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COMMODITY – CONSUMER – QUALITY: Three concepts, three phenomenons, three universes, generated by specific individual realities and assuming extremely complex forms, sometimes difficult to decipher. They have developed progressively, in separate stages of evolution, being often restructured and reevaluated depending on the modifications of the socio-economic universe, but offering in the same time a global view upon worldwide economic relationships.

It is not for the first time when we state that commodity represents a phenomenon with which the market is confronted, a process, a transformation, an evolution, a cause or an effect produced upon nature and society as a whole, with all its manifestations in time and space. The statute of commodity represents a dynamic act which implies and attracts objects and behaviors determined in time; the commodity becomes more than just an accumulation of value, seducing and consistent, mean and message, instrument and objective, outlining a single word, a system.

Object – entity or group (lot of objects - entity) the commodity, as the object of trade implies profitability, credibility and professionalism, proving this way virtues of culture and civilization. The commodity is a phenomenon specific for the market, in which the cycle money-commodity-money is realized. The fact that the commodity is circulated as a group generates numerous and subtle operational assemblies, obeying severe and well defined regulations, much more complex determinations and approaches, such as: ensuring product authenticity, preventing and avoiding fraud and false, ensuring stability along the path of physical distribution, preventing and avoiding aggressions upon commodities, interrelating and adapting packaging to the present imperatives etc.

Nowadays though, the commodity is considered to be not only a physical entity, but also a psychological one. The extension of its coordinates, much beyond its material borders is determined by the process of diversification and variation of the consuming necessities.

This diversification draws upon itself a deeper segmentation of the demand, which inevitably leads to a diversification of the commodities supply. The nowadays consumer is going through sensorial experiences depending on the functional activity, symbolic, or just depending on the inherent attraction of the visual shape. Consequently, the contemporaneous commodity, in its global configuration, is defined by the following components: economic,
The diversification and quick renewal of the commodity supply under the impact of the fast scientific and technical development, the intensifying commercial transactions, growing consumer and society needs, have imposed quality of goods as the main determinant of organizations’ competitiveness.

The terminology and meaning of quality of commodity, no matter the point of view (philosophical, psychological, economic or technical) is defined according to several criteria, such as: the design, crafting and delivery, the degree of satisfaction of the consumer’s needs, the conformity with a referential, the fulfillment of national and international regulations, the fulfillment of regulations referring to the protection of life, individual’s health and environment, the adaptation to world’s requirements etc.

Taking into consideration the trend of continuous improvement and the extending commodity supply, and also the constant growth and diversification of consumers’ needs, the producing companies define quality of supplied commodities depending on the dominant position desired on the market at a certain moment. Concerning the evaluation of the consumers’ needs degree of satisfaction, the organizations must take into account the operational conditions of the quality of commodities, which is reflecting the way in which the consumers’ requirements, or those of the society as a whole, are perceived in each stage of the product’s trajectory.

The liberalization of international trade proves the general trend of the modern society, meaning the gradual diminishment, up to total disappearance of all the categories of barriers that would impede the exchanges and respectively, the circulation of commodities at global scale. We hear more and more often about: the global organization, global market, global product, global distribution, global consumer and even global tastes.

The essay “Commodity-Consumer-Quality” is bringing into attention of the scientific society, the specialists, the economic operators within production, trade, services, a series of aspects linked to the three components that are interdependent one from the other, in order to find solutions to the new challenges that appear in such a dynamic economy. It is a special occasion for revealing the results of the research, to consolidate the link between practice and theory, to define new projects regarding the academic qualification that the contemporary society requires.
THE ROLE OF THE CUSTOMS AGENCY IN THE FIGHT AGAINST COUNTERFEITING:
THE FALSTAFF SYSTEM

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Abstract: In recent years counterfeiting has become a widespread phenomenon, which has grown out of all proportion and represents a serious threat to international security, to consumers’ health and to economic development. The law protects intellectual property rights. The most recent national and European legislation is represented by EC Regulation 1383/2003, which replaces and repeals the previous Regulation 3295/94, and the law of 24 December 2003 N° 350 (2004 budget law). In the latter law, art. 4, comma 54 allows for the setting up of multimedia database for the collection of characteristic data suitable for identifying the products to be protected. In accordance with this provision, in 2004 the Customs Agency started up a project called FALSTAFF (Fully Automated Logical System Against Forgery and Fraud), a system of new customs instruments for the fight against counterfeiting, which received an honorary mention in 2005 for one of the best e-government initiatives. The system consists of a multimedia databank of authentic products, inserted into the Customs Agency’s IT system. The databank is fed by the parties owning the rights and allows a comparison between the characteristics of suspect articles and those of the original products.

Keywords: counterfeiting, property rights, products identity

INTRODUCTION

From the 1970s onwards forgery and piracy of original products has become a constantly growing problem of worldwide importance, with negative effects on an economic, social and fiscal level.

Within the EU, the statistics on action by Customs in relation to the fight against counterfeit and piracy are drawn up by the European Commission, based on the data transmitted by the EU Member States, in accordance with the Community’s relevant customs legislation. In the European Union in 2005 Customs seized 75 million articles, involving 26,000 cases; in 2006, they intercepted more than 250 million counterfeit and pirated articles, involving 36,486 cases. Data show an enormous increase in the goods seized, in almost all sectors of goods, as well as in the Customs activities in this area. Close cooperation between Customs services inevitably played a role in the increase in seizures made during 2006.

In the 1970s counterfeiting regarded luxury goods for which the difference in price from the legal product was often very significant, but in recent years even commonly used goods have been subjected to counterfeiting. Particularly worrying is the increase of
counterfeiting in medicines and products for personal care, as these products could potentially harm the health and safety of consumers.

Figures 1 and 2 show data of registered cases for the years 1999-2006 and articles seized by type of product in 2006 are respectively reported.

![Fig. 1. Numbers of registered cases for years 1999-2006](source: European Commission-Taxation and Customs Union)

The considerable increase in the number of cases involving seizures, from 26,000 cases in 2005 to over 36,000 cases in 2006, suggests more effective risk management and customs controls.

![Fig. 2. Articles seized by type of products](source: European Commission-Taxation and Customs Union)

The data in figure 2 reflect the trend towards diversification in the products that are subject to counterfeiting and piracy.

Numerous countries are producers of counterfeit goods. In terms of overall quantities seized, China, with over 80% of all articles seized, remains the main source for
counterfeit goods, followed by the United Arab Emirates (UAE), Malaysia, India, Hong Kong, Turkey, et.(fig 3).

Some countries specialise in the production of specific goods. For example, India is the main producer of counterfeit medicines, thanks to its considerable technological development; it is followed by the UAE and China. These three countries together are responsible for over 80% of the counterfeit medicines seized. In the food and electrical equipment sectors the main producers are Turkey and Malaysia respectively. However, with regard to the number of cases dealt with by Customs, the range is far more widespread and China only accounts for a third of the cases. However, it has become much more difficult to identify which countries counterfeit products come from, since they are not always exported by a direct route from the place of production to the market. Certain countries may be identified as the source country where significant numbers of transhipment operations are carried out, rather than the actual manufacturing of the fake goods themselves.

According to the type of goods seized, Customs record few cases concerning enormous quantities of seized articles, as is the case for cigarettes, where 214 cases led to the seizure of the huge number of 156,652,675 packets, and there is a growing number of cases involving fewer articles. For example in the case of clothing and accessories (belts, bags, glasses etc), the 23,040 cases registered led to the seizure of 30,256,061 articles. This could be explained by the fact that more traffic has been detected in postal and air traffic, possibly due to booming internet sales.

Seizures made by Customs increased in almost all Member States, though the results of the German customs authorities warrant special attention with 142,259,986 cases, followed by Greece (26,000,452), Slovenia (22,416,958), Belgium (18,744,113) and Italy (18,044,705).

