

How Can Companies Adapt to the Growing Competition?

Madăr Anca
Neacșu Nicoleta Andreea
"Transilvania" University from Brașov
ancamadar@unitbv.ro
deea_neacsu@yahoo.com

Abstract

Every enterprise aims to produce, sell as many products as possible, penetrate as many markets as possible, and thus get as high as possible profit. This can be accomplished by meeting customer requirements and delivering quality products. The paper presents a study conducted within S.C. Continental Powertrain Romania S.R.L., located in Ghimbav, Brașov county. This study aimed to identify the implementation of a quality strategy at the factory, in order to highlight the importance of implementing quality management in a company, but also to find results obtained from such implementation.

Key words: quality, management, strategy,
J.E.L. classification: D22, L15

1. Introduction

The superior quality of products or services offered by economic agents are basic criteria for achieving customer satisfaction and profitability. A high level of quality will lead to more customer satisfaction, often allowing cost savings, increased profitability and ensuring the competitiveness of products / services on the market

The reason for choosing this theme stems from the desire to demonstrate how important it is at present to address the most efficient quality strategies of any large organization, such as Continental Powertrain Romania, which is present in the most important markets of the world .

2. Theoretical background

The theoretical foundations of quality management have been defined on the basis of researchers and papers elaborated by scientists starting with the 1950s.

Quality management is a way to ensure the competitiveness of products and services and, the credibility of companies on the market. (Rondelli V., Cojocariu S. 2004, p. 11).

Currently, quality management is the major business development objective. According to Drăgulănescu N., Drăgulănescu M. (2003, p. 63), the quality management system is a management system that guides and controls (introduces and maintains) an organization in terms of quality. In order to make known the benefits of implementing this system and to help the economic organizations to implement it, in 1988 the European Foundation for Quality Management (EFQM) was established, through the participation of 14 major Western industrial enterprises (Drăgulănescu N., Drăgulănescu M. 2003, pg. 93). This foundation seeks to strengthen the position of European industry on the global market by improving the quality of products, services and processes.

The concept of "strategy" (etymologically comes from the Greek "strategos" = the art of combining) or "spotlight" is the combination of the major objectives that the enterprise intends to achieve and the necessary means.

Quality assurance strategies are a priority in both the company's diagnosis and its strategic approach (Todoruț A.V., 2007, p. 76).

The quality of the products and services is an objective of the company in the market strategies, but also a way of action throughout the design, technological preparation, production and service processing, control through inspections, analyzes, tests, product distribution and maintainability service.

Competitive strategies describe how the company seeks to gain advantages over competitors. Through its quality strategy, the company's management aims at: meeting the requirements of the beneficiaries and social needs; establishing the quality level in accordance with the requirements of the market and competitiveness requirements; integrating quality into the company's mission and goals; changing the mentality of the personnel regarding the assurance of the total quality, the processes, the products and the behavior of the human resources (Todoruț A.V., 2007, pg. 76). To be more competitive and offer customers reliability, the producers have to implement their own quality strategies, so they are investing in new technologies, in the implementation of quality standards and wish to obtain strong certifications, with a high credibility on the market (Neacșu N.A. 2017).

3. Continental Powertrain Romania company

Continental Powertrain Romania S.R.L., the subsidiary of the German group of the same name, is a privately-owned industrial unit whose main activity is the manufacture of other parts and accessories for motor vehicles and motor vehicles.

Starting with October 1, 2013, the Fuel Supply trade unit, part of the Continental Powertrain Division, has begun production of high-volume fuel pumps in Europe. The global automotive supplier has built a new factory for fuel pumps and fueling units in Ghimbav Industrial Park, Brașov.

In Romania, the company owns 7 legal entities with a total of 14,000 employees in March 2018 with total investments of approximately 175 million euros in 2017 (<https://www.continental-corporation.com/ro-ro/presa>). In Brasov, Continental is in Ghimbav industrial park. 40 million euros were invested in this factory, with 22,000 m² and 1,200 employees.

Every vehicle powered by an internal combustion engine has a fuel supply unit. In contrast to the injector pump on the engine, the fuel supply pump is in the tank where the engine is constantly supplied with fuel under all driving conditions, including when the tank is almost empty and in curves or bumps (in climbing or descending).

