Implementation of total quality management
Case study: British Airways

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Abstract: Total Quality Management (TQM) has an important role in any company, since the implementation of this program companies can continuously improve their performance. Thus, organizations will be able to considerably meet their internal and external clients' needs in terms of services and products quality, and they will also be able to develop an efficient and profitable business. The paper analyzes how this concept was implemented by the British Airways airline, since it is among the first companies that have implemented such a program.

Key-words: quality, management system, services, products, efficiency.

1. Introduction

The methods to ensure the quality of products and services have evolved continuously in accordance with the rapid technological and socio-cultural changes, that have marked the evolution of society, especially in this century. (Băltescu, C.A., Boșcor, D., 2014, 65)

Also, in the European Union, the consumer protection policy should be regarded as a horizontal policy aimed to promoting consumer interests. In addition, this policy has significant effects on other EU policies such as: Common Agricultural Policy, environment, transport and energy policy which include rules regarding consumer rights. (Neacșu N.A. 2011, 52)

These requirements taken into account, integrated quality assurance concepts have been implemented since the 80s. The starting point of these strategies was the "new philosophy" defined by Feigenbaum: Total Quality Control.

Of these, particular interest is the concept of total quality management used in parallel, or in relation to the "total quality."

In the definition of total quality management (TQM) more guidelines can be highlighted.

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a) The vast majority of authors agree that TQM is, above all, a new philosophy, a new model of enterprise culture, with the aim to orient towards customers all its activities and processes and optimize them so that they could bring long-term benefits.

According to Drummond (Drummond, H 1992, 13), for example, TQM is a business philosophy based on customer satisfaction through quality orientation of the entire organization.

Koller (Koller, J., K 1995) defines TQM as representing a systematic way of managing an organization's results. TQM involves new management strategies, changes in culture and infrastructure, tools and techniques to determine all members of the organization to collaborate and enable continuous improvement of quality defined by the client.

b) A number of authors point out, defining TQM, besides its philosophical dimension, the technical and social aspects that are involved in this philosophy.

In Oess’s opinion (Strauss, B. 1994, 202), for example, TQM must be approached as a two-component system, including a technical and a social subsystem of inter-relationships being established between them.

c) According to another orientation (Kélada, J. 1990, 36-37), TQM is a three-dimensional concept, a management philosophy based on a certain logic that involves the use of specific methods and techniques, resulting its third dimension, the technical one.

In essence, TQM is a philosophy of business management dealing with getting continuous improvement of customer satisfaction through quality management products and services, led in the entire company. TQM is a new approach to corporate management by applying total quality ideas across the organization.

The advantages of implementing TQM are:
- Improving the company's reputation - faults and problems are identified quickly (the "zero defects");
- Significant improvement in quality of products or services;
- Customer satisfaction increase, which leads to additional sales;
- A significant decrease of resources waste;
- Increased productivity because the staff use the time more efficiently;
- Increasing the market share on the long term;
- The workforce is motivated by additional responsibilities, teamwork and involvement in decision-making on TQM;
- Lower costs;
- Focus on continuous improvement.
2. British Airways overview

British Airways is the national airline of the United Kingdom, the operational headquarter being based in Waterside. The airline is a founding member of the Oneworld alliance with American Airlines, Cathay Pacific and Qantas. British Airways is one of seven airlines that fly to all six inhabited continents.

British Airways carry passengers, cargo and letters from Heathrow, Gatwick and London City airports. It has expanded its network in more than 500 destinations through joint business agreements with American Airlines and Oneworld alliance members. The carrier manages a fleet of over 240 aircrafts, consisting primarily of Airbus and Boeing. In 2013, British Airways has taken delivery of its first of 42 Boeing 787s, with the first of its 12 Airbus A380s due to touch down in the UK July 4. British Airways is the largest Boeing 747-400 operator in the world. (Low Teacher)

In 2010 British Airways and Iberia have merged and created International Airlines Group.(Slideshare, 2013)

To survive both short-term and long-term on global market, where there is fierce competition between airlines, British Airways had to focus on a variety of goals and objectives.