With reference to the means of transport used, it can be seen that almost 80% of the total of all cases regard air (54%) and postal (23%) traffic. Due to the nature of the different types of transport, cases involving sea traffic, about 7%, invariably lead to bigger seizures per case.

Most counterfeit products pass through Customs, so European regulations granting customs authorities stricter and better organised controls may be a further effective instrument in the fight against counterfeiting and piracy.
THE LEGAL FRAMEWORK


Amongst other things, the above mentioned regulations have widened the field of application of previous dispositions, also allowing for the protection of rights relating to national property for plant varieties, to appellation control and geographical appellation, so as to guarantee effective protection for high quality products of considerable commercial value and thus particularly subject to the phenomenon of counterfeiting by third countries.

EU Council Regulation 1383/2003 is the fundamental regulation, granting customs authorities a series of powers, including that of suspending the release of goods suspected of violating an intellectual property right. Action can be taken directly by Customs or at the request of the owner of the right.

Regulation 1891/04 contains the procedural rules of the fundamental regulation.

Council Regulation EC n. 1383 of 22nd July 2003 distinguishes between counterfeit goods and usurpatory goods.

Counterfeit goods are:

- goods, including their packaging, on which there are trademarks placed without authorisation, identical to those officially registered for the same types of goods, or which cannot be clearly distinguished from such trademarks and thus violate the rights of the owner of the trademark in question;
- any distinguishing marks (including logos, labels, leaflets, etc.), even if presented separately;
- packaging carrying marks of counterfeit good presented separately.

Usurpatory goods are:

- goods which are, or contain, copies produced without the permission of the owner of the copyright or similar rights or of the owner of the rights relating to the design or model, whether registered or not, according to national law, or of a person authorised by the latter in the country of production.

As most Member States have implemented the simplified procedure provided for by Article 11 of Council Regulation (EC) n 1383/2003, there is a decrease in the amount of cases involving the seizure of counterfeit articles, pursuant to other legislation. The majority of the cases leading to seizures occur during import procedures.

A widespread form of counterfeiting is that of the false indication of the origin of goods, in other words the false “made in …”. In Italy, Law n. 350 of 24th December 2003, art 4 comma 49 (Budget Law 2004) reinforced protection of the “made in Italy” mark. In this law, in order to strengthen the instruments used in the fight against counterfeiting, legislators provided for agreements between the Customs Agency and producers, at the request of the latter, in order to set up a multimedia databank for the collection of characteristic data suitable for identifying the peculiarities of products needing protection, without additional costs for the public purse.
Following directorial decision n.282/UD of 28th February 2004 the databank was set up at the Customs Agency and is fed by data included in the requests for protection made by the owners of intellectual property rights. When the authorities discover the violation of an intellectual or industrial property right during import, export, sale or distribution they can seize the counterfeit goods if authorised by judicial authorities, to whom they must make a report. After three months the goods can be destroyed, if possible at the expense of the offenders. Samples must be kept for use in legal proceedings (art 4 Law 30/2003 comma 80).

The violation of intellectual property rights takes place every time goods carry an indication of origin which is not the real one, or when there are distinctive signs, logos and so on that induce consumers to believe that the goods are of Italian origin, for example a T-shirt with the label “made in Italy”; or with the Italian flag, or the Italian logo, or any other indication that brings Italy to mind.

The law protects intellectual property rights, in other words all those various forms of innovation that are susceptible to economic use. One classic example is that of copyright, that is to say the right over the creation of a work of creative intelligence (novels, films, soundtracks etc). The law also protects industrial property rights, such as patents, designs, models etc.. Industrial property rights also include trademarks. A trademark consists of a word, symbol or a combination of the two, used to identify a product or service and to distinguish it from competitors. A patent gives its owner the right to prohibit others from producing, using, selling or importing the patented object. A patent can be surrendered or granted under licence subject to payment of the owner. Industrial property rights also concern new plant varieties, thus it is possible to protect plant varieties which are new, homogenous, stable and different from existing ones.

The protection of intellectual property rights in Italy is contained in articles 473 and 474 of the penal code, which identify various possible offences.

In 2004 the European Parliament issued Directive n° 48, with the aim of creating equal conditions for the protection of intellectual property rights in member states and the internal market. This Directive was adopted in Italy by Legislative Decree n°140 of 16th March 2006.

On 25th April 2007 the European Parliament approved Directive IPRED2, which targets counterfeiting and piracy, introducing heavy penalties for counterfeiting offences and for violation of intellectual property rights. After 2 years of intensive negotiations between politicians and representatives of the sector, the Strasbourg Parliament approved an ambitious law against organised crime groups engaged in the counterfeiting of medicines, goods, cosmetics, CDs and DVDs, but which, at the same time, protects Web users from prosecution. The Directive excludes penalties for those who violate copyright for private use, excluding from the field of application of the Directive “acts carried out by a private user for personal use, without making a profit”.

The intention is that of protecting businesses and consumers from counterfeiting, a practice that costs Europe’s GDP 8 billion Euros a year and often puts people’s health at risk.

1 In Italy the law (248/05) already punishes with a fine those who buy goods which, by their quality, the conditions of those offering them or their price, lead one to believe that the rules on origin of goods and intellectual property have been violated. If the purchase has been made by a trader or somebody else who is not the final consumer, the law imposes a fine of up to a million Euros.
serious risk. Counterfeiting and piracy give vital support to organised crime and the fight against these phenomena is not helped by the fragmentary laws in force in the EU.

THE FALSTAFF MULTIMEDIA DATABANK

In accordance with Law 350/2003 the Customs Agency in Italy set up the multimedia databank known as FALSTAFF (Fully Automated Logical System Against Forgery and Fraud), which collects technical information and images relating to legal products.

In order to use this instrument, the owner of intellectual property rights presents an online request for protection, in accordance with European Regulation 1383/03, listing the products to be protected and, for each one, the characteristics of the product and known forms of counterfeiting. The request may be accompanied by models, files, images of brands, explanatory leaflets or brochures and any other element that may be useful in recognising the original model and discovering counterfeit ones. The request consists of:

- a company profile: (company name, VAT number, address, name of the person acting as contact, phone number);
- a product profile: technical characteristics, packaging, customs routes;
- signs of counterfeiting (e.g. for running shoes the original ones have uppers with non-retention punch holes which allow a slow shrinking effect and very fast swelling, while in the counterfeit product compression and decompression happen at the same speed).

All the information contained in the profiles feed the risk analysis system and the system of screening of customs declarations that accompany goods when crossing frontiers.

Before the FALSTAFF IT system came into operation, request were made on paper and were filed, along with accompanying documentation, by the anti-fraud office of the Customs Agency, who then sent the information to all national or European customs services. This system, while having exactly the same principles as the new multimedia one, was difficult to consult and slow to respond.

By using the FALSTAFF system, the owner of an intellectual right presents the request online to the Agency, which verifies it and validates the data it contains, entering these into the Agency’s IT system. From that moment on the data are instantly accessible in all the Agency’s offices. During inspections, officers can consult all the information provided by producers and contained in the FALSTAFF databank, facilitating the identification of counterfeit goods or those not conforming to quality and safety standards. If there is a suspected case of counterfeiting, the goods are blocked for a specified time until experts inspect them.

Associations and bodies operating in these areas contribute to the training and instruction of the officers who carry out checks and provide continually updated and directly useable information for distribution to consumers. Companies set up and update web pages and operational guides for the identification of authentic products and their conformity with quality and safety standards. This information is used directly by customs officers and offers fundamental support for effective, selective, fast and uniform checks.

On the basis of the information in the FALSTAFF databank, Customs carry out targeted checks, integrated into the automatic risk analysis system and the system of automatic selection of the import, export and transit operations to be verified.

