

# SMHARTER

TURN YOUR WAY OF WORKING INTO  
YOUR COMPETITIVE ADVANTAGE

## Introduction to Continuous Delivery

### Summary

Continuous delivery can be a game changer by how it helps organisations stay a step ahead by delivering value to customers reliably and frequently.

While releasing software to users is usually a painful, risky, and time-consuming process, this tutorial sets out principles and technical practices that allow rapid, incremental delivery of high-quality, valuable, new functionalities to users.

In this tutorial, we take a unique approach of moving backward from release through testing to development practices, analyzing at each stage how to improve collaboration and increase feedback so as to make the delivery process as fast and efficient as possible. At the heart of the tutorial is a pattern called the deployment pipeline, which involves the creation of a living system that models your organisation's value stream for delivering software. We spend the first half of the tutorial introducing this pattern, and discussing how to incrementally automate the build, test, and deployment processes, culminating in continuous deployment.

In the second half of the tutorial, we introduce agile infrastructure, including the automated management of testing and production environments. We'll discuss automating data management, including migrations. We will cover development practices that enable incremental development and delivery at length, including a discussion of why branching is inimical to continuous delivery, and how practices such as branch by abstraction and componentization provide superior alternatives that enable large and distributed teams to deliver incrementally.

#### **Audience:**

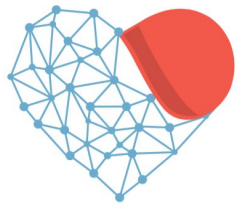
- Software developers
- Business analysts
- Software testers
- Enterprise architects
- Technical managers
- Systems, network, and database administrators

**Duration:** One and a half days.

**Prerequisites:** None.

[SmHarter Ltd.](#) UK, London.

Phone +44 7707996708 - Email [info@smharter.com](mailto:info@smharter.com)



# SMHARTER

TURN YOUR WAY OF WORKING INTO  
YOUR COMPETITIVE ADVANTAGE

## Learning Objectives:

- Understand the importance of fast feedback on the production readiness of an application throughout the delivery process, and how to get it.
- Understand how to improve collaboration between people involved in delivering software.
- Understand the principles and practices that enable continuous deployment, including data management.
- Experience automating testing and deployment.
- Experience evolving an application without using version-control branches.
- Understand the management of continuous delivery with large and distributed teams.
- Understand how to transform your organisation's delivery process to enable continuous delivery.

## Agenda

### Morning

- Introduction of trainers and participants.
- Introduction to continuous delivery and to deployment pipelines, principles, and prerequisites.
- Automated tests and where they fit in the delivery process.
- Refresher on continuous integration, feature branching, and trunk-based development.

### Afternoon

- Building deployment pipelines for component and service-based architectures and dependency management.
- Going live, A/B testing, and business metrics.
- Remediation plans, data management, and migration.
- Infrastructure automation: environments and infrastructure provisioning, management, and monitoring.
- Adopting continuous delivery, suggestions on hiring, tooling, change process, and case studies.

[SmHarter Ltd.](#) UK, London.

Phone +44 7707996708 - Email [info@smharter.com](mailto:info@smharter.com)