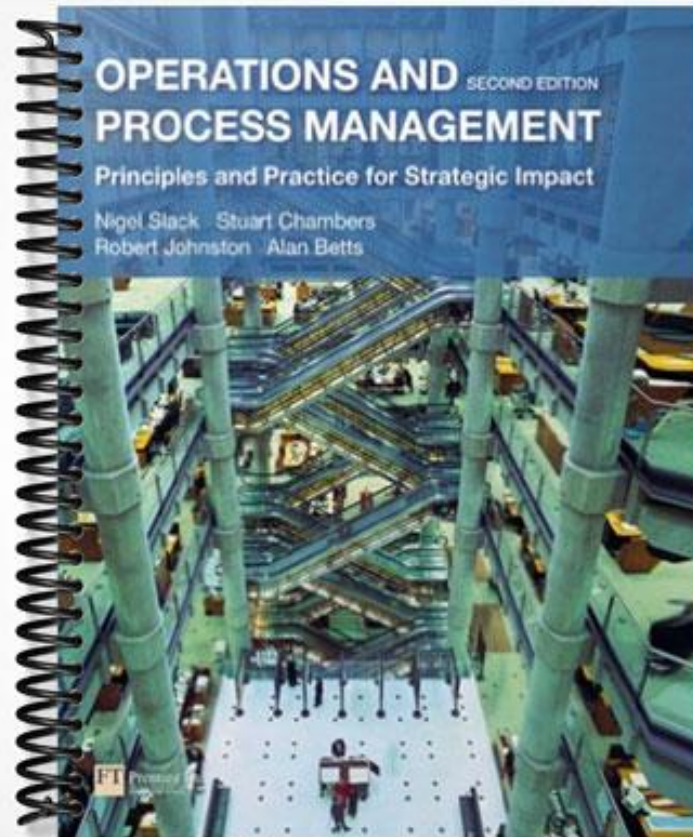


SOLUTIONS MANUAL



Part 2

Solutions for Case Studies in the Book

AAF Rotterdam

Case synopsis

This case deals with a theatrical services company based just outside Rotterdam in The Netherlands. Small when it was founded in 1999, the company has now grown to employ 16 full-time and 20 freelance employees and has a revenue of slightly over €3 million. Two types of services have emerged. The first concerns the sale and hiring of stage equipment (mainly lighting, sound and staging equipment). The other involves production services, including designing, constructing and installing entire sets for shows and conferences. The case describes the various departments within the company and the nature of both types of services. The company seems to be reaching the point where the requirements and objectives of both types of services, to some extent, conflict with each other. Yet both types of services are still mutually dependent. The underlying issue in the case is how to reconcile the needs of the two services.

Using the case

This is a general introduction case to operations and process management. It is not a case where there is a 'correct answer', or even a clear and well-defined decision to be made. Rather it is a case that can be used to illustrate both the general approach to understanding operations as embedded in the diagnostic logic chain used in Chapter 1, and the nature of some general operations management issues such as focus. Because of this, the case is best used at the beginning of a course in order to set the agenda for the topics that will be covered in the course. The case is sufficiently general for tutors to draw out from the case, whichever topic they are going to cover in the course. For example, although inventory management is not explicitly emphasized within the case, it is clear that the inventory of lighting and other equipment is a key decision for the hire and sales part of the company. Students can be encouraged to discuss this issue generally during the case debrief so that its inclusion in the course can be justified.

While the case can be set as a group assignment prior to presentation and discussion, it is also suitable for individual reading by students who then can contribute to the discussion in class. So, at the first session, one could simply ask the students to read through the case and then use it to promote a general discussion on operations and process management during the session.

Notes on questions

Questions 1 – Do you think Marco Van Hopen understands the importance of operations to his business?

This question can be used to discuss the issue of what a full understanding of operations and process management means in any business. During this discussion it is useful to point out the difference between the technical knowledge that is embedded in any operation or process on one hand, and the tasks that are necessary to run the operation or process on the other. Marco Van Hopen is clearly knowledgeable and certainly enthusiastic because of his knowledge of the task. He regards production services in particular, as being an exciting and high adrenalin business to be in. This is why he started the company. As the company has grown he has become aware of how important it is to organize the company's operations internally. This has been forced on him because of the growth of the company. What was acceptable for a relatively small group is no longer viable for a large business. Individual processes and the needs of the customers they service (internal or external) must be identified, and they must be designed and organized to meet these needs. From the various statements attributed to Marco, he is now coming to see this. He is also beginning to understand the nature of the relationships between the various processes within his business. In particular, the sometimes-conflicting needs of sales and hiring on one hand and production services on the other are becoming evident.