Innovative solutions, such as brushless fuel-based pumps (also manufactured in Brașov), make a major contribution to increasing energy efficiency and thus reducing the CO₂ emissions of a car.

Continental's main customers include: Ford, Volvo, Audi, Bmw, Volkswagen, Jaguar, General Motors, Peugeot Citroen, Kautex, Daimler. Inergy, Plastic Omnium.

Continental's leading suppliers include: Domel, Gessmann, Stuken, VolaPlast, Wix Filters, Thomas, Hengli, KE Elektronik, Lorom, Theo Hillers GmbH, Kalfmann Industries, Schlemmer, Pollmann, Frankische.

Continental has begun production of large volumes of fuel pumps only in 2013. But there are other companies that produce these pumps and which represent the competition for Continental, which is relatively new in this field. Some of Continental's biggest competitors are Bosch, Daniken, Magna, VDO, Delphi, TI Automotive and Pierburg.

The cumulated turnover of the seven companies that make up the Continental Group in Romania in 2016 increased by 14% compared to the previous year, to 2.3 billion euros or over 10.2 billion lei. If all seven divisions were concentrated in one company, Continental would rank third among the top companies in Romania, after Automobile Dacia and OMV Petrom (<http://www.zf.ro/companii/continental>).

Worldwide, Continental's Romanian business accounted for 5.9% of the total turnover of the German concern in the year 2016, of 39.2 billion euros.

Continental Romania plans to invest over 160 million euros in 2018. Of these, the largest are planned in Timisoara, Sibiu, Brasov and Iasi. Among the new projects developed by Continental in Romania last year was the expansion of the electronic component factory in Timisoara.

Continental's 2016 results show that the German car group has invested in that year 170 million euros in its operations in Romania, with a total investment value of 1.2 billion euros for the period

1999-2016. Regarding Renault Romania Group, total investments in Romania amounted to 2.5 billion euros in 2000-2016 (<http://0-100.hotnews.ro/2017/05/03/continental-a-devenit>). In addition, last year, the company added 1,000 more employees, reaching a total of 17,500 people, very close to the Renault Group, which has a total of 18,000 employees. In the company, nearly 5,000 engineers develop products and software for future mobility.

SWOT analysis is a strategic, flexible and easy-to-use analysis tool that an organization or project team uses to identify the most appropriate action directions. The purpose of the SWOT analysis is to achieve a strategic plan or to find a solution to a problem, taking into account the internal and external factors of a team or an organization.

Figure no. 1. SWOT analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">- Main major investments in the automotive sector in Romania, but also in the production of fuel, attract sub-assemblers, components and fuel manufacturers and generate the expansion of those located most active in the automotive industry;- The existence of a history in the production of cars- There is a traditional machinery and pump industry at the pump, highlighted by the production of high complexity components- Cheaper workforce than other CEE countries;- The level of car ownership is lower compared to the rest of Europe, which highlights an emerging market;- Strategic positioning of the Competitiveness Pole, offering advantages for component and fuel manufacturers delivering in both directions: Romania and the rest of the European Union;- Existence and development of high added-value activities in multinational suppliers' production units.	<ul style="list-style-type: none">- The limited decision-making of Continental production units affects the inertia of creating a critical mass of the Competitiveness Pole;- The lack of skills required by the automotive industry to train staff- The lack of skills in the field of product testing open to the public that would accelerate local supplier development and reduce spending and reduce time for Continental.