In this respect, the general objectives of the company are divided into three categories:  (UK Essays)

Global - for all passengers - whether they are traveling just for pleasure or on business.

Premium - ensure that passengers receive the highest quality services.

Air - focuses on aviation; owning the best equipment, products and services.

Also, British Airways is considering four strategic objectives:

First airline customers top choices - to remain the first choice when it comes to premium international flights, cargo, economy or short flights.

Quality service - to provide the best service to passengers on all routes and in all classes of aircrafts during flight and to improve online services.

Global expansion - to continue to expand its list of destinations, through partnerships with other airlines.

Satisfying customer needs - to explore the latest features and products to enhance customer loyalty.

The main competitors of British Airways are:

1. Deutsche Lufthansa AG - Air Ambassador of Germany, Lufthansa offers flights to 209 destinations in 81 countries worldwide. (Bilete-avion). It manages a fleet of over 300 aircraftsfor passengers.(eSKY) It is also a market leader in international air transport through Lufthansa Cargo. Other major segments of the group are the maintenance, repair and overhaul by Lufthansa Technik services, air catering services by LSG Sky Chefs, and IT services through Lufthansa Systems.
2. Continental Airlines, Inc. - Continental Airlines is the world's fifth largest airline. Continental, together with Continental Express and Continental Connection, has more than 2,600 daily departures throughout the Americas, Europe and Asia, serving 132 domestic and 137 international destinations. Continental is a member of Star Alliance. (Makemytrip, 2015)

3. United Air Lines, Inc. - A leading passenger and cargo airline, United serves more than 230 destinations in some 30 countries. The airline, which also offers regional services via subsidiary United Express, operates a fleet of some 700 mainland aircraft. In addition, it leads the Star Alliance, a marketing and code-sharing group that includes Continental and Lufthansa. (Hoovers, 2015)

3. Implementation of total quality management at British Airways

In order to practice TQM, the main focus was on the British Airways transformation from an engineering based company in one dictated by the market. There are four key factors that contributed to the success of the company, namely:

1. Continuous reduction of costs;
2. Focus on providing excellent customer service at a premium price;
3. Cover growing market through alliances and partnerships;
4. Maximize return on individual flights by investing in computerized reservations. (Law Teacher)

In 1987, the year when the company was privatized, the company management believed that to be the best and to be a world-class organization, they have to use the strategies and processes that should create vision and inspire the employees to gain their trust. This could only be possible by implementing TQM program. It was implemented in British Airways' Technical Workshops. The Technical Workshops (hangars) of British Airways are responsible for the overhaul and the repair of aircraft components.

In order to be the best in this industry, the management team of British Airways Technical Workshops decided that they must win through teamwork, customer satisfaction, profitability and reputation.

Along the "path" to implement TQM, there were identified the following key steps:

1. Conducting a study to diagnose the current position within the technical workshop and reporting results;
2. Obtaining support and a full commitment to TQM concept from all levels of management;
3. Educating staff according to the principles of TQM and facilitate necessary changes in management style;
4. Changes in policies, procedures and work practices that would fit and would facilitate new organizational culture required;
5. Starting the quality improvement process;
6. Reviewing progress made and fostering a sustained commitment from all levels of the organization.

In order to examine the controversial issues and problems facing the staff, a survey was distributed among employees from technical workshops, among customers and in supplying areas. To do this, an analysis of the cost of quality was made.

The approach taken by the company in collecting quality costs was the breakdown of employees activities related to quality in three main activities, namely:

1. Anticipation - activities that provide performance "right first time";
2. Assessment - activities that check if the concept of "right first time" is done;
3. Failure - activities resulting from the failure of the concept "right first time".

Each manager or team leader was asked to make an assessment of how their subordinate staff spent time during activities related to quality. Knowing how to bear the cost of quality has had a significant contribution in educating staff on the concept and principles of TQM. It also helped of strengthening and justification of need for training personnel in accordance with TQM, to overcome any skepticism about TQM, to promote considerable debate on this issue and to ensure that the improvement of individual projects activity can be measured. (Rawlins A. R. 2008)

Data collected from the survey was introduced in a diagnostic report and seven improvement activities have been identified:

1. The way the employees view the company's management;
2. Managerial style;
3. Implementation of changes;
4. Communication;
5. Systems and procedures;
6. Facilities and conditions;
7. Attitude of employees.