The FALSTAFF project has proved to be a useful instrument in the fight against counterfeiting due to its ability to use all the positive aspects of technology and large scale information sharing. The FALSTAFF project received an honourable mention in the 2005 eEurope Awards for eGovernment, with the following motivation given by the jury:
“FALSTAFF is an innovative and ambitious project for fighting the phenomenon of counterfeiting in the EU market and may be an excellent example for other European customs authorities to follow in improving effective co-operation between member states and the EU.”

CONCLUSIONS

The intervention of the customs authorities with regard to counterfeit or usurpatory goods, or those violating intellectual property rights, when they enter the EU, are exported, re-exported or in transit through EU territory, helps to keep these goods off the market and to fight the spread of illegal activities effectively, without obstructing the free movement of legitimate goods. The intervention of the customs authorities takes place with the prohibition of the release for free circulation, export or re-export of goods suspected of being counterfeit, usurpatory or of violating certain intellectual property rights, or with the blockage of these goods for the time necessary to ascertain whether they are counterfeit or not. If this is the case, the goods are seized.

The harmful effects of the illicit trade in counterfeit goods are well known. Various strategies are used to protect intellectual property and the authenticity of goods, whichever category they belong to. European regulations state that member countries must pass on information relating to seizures, description of the goods, the quantity, their origin, the means of transport used and the type of intellectual property right violated. By studying the data collected it is possible to gain useful information for an efficient analysis of counterfeiting in the EU and this allows Customs to take appropriate countermeasures in order to fight the phenomenon. The EU data can be shared with the customs services of other countries in a global co-operation programme.

Within the fight against counterfeiting carried on by the Italian Customs Agency, the FALSTAFF IT system is of particular importance. It is a databank containing all the requests for protection made by companies and the details of the goods to be protected, so that customs officers can intervene directly and block suspected counterfeit goods at the frontier during inspections.

The fight against counterfeiting is also carried on through European or bilateral co-operation agreements, joint customs operations, workgroups within the World Customs Organization (WCO)\(^2\). Joint targeted checks with the customs services of other EU countries are also carried out in order to fight the phenomenon of counterfeiting, to discover new routes and new channels taken by counterfeit goods, checking frequently, every 10-15 days, all the goods belonging to particular categories, arriving from particular countries considered to be at risk.

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2 The World Customs Organization (WCO) is an intergovernmental organization that helps Members (Governments usually represented by Customs administrations from 170 countries) communicate and co-operate on customs issues. It was established in 1952 as the Customs Co-operation Council; it adopted its current name in 1994.


8. European Commission Taxation and Customs Union - Summary Of Community Customs Activities On Counterfeit And Piracy- Results At The European Border – 2006
POST ADHESION STRATEGIES FOR THE GOODS RESEARCH IN ROMANIA

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Abstract: In the context of the Romania’s integration to the European Union, a very important issue of the Romanian commodity science is the research of native goods and those which are trade free within the 27 member states. This situation is supported also by the evolution of the market’s globalization through different forms and structures, among which the quality and the price are the most important ones. Also, the new legislative frame created before the adhesion has generated new directions for the technological design, opening ways to the non pollution technologies, standardization and, respectively, the goods research. Taking all this facts into consideration, the authors present in this paper work a conceptual model for the complex research of the alimentary goods in the perspective of 2007-2012.

Keywords: the extension of the globalization process, inner quality characteristics, the complex goods research, conceptual draft for goods research, market’s globalization.

INTRODUCTION

Marked by the profound changes of this beginning of the century, the world economy is remodeling the numerous connections which ensure its performance. The world commerce is under the double impact of proliferation of the regional agreements and of extension of the globalization process.

Once the Romania became a part of the European Union, even more Romanian people are wondering about the advantage and the costs of this adhesion, but also about the goods research and design required by the quality European standards. The enforcement of a design and goods quality assurance system within Romanian companies is the main problem of the Romania’s success on the unique European market.

In this paper work, the approach of the issues generated by the goods research in the context of the Romania’s adhesion to UE, is moving toward the study of the goods in the context of the market’s globalization, toward the goods’ accreditation and certification in connection with the economical and legislative frame, toward the appropriation of new, complex and integrated objectives, suitable to the new use value in the alimentary goods by promoting a social policy to ensure a civilized and European standard. According to the standards and practice within the industrial advanced countries, the promotion of the goods quality research–far from being just propagandist phrase-represents the organization’s continuous development of its abilities for quality.

Becoming a part of the European Union, Romania must have its own policies and strategies with respect to the goods’ quality research field in accordance with the EU requirements.
The national strategy of quality promotion in Romania should involve a number of realistic and achievable goals, upon which, we the authors will insist in a future presentation.

PROPOSAL OF A CONCEPTUAL MODEL OF COMPLEX GOODS RESEARCH IN THE PERSPECTIVE OF 2007-2012

The logic of the scientific research, as proven by great representatives of the modern thinking, as Karl Popper, is a complex process, in which in symbiosis and interaction meet all kind of causes and determinations, expectations and visions, based both on the human nature characteristics and on the stages and projections of the social system. The research is, in a way, metaphysics, because it often starts from speculator elements, but it is mostly the expression of a superior awareness level.

Up until now there is neither a unique model in the complex field of goods research, nor a valid strategy model for the EU members. In some fields of the commodities science, the preoccupation and the efforts for research remained at the level of individual initiative, often with historical and cultural orientation, without having the force to find, sustain and follow objectives important to the development of the goods awareness. In this context, according to the requirements of the Romanian’s goods research, we are presenting a conceptual model of complex goods research in the perspective of 2007-2012, intended to be a guide of the modern commodities research with respect to the Romania’s adhesion to EU (Fig 1). We consider that settlements and resources are needed to ensure the natural proceeding way for the goods research process, following its own logic and involving professional values. Therefore, it became necessary to develop a managerial field to take over the continuous goods research problems, in their essence, in order to reach the imperative improvements.

Figure 1 - Conceptual model of the goods research in the perspective of 2007-2012
Due to some unstable chemical components, as very complex and heterogeneous systems, and also due to the many internal and external influences in time and space, even more alimentary goods are suffering from time alteration of their properties. Establishing the quality of a good has a high level of difficulty and involves the unitary evaluation of the quality, requirement difficult to ensure mainly because of the great number of quality characteristics needed to be taken into consideration.

As criteria for establishing quality may be, according to the alimentary goods specific nature, the followings properties: physical-chemical, sensuous, microbiological, and aesthetic, etc, all of those being in fact basic requirements for quality, used as reference for the real quality. The development of models in the commodities science has characteristic features within the goods’ science because it uses a plurality of sciences in developing its object. In the most cases, the production companies in Romania cannot find an answer to a series of questions with reference to SR EN ISO 9000/2006, such as: How to advance new ideas in order to satisfy the potential clients’ requirements? Who can advance new ideas? Who is informed about the issues concerning the final users and their requirements?

As a consequence, we consider that at the management level of each economic organization must be a continuous preoccupation, respectively, an innovation program based on the goods quality research program.

COLLEGIATE RESEARCH AND EXTENSION

In the advanced countries, the boundaries of the university are mixed up with the countries borders, because the university has, all over the world, a teaching and scientific mission. The recent society peremptorily demands the university to start the transition from the research over... and the research about... to the research of future perspective in order to catch the future transformations and trends within the goods’ technology.

In most part of the developed countries, the extension represents one of the main activity developed within the extension departments within each university, regardless its profile. In fact, in these countries, the university has the fate to create and disseminate new knowledge for the society with the purpose of contributing to its development. The extension is a bridge between the results of the research and the practical experience gathered by the advanced countries. The research of the goods quality will continue to be a force in Europe, because it contributes to: the competition increase; the extension of the information exchange; the furtherance of the Romanian economic agents to comply with the EU market requirements, in order to increase the competitive advantage of the Romanian goods; accomplishing experimental models in order to assimilate the new technologies.

