

Ba main transformation process

[Science](#), [Physics](#)



Executive Summary The purpose of this report is to discuss the main theories, models, frameworks and issues in the area of operations management, using British Airways as a working model, throughout the report. It was prepared for a coursework assignment as part of a Operations Management Module. Academic journals and books from the area of operations management were used to illustrate the main points in the report to give evidence and back up the information provided.

Key findings of this report show how quality impacts on the development of the operations strategy in British Airways and how the key elements of design contribute hugely in operations. The importance and role of supply chain was discussed and three quality control methods; Quality Sampling, Total Quality Management and ISO 9000 were evaluated to how they could improve the performance of British Airways. Conclusions were drawn and it was found that operations management, based on the points discussed is a major factor to an organisation's success.

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1. Introduction This report has been issued by University as part of this Operations Management module, in which a company will be selected and used as a working model throughout the report. The chosen company that will be used in relation to operations management is British Airways (hereafter BA). The various elements of operations management will be researched and applied to BA's main transformation process. This will be done using academic articles and books in the area of operations management to illustrate the main points.

The report will begin with an overview of BA's main transformation process indicating key inputs and outputs and then investigate how quality might impact upon the development of the operation strategy. Next it will review the key elements of design and how this impacts on the operation. Finally the role of supply chain in BA's operation will be discussed and three different quality control methods will be evaluated to show how these might improve the performance in operations. Conclusions will be drawn and any overriding management issues identified.

. BA's Main Transformation Process

The transformation process is a “ model that describes operations in terms of their input resources, transforming processes and outputs of goods or services” (Slack et al, 2008, Page 8) BA use their aircrafts and staff which allows passengers and freight to travel from one destination to another thus, making this BA's main transformation process. The operations function of a business is the arrangement of the resources which are allocated to the production and delivery of an organisations goods and services.

Three roles that are important for an operations function are the implementer, supporter and driver of the business strategy. In this example the operations functions follows the inputs of the transformation process. BA's main transformation process inputs are the 238 aircraft in service, 32 million passengers, and 760, 000 tonnes of cargo that it carried in 2009/10 along with the pilots and cabin crew. These are the transforming resources which allow the operation to take place and results in the service being provided.

This uses the transformed resources which can be split into two types; facilities such as the buildings and equipment, and staff who are all the people involved in the operation in some way. (ba. com) " The main activities of British Airways Plc and its subsidiary undertakings are the operation of international and domestic scheduled air services for the carriage of passengers, freight and mail and the provision of ancillary services" As BA is one of the worlds largest airlines operating internationally, the transformation process can be complicated with many units or departments interconnecting and contributing to the overall operation.

Some of the operations with in BA include British Airways World Cargo carrying freight, mail and courier traffic. (ba. com) They key outputs of BA's transformation process are the millions of transported passengers to over 300 worldwide destinations and the cargo including dangerous goods and live animals. The outputs are services and therefore intangible. 3. Quality & Operations Strategy Operations strategies plan how the function will achieve futuregoalswhich are aligned with the companies overall strategy.

This can be done by understanding current capabilities and limitations, exploiting current capabilities in quality and process innovation. The basic role of operations is to implement strategy. “ Operations strategy concerns the pattern of strategic decisions and actions which set the role, objectives and activities of the operation” (Slack et al, 2007, Page 63) Operations are the resources that create products and services. There are four perspectives on operations strategy; top down, market requirements, bottom up and operations resources perspective.

BA states “ Meeting the rising expectations of our customers’ remains central to our strategy of transforming British Airways into the world’s leading global premium airline” This includes investment in their staff, aeroplanes and facilities in order to provide a premium quality service to their customers. (ba. com) “ Quality is consistent conformance to customers’ expectations” (Slack et al, 2007, Page 539) Relating this to the above strategy of BA the quality of the service would be the friendly and helpful cabin crew, the flight leaving on time, clean aircraft and baggage arriving at the same time and destination as the passenger. Punctuality ensures other operational processes run smoothly and remains a key factor in whether customers would recommend British airways to other travellers” (ba. com). Therefore if BA produces a quality service to all of its customers, it is likely that they will get more business through recommendations and giving them an advantage over other airlines. As the quality of service that BA provides is paramount to the customer and can be a deciding factor on repeat business, this will have to be incorporated to the overall operations strategy of the organisation for it to be a success.

