Value Stream Management Foundation (DevOps Institute)

Summary

Length: 16 hours Level: Experienced

This course is an introduction to value stream management principles, practices, and tools. Designed to optimize value flow and realization in digital value streams and develop individuals' skills. Digital value streams include the software applications and services in addition to the platforms that support them e.g., cloud infrastructure or DevOps toolchains.

Learning Objectives

After completing this course, students will be able to:

Describe the origins of value stream management and key concepts such as flow, value, and delivery
Describe what value stream management is, why it's needed and the business benefits of its practice
Describe how lean, agile, DevOps, and ITSM principles contribute to value stream management
Identify and describe value streams, where they start and end, and how they interconnect
Identify value stream roles and responsibilities
Express value streams visually using mapping techniques, define current and target states and hypothesis backlog
Write value stream flow and realization optimization hypotheses and experiments
Apply metrics such as touch/processing time, wait/idle time, and cycle time to value streams
Understand flow metrics and how to access the data to support data-driven conversations and decisions
Examine value realization metrics and aligning to business outcomes, and how to sense and respond to them (outcomes versus outputs)

Course Outline

1. MODULE 1: HISTORY AND EVOLUTION

    Introduction to Module One: History and Evolution

    VSM Foundation Courseware for Module 1 - History and Evolution

    Value Stream Mapping Origins

    Case Story: Chipotle

    From Mapping to Management

    Watch This YouTube Video: 'What is Value Stream Management?' with Eric Minick

    Lean Thinking

    Exercise: Assess where your organization is on your value stream management adoption journey

    The State Of VSM Report 2021

    Module 1 Quiz

2. MODULE 2: IDENTIFYING VALUE STREAMS

    Introduction to Module 2: Identifying Value Streams

    VSM Foundation Courseware for Module 2 - Identifying Value Streams

What is a Value Stream?

Exercise: Identify at which step your team is on the VSM Implementation Map and what you would need to do to reach the next step.

Identifying a Value Stream

Watch This YouTube Video: 'Value Stream Identification - Lessons from the Wild' with Carl Starendal

Value Stream Thinking

Case Story: Bank of New Zealand

Module 2 Quiz

3. MODULE 3: MAPPING VALUE STREAMS

Introduction to Module 3: Mapping Value Streams

VSM Foundation Courseware for Module 3 - Mapping Value Streams

Mapping Techniques

Case Story: Northrup Grumman

Watch This YouTube Video: 'How to Do Value Stream Mapping' with Helen Beal

Value Stream Mapping Scoping Canvas

Exercise: Sketch out a map to show how this approach to value stream mapping compares to your own experiences or understanding of the approach.

Value Stream Thinking

Module 3 Quiz

4. MODULE 4: CONNECTING DEVOPS TOOLCHAINS

Introduction to Module 4: Connecting DevOps Toolchains

VSM Foundation Courseware for Module 4 - Connecting DevOps Toolchains

CICD and VSM Delivery and Management Platforms

Watch This YouTube Video: 'Creating a DevOps Toolchain' with Brian Ashcraft

Case Story: Nio

Building a DevOps Toolchain

Watch This YouTube Video: 'Integrated Tool Chain Demonstration'

Exercise: Draw out your DevOps toolchain as it would align to the value stream cycle.

The VSMP and the Common Data Model

Module 4 Quiz

5. MODULE 5: VALUE STREAM METRICS

Introduction to Module 5: Value Stream Metrics

VSM Foundation Courseware for Module 5 - Value Stream Metrics

Measuring Value Streams

Measurement Frameworks

Case Story: DNB

Value Stream Flow Metrics

Watch This YouTube Video: 'Value Stream Management: Metrics' with Yaniv Sayers

Value Stream Realization Metrics

Value Stream Realization Metrics Continued

Exercise: Write an example benefits hypothesis for value stream improvement.

Module 5 Quiz

6. MODULE 6: INSPECTING THE VALUE STREAM

Introduction to Module Six: Inspecting the Value Stream

VSM Foundation Courseware for Module 6 - Inspecting the Value Stream

The Pillars of Empiricism and Visibility

Case Story: Healthfirst

What to Inspect

Exercise: Diagram out how you do or would get the data you need from your systems to inspect your value stream real-time.

Flow Inspection

Watch This YouTube Video: 'Value Stream Management: Inspecting Flow' with Jonathan Harding

Value Realization Inspection

Module 6 Quiz

7. MODULE 7: ORGANIZING AS VALUE STREAMS

Introduction to Module Seven: Organizing as Value Streams

VSM Foundation Courseware for Module 7 - Organizing as Value Streams

Team Organization

Watch This YouTube Video: 'Organizing as Value Streams' with Richard Knaster

Stream Alignment

Case Story: Adidas

Organization Structure

Value Stream Roles

Emerging Value Stream Roles

Watch This YouTube Video: 'Value Stream Architect: Bryan Finster' with Don White

Role Transitions

Funding Stream Orientation

Module 7 Quiz

8.   MODULE 8: EVOLVING VALUE STREAMS

Introduction to Module Eight: Evolving Value Streams

VSM Foundation Courseware for Module 8 - Evolving Value Streams

Why is VSM Important Now?

The New Methodology

DevOps Interventions

Watch This YouTube Video: 'How to Prioritize Hypotheses for Testing' with Jeff Gothelf

Case Story: Schneider

VSM OKRs

Exercise: Write 3 OKRs for you and your value stream team (make at least one of the customer oriented).

Module 8 Quiz

Audience

People working in an organization aiming to improve performance, especially in response to digital transformation or disruption. Any roles involved in the creation and delivery of products or services: Leadership and CXO, especially CIO, CTO, CPO, and CVO; Transformation and evolution leads and change agents; Value stream architects, managers, engineers; Scrum Masters, agile and DevOps coaches and facilitators; Portfolio, product and project managers, and owners; Business analysts; Architects, developers, and engineers; Release and environment managers; IT Ops, service and support desk workers; Customer experience and success professionals.

Prerequisites

There are no prerequisites, although having a working knowledge of lean, agile, DevOps, and value stream principles will be useful.