OPORTUNITIES	THREATS
<ul style="list-style-type: none">- The real economic growth rate of Romania (which is slowly but steadily increasing) will lead to the recovery of domestic vehicle sales in the coming years;- Increasing the import taxes for non-European producers will positively affect the import of finished units from Romania to the EU- Trends of "outsourcing" for the certain activities from multinational suppliers to the local firms;- The cost pressure of the global automotive industry combined with Continental's strategic positioning, creates a positive environment for focusing on local suppliers and leads to local firms' capabilities.	<ul style="list-style-type: none">- The exports in Romania will generally be linked to the economic recovery step in other European countries;- The fluctuations in the foreign exchange rate in Romania make prices unpredictable for importers and exporters,- Continuous salaries growth in the automotive industry may affect competitiveness in the medium and long term.- The consumer market for new cars in Romania is affected by the reduction of the taxes on imported second-hand cars, but also by the fuel price;- The tendency of lagging behind the capacity of the education system to deliver staff and especially highly qualified staff;

Source: Authors' contribution

4. The continuous improvement of quality strategy implementaion, by developing a local testing center

Continental, one of the world's largest automotive suppliers and the world's leading tire manufacturer, inaugurated a research and development center in 2016. The company develops intelligent technologies for the mobility of people and their goods. As a trusted partner, the international auto parts supplier, tire manufacturer and industrial partner offer sustainable, safe, comfortable, individual and affordable solutions.

Hence, the company's interest in adopting the most innovative quality strategies that allow the elimination of scraps and the manufacture of high quality products.

That's why the Ghimbav unit has opted to implement a test center as close to the unit, a center that allows it to increase the quality of the manufactured products, but also to increase the customer's trust.

By implementing this testing center, the company has set itself the following objectives:

- Cost optimization by reducing losses caused by non-quality
- Elimination of transports to the Testing Center in Germany
- Optimizing the delivery time of the goods to the customer
- Reducing complaints about delivery delays
- Eliminate the possibility of delivering non-compliant parts directly to the customer
- Detecting inefficient processes
- Creating a long-lasting relationship with the client
- Creating a favorable image on the market
- Elimination of return costs
- Removal of costs with additional inspection
- Improving working methods

Having this test center provides a favorable position on this market compared to the competition that does not yet have such a center.

The company's management argues that the main reason why this investment was made is strictly related to the quality of the manufactured products. Being a company that focuses on quality and not on quantity, it considered that it is appropriate to take advantage of such a center.

Until this investment came to an end, the components produced by Continental were tested only in German laboratories. For this reason, it has dwindled the cost of transporting products to the test center in Germany, which has the effect of eliminating customers' waiting times. Continental also has such centers in India, China and the US, but the testing and development center in Braşov benefits from the latest and most complex equipment in the field and can perform a wide range of tests, from performance parts tests as well as analysis of fuels. The equipment at this center is state-of-the-art, produced in Germany by renowned companies in this segment. Implementing such a quality strategy also minimizes the cost of customer complaints, as well as insights into an external inspection or return on products.

The project for the construction of this center was started in August 2015, and today the Braşov center, which stretches over an area of 1,800 m² near the Continental Ghimbav factory, is the most modern and complex center of its kind in the company, with a number of 60 specialists in the field of automotive engineering.

The center is divided into several rooms where various tests are performed on the components produced by the company. At this moment, four kinds of fuel pumps (diesel, gasoline, with brush and without brush) are produced at Ghimbav, which, from the point of view of plastic casings and various related components, is a variety of several dozen models, and in time will reach hundreds of models.

The parts manufactured by Continental Romania will enter these test rooms in order to be verified so that they meet the requirements of the customers. One of the special rooms is "Vibration test room", where the pieces are subject to extreme tests. The pieces are subject to mechanical shocks, for example, to simulate what happens to them on a road with holes, both when the pieces are mounted on a vehicle and during the transport of these parts.

Also in this room is tested the aging of the piece, you can see what happens to that piece after 10 years, if it still meets the same standards from the beginning in terms of quality and performance, which delights the company's customers.

At the same time, in another room, the parts are tested from a climatic point of view, and in the special equipments, the parts are subjected to thermal shocks. In the thermal chamber, in one second, the piece switches from a temperature of +80 degrees Celsius to a temperature of -70 degrees Celsius, so that it can be seen how the component behaves at such a thermal shock.

Last but not least, in the center of Ghimbav there is also a fuel management area, which in terms of complexity is the largest in the company. Here the parts are tested with various types of fuel, as if they were mounted in the tank of the machine. The last component of this center is a functional room where the new Continental product will be tested on the catalysis side, which will enter on the production line of the Ghimbav factory from next year.

