# The Quality Performances of the Products – A permanent Preoccupation of the Companies

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#### Abstract

A very important element is for one to understand the fact that products satisfy certain consumer needs. Thus, the offering company, knowing consumer exigencies, will orient its activity according to them, the role of *the primordial character of the request* being essential in the strategic orientation of the company.

Under the conditions of globalisation and the increase of the importance of information for the modern consumer, the people's exigencies regarding the household appliances will be more and more focused upon the unrestricted access to information, one of the premises of the international society.

**Keywords:** product, intelligent house, efficient refrigerators

#### Introduction

Companies are obligated nowadays to cope with the present economic and social environment, the integration of marketing in their activity being, thus, the most appropriate way for a modern and profitable management. Moreover, they must take into account the fact that, at this moment, there are problems related to:

- the accentuation of competition at a global level;
- the existence of an economic stagnation or recession in some countries;

- complex changes at the level of consumption markets (the increase of the number of employed women, smaller families, the diversification of lifestyles, late marriages) and of business markets (the superior quality of goods, their faster delivery, the reduction of the product lifecycles), that accelerate the dynamism of modern market;
- the increase of the exigencies regarding the level of training of the work force;
- accomplishing an integrated system of quality and environment,
  correlated with the norms for security and occupational health;
- the increase of the differences between the population with large incomes and the one with small incomes;
- the reduction of the work force in many sectors, as a consequence of automation, robotics;
- the transition to the market economy of the Eastern Europe countries, a process that is complex, difficult and long;
- creating a favourable company image.

Marketing will give managers the specifics techniques and instruments to be able to get a market study that is as complete as possible, so they can afterwards establish a certain strategy that offers the company a favourable position on the market and has a certain competition advantage. The specific marketing activities (market research, the analysis of consumer behaviour, the policy regarding the product, price, distribution, promotion etc.) will be correlated with all the other business activities (research-development, production, commercial etc.), all being applied by the management functions (planning, coordination, execution, control, regulation).

The offered products and services, the improvement of their quality, are a permanent preoccupation of the companies in order to establish the marketing strategies. An element of great actuality, harmoniously integrated in the future society and that must keep in mind is the development of home automation.

## Results and Discussion

Home automation represents a stage in full ascension, which leads to the increase of the quality of life and the rational use of the existing resources. One prefigures the gradual transition to automated electronic devices that can be controlled and commanded from distance,

due to the artificial intelligence they will possess and the ability to communicate through a network.

Modern man has rapid access to information from all over the world, as a consequence of the new technologies from the area of telecommunication, communication environment, the types of transmitted information and the equipments. The technologies of information and communication will affect the individual way of life, having a powerful impact upon work, education, science, health, spare time, transportation, environment and also other areas of daily life. The home is the environment in which a large part of our life takes place, being necessary to integrate it in the global system of the information society. The "intelligent" house will offer multiple connections to information highways, so, alongside the phone line, radio waves, TV cable, new means of communication will be available, such as optic fibre or infrared radiations, which will be used for communication. The intelligent house will offer access to electronic services, which are: telework, telemedicine, teleeducation, telegoverning and e-commerce.

Connecting the house to the information highways will also give the possibility of supervising and controlling the household appliances and devices from distance.

Due to the recent improvements, through the use of specialised microprocessors and of some concepts that are specific to automation (such as feedback and fuzzy logic), the household appliances, based on the information that is received from sensors, will be able of establishing their own optimum functioning regime.

The use of specialised microprocessors that are based on fuzzy logic is limited only to some groups of products: washing machines, vacuum cleaners, microwave ovens.

In conclusion, the apparition and application of home automation represents a premise for the increase of the quality of life and the change of lifestyles. Microprocessor systems, that reduce human intervention at minimum, are at the basis of more and more household appliances. Home automation also brings the possibility of supervising all the household appliances from great distances, through the communication networks.

Currently, the fierce competition from this area causes the producers of household appliances to organize their own laboratories of research and innovation, in order to discover and create new models that can be more and more efficient and attractive regarding their qualities.

All the companies that produce refrigeration equipment have common preoccupations regarding the following quality characteristics: no Freon; "No Frost" system (without ice – the cooling is achieved using streams of cold air, that do not allow the forming of ice in the refrigerator); a separate control for the refrigerator and freezer; electronic temperature control; LCD display; automated defrosting; acoustic and optic alarm when the interior temperature is not achieved and when the door is open for more than one minute; a warning signal for power shortages; programming the temperature according to the food that must be preserved and that also indicates the deadline until which it can be eaten; reversible doors; interior illumination; shelves that are light, transparent, adjustable etc.

In order to exemplify the newest and most modern particularities of household appliances, we have selected a group of products, namely refrigeration equipment.

The south-Korean corporation *Samsung* presented, at the Consumer Electronics Show (CES) in Las Vegas, a refrigerator that allows the clients to access the Twitter micro-blogging site.

The clients can visit the portal and can also use the eight inch multi-touch screen in order to access the Pandora music service or Google Calendar, according to *Daily Business*, citing Mashable. This refrigerator that is considered revolutionary allows the members of the family to leave messages check the temperature outside or inside the refrigerator or access culinary recipes.