So the answer to the question, 'Does he understand the importance of operations'? most likely is, 'Yes, but not as yet fully'.

Question 2 – What contribution does he seem to expect from his operations?

Chapter 1 of the text identifies four contributions of operations management.

1. It should attempt to control (or minimize) the cost base of the business.
2. It should attempt to increase the revenue of the business through its ability to serve customers.
3. It should do these two things without needing to invest an excessive amount of capital in the business, and
4. It should be able to develop the capabilities that will bring it more business in the future.

Although these points are not addressed explicitly (they rarely are in any organization) there is enough evidence from Marco's statements to make some judgement. See the table below.

Contribution of Operations	Any Evidence?
Operations' contribution to reducing costs	Yes, there is some evidence. For example, '..... by working together more we could increase our ability to take on more work without increasing our cost base'.
Increased revenue through serving customers	Again, yes. '..... we have succeeded in differentiating ourselves through offering a complete design, build and install service that is creative, dependable, and sufficiently flexible to incorporate last minute changes'.

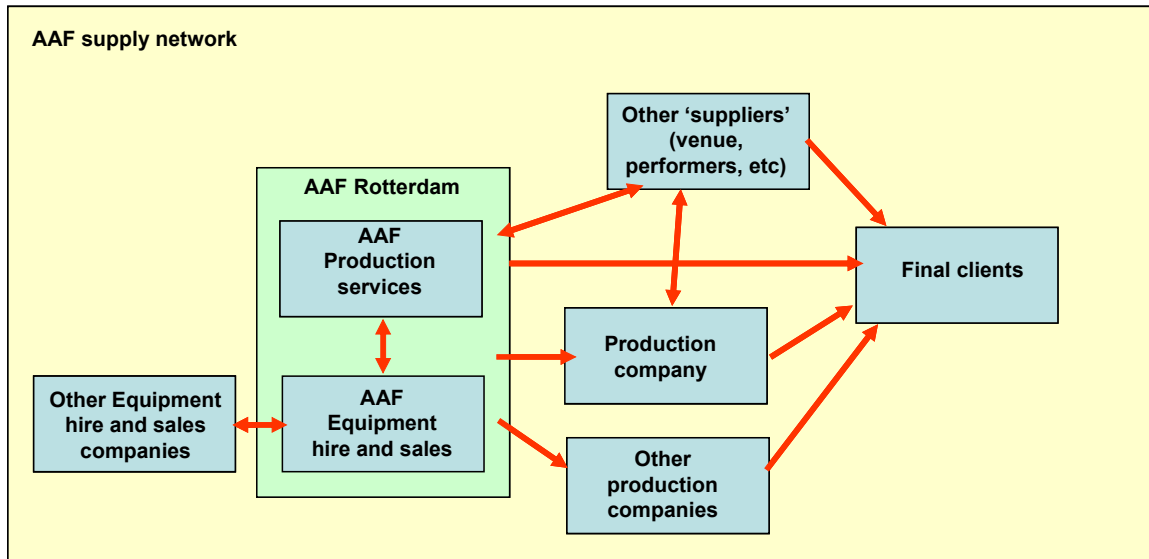
Contribution of Operations	Any Evidence?
Minimize the investment needed	This is less clear. However, Marco is clearly aware of the amount he has invested. '.... We have over €1 million invested in the equipment....' Also, he sees maintaining investment in new equipment as being vital to the company's future success. '....we need access to the latest equipment in order to win production services contracts'. This is used as a justification for retaining the sales and hire part of the company but there is no explicit discussion of the trade-off between the benefits this investment brings and the costs (including opportunity costs) in a period when the company is growing quickly.
Develop the capabilities to secure future business	There is very little evidence that Marco is yet thinking about the future in terms of operations capabilities. He sees the company as growing and that changes will have to be made, but it is growth that is central to his thinking rather than developing unique capabilities that will protect him from competition in the future. Of course, he may just wish to develop the business to a certain size and then sell it.

Question 3 – Sketch out how you see the supply network for AAF and AAF's position within it.

This question can be used to explore the issue of 'Who exactly is the customer?', and to establish the idea of the three levels of operations and process management analysis.

- The level of the supply network
- The level of the operation or business
- The level of the individual process.

There are many ways of drawing the supply network for any type of business and this is also true for AAF. However, the diagram below is one way of illustrating the various relationships between some of the significant players in the supply network, where the double-headed arrow means that either the flow of service is both ways or the nature of the relationship is one of collaboration rather than a straightforward supply of service.



