Continuous Testing: A Lifecycle Approach

Satyan Prakash
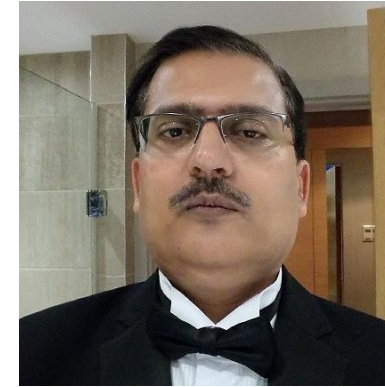
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Agenda

- What?

- A Lifecycle approach

- Why?

- Get in shape for CT

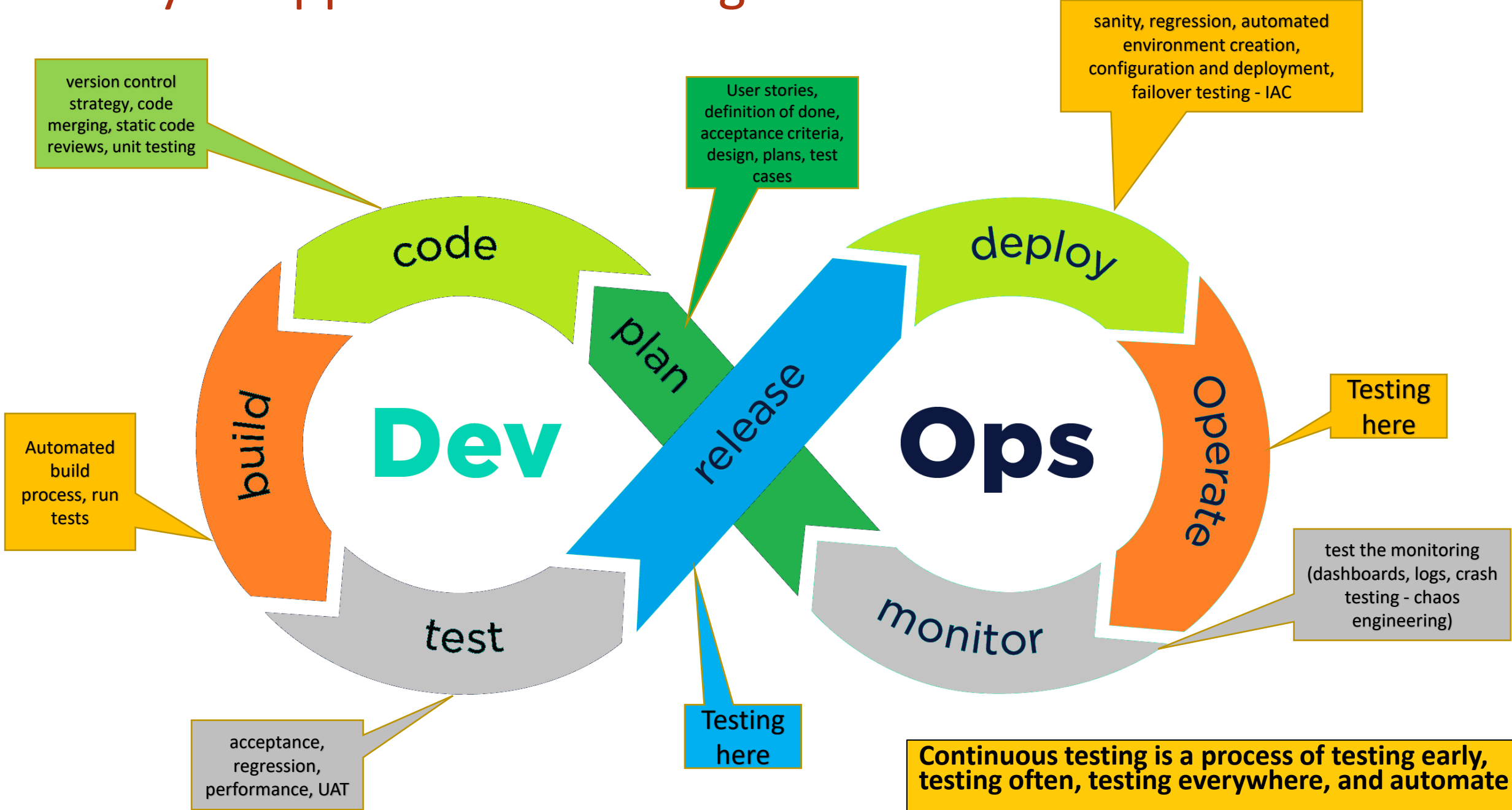- Manual or Automated?

