

# Strategic Management in the Digital Economy

## Course description

### 1. Target group and prerequisites

This course is an elective in M. Sc. Economics, M. Sc. Management and Economics, M.Sc. Management, M. Sc. Sales Management, and M.Sc. Mechanical Engineering. The course requires a solid background in management accounting and/or strategic management.

### 2. Course frequency

The course will be held by Mr. Razvan Olosu once an academic year, preferably in the summer semester. The course consists of seven sessions of four hours each.

### 3. Course objectives

Upon completion of this module, the students will be able to understand the philosophy of strategic management in the digital economy. Students will be able to critically discuss the theory of digital strategic management and will learn to apply strategic management in the digital economy in practice.

### 4. Content

Part 1: The philosophy of strategic management in the digital economy

- Introduction to Management and Digital Business Strategy: conceptual framework, evolution of the firm, the discipline of strategic management, the new strategic framework in the digital economy, strategic decisions and role of management
- Profits, Competition and Cooperation in the Digital Economy: Profit as strategic goal and fundamental shifts in the digital economy, the nature of competition and cooperation

Part 2: The theory of digital strategic management

- Strategic Analysis Framework: traditional analysis tools, digital value chain analysis, an adjusted five forces model, strategic business options, modern analytical tools, optimization frameworks, game and complexity theory
- Firm's Competitive Advantage: the economics of value creation and value capture, generic positioning choices (cost advantage, differentiation, focus), platform creation
- Sustainability of Competitive Advantage: creating and maintaining inimitable resources, building monopoly power, execution and decision speed, organizational computational power, measuring competitive strength
- Innovation and Evolution as Origin of Digital Competitive Advantage: innovation business models and profit patterns, management innovation, product and process innovation, imitation, evolution and its mechanisms.

- Competitive Forces: individual players and factors, competitive strategy and digital industry, concentration (duopolies, monopolies, oligopolies), fragmented markets, global vs local markets, competing networks of digital firms and ecosystems
- Digital Industry Lifecycles: competitive strategies and new market creation, competitive strategies in mature markets, competitive strategies in declining markets, management of strategic phase transitions

### Part 3: The practice of strategic management in the digital economy

- Strategic Digital Business Design: business assumptions, strategic and operating choices, platform creation and management
- Value Growth: growth strategies in mature digital industries, growth strategies in emergent digital industries, IPR protection, product innovation and differentiation, entrepreneurial organizational structure, vertical and proprietary business models
- Managing the P&L of a Digital Business: P&L strategic directions, impact of strategic decision on P&L structure, expansion (economies of scale and scope), focus, contraction, P&L revenue and cost management, challenges in digital P&L management, the digital balanced scorecard
- Pricing: fundamental pricing methods, dynamic pricing rivalry, competitor response, cooperative pricing and market structure, price leadership, power pricing schemes
- Principles of Organizational Design: organizational choices (do we still need management in the digital economy?), structure and configuration, self-organized systems: the DAO - (Digital) Decentralized Autonomous Organization, hiring and competence development, incentive and retention systems in the digital economy, leadership styles, decision making mechanisms, cultural biases
- Digital Network Creation: mergers and acquisitions, strategic alliances and partnerships (strategic networks, value chain disaggregation and horizontalization, network competition, lifecycle alliances and prisoners' dilemma, industry association, cartels and trusts, industrial policy, lobbying and politics)
- Management of R&D and Digital Technology: economics of R&D, setting an R&D organization, R&D operating modes, crowd sourcing, open source, the patent race, horizontalization vs. verticalization, measuring R&D performance (productivity, cost, time and quality)

## 5. Materials

Essential readings and learning materials will be made available on Moodle.

## 6. Type of assessment

The final grade will be based on the written exam (90 min).

## 7. Application

The number of participants is limited to 20. Students can apply by using the dedicated application form on our website. Besides, our website provides additional organizational information.