CONCLUSIONS

• Expectant the globalization of the markets the relationship product-good and its research become more complex through the national, international and transnational concepts.

• The statute of good and its inner characteristics are influenced by a number of factors, such as: technologies’ improvement, producer’s and consumer’s requirements, consumer’s expectations and needs, market’s requirements based factors, legislation.
• Within the EN ISO 9000/2000 and 2005 standard series, the continuous improvement of the goods quality is no longer just an element of the quality system, but also a way of management.

• The lasting development of Romania cannot be conceived and achieved in the lack of a policy, of a strategy and of a national program concerning the quality promotion in all the fields of the social and economic life.

• Through the presented conceptual model, the authors are offering a diagnosis, vision and action device, which will allow the independent experts to evaluate the goods and companies with respect to the level of conformity with the EU aquis.

REFERENCES

GRADATION OF INDUSTRIAL PRODUCTS QUALITY ASSESSMENT METHODS ACCORDING TO THE RESULTS OBJECTIVITY DEGREE

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\textbf{Abstract:} In this paper six quality assessment methods of industrial products are presented and gradated according to the results objectivity degree. To gradate these methods, a research was conducted in Ploieşti city, which had as objective consumers’ quality assessment of a textile, with 45% wool and 55% polyester. The results obtained provide some information about the usage of few methods, but which have an acceptability objectivity degree, in future researches.

\textbf{Keywords:} quality assessment, objectivity, industrial products, textile

\section*{INTRODUCTION}

The quality product assessment denotes a relation (comparison) between the analyzed quality product and a \textit{reference}, which can be:

\begin{itemize}
  \item product quality made by the same company, in a previous time period;
  \item product quality made by the best company in the market;
  \item product quality made by the best company in the world;
  \item consumers’ requirements (needs).
\end{itemize}

The modern science of commodities uses different methods to assess the industrial products quality, techniques which are differentiated according to the results objectivity degree, inclusive its advantages and disadvantages. The main methods are: quality complex indicator, general point method, continuum model, subfeature model, customer satisfaction performance model and products quality deviation towards consumers’ needs model.

GRADATION OF INDUSTRIAL PRODUCTS QUALITY ASSESSMENT METHODS ACCORDING TO THE RESULTS OBJECTIVITY DEGREE

To gradate the six products quality assessment methods according to the results objectivity degree, a survey was conducted, which had as objective consumers’ quality assessment of a textile (with composition 45% wool and 55% polyester, length 1 meter and width 1.55 meters). Consumers were asked to assess seven textile aesthetic attributes (color intensity, pattern, texture, handle, luster, skin-tight and defects), through questionnaires, using the six quality evaluation methods.

The studied population was the Ploieşti’s citizens with age between 20 and 69 years, in number of 186,971 persons [6], being both observation and sample unit.

To gather information for this research, the communication with sample unit structured method was used, which is based on a questionnaire, whose questions were presented in the same order and wording to all interviewers [4].
The random sampling technique was preferred for this research, which implied that the selection of consumer’s sample elements was made according to the proportions of persons’ age groups (there are 10 age groups, from 5 to 5 years), sex (women and men) and residence (the city’s north, south, east and west areas). Determination of consumer’s sample size was made in relation with population variance and accepted sample error, at 390 persons, i.e. 0.208% from studied population.

The compute values (which result from centralization and interpretation of interviewers’ responses), ideal values (which assessment of analyzed textile should have) and the results deviations of the analyzed textile quality assessment methods are shown in table no.1.

Table no.1 Compute values, ideal values and results deviations of analyzed textile quality assessment methods

<table>
<thead>
<tr>
<th>Crt. Nr.</th>
<th>Textile Quality Assessment Method</th>
<th>Compute Value $x_{ck}$ (points)</th>
<th>Ideal Value $x_{rk}$ (points)</th>
<th>Absolute Deviation $d_k$ (points)</th>
<th>Relative Deviation $(d_k %)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1.</td>
<td>Quality Complex Indicator</td>
<td>0.7045</td>
<td>1</td>
<td>0.2955</td>
<td>29.550</td>
</tr>
<tr>
<td>2.</td>
<td>General Point Method</td>
<td>0.8010</td>
<td>1</td>
<td>0.1990</td>
<td>19.900</td>
</tr>
<tr>
<td>3.</td>
<td>Continuum Model</td>
<td>0.8861</td>
<td>1</td>
<td>0.1139</td>
<td>11.390</td>
</tr>
<tr>
<td>4.</td>
<td>Subfeature Model</td>
<td>0.8873</td>
<td>1</td>
<td>0.1127</td>
<td>11.270</td>
</tr>
<tr>
<td>5.</td>
<td>Customer Satisfaction Performance Model</td>
<td>4.1339</td>
<td>5</td>
<td>0.8661</td>
<td>17.322</td>
</tr>
<tr>
<td>6.</td>
<td>Products Quality Deviation towards Consumers’ Needs Model</td>
<td>0.1507</td>
<td>1</td>
<td>0.1507*</td>
<td>15.070</td>
</tr>
</tbody>
</table>

- The compute value of product quality deviation towards consumers’ needs model is used, because it is in fact the absolute deviation

The ideal values, from column 3 of table no.1, are “1”, respectively “5”, which denotes a complete satisfaction of consumers’ quality expectation. Reference value “1” is for quality complex indicator, general point method, continuum model, subfeature model and product quality deviation towards consumers’ needs model, and “5” for customer satisfaction performance model.

The column 4 of table no.1 contains absolute deviations of compute values from ideal values, estimated with the formula (1):

$$d_k = |x_{ck} - x_{rk}|$$

where:

- $d_k$ - absolute deviation of compute value from ideal value, for k method;
- $x_{ck}$ - compute value of k method;
In the following calculations, the values of $k$ stand on the correlation between columns 0 and 1 of table no.1.

$$d_1 = |x_{c1} - x_{d1}| \Rightarrow d_1 = 0.7045 \Rightarrow d_1 = 0.2955$$

$$d_2 = |x_{c2} - x_{d2}| \Rightarrow d_2 = 0.8010 \Rightarrow d_2 = 0.1990$$

$$d_3 = |x_{c3} - x_{d3}| \Rightarrow d_3 = 0.8861 \Rightarrow d_3 = 0.1139$$

$$d_4 = |x_{c4} - x_{d4}| \Rightarrow d_4 = 0.8873 \Rightarrow d_4 = 0.1127$$

$$d_5 = |x_{c5} - x_{d5}| \Rightarrow d_5 = 4.1339 \Rightarrow d_5 = 0.8661$$

$$d_6 = 0.1507$$ (see the footnote of table no.1)

Because all six methods have different ideal values, the absolute deviations can’t be a reference. Therefore, the relative deviations are determined for each method, using the formula (2):

$$d_k \% = \left( \frac{x_k - x_k^k}{x_k} \right) \cdot 100 \Rightarrow d_k \% = \frac{d_k}{x_k} \cdot 100 \quad (2)$$

where:

- $d_k \%$ - relative deviation of compute value from ideal value, for $k$ method.

$$d_1 \% = \frac{d_1}{x_1} \cdot 100 \Rightarrow d_1 \% = \frac{0.2955}{1} \cdot 100 \Rightarrow d_1 \% = 29.550\%$$

$$d_2 \% = \frac{d_2}{x_2} \cdot 100 \Rightarrow d_2 \% = \frac{0.1990}{1} \cdot 100 \Rightarrow d_2 \% = 19.900\%$$

$$d_3 \% = \frac{d_3}{x_3} \cdot 100 \Rightarrow d_3 \% = \frac{0.1139}{1} \cdot 100 \Rightarrow d_3 \% = 11.390\%$$

$$d_4 \% = \frac{d_4}{x_4} \cdot 100 \Rightarrow d_4 \% = \frac{0.1127}{1} \cdot 100 \Rightarrow d_4 \% = 11.270\%$$

$$d_5 \% = \frac{d_5}{x_5} \cdot 100 \Rightarrow d_5 \% = \frac{0.8661}{5} \cdot 100 \Rightarrow d_5 \% = 17.322\%$$

$$d_6 \% = \frac{d_6}{x_6} \cdot 100 \Rightarrow d_6 \% = \frac{0.1507}{1} \cdot 100 \Rightarrow d_6 \% = 15.070\%$$

Relative deviations obtained can be compared by calculating the arithmetical mean (average) and the absolute deviation of each relative derivation from the mean.