- Measure success

Satyan Prakash

- Software Delivery leader with 25+ year experience encompassing global application delivery, program / portfolio management, solution design and technology consulting

- Proven track record in successfully leading complex and global delivery teams using Agile and DevOps

- GSA UK 2018/2019 Professional Awards Finalist
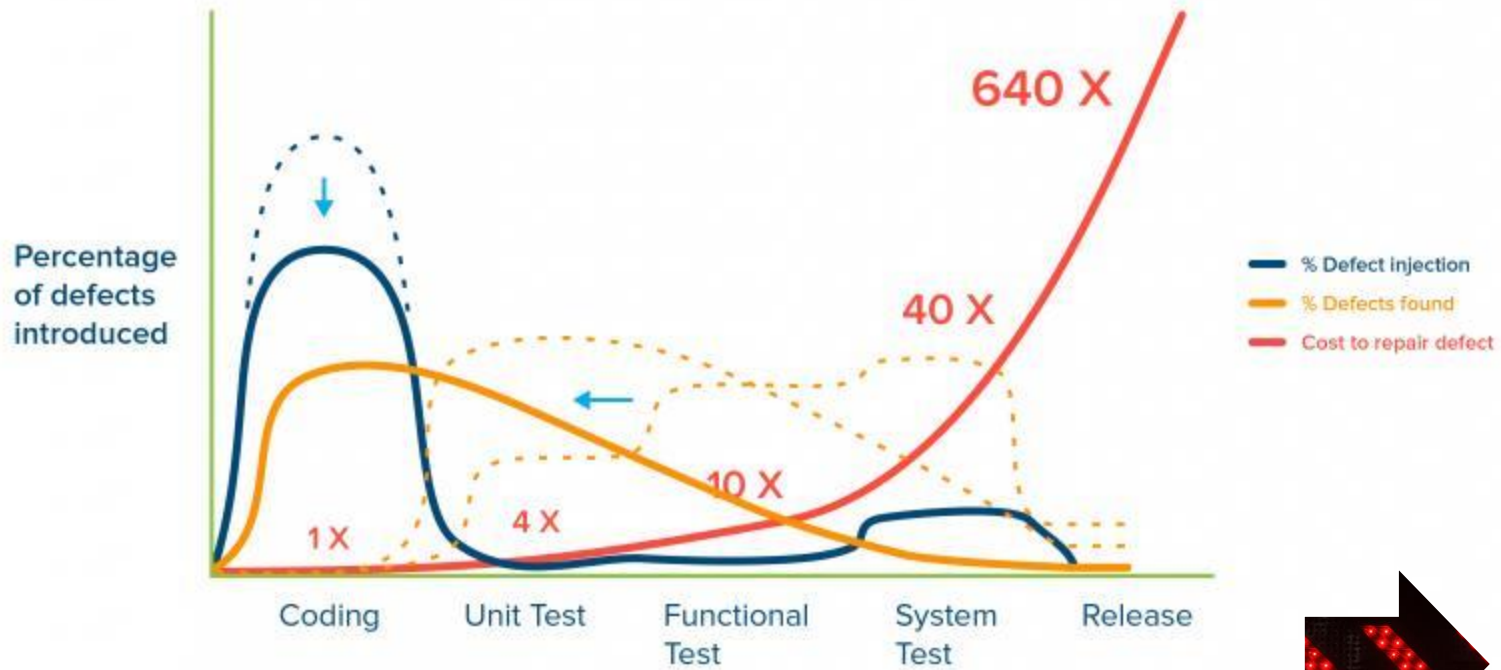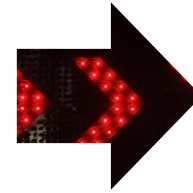
- DevOps Institute Ambassador

What?

