

Topic

Digital Transformation

Brief Description

Overview

Information technology have transformed the ways in which firms compete, and have become an important factor in management decisions at all levels of the business. Our economy is sometimes referred to as the "digital economy", which is indicative of the pervasive nature and the critical role of technology in business strategies and operations.

This course will help to analyze the application of technology in its wider sphere of social transformational drivers, and to apply that in your own sphere of influence. It is aimed to cover the following objectives

- To analyze what Digital Transformation means and how it affects society, industries and individuals.
- To identify and understand the economic and technological factors that are at the heart of the digital revolution taking place in the economy.
- To manage and lead product and service innovation initiatives in the digital space, assessing strategies and plans for managing the risks –and exploiting the opportunities- associated with Digital Transformation.

Content outline

Through a series of lectures, discussions, activities and cases, this course provides you with the tools to understand, envision, and create a strategy of digital transformation. The course is led by four professors who bring in complementary

skillsets. The reading material range from articles in press to proprietary content and will be provided to you. Participants are expected to come prepared having read the material due for each session.

Welcome to the beginning!

- **Digital Transformation Thinking and Doing (2 sessions)**
 - Successful efforts at digitization have to keep both technological and managerial perspectives in mind. In the first part of the class, we will discuss why understanding “Digital Transformation” is important for future digital leaders, including its conceptual origins, what questions it raises for managers, and its implications for the organization. Then, we will apply our understanding to a short case that will be provided in class. You will develop a simple go-to framework for initiating digital transformation in your organizations.

- **The Digital Social Interface (2 sessions)**
 - This part aims at understanding how to weave the physical (traditional) and digital (online) worlds to better interact with customers by taking a look at how digital & physical innovations are changing the business world.

- **Disruptive Technologies (2 sessions)**
 - The combination of emerging technologies with the re-imagination of traditional processes and business models will transform not only entire industries but society as a whole. Which are the key technologies to follow? Which models can we use to understand its impact? In these part we will explore some of the technologies that have the potential to disrupt entire industries, looking at the

opportunities and challenges they pose for current players in those industries.

- **Cybersecurity and the Digital World (2 sessions)**

- Digital technologies bring connectedness and exciting opportunities for innovation. At the same time, organizations are increasingly vulnerable to cyberattacks that disrupt productivity, jeopardize privacy, and threaten companies' operations. This part will examine cybersecurity from a holistic, managerial viewpoint, equipping students with the tools necessary to conceptualize cybersecurity and to develop strategies and actions to address emerging threats.

Module format and assessment

Students will participate in a group project that will challenge them to develop a digital transformation program in a real company. The project will be assessed. Groups will be assignment in advance of the module and will be required to begin collaboration on their project before the week commences.

Groups will be required to present their project at the end of the week.

The academic credit that will be offered for this module is equivalent to 15 contact hours. The evaluation criteria are class participation (50%) and the group project (50%).

Apart from the classes and group work, the week will include company visits, which will be complimenting the topic, and cultural immersion activities.

Faculty

The course will include four faculty from IE Business School, as well as guest lectures and conferences from executives at leading Spanish organizations.

Prof. Alvaro Arenas (Lead Faculty)



Alvaro Arenas is Professor of Information Systems and Information Security at IE Business School, where he teaches on MBA programmes in the topics of digital innovation, risk management and information security. Alvaro is also Head of the Information Systems and Technologies Department at IE.

Alvaro's research work has focused on trust and security in distributed information systems. His research has been published in a number of top tier academic journals. Highlight of some of his research work includes models for reputation management in service computing; trust management in virtual organizations and business collaborations; and security requirements for large-scale distributed systems.

Before joining IE, Alvaro was a senior research scientist at the Science and Technology Facilities Council (STFC) in the UK, leading the Distributed Systems Team at the STFC e-Science Centre.