The arithmetical mean of relative deviations is estimated with the formula (3):

$$\ddot{d} \% = \frac{\sum_{k=1}^{s} d_k \%}{s} \quad (3)$$

where:

- $\ddot{d} \%$ - arithmetical mean of relative deviations;
The absolute deviations of relative deviations from the mean are evaluated with the formula (4):

\[ D_k\% = \left| d_k\% - \bar{d}\% \right| \]  

where:

- \( D_k\% \) - absolute deviation of relative deviation from the mean, for \( k \) method
- \( D_1\% = \left| d_1\% - \bar{d}\% \right| = \left| 29.550\% - 17.417\% \right| = 12.133\% 
- \( D_2\% = \left| d_2\% - \bar{d}\% \right| = \left| 19.900\% - 17.417\% \right| = 2.483\% 
- \( D_3\% = \left| d_3\% - \bar{d}\% \right| = \left| 11.390\% - 17.417\% \right| = 6.027\% 
- \( D_4\% = \left| d_4\% - \bar{d}\% \right| = \left| 1.270\% - 17.417\% \right| = 6.147\% 
- \( D_5\% = \left| d_5\% - \bar{d}\% \right| = \left| 17.322\% - 17.417\% \right| = 0.095\% 
- \( D_6\% = \left| d_6\% - \bar{d}\% \right| = \left| 5.070\% - 17.417\% \right| = 2.347\% 

The six textile quality assessment methods are graded according to the results objectivity degree based on the above calculated values. The small absolute deviations of relative deviations from the mean (\( D_k\% \)) are the higher results objectivity degree will be.

The gradation of analyzed textile quality assessment methods according to the results objectivity degree is presented in table no.2.

Table no.2 Gradation of analyzed textile quality assessment methods according to the results objectivity degree

<table>
<thead>
<tr>
<th>Crt. Nr.</th>
<th>Textile Quality Assessment Method</th>
<th>Absolute Deviation of Relative Deviation from the Mean (( D_k% )) (%)</th>
<th>Results Objectivity Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Customer Satisfaction Performance Model</td>
<td>0,095</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Products Quality Deviation towards Consumers’ Needs Model</td>
<td>2,347</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>General Point Method</td>
<td>2,483</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Continuum Model</td>
<td>6,027</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Subfeature Model</td>
<td>6,147</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Quality Complex Indicator</td>
<td>12,133</td>
<td></td>
</tr>
</tbody>
</table>
Table no. 2 shows that the customer satisfaction performance model (0.095%), products quality deviation towards consumers’ needs model (2.347%), and general point method (2.483%) have the highest results objectivity degrees.

Fig. no. 1 shows the gradation of analyzed textile quality assessment methods according to results subjectivity degree. Thus, the quality complex indicator (12.133%), subfeature model (6.147%) and continuum model (6.027%) have the highest subjectivity degrees among the six studied techniques.

**CONCLUSIONS**

The study showed that methods which are based on consumers’ quality assessment (e.g. the customer satisfaction performance model) have a higher objectivity degree than those methods in which the attributes intensity and consumers’ expectations are evaluated independently and the researcher makes the assessment (e.g. products quality deviation towards consumers’ needs model).

Another important opinion is that the methods which use a high point scales (e.g. general point method, continuum model and subfeature model) have a higher subjectivity degree than those methods which apply low point scales (e.g. customer satisfaction performance model and products quality deviation towards consumers’ needs model).

It can be added that methods which assess quality through individual values of quality characteristics (e.g. the customer satisfaction performance model, products quality deviation towards consumers’ needs model and general point method) have a higher objectivity degree than techniques which use a single assessment, to product overall (e.g. continuum model).

A significant fact is also that methods in which the mathematical equations ignore the different importance of characteristics in consumers’ product quality assessment (e.g. general point method and subfeature model) have a higher subjectivity degree than those methods which weighting the attributes (e.g. customer satisfaction performance model and products quality deviation towards consumers’ needs model).
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CITIES’ BRAND IDENTITY. HOW TO MARKET IT

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Abstract: Cities and states entered a difficult process of transition, from a stable industrial economy that dominated world markets, to a rapid changing economy, intensively informational, subject to a strong global competition. Local authorities cannot force the market to react as they wish, but have to respond positively to the trends and forces that govern the market evolution. Response policies and measures to stop the market forces failed, while active and interactive enabled cities to collaborate with private firms in various ingenious ways, which took into account the market forces. Within this learning process, the authorities response lay behind the market changes, and the policies applied did not adapt quickly enough to the changes occurred in the structure of activity sectors. Marketing is a challenge even for private corporation, which are often perceived as specialists in practicing marketing. Marketing should not be exclusively the advantage of private sector, local communities, areas can be promoted as efficient as the goods and services of a company, and these have to benefit of the complex practices of the marketing from the private sector.

Keywords: city, brand, brand identity, market

INTRODUCTION

The last decade of the 20th century is characterized by increasing economic, social, political challenges that municipalities have to administer according to the interests of the main stakeholders. The present configuration of Europe transforms the old competition between nations, the main actors being the cities, the competition between these becoming more and more free and harder.

URBAN MARKETING AS A STRATEGY FOR ECONOMIC DEVELOPMENT

Urban marketing implies choosing some suitable ways of projecting and organizing cities to meet the requirements of the target segments interested in urban development. It is considered that urban marketing reached its goal when the businessmen community and the citizens are satisfied with the urban economic-social environment, when the visitors’ and investors’ expectations are met according to Kotler, P. & Hamlin, M. A. & Rein, I. & Haider D. H. (2002).

Nowadays, urban marketing becomes an outstanding characteristic of the strategy of local economic development. The economic development implies establishing a long-term marketing strategy oriented to preserving and developing the natural, economic and manmade potential of the local community. The context in which the urban marketing operates is characterized by increasing competition between urban communities to attract human,
material and financial capital (there are only in Europe more than 500 regions and over 100,000 communities in competition for the same limited investment and human resources), high frequency of changes of the economic, social and political environment and a bad understanding of the “urban marketing” notion/concept.

Urban marketing is used to accomplish several goals, such as creating a positive image for the community, attracting of companies, institutions, tourists and specially-skilled work force but as well has to find markets for their exports, to adopt instruments for the strategic marketing management in order to create an “urban brand” according to Kotler, P. & Gertner, D. (2002).

The old strategies of promoting the local communities are no longer valid in the context of some markets in a continuous and rapid change. To be effectively competitive, these communities have to ground their local development strategies also from the marketing prospective. As a result, communities are compelled to produce goods, services required by the present and potential inhabitants, companies, investors, national and international institutions.

Urban marketing, especially in the USA, is a several billion dollars industry, where goods and services produced in cities are promoted and “sold” in an aggressive way. Many communities wish to create a new image or to replace the negative one. By urban marketing, local communities can be promoted in the same complex way as any product or service in the private sector. The marketing instruments can be adapted to the communities’ problems that promote their development potential to create a “brand” backed by a well individualized identity. Urban marketing conveys the city identity to be understood by the target segments. Conveying this identity there is created the image of the city, which is characteristic for the way it will be perceived in the future by the potential actors implied in the urban development according to Bradley, (2001).