A Lifecycle approach for testing

Why?

Jones, Capers. *Applied Software Measurement: Global Analysis of Productivity and Quality.*

Enables Shift Left
- Fix more bugs in cheaper phases

Agile/DevOps – Quick Iterations
- Less defect fixing, more development
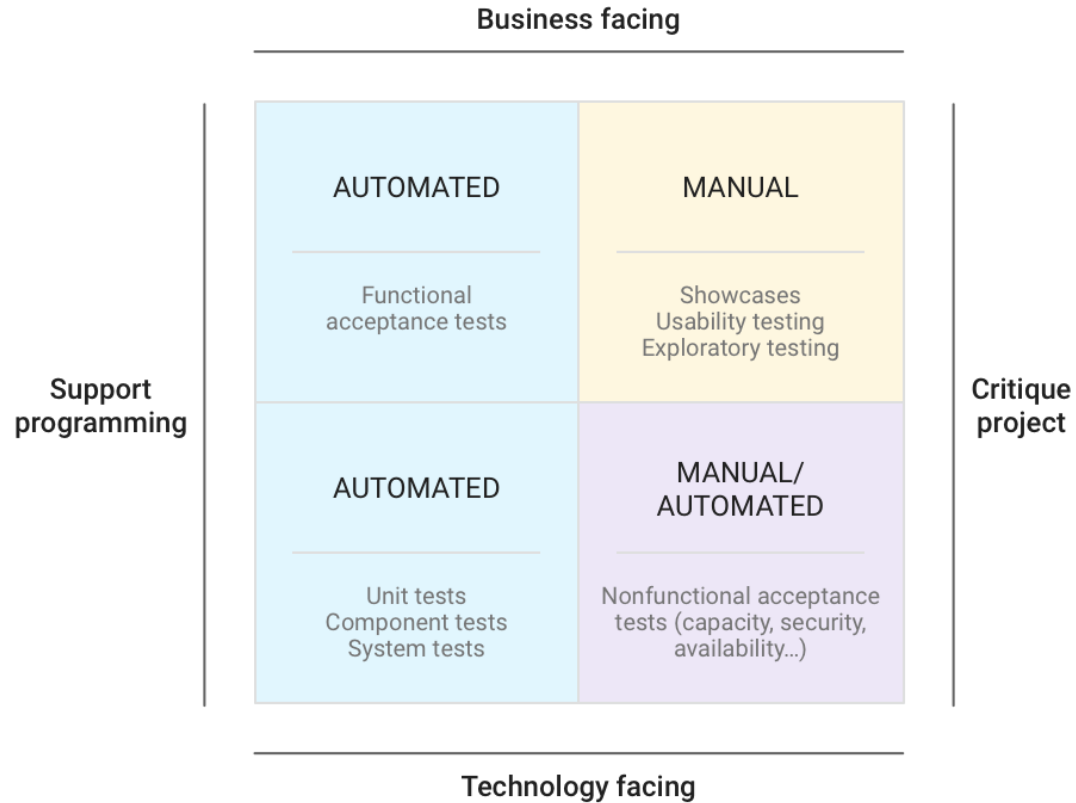
Distributed Complex Architecture
- Complex testing