It is clear from internal sources that the entire investment would have reached €6 million. Although the investment was a fairly expensive one, the factory management claims that it was absolutely necessary because the cost of return, penalties, or transport to the test center in Germany was high, and after the center was put into operation, they were expected to diminish.

5. The implementation results

According to internal sources, this investment has reduced the cost of transporting parts to a test center in Germany in a proportion of 100%. At the same time, lowering these costs has reduced the cost of customer complaints and implicitly those shipping costs with the return of nonconforming products from the customer, supported by Continental. According to these sources, the Continental Group, by concluding all contracts with its customers, undertakes to bear all costs by returning all products that do not meet the customer's quality / requirements.

Therefore, the decision to invest in a testing center as close as possible to the factory in Braşov County was beneficial for both the Ghimbav plant and all the other units in Romania. Inside this center are tested all Continental products manufactured throughout Romania. Thus, we can deduce that all the additional costs that were recorded by the transport to the test center in Germany were reduced locally, respectively for all Continental units in Romania.

This center was put into operation in the autumn of 2016, and company specialists claim that it has produced exceptional results in reducing the number of complaints received monthly.

The fact that the pieces, before being sent to the customer, pass through a performance testing center that allows identification of the nonconformities at the right time brings a significant decrease in scraps.

6. Conclusions

In a continually moving world where the ability to be one step ahead of the competition is crucial, quality plays a leading role in the strategy of any organization. When continuing development promotes globalization by reducing distances and removing borders, and consumers have access to products for any market, the pressure on organizations in different areas to decrease costs and improve their products, services and processes, increases the quality of goods or services the organization to be competitive on a global scale.

This paper highlights the fact that the issue of quality improvement, although not an absolute novelty, represents and will always represent a current topic and concern of any organization regardless of the type of activity it performs or the industry in which it operates .

Continental Powertrain Romania is now able to offer safe products that have been subjected to tough tests so as to offer much longer durability. It turned out that the decision to invest into a testing center in Romania was beneficial for all Continental units across the country.

Therefore, it is important that there are industries in the Braşov market which are constantly concerned with the increase in the quality of the products / services they offer, as they can indirectly contribute to the growth of small local entrepreneurs who are interested in the success of global organizations.

7. References

- Alecu B. 2016. *Continental has passed 2.3 billion euros. In four years, Romanian companies of the largest exporter in the auto parts industry increased by one billion euros, and the number of employees doubled to 16,500 people.* [online] Available at <<http://www.zf.ro/companii/continental-trecut-2-3-mld-euro-patru-ani-afacerile-romania-celui-mare-exportator-industria-componentelor-auto-au-crescut-miliard-euro-iar-numarul-angajati-s-dublat-16-500-oameni-continuum-15265761>> [Accessed 26 April 2018].
- Drăgilănescu N., Drăgulănescu M. 2003. *Services Quality Management*. Bucharest, AGIR Publishing Hous.
- Mitrea A. 2017. *Continental has become the largest employer in the Romanian automotive industry. Expansion continues with another 1,500 new jobs in 2017.* [online] Available at <<http://0-100.hotnews.ro/2017/05/03/continental-a-devenit-cel-mai-mare-angajator-din-industria-auto-romaneasca-expansiunea-continua-cu-inca-1-500-de-noi-locuri-de-mu>> [Accessed 26 April 2018].
- Neaţu N.A. 2017. Implementing quality strategies to increase competitiveness on mineral waters' market, *Bulletin of the Transilvania University of Braşov Series V: Economic Sciences*, Vol. 10 (59) No. , p. 104.
- Rondelli V., Cojocariu S. 2004. *Quality services management in tourism and hospitality*. Bucharest, THR-CG Publishing Hous.
- Todoruţ, A.V. 2007. *Quality Management. Theory and Practice*. SITECH Publishing House, Craiova.
- Press release. 2018. *19,700 Continental employees in Romania are working for the future of the automotive industry.* [online] Available at < <https://www.continental-corporation.com/ro-ro/presa/comunicate-de-presa/19-700-de-angajati-continental-din-romania-luceaza-pentru-viitorul-industriei-auto-123966> > [Accessed 26 April 2018].