Urban marketing is an indispensable element within the strategies for economic development of the cities, contributing to the overall vision of the strategy. This helps cities to accomplish many objectives (attracting new national or international companies, consolidate industrial infrastructure, developing tourism, diversifying and improving transport and health services), while they have to maintain a certain level or to cut off public expenses, and to face the harsh competition to attract new investors. The biggest challenges for urban marketing are changes occurred in market structure and dynamics, which exceed the response capacity of the cities.

The sole existence of a developed industrial infrastructure is not sufficient for a community to reach the development goals, marketing must create the image, the message to be conveyed to potential investors. Urban strategic marketing is the most adaptable and productive approach of the problems that the communities face. Urban marketing became an extremely important economic activity and, in some cases, the main source of local welfare. Inside clients – oriented marketing is not only a technical problem, of marketing technique, messages and targets, but also one defining the city development in terms of value system of the public.

As it results from the definition of urban marketing¹, its main target represents attracting activities with potentially advantageous benefits for the community and maximizing satisfaction of segments on the target market To analyze these definitions, the

¹ Definitions where collected in paper - Territorio e marketing tra letteratura e nuovi percorsi di ricerca - Liuc Papers, nr. 149, Seria Economia e Istituzioni June13 2004 - author Cecilia Giloi -www.biblio.liuc.it
following will be followed: existing relationships between urban and general marketing (in practice and theoretically); explicit and implicit interactions between urban marketing and the market concept; type of objectives set by running activities specific to urban marketing.

The unstable economic and political environment places local authorities in the position of facing new social needs and expectations. This is the result of increasing competition between communities, diminishing financial resources, losing confidence in the efficiency of traditional ways of territorial planning. It is obvious that public institutions should play an active role in administering of territory, the development control is no longer sufficient: local authorities have to initiate a market-oriented local development. Initiating local development can be carried out by using urban marketing that improves the competitive position of the city.

The main objective of urban marketing is that of creating a strong relation between public policies and consumers requirements to make the functioning of urban system more efficient.

**URBAN MARKETING PROCESS-STARTS AND ENDS**

Urban marketing is a continuous activity to be adapted to take into account the changing economic conditions and the new opportunities. Urban marketing tasks undergo a permanent change, while new activity sectors are created, new technologies appear, companies expand, and old business diminished and merged. While conditions and clients change, products should be modernized and improved and new products should be designed to satisfy new needs. Some characteristics of cities are able to permanently resist in the new economic context: a well-prepared and qualified workforce, basic infrastructure, technical equipment, schools, universities, research centers. Nevertheless, instruments and programs required to support these programs are in a constant process of assessment, reformulation and change. These changes are caused by increasing inter-urban competition, considered the key element of approaching the urban economic development from the urban marketing perspective. (Padurean M., 2002)

Urban marketing processes start with city analysis and defining the strategic mission and vision. The SWOT analysis is a technique, recommended to synthesize the strong points and the weaknesses of the city, opportunities and environment threats. No development strategy can succeed without a previous detailed analysis. All involved elements (from strategic analyses to activities assessment and control) lead to achieving the same objective: creating value for community. If in case of private companies we can talk about obtaining profit, marketing, in case of local communities aims to creating value.

Selecting marketing tactics depends on marketing strategies and municipality objectives, each strategy requiring a different mix of activities according to Kotler, P. & Gertner, D. (2002).

As a particularity, marketing tactics and strategies have in view increased threats (tactics, including spatial/functional aspects), by redefining architecture, rearranging open spaces, improving the quality of environment factors. (Stanciulescu G., 2004)

Political element is strongly involved in urban marketing process. Many times, municipality (the politicized public institutions management) consciously distorts the message conveyed, this leading to situation in which realities of the city (as a product) differ from those presented by marketing communications. A non-politic public management should be the guarantee of urban marketing success limiting the influence of political factor. To limit the political influence, cities should give a greater importance to the
strategic planning process, more than satisfying the elective needs of the present, to incorporate the market more general perspectives within the community evolution.

According to Kotler according to Kotler, P. Haider, D. Rein, I. (2001) the main elements composing urban strategic marketing are presented as follows: the initial task is to form a planning group made of citizens, businessmen and local authorities. This planning group ensures the importance of collaboration between the public and the private sectors, as well as the need to involve all the beneficiaries in the effort of modeling the respective place future.

The mission of the group is threefold: first it has to define and analyze the state of community, the main problems it has to face and their causes. Secondly, it has to conceive a perspective solution to community’s problems based on a realistic assessment of available values resources and opportunities. Thirdly, it has to elaborate a long term action plan with some intermediary investment and transformation stages.

The planning group has to initiate a market oriented strategic planning process. Studies conducted on planning groups indicate that various forms of strategic planning are used, as an auxiliary managerial instrument to set fundamental action directions, objectives, and resource allotting.

Taking into account the theoretical aspects presented, we can identify at municipality level the preliminary conditions that sustain the urban marketing activity, as an efficient tool for the durable and sustainable local development and for an increased competitiveness of the city. These conditions are similar to those imposed to similar firms acting in a competitive and instable environment. By meeting these requirements there are in view establishing and implementing the strategic planning processes that can be affected on the level of a whole city or only at some activity sectors level. There must be pointed out those procedures specific to urban marketing are efficient only if municipality owns human resources specialized to administer efficiently activities in conditions of coercion generated by the environment they are into (insufficient financial and material resources, political interferences, environment instability).

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MARKETING MIX AND TOTAL QUALITY MANAGEMENT IN PUBLIC AND PRIVATE SERVICES

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Abstract: The tool for marketing strategies implementation is marketing mix (MMix) by the 4P or 5P. This mix of components offers the possibility of harmonizing the purposes of companies and customers. A new concept of Total Quality (TQ) has been developed and implemented, firstly by the industrial companies and later on by others (even public administration organizations). This approach is an integrative strategic philosophy and behavior, focused on TQ objectives and the adoption of a new managerial style – Total Quality Management (TQM). In our opinion the MMix and TQM are complementary philosophies to approach companies applicable in public and private sector.

Keywords: Marketing mix, TQM, philosophy, sustainable development

INTRODUCTION

The main reasons of this paper are: the conclusions of John Raven [8] about the future of the society and the remarks that marketing and economic principles, alongside of over industrialization, direct the mankind to self destruction, generates the idea of a new orientation of the economists (including marketing specialists) and technicians (engineers, various specialists) and the theory that the knowledge society, expected to be the next stage of social development, after postindustrial and information society, suggests the need of using knowledge management.

According to these the top management should hold a larger amount of information from various fields (technical, economic, social, cultural, politic etc.). In this case the two concepts, MMix - belonging to the economic field and market approach and TQM – belonging, at the beginning, to the technical field extended later on to the industrial company management, could be linked and offer a powerful social related tool for ANYONE that manage a company/organization.

Public and private services offer the best opportunity to study and to observe the need of these theories to link. To confirm the hypothesis it was worked out a survey on top management knowledge of MMix and TQM philosophies. A number of about 300 subjects from the levels of general, deputy, marketing, sales/commercial, production, technology managers and chief engineers, were questioned, by mail, with a reply return of 214 from private and public services.

The results of the survey direct us to the conclusion that it is necessary to underline the linkage between the mentioned theories and to create a joint philosophy to be spread on the managerial stuff.
SURVEY METHODOLOGY AND RESULTS

The targeted managers sample for the replying the questionnaire was of about 400 subjects selected to include three categories of top management from commercial companies part of them involved in public and private services. The sample was created from lists of references issued by the team of researchers. This allows a very good rate of reply, due to the personal relation and a better understanding of the aim of the research.