Get in shape for CT

- Testers to work alongside developers
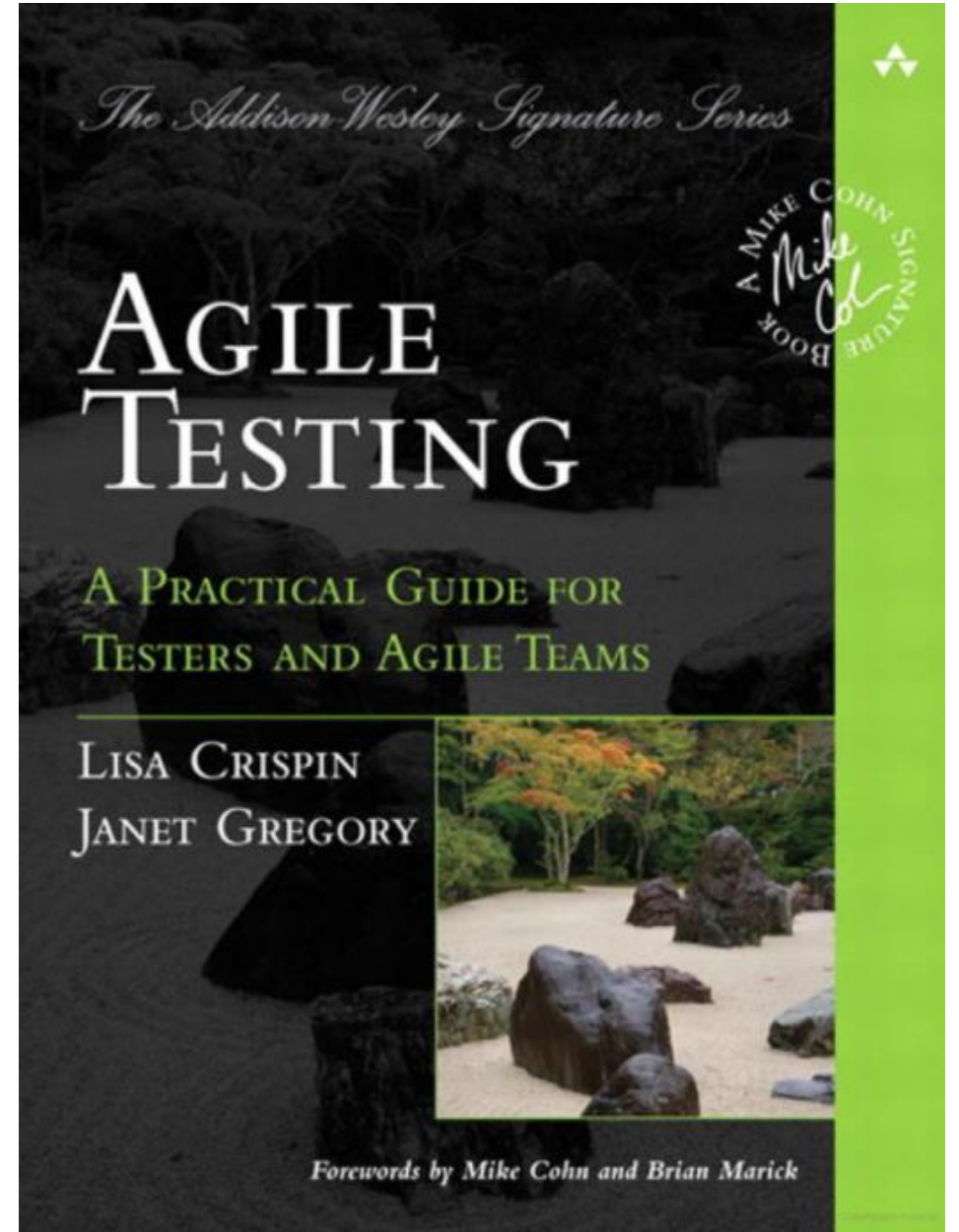
- Retain useful manual test activities such as exploratory testing, usability testing, and acceptance testing

- Keep Automated Test suites functional all the time

- Avoid hard to maintain test suites

- Continuously review and improve your test suites

- Ordering the tests: faster-running unit tests -> slower-running acceptance tests -> manual testing

- Test driven development

Manual or Automated?