The first point to make is that within AAF Rotterdam there are two important collections of operations processes, one for each of the service groups that AAF supplies. There is also a relationship between them inasmuch as production services rely on equipment hire and sales having the very latest in sophisticated technology, while Marco sees production services as being the major customer for the equipment hire and sales part of his company.

There are several suppliers to AAF, but the ones mentioned explicitly in the case are other equipment hire and sales companies. These are important because maintaining relationships with similar hire and sales companies allows AAF to supply its own customers even when it has run out of its own equipment. And, although the other equipment hire and sales companies are competitors, it is in their interests and AAF's interest to cooperate because it allows all of them to maintain supply without over investment in equipment.

There is a similar ambiguity on the demand side of the network. Much of AAF's work comes from production companies who are in turn taking responsibility for supplying services to the final clients. Yet AAF themselves will also take on this role for some clients. In other words, at times, AAF finds itself a competitor to its own customers. Of course, this is not unusual, but it is worth exploring the implications of this with students. Similarly, AAF will act as a supplier to other production companies, so its customers will also be in competition with each other. Ideas of partnership, supply, dual sourcing, 100 per cent supply agreements and so on can be brought in at this point, if considered relevant.

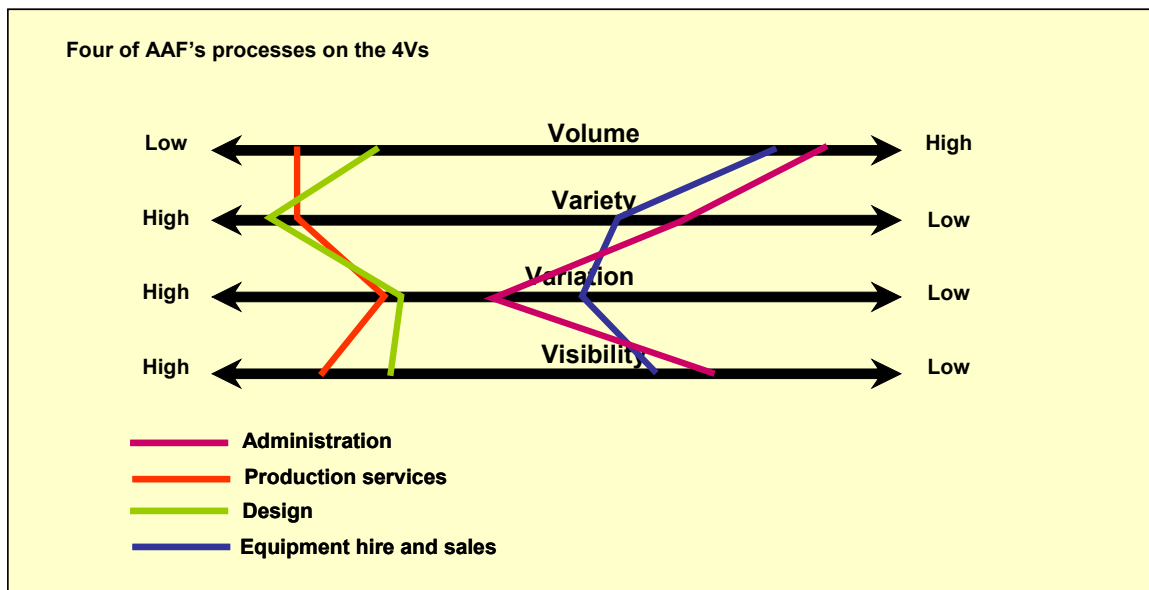
There may also be other suppliers to the final clients and/or the production company, such as the companies that own the venue for the conference or performance, the performers or compère, and so on. These organizations may be serving the final client or the production company, but it is almost always important for AAF to develop some kind of relationship with them because they will be (or should be) collaborating to provide the final service.

Question 4 – What are the major processes within AAF, and how do they relate to each other?

There are four processes mentioned explicitly in the case. They are:

- The production services process
- The equipment hire and sales process
- The design studio process
- The administration process.

In fact each of these processes is probably composed of other, smaller processes, but we will treat them at this level. There are a number of ways of distinguishing between these processes, but the important point to bring out in the discussion is that the processes do differ. Therefore, because they differ, they would need managing in different ways. Perhaps the most important way of distinguishing between the processes is to use the four Vs explained in the text. The figure below summarizes each of these processes on the four V dimensions.



Production services are of low volume but each job is different and so the variety is high. Variation is high (more lumpy as it says in the case) and because much of the value is added with the eventual customer, visibility is high.