In BA's 2009/10 annual report and accounts their strategy and objectives include meeting customer needs and improving margins through new revenue streams. Total Quality Management can have an influential impact on this as quality can reduce costs and increase dependability. " Lowered total quality expenditures, increased level of quality and reallocation of quality resources to prevention and away from appraisal and defect/failure correction activities" (SAM Advanced Management Journal, 1990, Page 25). This supports the above strategy of BA. TQM enables the developing of strategic thinking due to its inter-disciplinary nature" (Journal of Manufacturing Technology Management, 2004, Page 264) Overall in respect to BA this means that there has to be quality control in place for the overall strategy to be successful. When developing the operations strategy, taking quality into consideration there may be a higher cost initially, however, referring to the research above costs may be reduced overall due to less errors and more emphasis being placed on prevention tactics. 4.

Design in Operations

There are five stages of service design which will be looked at individually in relation to BA; 4. 1 Concept Generation If BA were to introduce a new destination to the existing range that they already offer if they decide to follow the market requirement perspective which is " what the market position requires operations to do" (Slack et al, 2001, Page 65). A lot of people would have to be involved from management at the top down to the customers. Market research would be a good idea to get ideas and suggestions from the customers for the proposed new destination. " Operations strategy involves translating marketing requirements into

operations decisions” (Slack et al, 2007, Page 63) 2. Concept Screening This stage involves the ideas going through feasibility, acceptability and vulnerability evaluation. Questions such as are the resources such as aircrafts and staff available, will it be accepted and what may go wrong with it and will it all be answered and evaluated. At this stage the ideas will progressively get fewer as each one is evaluated until there is only one possibility left. . Preliminary Design Preliminary design is the identifying of component products and services in the package, which in this case is the new flight destination in BA and the process of this will also be defined at this stage. The components of the new flight destination may be the aircraft, cabin crew, pilot, information leaflets and arrangement of new flight path and times. BA is part of a mass service process type in which there are many customers transactions therefore there is limited contact time and not much room for customisation.

For example BA cannot put on a special journey for a single person as there are a range of pre-planned journeys for passengers to choose between. 4. Evaluation and Improvement Design evaluation and improvement is used to see if the preliminary design can be improves and this can be done using various techniques including quality function deployment, value engineering and taguchi methods. Looking at Quality Function Deployment (QFD), which is a technique used to ensure that the eventual design of BA’s service actually meets the needs of the customers.

For example the new flight destination would have to be where the customers want to go and figure how this can be achieved. 5. Prototyping

and final design The final stage of design is to turn the design into a prototype. For the new flight destination this may be running the flight on a trial basis to get reactions and feedback from the BA customers. Through the design process the five performance objectives; quality, speed, dependability, flexibility and cost will be considered.

For example it can be decided if the quality of service will be the same as a regular flight or if it is going to be increased and marketed as a premium flight. Will the flight be dependable and be on a regular basis and will the cost be in relation to the service as mentioned above and if the customers will be willing to pay more. This would be classed as a product layout within BA which “ involves locating the transforming resources entirely for the convenience of the transformed resources” (Slack et al, 2007, page 193).

The transforming resources being the people, for example in BA as they can move through the airport in a predetermined route to enable them to get to the aircraft. 5. 0The role of Supply Chain A supply chain can be described as “ A linkage or strand of operations that provides goods and services through to end customers; within a supply network several supply chains will cross through an individual operation” (Slack et al, 2007, page 402) All supply chain management has a common objective to satisfy the end customer and in the case of BA this will be the people travelling on the flight or BA’s World Cargo.

As mentioned in the design process the five performance objectives; quality, speed, dependability, flexibility and cost will have to achieve appropriate levels in the supply chain. These can be looked at individually in relation to

BA: 1. Quality For a flight many onboard services are required including the equipment food and drink. By the time the meal reaches the customer on the flight it has gone through many operations in the supply chain. It is important that at each stage there are minimal errors as this multiplies by the time it reaches the customer.

Each stage then needs to take responsibility for its own and their supplier's performance. This can in turn, ensure that the supply chain can achieve a high level of customer satisfaction at the end and therefore increase the chance of returning custom. 2. Speed In relation to BA, speed can mean the time it takes a customer to be served from the time they request the item to when it arrives. For example, receiving a drink in-flight. A fast response may be achieved by ensuring there is enough resources and stock, such as flight attendants and beverages within the supply chain.

If there is a large amount of stock then the customer's demand will be fulfilled. In order for this to be successful, the products received from further up the supply chain, such as from the manufacturers need to have fast throughput time. Achieving this allows the customer demands to be met if there is stock readily available. 3. Dependability This means that BA has to have the correct stock in the right place at the right time. The airline needs to have the correct number of supplies or more on board at the time of a flight take off to ensure the demands of the customers are met.

