ABSTRACT

of the thesis

TITLE: ASPECTS CONCERNING THE RELATIONSHIP: STRATEGY – QUALITY MANAGEMENT – PRODUCT PERFORMANCE (APPLIED TO THE COMPANY NETAFIM).

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The external environment of a company includes in its structure events, which alongside the technological and the economic aspects, may affect the achievement of organizational goals. As a result, leaders of organizations developing their specific business strategies that refer to environmental elements. One of the most popular is Porter's generic strategy [74], which ranks business strategies into two large groups, from the point of view of leadership:

- Cost leadership strategy;
- Differentiation strategy.

The cost leadership strategy suggests an internal orientation through which a company focuses on operational practices that produce the lowest cost in that field. Practicing the lowest cost may lead to premises of a diminished level of quality to market requirements, which may result in loss of customers.

The successful implementation of a **differentiation strategy**, on the other hand, allows company products to meet the differentiated needs of customers on the market, better than other strategies.

The value added to a product such as the services of a certain quality for customers, a modern technology and an efficient distribution network, enable the company to fix a price higher than the average market prices. Manufacturers using the second type of strategy have higher costs than competitors – the relative advantage being derived from the price of the product [74]. The perspective of the company, based on the use of resources, takes into account the fact that the basic elements of the company strategy are the result and the accumulation of resources and

organizational capacities [79]. At the same time, it requires the practice a quality management able to control the manufacturing processes

The research aims at understanding the relationship that exists between quality in a company in terms of addressed strategy and its effect on product performance given the practice an efficient quality management.

The research consists of a survey on a sample of 220 company customers fully. The research model will include the following:

- Setting the surveyed population size and determining the sample size;
- Sampling;
- Setting the model attached to the population;
- Independent variables;
- Dependent variables.

The study is based on the link between performance, quality management and competitive strategy.

Performances are highlighted by:

- 1. Customer satisfaction;
- 2. The amount of annual sales / turnover of the company.

Quality management is assessed through two components:

- 1. Cost of the product;
- 2. Focus on quality of the product.

Competitive strategy is assessed at three levels: internal relations, external relations and time.

In the application part of the thesis, the performance measurements included customer satisfaction and the national value of sales of six main products; three of them are defined as products made in mass production, and the other three are defined as products produced in small series. All selected six products are used by customers to meet the same needs.

Understanding the competitive market becomes part of the customer requirements and is therefore very important, since companies have shifted the emphasis from product to the customer.

Customer satisfaction is difficult to follow because there is a satisfying effect in keeping a customer.

Customer retention is a major challenge for the manufacturer, since a client can change the supplier on the basis of a lower price alone. [52] Given the high costs involved in recruiting a new customer it is very important to focus on parameters such as customer satisfaction. [88]

The study is carried by taking into account three different scenarios:

- 1. The first hypothesis relates to quality management practices and to company performance; related to this hypothesis, there are two distinct approaches.
- 2. The second hypothesis is the research hypothesis, with reference to the competitive strategy
- 3. The third hypothesis focuses on the effect of interaction between the company strategy and quality management and their impact on performance.

Thus, a fundamental understanding of the factors that influence customer satisfaction is essential for trade. Moreover, the need for research into customer satisfaction / dissatisfaction was accentuated by the growing demand for long-term profitability of traditional companies.

The considerations on the overall structure of the thesis look at several issues.

Buyer satisfaction generates the idea that a customer is satisfied when they purchased a product that best meets their specific needs. This study seeks to discover and formulate the concept that the quality of products is correlated with the strategy and performance of the company in terms of sales. The study is divided into two parts: the first deals with the quality of the final product, the second with the manufacturing strategy of the company. These two aspects converge towards a third area, namely company profitability. This structure of the study allows the separation of each part and its discussion in depth as a separate block of information and analysis; then creating some connections between all the segments and addressing joint and inclusive conclusions.

