

Transforming Organizations and Markets with Digital Technology

Introduction

Until recently, the knowledge of Information Technology (IT) and its application in the enterprise had been confined to the IT Department, requiring top management to take very concrete decisions from time to time. Not anymore. Today – in the Digital Age – successful business managers understand “digital”, anticipate its impact on business, and leverage that insight for building digital competencies across the entire organization.

The Digital Age is fueled by the drastic reduction in the cost of processing, storage, and communication, creating a high-density digital environment. During the last years, we have witnessed the “consumerization” of digital technologies, that is, the scope and impact of these technologies now transcends the application domain of enterprises to include large parts of society. Technology today is both available and affordable. This creates a new phenomenon where individuals incorporate cutting-edge digital technologies in their personal lives before businesses get a chance to adopt and implement them. In a way, this leads to a new kind of digital divide –that between society and business. Customers and employees of the younger generation come with new expectations that companies are not prepared to meet.

To address this challenge, today’s business leaders must be able to think digital. Thinking digital does not equal thinking IT. Digital focuses much less on process automation, transactions, and efficiency, and much more on creating new value-added experiences and interactions with customers, employees, and business partners. Ultimately, it enables the firm to generate new revenue by finding unique ways to combine its physical and digital resources.

Learning Objectives

This course aims to explore the digital transformation of businesses from the standpoint of a general manager. It develops a set of concepts, frameworks, and tools to help students understand how organizations can foster digital capabilities and turn them into a competitive advantage.

Content

This course is organized around three main interrelated areas in digital transformation journeys:

The “WHY” of Digital Transformation: Seeing Beyond the Immediate Digital Trends.

Understand the shift from IT to Digital. Understand the nature of the principle digital drivers –social networks, mobile, the cloud, and Big Data. Explore how these drivers alter society and the way in which firms compete.

Introduce the concept of “digital density”. Explore how this framework could be applied for a better understanding of the processes of digital transformation in businesses and entire sectors in the digital age.

The “WHAT” of Digital Transformation: Transforming the Vision into a Viable Business Strategy.

Identify the principle goals and objectives that organizations seek to address when launching and executing a digital transformation initiative.

Understand that the nature of digital transformation initiatives may differ: focused on processes, seeking to change the customer experience, or changing the entire business model.

The “HOW” of Digital Transformation: Building a Digital Mindset.

Understand the organizational changes that are typically associated with any digital transformation “journey”.

Identify the competencies that executives need to develop to lead journeys of digital transformation.

Methodology

The course employs a combination of case discussions and lectures. Since the content of the course deals with a rapidly changing environment, we encourage you to stay up-to-date by reading specialized business press as well as technology websites and blogs.

The course is not intended to train technology professionals, CIOs, or IT consultants. It is aimed at general business managers and requires no prior technical knowledge.

Evaluation

You will be asked to fulfill standard class attendance and participation requirements as well as to complete a final exam (more details on the exam will be provided in class). The grading breakdown is shown below:

- Class attendance and participation – 50%
- Final exam – 50%

Professor Biography



Prof. Harris Kyriakou
Assistant Professor of Information Systems

Prof. Kyriakou holds a Ph.D. in Business Administration from Stevens Institute of Technology, an M.S. in Technology Innovation Management from Carnegie Mellon University and a B.Sc. in Digital Systems from the University of Piraeus, Greece.

Areas of Interest: Open & User Innovation, Computer-Supported Cooperative Work, Crowdsourcing & Crowdfunding, 3D Printing & Open Source Hardware.

His research interests include collective innovation, computer-supported cooperative work and crowdsourcing. Specifically, he examines how people in open innovation communities can be better coordinated. The focal point of his current research is the evolution of open hardware designs from a social and information network perspective. He is also interested in the reuse parameters of innovation processes.

Most recently, his research won the best dissertation award from Stevens School of Business and the first place in an INFORMS competition among more than 170 participants. Part of his work has been accepted for publication at MIS Quarterly and has been presented at the Academy of Management Annual Meeting, the International Conference on Information Systems (ICIS), the Open Hardware Summit and the World Maker Faire.