The collected filled in forms were processed to offer to researchers as much information as possible regarding the subjects level of knowledge about MMix and TQM or the potential link between them, and of course to have base information from private and public services.

The survey methodology and data analysis ware made according to the Organizational Demand Analysis [6], Qualitätsmanagement für Nonprofi-Organisationen [2], methods used in marketing research without affecting the objectivity of the research.

The questionnaire has five parts:

- MMix theory (Q_{M1} – Q_{M5})
- TQM theory (Q_{T1} – Q_{T5})
- MMix – TQM joint (Q_{J1} – Q_{J4})
- Future knowledge interest (Q_{F1} – Q_{F3})
- Identification data (Q_{I1} – Q_{I3}).

The “M” and the “T” question offer information about the basic level of knowledge referring to the MMix and TQM concepts. The “J” and “F” questions have the aim to test at first sight the connections of the two theories and the interest of the subjects against new theories and their availability of testing it on their companies.

The results of the survey confirm the assumption that the economists are more confident with the theory of MMix. They are presented in figure 1 in absolute numbers and in figure 2 as percentage that shows more about the level of knowledge.

Due to the fact that the economists were more than the technicians the graph shows only the fact that there is a difference in the level of knowledge based on the background of the person.

The results, as percentage, show that 77 to 97 of the economists are familiar with marketing and 66 to 79 engineers (Q_{M1} – Q_{M5}). About TQM information the percentage is 89 to 99 on the side of engineers and 43 to 58 on the side of economists.
knowledge about the MMix is at a better level than the economists about TQM. The result of the whole sample shows that it is placed at a median level (figure 2).

On the other hand, the assumption is somehow confirmed by the results, but it should be taken into account that the sample was made by 60% economists, 33% engineers and 7% others. This structure seems to be representative for public and private services providers.

The answers to the $Q_{j1} - Q_{j5}$ are shown as follow:

- $Q_{j1}$, one can see that the majority (54%) considers the syntagm “our customer – our master” related only with MMix and 25% to both (the right approach);
- $Q_{j2}$, 157 subjects (73%) consider that quality could be the main root of the MMix-TQM philosophy;
- $Q_{j3}$, a great majority of 89% was obtained by those considering that the 10 mentioned elements could be the basic structure for the joint theory and about half of them consider that these elements could be structured as a decagonal system;
- $Q_{j4}$, 59% are considering that a new theory could be an alternative to a sustainable development in public and private services.

The questions highlight the interest of the subject for a new theory.

As a conclusion of the survey, we can appreciate that the working hypothesis ware close to the perception of the public and private services and confirmed a potential gap that could be filled by a new trend – MMix & TQM joint philosophy.

CONCLUSIONS

The first conclusion is that a joint MMix-TQM philosophy could be a potential future approach of public and private services providers for a sustainable development in the age of knowledge management.

The joint philosophy could use the elements of both theories and create a common body of knowledge that could be better applied to approach a company for a sustainable development.

As we proposed by $Q_{j2}$, the “QUALITY” could be the core of the joint theory. A proof for this is that the quality is taken into account in each of 5P used by MMix.

The MMix has a 5P structure: product, price, placement/distribution, promotion, personnel. Even if at the beginning MMix was formed by the first 4P, later the 5th was added one for services that are considered more dependent on the personnel than the goods supply. Now, all the 5P are important for goods or services at the same extent.
We are sure that these ideas briefly shown as potential skeleton (Figure 3) of the joint philosophy could be a start for the analysis and working out of the proposed subject.

![Figure 3. The skeleton of the joint MMix – TQM philosophy](image)

REFERENCES

INCREASING CORPORATE SOCIAL RESPONSIBILITY THROUGH CREATIVITY & INNOVATION

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Abstract: The present essay tries to define corporate social responsibility through the process of creativity and innovation. The CSR has evolved and extended its meaning during time, as organisations began to perceive its importance, and started integrating it into their strategies and corporate decisions. On the same time, a very important aspect concerns the society’s tendency to become more and more conscious and preoccupied of the impacts of companies’ actions. As a result, creativity and innovation play an essential role for creating proper corporate citizenship awareness and for gaining competitive advantage on the market, even if at a certain price.

Keywords: Corporate Social Responsibility, Corporate Citizenship, Innovation, Creativity

INTRODUCTION

For the first time, the topic of CSR has been developed more detailed by Bowen in 1953, claiming that “businesses have the obligation to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society”, anticipating its large impact upon the community and the organisations in the same time. Later on, Carroll (1979) added that businesses have to fulfill simultaneously four main responsibilities: economic, legal, ethical and philanthropic. Out of these four, we will focus on this paper on the last two, and the way they interact with the first two (see figure 1).

Some of other early definitions of CSR state that “CSR is seriously considering the impact of the company’s actions on society” (Paluszek, 1976) and that “the idea of social responsibility […] requires the individual to consider his acts in terms of a whole social system, and holds him responsible for the effects of his acts anywhere in that system” (Davis, 1967).

Accordingly, the concept of CSR developed and extended its meaning, resulting the “corporate citizenship”, the generic term used, including also corporate social responsiveness and corporate social performance, another two concepts derived from CSR (see figure 2).

The increased concern of the societal environment for the business criticism has resulted in the continuous evolution of the CSR concept and this has lead to a more responsible society with increased expectations.

Accordingly, there has been proved that the consumers are willing to support responsible organisations when shopping, as the corporate social responsibility, such as community involvement and corporate giving, may induce consumer goodwill toward the organisation. In his book, “The Generous Corporation”, Mitchell suggested that there is a need for a philosophy to promote large corporations as a force for social good, as some
were feeling affected and threatened by the power of large corporations. The reasons for which it is called “responsibility”, is because it reflects the society’s expectations from the business, such as corporate giving, product and service donations, volunteerism, partnerships with local government and other organizations, or any other kind of voluntary involvement of the organization and its employees with the community or other stakeholders.

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**Corporate Social responsibility** – emphasizes obligation, accountability

**Corporate social responsiveness** – emphasizes action, activity

**Corporate social performance** – emphasizes outcomes, results

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Figure 1: The pyramid of corporate social responsibility
Source: Carroll and Buchholtz, 2006

Figure 2: Corporate citizenship concepts
Source: Corporate citizenship concepts
Source: Carroll and Buchholtz, 2006
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Accordingly, there has been proved that the consumers are willing to support responsible organisations when shopping, as the corporate social responsibility, such as community involvement and corporate giving, may induce consumer goodwill toward the organisation. In his book, “The Generous Corporation”, Mitchell suggested that there is a need for a philosophy to promote large corporations as a force for social good, as some were feeling affected and threatened by the power of large corporations. The reasons for which it is called “responsibility”, is because it reflects the society’s expectations from the business, such as corporate giving, product and service donations, volunteerism, partnerships with local government and other organizations, or any other kind of voluntary involvement of the organization and its employees with the community or other stakeholders.

Therefore, the marketing potential of corporate responsibility initiatives has been investigated closely, as considered “an appropriate tool to strengthen social cohesion and community awareness” (Korka, 2006). Some of the most important advantages can lead to an improved corporate image, better market penetration, improved personal relations and external relations.

One of the consequences is that The Business Ethics 100 Best Corporate Citizens list was developed and first published in 2000. It has since gained recognition as an indicator of best practices in the area of corporate social responsibility and is regarded as the third most influential corporate ranking, behind Fortune magazine’s “Most Admired Companies” and “100 Best Companies to Work For”. The methodology for the list was developed according to a scoring system that ranks companies according to financial, environmental, social, and governance performance. More precisely, The 100 Best Corporate Citizens list ranks firms based on how well they perform in eight categories: shareholders, community, governance, diversity, employees, environment, human rights, and product. Summarizing, the scores draw on both financial information and measures of corporate social performance.

