



## Operations I

### Introduction

Operations Management is fundamentally about finding better ways of doing things in a company. Its ultimate goal is to fulfill the promise made to the customer in a way that is (a) efficient (short-term) and (b) sustainable (long-term). In fact, achieving innovative and excellent operations has played an essential role in many of the great success stories business has written, such as, for example, Amazon, Southwest, Toyota, or Zara.

### Objectives

We will explore the key tools and concepts that will allow us to leverage the operations of a company as a major source of competitive advantage (i.e. weaponize operations). This will also strengthen your profile as future managers, as in most organizations, improving and innovating operations is more crucial than ever. Fortunately, it usually is also more reliable and cheaper than most other ways of generating competitive advantage.

The specific goals of the course are as follows,

1. Learn the basic elements and tools of operations management.
2. Understand why operations strategy may be a great source of competitive advantage.
3. Learn how to create value from operations.
4. Get a general overview of ops key concepts and their relationship with other areas of the firm, such as finance and marketing.
5. Understand the similarities and differences between product and services companies.

### Competences

#### Basic Competences

- CB7. The students know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.
- CB8. The students can integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments.
- CB9. Students know how to communicate their conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way.
- CB10. Students possess the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

#### General Competences

- CG1 - Listen, understand, and contrast the points of view of others to make an objective composition of a business situation. Communicate in a structured and persuasive way. (Interpersonal communication).

- CG2 - Work effectively in multicultural teams, assuming the leadership of a project when required. Integrate the value of diversity in the decision process and teamwork. (Ability to work in multicultural teams).
- CG3 - Critically evaluate the information and the context of a business situation to reach its own conclusions for making prudential decisions. (Critical thinking).
- CG4 - Acquire the self-knowledge and self-control necessary to work effectively in professional environments under pressure, understanding the motivations of others and the culture of the company. (Emotional intelligence).
- CG5 - Apply proven ethical criteria in making business decisions, respecting the intrinsic dignity of each person and the achievement of the common good. (Integrity).
- CG6 - Develop a proactive and open mindset to organizational change in order to design and promote process improvement initiatives and facilitate one's ability to adapt to new organizational cultures. (Innovative spirit).

### **Specific Competences**

- CE01 - Identify the relevant data to diagnose a business problem and generate sensible decision alternatives.
- CE03 - Analyze and design optimized customer-oriented operations and logistics systems, according to the principles and applicability of the Lean philosophy (eliminate what does not add value).
- CE04 - Design strategies for product and service operations optimizing the supply chain by applying the theory of restrictions (TOC), input-output analysis and queuing theory.

### **Content**

The main topics covered by this course include:

- Process analysis and fundamental variables
- Capacity analysis
- Input/output analysis
- Queuing theory
- Inventory management
- Supply management

### **Evaluation**

The course evaluation will be based on:

- Class participation and one team assignment (60%)
- Final exam (40%)

The IESE Business School's Honor Code and Learning Partnership apply to all activities in this course. For individual assignments, unless explicitly stated, you should not interact with anyone else. For deliverables to be done in teams you should interact only with the members of your team.