedback loop:  
gevonden problemen om  
het testen te verbeteren

Refinement:  
Bespreek  
voorbeelden,  
uitzonderingen en  
stel de vraag "hoe te  
demo'en/testen"?

Focus op NFT's

Testmatrix als strategie voor user story level

Story impacts	Programmer	Tester	User
Web interface	●		●
Calculation	●	●	
Business rule	●	●	
Letter/e-mail	●		●



## 2. Program layer

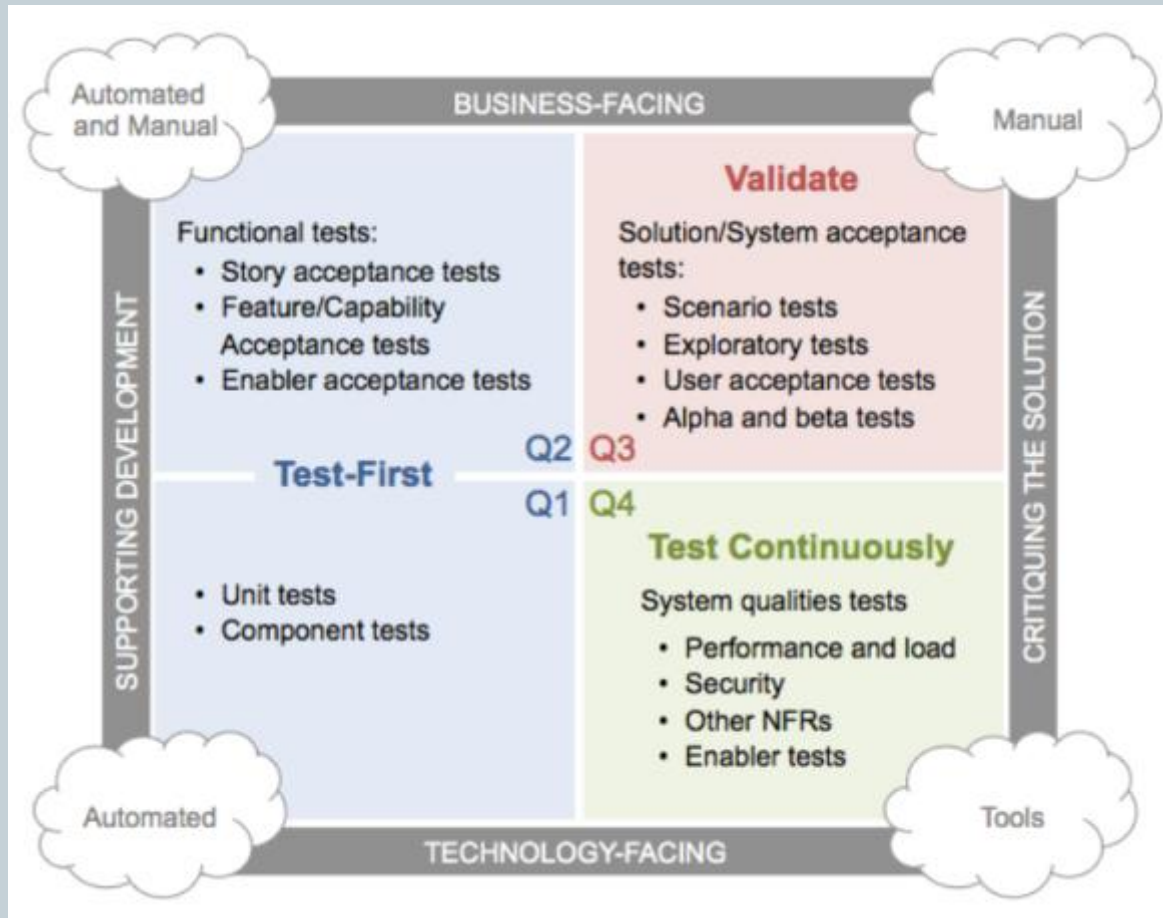


“Your assignment”

- Verdeel werk tussen individuele teams en voeg voltooide functies samen in een continue ‘delivery pipeline’
- De Agile Release trein (ART) bundelt het werk van de teams samen tot een gecontroleerd product

## 2. Program layer

- Brian Marick's Agile Testing Matrix



## 2. Program layer

- Test strategie

Explain how test activities contribute to build a quality solution

Ensure that the right tests are done (at the right time, by the right team)

Assure that the testing is of sufficient quality (coaching and auditing)

Explain how to gather intelligence on progress and quality

# 3. Afsluiting

UW PARTNER IN TESTEN



DANK VOOR UW AANDACHT

**Infocon Testing Services**  
Kooikerstraat 7  
5241 MC Rosmalen

**M** +31 6 55382050  
**E** [info@infocon.nl](mailto:info@infocon.nl)  
**W** [www.infocon.nl](http://www.infocon.nl)