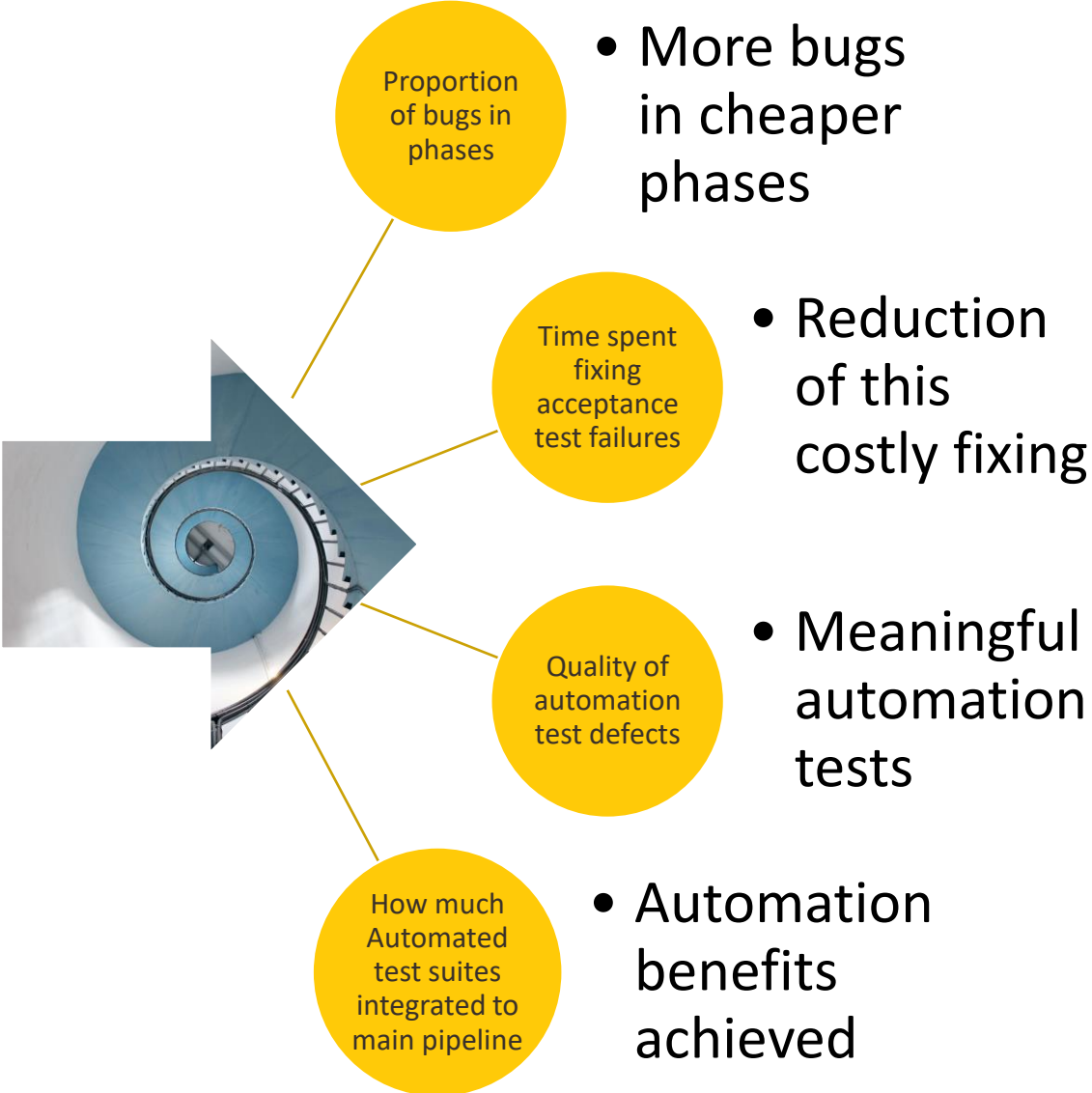|	Business facing	
Support programming	AUTOMATED	MANUAL
	Functional acceptance tests	Showcases Usability testing Exploratory testing
	AUTOMATED	MANUAL/ AUTOMATED
	Unit tests Component tests System tests	Nonfunctional acceptance tests (capacity, security, availability...)
	Technology facing	**Critique project**

Diagram, initially created by Brian Marick and later referenced in the book Agile Testing: A Practical Guide for Testers and Agile Teams

Measure success

- **Proportion of bugs in phases** — More bugs in cheaper phases
- **Time spent fixing acceptance test failures** — Reduction of this costly fixing
- **Quality of automation test defects** — Meaningful automation tests
- **How much Automated test suites integrated to main pipeline** — Automation benefits achieved

THANK YOU
Meet me in the Network
Chat Lounge for questions