WM9PP-15 Digital Product Development

26/27

Department
WMG
Level
Taught Postgraduate Level
Module leader
Devon Allcoat
Credit value
15
Module duration
4 weeks
Assessment
Multiple
Study location
University of Warwick main campus, Coventry

Description

Introductory description

This module covers digital product development using lean, agile management practices and cloud technologies. While seemingly two different/diverse areas, most of today's digital products are developed to run in the cloud due to its inherent flexibility, scalability, and pay-as-you-go model. This module will culminate in a hands-on project developing a new digital product and designing the accompanying cloud architecture.

Module aims

The principal aims of this module are to provide students with a detailed understanding of latest practices in digital product development, and the disruptive technologies associated with cloud computing that act as enabler for many best practice examples in this space. Participants will develop an in-depth knowledge of cloud computing, the management of cloud assets and their utilisation in the innovation and management of digital products.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

a) What is a Digital Product?

Definition and comparison with traditional product development.
Case studies
b) The Digital Product Lifecycle

Product concept and R&D
Manufacturing and product development
Launching a product and sales planning
Customer experience strategies for retail
c) Cloud Computing Concepts

Cloud fundamentals
Cloud design principles
Security
Cloud technology
d) Growing a Digital Product

Digital technology development and enhancement.
Growth and digital hacking.
Managing a digital enterprise.
Continuous deployment.
Innovation,
Dispersion and diversification.
e) In-module Activity

A practical simulation of the above topics

Learning outcomes

By the end of the module, students should be able to:

- Critically analyse industries and competitors to develop new products and identify opportunities for digital disruption.
- Demonstrate a thorough comprehension of, and an ability to apply best practice in digital product development.
- Demonstrate knowledge of cloud computing concepts and the design of resilient, modern, cloud native architecture.
- Critically analyse the risks associated with a digital product development, and devise appropriate mitigations to manage them.
- Apply advanced lean management principles collaboratively to enhance the product development lifecycle, showing expertise in developing, assessing, and overseeing digital solutions.

Indicative reading list

Specific reading list for the module

Interdisciplinary

A mixture of technology/computing topics and business topics.

International

Topics are of high international demand.

Subject specific skills

Industry analysis skills, technology analysis and identification of relevant applications in a variety of business contexts , an ability to apply best practice in the growth hacking and lean management, rapid product development and continuous deployment, cloud computing.

Transferable skills

Business strategy development, presentation skills, teamwork, research, IT fundamentals, creative thinking.

Study

Study time

Type	Required
Lectures	10 sessions of 1 hour (11%)
Seminars	20 sessions of 1 hour (22%)
Practical classes	(0%)
Online learning (independent)	30 sessions of 1 hour (33%)
Private study	30 hours (33%)
Total	90 hours

Private study description

There will be online Moodle content and activities that students can work on as independent learning. For the Private Study, students will use the time to consolidate their understanding of taught material. This includes reviewing lecture content, completing weekly reading from core and supplementary texts, practising problems or applying concepts to real-world case studies, and preparing for assessments.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time	Eligible for self-certification
Group Assessment - Digital Product Development Campaign	30%	18 hours	No
In teams, groups develop a concept for a digital product, the necessary architecture and lifecycle management plan. Peer Marking Process will be adopted in this assessment			
Assignment	70%	42 hours	Yes (extension)
A business-style report detailing a digital product development strategy.			

Assessment group R1

	Weighting	Study time	Eligible for self-certification
Individual Assessment - Digital Product Development Campaign	30%		No
Students are required to develop a concept for a digital product, outlining the necessary architecture and lifecycle management plan. The presentation must also include a reflection on the application of collaborative lean management principles within the context of the product development lifecycle. The submission should be a pre-recorded video presentation.			
Assignment	70%	42 hours	No

Feedback on assessment

Written feedback for group assessment and assignment.

Availability

There is currently no information about the courses for which this module is core or optional.