For example " If the individual operations in a chain do not deliver as promised on time, there will be a tendency for customers to over order, or order early, in order to provide some kind of insurance against late delivery"

(Slack et al, 2007, page 404) A way that BA can control their “ items of low value, fairly consistent usage and short lead time” (Tersine, 1982, page 432) such as beverages is the two bin re-ordering system. This is an effective way of controlling stock levels as it can easily be seen when the re-order point is reached. 4. Flexibility

Flexibility is the supply chains ability to manage changes and disturbances. If BA’s stock levels are managed this should allow flexibility so the end customer’s needs are met and done so in a responsive manner. For BA to be flexible all operations in the supply chain must also be flexible. 5. Cost At each operational stage of the supply chain costs are incurred in order to produce the final product or service. A way of reducing costs is through JIT. Just-in-time is a Japanese management philosophy which tries to eliminate waste and always improve productivity.

JIT has many roles to play in an organisation as “ Continuous improvement processes are associated with JIT including product quality, process efficiency, information systems and operating value-added activities more effectively while eliminating non-value-added activities” (Wild, 2002, page 61) BA may also incur costs whilst finding the right suppliers or trying to find one supplier of there required costs to cut the cost of their transactions and come to a mutually beneficial agreement for both parties. 6. Quality Control Methods

Measures for quality characteristics within BA can include functionality which is how well the service does the job, for example taking people to their required destination safely. Appearance is another which relates to the decor

and cleanliness of aircraft, lounges and crew. Reliability, consistency of the flight service and keeping to the allocated times is another characteristic which is important to the service that BA provides. Durability ensures that the service provided is up to date and relevant to the customers needs.

Recovery is the ease with which problems can be resolved and contact between airline staff and customers. These characteristics can be measured as variables and attributes. For quality control methods to take place operations must identify how the quality characteristics can be measured and a standard to which it can be checked against. As much of BA's quality comes down to service it can be difficult to perceive as this has no quantified measure. Quality control uses statistics, process analysis and quality standards, these attempts are to solve the root cause of any quality problems.

Quality means "doing things right, first time, every time" (Slack et al, 2010, Page 505) and in turn this will have a positive effect on revenues costs and customer satisfaction. The techniques of controlling quality that will be looked at in relation to BA are; quality sampling, total quality management and ISO 9000. 1. Quality Sampling This can be done by handing out surveys towards the end of the flight to receive customer feedback. The results can then be used to determine whether or not the quality characteristics mentioned above are up to the correct standards as expected by the customers and what BA wants to achieve.

This will not be 100% checking as not every person will take the time to fill this out; however it can give a good indication of BA's performance. The

results of this can then be used to find areas that need to be approved for example the courtesy of the crew or areas that are positive such as the decor and cleanliness of the aircraft. Overall if action is taken this should help to improve the performance of BA. 2. Total Quality Management Total Quality Management, (TQM) means meeting the needs and expectations of customers.

This includes all costs associated with quality which are prevention, appraisal, internal and external failure costs. Prevention costs are used to save failures and errors occurring. This can be the training and development of personnel and designing and improving of services and aircrafts to reduce any quality problems. Appraisal costs that could be incurred with BA are the setting of sampling plans as mentioned above and also conducting customer surveys. Internal failure costs, dealt from within the BA may include lost time due to errors. For example if problems occur and a flight is delayed or unable to take off.

If a strategy is in place this could prevent this error from happening. Finally external failure costs which are errors going out of the operation to the customer. An example can be an annoyed customer who takes up the time of staff at a check in desk. The main aim of TQM is that the processes and products will be continually improved. 3. ISO 9000 Without any quality control methods there is little or no basis to measure and monitor quality performance. Certification to the ISO 9000 standard demonstrates if an organisation's quality of service and products are acceptable.

This may improve the performance of BA as it gives assurance to customers that the service has to be at a certain standard so therefore there could be an increase of custom. However this could prove costly to train staff and conducting audits. 7. Conclusions The main findings from this report were the effects of quality on the development of the operations strategy and how design also impacts on this within BA. It was shown how quality, speed, dependability, flexibility and cost form the basis to all the decisions that are made in the area of operations management.

It was found that meeting the rising expectations of BA's customers was paramount and quality control remained central in this. It was suggested that BA could use a survey to receive feedback to work on and improve if appropriate. This could increase the standard of quality of service within the organisation. The five stages of design in operations; concept generation, concept screening, preliminary design, evaluation and improvement and prototyping and final design were identified and evaluated.

The role of supply chain was discussed against the five performance objectives; quality, speed, dependability, flexibility and cost will have to achieve appropriate levels in the supply chain. Quality and its importance were shown how it can improve the performance of BA. In final conclusion it was found that operations management, based on the points discussed is a major factor to an organisations success. 8. References LEONARD, D and MCADAM, R. , 2004. Total quality management in strategy and operations: dynamic grounded models, *Journal of Manufacturing Technology Management*. online]. 15(3). Pp. 254-266. Available from: [http://www.](http://www.https://assignbuster.com/ba-main-transformation-process/)

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