

DigTST - Version: 1  
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# Testing in the Digital Age: DevOps, ChatOps and Automation to support Testing



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 1 days Course

## Description:

Digital is the buzz-phrase of the moment. Most new projects nowadays seem to be part of a 'Digital Transformation'. Transformations in business and IT of any flavour are ambitious and not undertaken lightly. Digital must be important then. But what is it?

Is Digital the 'app economy'? Certainly Digital involves mobile, the customer experience, social media and big data more and more. The SMAC acronym (Social, Mobile, and Analytics in the Cloud) summarises this view that the changes most companies want to make to their systems involve all four aspects.

Paul offers his own label for this phenomenon: "Software Development at the pace of marketing". Marketers see IT as the vehicle for doing rapid, continuous, relentless experiments in parallel with rapid, continuous, relentless delivery of new features to keep up with the Digital competition.

This workshop explores the Digital Revolution and how Continuous Delivery and DevOps are seen as the route to success. But testing could be the bottleneck that prevents success if they don't adapt, and quickly. How will testers survive in this new world? Paul describes, demonstrates and discusses key aspects of DevOps, ChatOps and Automation and identifies the new behaviours and skills required to succeed.

## Intended audience:

Testers and developers – all levels

Test leads, test managers

Anyone who tests in Digital Projects

## Prerequisites:

## Objectives:

## Topics:

### Digital Transformation

- What is it?
- IT is getting closer to the business
- Frequent and regular software delivery is critical
- Automation, (Not just Test Automation), Is Critical
- Exercise: how often do apps change?

### The Challenge of Shift-Left and DevOps

- Shift-Left is not new
- What is driving shift-left?
- From Agile to Continuous Delivery
- Slow Release, Deployment and Infrastructure Change
- Exercise: How long does it take you to...?
- The goals of Shift-left and DevOps
- Exercise: What are the consequences for testers?

### DevOps Overview

- A Culture, not a Technology
- Automate (nearly) Everything
- The Delivery Pipeline, Collaboration and Decision Making
- Exercise: what can be automated and what cannot?

### The DevOps Tools Landscape



- Infrastructure
  - Cloud IaaS, PaaS , Database
- Development
  - Build
  - Continuous Integration (CI)
  - Software Configuration Management (SCM)
  - Release Management
- Deployment
  - Repository Management
  - Configuration/Provisioning
  - Containerisation
  - Security
- Operations
  - Business Intelligence (BI)/Monitoring
  - Logging
- Testing
- Collaboration

## Tools Information

- DevOps Tools Stack Case Studies
- DevOps Tools Periodic Table, Tools Knowledge Base

## Collaboration, ChatOps and Decision-Making

- Culture, Communication and Automation
- Behaviour-Driven Development
- ChatOps Demonstration
- Does TestOps Exist?

## Test Automation - Ambition and Reality

- What does "test automation" really mean?
- The state of automation
- Automation – Models of Scope and Process
- Discussion: Is a New Model required?



## New Model for Testing

- Sources of Knowledge, Exploration and modelling
- Examples of models
- Models, Test design and Automation
- Discussion: What Skills are required?
- The New Model, Skills and DevOps

## Digital Testing Strategy

- What is Test Strategy anyway?
- Interventions
- Test Automation
- Test Assurance

## Surviving Shift-Left, Continuous Delivery and DevOps

- Advice for testers
- Advice for test managers