They held some courses for managers for three days. These courses have conceptually explained TQM philosophy and revealed findings of the report. Managers were encouraged to submit ideas and action plans for staff involvement in improvement process. This required some changes in managing style.

Similar courses were held for all employees. Delegates of each course were taken from different areas of workshops to facilitate the exchange of ideas between departments. Quality improving groups, each involving up to 12 people, actively conducted projects for improvement.
Examples of projects: improved methods for sorting aircraft test equipment to ensure ease localization and certification control, an improved library for storing approved technical publications and a design of new measures regarding the workshop performance, so that the figures which provide performance to be meaningful and easy to understand.

British Airways Technical Workshops are recognized as the best in the aviation industry, by customers, competitors and even by British Airways itself. Benefits began to appear Two years after the launch of TQM. There have been positive changes in measures of higher level, which were used to report progress to the directorate. These measures included the proportion of components which are in good condition, the number of units that are not in good condition in the workshop and the number of units produced per month. British Airways launched their TQM program in September 1988 and by the end of 1999 the benefits of the program were visible. (Law Teacher)

It is important to note that after implementation of TQM, British Airways continued to apply total quality management on employees, the processes and customers, and the result was successful, as shown in Table 1: turnover increased by 23%, the number of employees fell by 3,153 people, increased the number of passengers who used the company's services, passenger load factor increased from 79.1% to 81.3% and aircraft fleet has grown to 33 aircraft. Although profit has declined and losses were recorded in the period 2008 - early 2010, after this date there is an important increase of this indicator.

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<tr>
<td>Turnover (£m)</td>
<td>8,758</td>
<td>8,992</td>
<td>7,994</td>
<td>6,683</td>
<td>9,987</td>
<td>10,827</td>
<td>11,421</td>
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<td>Profits (profit/loss after tax) (£m)</td>
<td>694</td>
<td>−358</td>
<td>−425</td>
<td>170</td>
<td>672</td>
<td>84</td>
<td>281</td>
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<tr>
<td>Number of employees (average FTE)</td>
<td>41,745</td>
<td>41,473</td>
<td>37,595</td>
<td>35,778</td>
<td>36,164</td>
<td>38,761</td>
<td>38,592</td>
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<tr>
<td>Number of passengers (m)</td>
<td>34.6</td>
<td>33.1</td>
<td>31.8</td>
<td>24.1</td>
<td>34.2</td>
<td>37.6</td>
<td>39.9</td>
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<tr>
<td>Passenger load factor (%)</td>
<td>79.1</td>
<td>77.0</td>
<td>78.5</td>
<td>78.5</td>
<td>78.2</td>
<td>79.9</td>
<td>81.3</td>
</tr>
<tr>
<td>Number of aircraft (at year end)</td>
<td>245</td>
<td>245</td>
<td>238</td>
<td>240</td>
<td>245</td>
<td>273</td>
<td>278</td>
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Table 1. The key trends for the British Airways (wikipedia 2015)
4. Conclusions

British Airways, founded in 1935, which is the subject of the case study, is the national airline of the United Kingdom of Great Britain, founding member of the Oneworld Alliance and one of the seven airlines that fly to all six inhabited continents.

The carrier manages a fleet of over 240 aircraft, consisting primarily of Airbus and Boeing.

Total Quality Management was implemented by British Airways in September 1988 from the technical workshops in the desire to improve and contribute to the success of the organization.

TQM program was characterized by customer focus, full participation, process improvement and process management and planning. TQM implementation process was a very long-term procedure.

Thus, in only two years of program implementation, benefits began to appear (e.g. positive changes took place in the top-level measures).

The company also had to experience many changes made on TQM program requirements and extensive market research that identified customer expectations for the standards to be served by an international airline known as British Airways.

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British Airways should focus on their quality standards

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