

Instructor's Manual

Operations and Process Management

Seventh edition

by

Nigel Slack

Alistair Brandon-Jones

Contents

Chapter 1	Operations and process management	8
Chapter 2	Operations and strategic impact	15
Chapter 3	Product and service innovation	28
Chapter 4	Operations scope and structure	36
Chapter 5	Process design 1 – Positioning	42
Chapter 6	Process design 2 – Analysis	51
Chapter 7	Supply chain management	62
Chapter 8	Capacity management	78
Chapter 9	Inventory management	87
Chapter 10	Resource planning and control	99
Chapter 11	Improvement	107
Chapter 12	Lean operations	113
Chapter 13	Quality management	119
Chapter 14	Risk and resilience	127
Chapter 15	Project management	133

Teaching Guide

CHAPTER 1

Operations and process management

Introduction

Teaching the material in Chapter 1 of the book is both the most important and the most difficult part of teaching an operations (or operations *and process*) management course. Most important because it is vital that students develop an enthusiasm for the subject and this is best attempted early in the course. Difficult because one has to establish some key principles before the ‘building blocks’ of the subject have been taught. We have found it useful always to work from whatever experience the students have. For post-experience students like MBAs this should not be too difficult. One can always ask them to describe the nature of operations in the companies they have worked for. One can even explore some of the prejudices they might hold about operations management (dull, obstructive, always screwing things up, etc.) and base discussions on that. Alternatively, and certainly for students who have less experience, one can ask them about recent experiences as a customer (both good and bad) and base a discussion on the importance of operations management around those experiences.

Key teaching objectives

- To enthuse students with the ‘hands-on’ excitement that can be gained from an understanding of operations management (*I want to prevent you ever enjoying a theatre performance, restaurant meal, or shopping experience ever again. I want you continually to be looking for the operations implications of every operation you enter. You are going to be turned into sad people who cannot go anywhere without thinking of how you could improve the process*).
- To convince students that all organisations really do have an operations function, therefore operations management is relevant to every organisation.
- To convince students that all managers are operations managers because all managers manage processes to produce outputs. (*Even marketing managers are operations managers. What you learn as marketing in business school is really the ‘technical’ side of marketing. Of course this is important, but marketing managers also have to produce marketing reports and information, without mistakes in them, on time, relatively quickly, flexibly enough to contain the latest information, and without using an army of marketing analysts to do so. In other words, they are producing services for internal customers*).
- To introduce the three key ideas in the chapter, namely,

- a) Operations and process managers manage transformation processes at three levels: the level of the supply network; the level of the operation itself (or ‘the organisation’ if that is more understandable to students); the level of the individual process (some of which will be within the operations function, and the rest of which will be in other functions).
- b) Operations and processes differ in terms of their volume, variety, variation and visibility (the four Vs).
- c) Operations and process managers must perform four sets of activities to ensure that their operations and processes contribute to overall strategic impact –*Direct* operations strategy, *Design* operations and processes, *Deliver* products and services by planning and controlling operations and process, *Develop* the performance and capability of operations and processes.

•

Exercises/discussion points

Exercise – The four Vs dimensions of operations can be used for many types of exercise. For example, one could ask different groups to identify different types of restaurant, food retailer, car servicing operation, cinema, club or pub, etc., and plot the ‘similar but different’ operations on the four dimensions. Alternatively, many television programmes can be recorded off-air which illustrate operations. These often look ‘behind the scenes’ of well-known operations such as airports. Any of these could be used to promote group discussions on what operations management might be like in such operations and especially the differences (in terms of the 4 Vs) between the processes shown.

Exercise – For residential courses, especially of post-experience students, an evening could be spent ‘on the town’, where syndicates are required to sample the services of a restaurant, a retail operation and an entertainment operation, and report back the following morning. This is a great way of giving participants a change of scene on the Thursday of a one-week course.

Exercise – Perhaps one of the most important points to get across in any introductory session is the ubiquity of operations and process management. MBAs in particular need convincing that the subject is relevant for them even if they are not going to be directly involved with the operation’s function. This is why the book has very deliberately taken an operations *and process* management perspective. It is vital that everyone understands that, to some extent, they are operations managers because they manage processes. Therefore, everyone has something to learn from operations management. The best way to emphasize this is to use the part of Chapter 1 that illustrates the space occupied by the subject when it was concerned primarily with ‘production’ management. Then point out the space that the subject occupies when we define it to include any kind of process in any kind of business.