The discussion and findings of the researcher can thus highlight the relationships between quality and company sales performance, and the relationship between company strategy and these performances. The findings may eventually indicate a common substrate between the three aspects of the study: product quality, the company's strategy and its sales performance.

The study undertaken is similar in many respects to a puzzle consisting of complementary aspects, one of them, sales performance, having both an intrinsic value but also serving as an element that combines the other two parts into a whole and thus completes the overall picture of research. In this way, the quality level and the strategy level are supported by the performance level and exerts at the same time an impact on it. The three sections of the study, performance, quality and strategy, act as a unit and describe the results in a comprehensive and exhaustive manner. They reflect in this way the essence of the directions on which the research is based.

Chapter 1. COMPANY'S STRATEGIC SYSTEM addresses issues related to the concept of strategy in a company, and its mode of action. The fact that any strategic system contains in its structure sub-strategic systems, and that any strategic system may be part of a strategic system fully constitute grounds for understanding that implementing a strategic system has both implementation, and administration and exploitation difficulties, especially at the start. The very concept of system makes the process of interaction of its elements, as well as building new interaction relationships between components, be disturbed by factors of external environment, or even internal factors; moreover, any strategic system has a historical character, taking into account the fact that it incorporates elements that were accumulated during its existence. These modelled balanced and sustainable relationships of various values of the system structure, generating new driving skills and the partial or complete restructuring of the technical and economic system. The changes required by a new strategy, can however generate so-called counter-intuitive offers. A chapter is devoted for the presentation of the most representative competitive strategies and most relevant performances used when creating the strategies. The end of the chapter addresses customer satisfaction issues as an essential element of business strategy.

Chapter 2. *THE QUALITY MANAGEMENT SYSTEM*. In human history, when it comes to quality, one can divide it into:

- The era of industrialization;
- Post World War II era.

To understand the quality status, we must turn to the formulation of professions. When people started forming communities and building cities, the need to respond to the growth and specific wishes of society led to the formulation of professions. Each art had a craftsman. This artisan was the only one skilled in that art, and transmitted his skills to his successor, usually from father to son. Around the XII century, when cities expanded, three artisans joined into associations to achieve each product. It represented the appearance of guilds, which controlled the professional conduct of their members. At the beginning of the twentieth century, on the other side of the

Atlantic, following the Industrial Revolution, the craftsmen of the United States became workers in factories and foremen became supervisors. Americans, following scientific management methods developed by Frederick Taylor, Henry Fayol, and the fundamental concept of productivity of Henry Ford, were able to achieve economic growth, increasing production volume at the expense of product quality.

The English statisticians' school, founded in the early twentieth century, spurred further development of statistical quality control. In 1932, Shewhart was invited to London University to teach courses in statistics and, within them, he suggested the first tools of statistical quality control, namely control charts. It can be said that this was the first systematic approach to quality or the birth of modern quality control.

The period after the Second World War, during periods of peace in the world, the West and East were found in completely different positions. In America, the economic environment was dominated by a "command economy", in which any product was sold immediately after production. The productivity method and promoting quantity instead of quality represented a machine properly adjusted and there was no cause for anxiety. With the loss of market shares, Americans and Europeans have noted the importance of quality assurance methods. By that time, quality was seen as a purely engineering procedure. In the 80's, Western management realized the vital importance of total quality, that means quality control throughout the entire company and the need of active and total participation of management and employees in the control process. In this business context, each manager of each department and each employee was responsible for results and deliveries. During this period, many theorists tried to develop a synthetic or holistic theory of quality management. Theories and practices taken from Japan were combined and then the term Total Quality Management (Total Quality Management) was used instead of Total Quality Control (Total Quality Control). In addition, at the time, awards for quality were established in the United States and Europe, to promote further the use of quality movement in Western industry.

In this chapter the author deals with the following issues: the relationship between quality management – the competitive market; the relationship between quality management – financial results; the relationship between quality management – services; and strategies oriented towards total quality management.