Design will be very similar to production services because it is an essential part of production services. Volume may be lower because not all clients require design services. Variety may even be higher than design services because not all designs will be accepted by the clients. Variation is likely to be similar to production services, as is visibility, although much of the design will take place without the client being present.

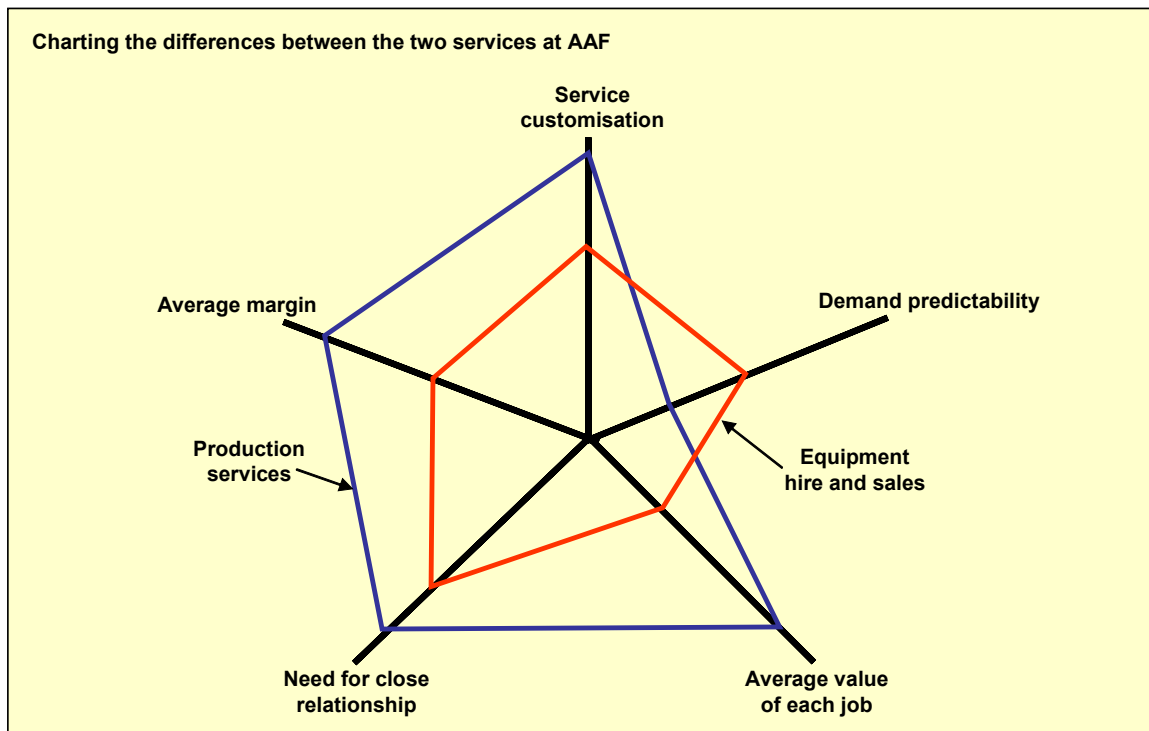
At the other end of the scale, equipment hire and sales is of far higher volume, and although in one sense variety is also high, the real effective variety is lower because every transaction is

very similar, even if what is actually being hired or sold is different. Variation is more predictable and, although some clients require installation, the degree of visibility or value-added with the client present is relatively low.

Administration is surprisingly similar to equipment hire and sales. The volume of transactions is likely to be very high (possibly several transactions for each client), and although every transaction will be different, the broad type of transaction is essentially the same. Sending an invoice is sending an invoice even if each invoice is different, sending an invoice is very essential. Variation is difficult to assess for the administration process. A fair assumption is that peaks and troughs could coincide for both the services offered by the company, and therefore variation could be relatively high. Visibility is likely to be similar to equipment hire and sales. The administration process is very much a back-office process.

An alternative analysis is to use a polar diagram such as the one below.

You can make the axes of the polar diagram anything you like. The main point is to demonstrate that the two main processes are different.



As a follow-up to this discussion it is useful to ask the questions, 'How will the various management decisions for these processes differ'? For example, to what extent can each of these processes be strictly defined? (Less so with production services and design, where, creativity is important, and more so with administration, equipment hiring and sales, where, outputs are more standardized). What kind of job designs, do the staff involved in each of these processes require? (Low volume, high variety, variation and visibility processes generally require flexible multi-skilled staff with good customer-facing skills; processes at the other end of the dimensions require, staff who understand the importance of dependability, adhering to the process and promoting efficiency). Other aspects of operations management can also be raised such as