The Arctic company, a part of the Arçelik group (Turkey), through the *Beko* brand, invented an ingenious technology, *Smart Blue* and integrated it into a new and complete variety of household appliances, which includes refrigerators, washing machines and dishwashers. The *Smart Blue* technology is based on the blue light which, integrated in a unitary set of functions and programmes, significantly improves the quality of life.

The Active Fresh Blue Light function of the Smart Blue refrigerator, by the specifics of the blue light, which is permanently active inside the fruit and vegetable compartment of the refrigerator, maintains the photosynthesis effect in that area and preserves the freshness, vitamins and nutritional properties of the fruits and vegetables for a longer period.

The *Infinity I-Kitchen* refrigerator, launched in Brazil by the *Electrolux* company, has the *touch screen* on the door as a particularity.

The interface of the *touch screen* of this refrigerator is efficient due to the GNU/Linux operating system. Even back in 1999, the Electrolux Company launched *Screenfridge*, a refrigerator that helps the user maintain a detailed record of what he buys the menu for dinner, the food that is still left in the fridge. This refrigerator can also work as a message service for the entire family. This household appliance can be considered among the first *intelligent household appliances*.

Furthermore, Electrolux has organized its own design laboratory, through which it annually attracts talented young designers from across the world, as a result of organizing a competition for innovations. Consequently, during the last few years, *Electrolux* has managed to amaze the world with some concepts that integrated "entertainment" devices and online tools, such as *Rendez-vous*, *Volare* and *Heart of the Home*.

In 2010, Electrolux presented the concept of an application that supports the user when trying to control nutrition, through which the users can observe the quantity of food they buy and reduce the quantity of unused food.

Moreover, Electrolux is involved in several countries in projects that test systems for intelligent household appliances, respectively energy systems that can communicate with the appliances in order to detect and automatically stop consumption in the peak periods of the day.

The *Infinity I-Kitchen* refrigerator was very well-received, both by the tech-savvy community and by many inhabitants of Brazil that also acquired it. This refrigerator follows the trends in the technology of household appliances and has a special feature the application that contains over 600 sophisticated recipes that were published in collaboration with a famous Brazilian magazine. The menu is grouped in seven different categories, from hors d'oeuvres and main courses to light menus and cocktails, offering the users the flexibility of deciding their own menus for the meals.

Again with the help of the *touch screen* panel, anyone has access to programs such as *Notes, Calendar* or *Telephone Information*. The display may also work as a digital frame with a slide show. The refrigerator also has intuitive commands and a versatile compartmentalization. The "Express" space can be used to cool drinks and desserts a lot faster, while the "icemaker" produces ice without the need for hydraulic connection.

This product was inspired by the "*Electrolux Infinity*" refrigerator, which received awards in three international design competitions: "iF Design" (Hanover), "Good Design Award" (Chicago) and "Brazilian Home Museum" (Sao Paulo).

Using the *Whirlpool* refrigeration equipment, as a consequence of applying the 6<sup>th</sup> Sense for Freshness Control technology, consumers can have their food as fresh as the day they bought it for up to four times as much. Through this new freshness control technology, the refrigeration at a correct humidity is guaranteed in the entire interior, giving the possibility of keeping food fresh up to four times as much.

The 6<sup>th</sup> Sense for Freshness Control with the Activ0° System from Whirlpool is available both for individual refrigerators and the incorporated ones.

Activ $0^{\circ}$  is a system that is dedicated to meat and fish. Two sensors ensure a constant temperature of  $0^{\circ}$ C, the ideal level to keep the taste, aspect and nutritional value of these types of food.

Whirlpool, along with Microban, the market leader in antibacterial solutions, has developed an antibacterial system of air filtering. It is the best available technology, which protects food and helps remove bacteria and odour. This innovation is available in all the products with ventilation or Multiflow system.

The filter consists of a polymer layer that has the *Microban* antibacterial system.

The antibacterial filter has been successfully tested and approved by a famous German laboratory – "LGA".

Could we imagine replacing the classical refrigerator with shelves and a freezer, with a special gel that can keep food fresh with almost zero energy consumption?

The refrigerator of the future has become a reality. A Russian designer, namely Yuriy Dmitriev invented the Bio-Refrigerator that suspends and cools the food that was inserted in the special gel. The food is inserted into the gel and it remains fresh for as long as necessary. The wonder gel manages to preserve the food using luminescence (light that is generated at small temperatures), has no scent and is not sticky. Along with these qualities, the refrigerator can even be hung from the ceiling, thus becoming an extremely interesting design piece.

#### Conclusion

The technologies of information and communication affect the individual lifestyle, having a powerful impact upon work, education, science, health, spare time, transportation, environment and other areas of daily life. The home is the environment in which a large part of our life takes place, being necessary to integrate it in the global system of the information society. Creating some household appliances with the highest performances will ensure in the future a growth in the individual degree of comfort and security, a high level of the quality of life and of the people's degree of information.

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