Chapter 3. *THE RELATIONSHIP STRATEGY* – *QUALITY MANAGEMENT* – *PRODUCT* PERFORMANCE refers to the chain services – profit and to the chain customer satisfaction – profit. The author shows in a documented manner that the serious problem due to lack of consensus on the definition generates the impossibility to interpret and compare empirical results.

After the study on customer satisfaction, the author

- 1. Recommends a framework for defining customer satisfaction on the basis of common elements in the specialised literature and consumers' opinions.
- 2. Discusses how this framework can be used to develop a definition of satisfaction that can be adapted to different contexts.
- Ensures that satisfaction definitions concur with the views of consumers, since it is important to understand the meaning that consumers give to satisfaction, and consumers need to understand the meaning of this term when it is used ...

The specialised literature and consumers' opinions about satisfaction – the specialised literature contains significantly different definitions of satisfaction, but all definitions have some common elements; three general components can be identified:

- 1) Consumer satisfaction is a response (emotional or cognitive);
- 2) The response relates to a particular central point (expectations, product, consumer experience, etc.);
- 3) The answer appears in a certain moment (after consumption, after the choice, based on accumulated experience, etc.).

The author shows that some of the literature focused on identifying the components of services' quality and customer satisfaction for establishing connections between customer satisfaction and performance in sales. He adds that according to Banker and Mashruwala (2009), it is important to understand what levels of customer satisfaction mean for the economic success of the company, while other authors focused on understanding the economic results of customer satisfaction and presented evidence that customer satisfaction has a positive impact on sales revenue, market share and behavior on purchase intention of customers. In addition, it is important to determine which aspects of services influence the dimensions of customer satisfaction, which have maximum impact on sales revenues. In the end of the chapter, the author determines a direct relationship between quality management – product performance – value of annual sales.

Until recently, the primary objective of most companies has been to focus the largest part of their resources and investments towards winning new customers, hoping to increase market share; in the last fifteen years, however, there was a new theory according to which theorists note that a significant drawback of a strategy that focuses solely on winning new customers is that current customers feel neglected and the possibility to move to a rival service provider is more significant.

Chapter 4. CASE STUDY. NETAFIM CORPORATION. It is the chapter in which the author focused the studies developed in the thesis. The corporate structure is presented in detail, the related departments, representative processes and assortment manufacturing programs, and the sales programs that were the subject of research of the thesis' author.

Chapter 5. RESEARCH METHODS. In this chapter, the author describes the aspects of the research method used, and the sampling of the population of beneficiaries analyzed. The questionnaire was distributed to customers who have purchased products of the Netafim company; before completing the questionnaire, the customers read the introduction and were informed of the purpose of the study. The estimated time of completion of the questionnaire was about ten minutes.

The research sample: The research sample included 360 customers who bought products of the Netafim company. The initial research population included customers worldwide. Most customers in the survey sample, 92%, come from the agricultural environment. This figure represents the percentage of customers based in Israel. The second largest percentage of customers represented in the sample, 8%, come from the agricultural environment located abroad (outside of Israel). The customers in the survey sample had an average of 7 years experience relations with the company, the oldest customer having a history of 13 years, and the newest customer, one year. 63% of customers sampled have an experience shorter than 7 years. The design and structure of the questionnaire highlights the link between product performance, quality management and competitive strategy.

After processing the results, several hypotheses yielded, which the author interpreted. IT BECOMES CLEAR THAT AT THIS STAGE OF EVALUATION OF THE RESULTS, FOLLOWING THE INCLUSION IN THE TEST OF THE PERCEPTION OF COMPANY'S STRATEGY, THE CUSTOMER SATISFACTION APPEARS

RELATIVELY LOW COMPARED TO THE DEGREE OF INFLUENCE OF THE QUALITY PERCEPTION AND PRICE LEVEL. SIMILARLY, ONE MAY NOTICE THAT THE PERIOD OF THE BUYER AS A COMPANY CLIENT AND / OR THE FREQUENCY OF HIS/HER PURCHASES DOES NOT AFFECT THE DEGREE OF SATISFACTION FELT.

