

Case 1 **Birmingham International Airport**

Case author: Robert Johnston
Teaching note: Robert Johnston

Synopsis

This case provides an overview of the workings of one of the most complex of all service operations, an international airport. It is an operation that will be well understood by students and can therefore be used to illustrate many of the key features of operations management. This is an ideal case to use on the first session of an undergraduate operations management course.

Key issues

- The nature of operations management
- Types of customers
- Macro and micro operations
- The complexity of operations
- Design, planning, control and improving operations
- Operations strategy

Indicative questions

1. Identify some of the micro operations to be found at the airport. For each one:
 - a) identify the transforming and transformed resources;
 - b) state which is the predominant transformed resource;
 - c) describe the output of each micro operation and say who you think are its customers.
2. Summarise the job of the operations director. What are the main issues/problems he faces in managing the airport?
3. What do you think Richard Heard actually does each day (i.e. how does he spend his time)?
4. Discuss the relationship between the day-to-day tasks and the long-term issues and explain how Richard manages to oversee both at the same time?

Discussion

1. Introduction

One of the first questions is what makes Birmingham International Airport (BIA) an 'operation'? In essence it provides goods and services to customers. It might be useful to ask students exactly what is the service provided to the passengers going through an airport. This is a good opportunity to introduce the idea of process, and the main steps in the process from car parking at the airport through to boarding the aircraft (and vice versa) can be documented. In essence the role of the airport is to 'batch' up its individual customers into planeloads.

This case allows students to get beyond the customer process and will help them think what it is like actually delivering this service and the problems in so doing.

2. Key features

Identifying some of the key features of this operation, from a management point of view, might be a good place to start. Suggestions might include:

- there are many different types of customers; passengers, cargo shippers, meeters and greeters, even plane spotters for whom services need to be provided
- it produces goods *and* services (such as food and information)
- it therefore processes not only customers but also materials and information
- there are many micro operations doing many different tasks, and therefore
 - ⇒ there are many internal customers of internal services
 - ⇒ the micro operations vary in terms of variety, volumes and customer contact
 - ⇒ there are many complex relationships between them all
 - ⇒ there are plenty of opportunities for things to go wrong
 - ⇒ different people are responsible for different micro operations
 - ⇒ all these operations have to be well designed, planned and controlled to ensure the whole operation works
- the role of operation is to support, implement and drive operations strategy (not just stick passengers on planes)

3. Micro Operations

An analysis of some of the micro operations helps illustrate many of the above points.

MICRO OPERATION	MAIN TRANSFORMED RESOURCE	MAIN TRANSFORMING RESOURCE	OUTPUT	CUSTOMER
baggage handling	baggage	baggage handlers trucks	moved baggage	passenger
information desk	information	information desk staff computer information systems	enlightened passengers	passenger airlines
immigration	passengers identity	immigration officers	national security	government and country
re-fuellers	fuel	tankers	re-fuelled aircraft	airlines

4. The Job of the Operations Director

The job of this operations director, like many operations managers is about leading and coordinating a team of people, and all of the micro operations, and linking with other divisions and suppliers to ensure that things go as smoothly as possible.

Students should be able to suggest a large number of issues/problems that Richard faces, for example:

- late flights
- angry passengers
- disgruntled staff
- absent staff
- bomb alerts
- equipment breakdowns

The thing to stress is that the reason any one of these is not easy to deal with is because of the complex nature of operations, there are just so many tasks and they are all interrelated, i.e. will affect each other. An equipment failure may have consequences for flights, for passengers, on staff

5. How does Richard spend his time?

The answer is “in meetings” - coordinating, sharing and monitoring the airport’s operations. This was Richard’s reply to this question:

“The focus of the job is all about really leading and co-ordinating a huge team of people so typically I will have a session of one of my general managers that will be looking after the airfield services or the

terminal security or whatever. It will be a briefing session of an hour or so with one of those managers talking over their key concerns going through their key performance indicators. Picking up on co-ordinations they have got with third parties, staff problems, customer service problems, getting an update on those. Just talking through planning, and planning the way ahead.

“Very much my role of co-ordinating what we are doing on the airfield much as in the terminal with security with everything else and providing the link to other divisions. So that is always part of the day. Trying to get out and be visible and be seen at terminal airfields at least for an hour probably most days.

“Also being seen by the staff. Being seen to be taking an interest in what they are doing. It makes a huge difference. Not just staff, but also customers, it is just seeing what is going on. You cannot afford to be remote from the business in any way.

“A typical day would also probably include either a safety committee meeting or a security committee meeting (we have three safety committees terminal, airfield and in-house staff). For these meetings we bring all the various practitioners on site together, share what is going on. We monitor performance against the standards.

“I might also have meetings with one of the airlines or one of the handling agents again just picking up on what their problems are. We are here to facilitate their operations. We have to work with them. It is not as simple as just laying down absolute security safety standards. They have to be practical and they have to be workable. We have got our benchmarks we do not go below them; we have to work with people.”

6. Day-to-day tasks and longer term issues

For many operations managers getting the balance between long term, more strategic tasks and decision making and dealing with day to day pressures is not easy (see case study 3 - A Day in the Life of Frederic Godé). At BIA Richard is closely involved at both levels. The secret is as Richard says “is to make sure you have really good processes and procedures in place”. The staff at BIA are well drilled to deal with problems and indeed there are operations managers, terminal managers for example, whose sole job is to deal with the day to day issues. Richard also keeps an eye on these but his concern is the longer term improvement of the processes, such as training and improved procedures, and also coordinating between all the different agencies and micro operations to try to ensure that nothing does go wrong, or when it does that they all know what to do!

Richard also allocates time for operational planning, once a year, which links the short-term issues to longer term plans. He is also closely involved in long range planning, for example major building projects to deal with forecasted increases in passenger numbers.