Chapter 6. RESEARCH RESULTS. The chapter presents the results of research conducted for each individual hypothesis and the directions necessary to analyse the company's performance: *Frequency of purchase* – the typical duration between orders of company products. This frequency is measured using a single question, using a line with 4 options: daily, weekly, monthly or minimum frequency.

- The company's product satisfaction the satisfaction will be measured using a single question (in relation to each product, as described below), using a scale of 4 answers, where 1 represents a low satisfaction level and 4, the maximum satisfaction.
- *Quality Management* (independent variable): As mentioned above, the perception of quality of two key issues: the perception of product quality and the perception of price, which is measured as follows:
 - *Quality Perception*: perception of product quality will be measured by two questions (in relation to each product separately, as it will be explained later). First, a direct question regarding the estimation of product quality. The second question related to quality will be if the purchase decision is the effect of quality. In both cases, the problem will be measured using a scale of 4 answers, where 1 represents a degree of lower quality and 4, high quality.
 - Price Perception will be measured by two questions (in relation to each separate product, as it will be explained later). First, a direct question regarding the estimation of product price compared to market prices. The second question, the price will be examined in a more indirect way, namely if the purchase decision is the price level.

In both cases, the problem will be measured using a scale of 4 answers, where 1 represents low prices and 4, high prices.

CONCLUSIONS AND CONTRIBUTIONS.

Although there is a unanimity of views on the understanding that a company's performance, resulting in the turnover and production volume valued on the market, depends on the interrelationship between strategy and quality management, these issues are dealt with separately in most companies. The purpose of this research is to seek to expand understanding of the relationship between the quality management within the company, its strategy and their effect on the performance of the company.

To date, few scientific studies have been conducted to identify the size of quality and of detailed aspects of services and relations between the size of quality management and customer satisfaction. To understand better customers' satisfaction in relation with the performance of products, in the case of the Netafim Company, the following questions can be formulated:

- Do quality management, satisfaction and customer needs contribute to and are they reflected by the company's performance?
- 2. Does multidimensional strategy affect company performance?
- 3. Do management quality and competitiveness strategy affect company performance on the whole?

The proposed research highlights understanding of the relationships between the quality in a company from the point of view of the strategy approached, and its effect on product performance, given the practice an efficient quality management.

Given the very extensive research issues, this study responds only to certain elements of essence. The aim of the study is to gain a deeper understanding of how product performance generates customer satisfaction in the context of quality and competitive strategy of the company, and how they affect the value of product sales. Thus, in this research, the link between quality management, competitive strategy and product performance was verified in terms of customer satisfaction and annual volume of products' sales (turnover).

The selection of customers was made by the researcher, corresponding to the order of six major products, separated according to the mode of production (three of which are defined as products manufactured in mass production, and the other three are defined as products produced in small series), and then according to the complexity and the scope of their production.

Personal contributions

With the aim of setting up an innovative approach for achieving optimization of quality cost, we propose a new approach by quantum-physics, which claims that an experiment performed on one particle and conducted differently several times, gives different results depending particle behavior. We claim that quality cost optimization is achieved by various estimates and consumer conditions. We therefore propose preliminary product tests which aim at determining the quality of the product and which depend on different conditions existing in every test and by every consumer, by reference to Alan Forrester' [25] "decision theory and information dissemination in quantum physics".

The research reveals that customer satisfaction, when it comes to products manufactured in small series, mainly depends on the quality and extent of its impact on the purchase intent of customers, but also on the price and its effect on the purchase intent, but to a lesser extent. When it comes to products with lower market demand, the model reveals the strategic influence of the time dimension. By contrast, when it comes to low complexity products, there is also a considerable influence of the external perception of the company's strategy.

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