Another proof for the importance and consideration of the CSR in business is the organisation Business for Social Responsibility, which companies join to learn how to implement policies and practices that will contribute to their sustained and responsible success, including issues such as business ethics, the workplace, the marketplace, the community, the environment and the global economy. Moreover, CSR means internalizing or eliminating the costs that were formerly passed on to the society in the form of dirty air, unsafe products, consequences of discrimination and others. Consequently, for some organisations, CSR means spending more money, or producing more expensive products. But, a survey from Business Week revealed that 95% of the respondents consider that the companies should not focus only on profits, but also be responsible to their workers and communities, even if this means they have to sacrifice part of their shareholders’ profits.

According to Simon Zadek, there are four ways in which a corporation responds to CSR pressures:

- **defensive approach**, when they will try to avoid the pressure and the costs,
- **cost-benefit approach**, when the companies will try to identify a direct benefit that exceeds costs,
- **strategic approach**, when the organisation will adapt to the changing environment and will include CSR in its emergent strategy and
• innovation and learning approach, meaning an active engagement regarding CSR and the opportunities it provides, such as understanding the marketplace and enhancing organizational learning, which leads to gaining competitive advantage.

The innovation is defined as the successful implementation of a creation, and there can be distinguished more kinds, such as products, process or social innovation. Innovation plays an intermediate role between creativity and productivity increase, because innovation tends to result in growth and efficiency, but not immediately in more profits. Sometimes, low profits may be the price of the innovative investment.

Therefore, in their attempts to be more and more social responsible, the companies started using their creativity and produce innovations to convince their stakeholders that they really are aware of the “corporate citizenship” concept. Davis and Blomstrom have defined CSR as “the obligation of decision makers to take actions which protect and improve the welfare of society as a whole along with their own interests”. This definition implies the process of creating positive benefits for society, for which the organisations have found new creative ways of accomplishing this.

For example, Chick-fil-A, a fast food restaurant operates foster homes, sponsors summer camps and is providing college scholarships through a foundation; Merck & Co., the pharmaceutical giant, supports science education in certain area; IBM is offering computers and IT training courses to schools; UPS has developed a 2 million dollars program with the purpose of helping nonprofit organizations to develop innovative ways of recruiting, training and managing volunteers; other companies supports volunteer work through their employees, or offers money, their services and time to provide education to youth, support for health organisations, arts and culture, programs for the handicapped, cleaning environmental pollution etc. But also simple things such as a fair workplace, providing safe products and engaging in fair advertising, producing environmental friendly products may be examples of corporate responsibility in its daily activity, because anticipating and preventing is better than reacting.

On the other side, there are also some new topics continually emerging from the technological advances, such as Internet based business (e-commerce) and genetically modified foods, which in their origin started from good ideas, but in the end may create new problems or challenges, or even be harmful to the society. These unanticipated side effects of technology is due to the fact that they were often implemented before being possible to really evaluate the side effects, ethical problems or other risks.

CONCLUSIONS

Summing up, corporate social responsibility became a very present topic in people’s minds, and consequently, an imperative issue for the companies. Because there has been proved that consumers are more willing to support responsible organisations when shopping, even if sometimes the costs are high, the corporations invest more for creativity and innovation as proofs of a more social responsible behavior. Actions such as community involvement and corporate giving may induce consumer goodwill toward the organisations and help them achieve competitive advantage.

REFERENCES

GLOBAL PERFORMANCE INDICATOR FOR VOCATIONAL TRAINING ORGANIZATIONS BASED ON THE EUROPEAN COMMON QUALITY ASSURANCE FRAMEWORK

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Abstract: The paper defines a global performance indicator for organizations providing vocational training, and recommends a methodology for determining this indicator, taking into consideration the European Common Quality Assurance Framework (CQAF) criteria.

For this purpose an evaluation model adapted to organizations providing vocational training is defined, as a basis for determining the indicator and a score system for evaluating the fulfillment of the CQAF criteria. The proposed methodology for determining the global performance indicator was applied, with experimental title, in the case of organizations that provide vocational training in Romania.

Keywords: global performance indicator, vocational training, European Common Quality Assurance Framework

EVALUATION MODEL FOR DETERMINING A GLOBAL PERFORMANCE INDICATOR FOR ORGANIZATIONS PROVIDING VOCATIONAL TRAINING

In order to define an evaluation model for the organizations providing vocational training the following was taken into consideration: the European auto-evaluation guidebook for educational services suppliers and professional training; the American auto-evaluation model Malcom Baldridge; the international standard ISO/IEC 15504-2:2003 Software engineering – the processes evaluation - Part 2: The carrying out of the evaluation; and the evaluation system used within competitions for awarding the European prize for quality (EFQM model). The proposed model is based on the following components: the CQAF criteria and sub-criteria, chosen as a reference; an auto-evaluation method based on a questionnaire format, with 5 evaluation levels (table 1); and a system of giving points, using the RADAR method.

Therefore, for evaluating the degree of fulfillment of the CQAF model criteria, the extent of realization of the organizational practices was taken into account (the variable $Mpo_i$, where “i” can take values from 1 to 65 – the total number of questions in the questionnaire used within the study conducted). Each question in the questionnaire was evaluated giving a score from 0 to 4 to the variable $Mpo_i$ (where “i” can take values from 1 to 65). For evaluating the degree of fulfillment of the model’s sub-criteria (the variable $Scc_j$, where “j” represents the sub-criterion’s code) in conformity with the degree of fulfillment of the specific objectives of each sub-criterion, the variable $Mpo_j$ was defined.
(where “j” can take values from 1 to 65) with values between 1 and 5 as follows: \( Mpo_j = Mpo_i + 1 \)

The variable \( Scc_j \) (exemplified in table 4) is computed as the average of the variables \( Mpo_j \) for questions relevant to the sub-criterion. The variable \( Scc_j \) can take values from 1 to 5. For example, in the case of sub criterion 2.1.c related to the personnel and the organization (table 1, questions nr. 22, 24, 29), the variable \( Scc_j \) is determined using the following relation: \( Scc_{2.1.c} = \frac{(Mpo_{22} + Mpo_{24} + Mpo_{29})}{3} \)

Table 1 Excerpt from the questionnaire proposed for the evaluation of organizations providing vocational training, considering the CQAF criteria (example for „Human Resources Management“)

<table>
<thead>
<tr>
<th>Human Resources Management</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>The management and putting to account the knowledge and the whole potential of your organization’s personnel, as well as planning the activities in order to implement the strategies and increase the efficiency is carried out through:</td>
<td></td>
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<tr>
<td>20. defining a policy in the field of human resources, based on the general policy of the organization, with objective recruitment, promotion, rewarding and determining of managerial positions criteria communicated to the whole personnel</td>
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<tr>
<td>21. determining the responsibilities using the job sheet card</td>
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<tr>
<td>22. assurance of proper working conditions</td>
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<td></td>
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<tr>
<td>23. assurance of the access of the personnel to detailed information regarding the objectives they need to fulfill</td>
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<tr>
<td>24. assurance of the equilibrium between individual necessities of the employees, the teams and the organization as a whole</td>
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<td>25. the results of the evaluation of the personnel lay the foundations for planning the activities</td>
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<tr>
<td>26. the trainers possess competences in the field and teaching experience</td>
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<td></td>
<td></td>
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<tr>
<td>27. the competences of the personnel are monitored and developed</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>28. the preparation plan of the personnel ensures an efficient support for implementing the strategic priorities, taking into account the present and future needs of the personnel and the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>29. Involvement of personnel and partners in the process of identifying certain ideas and suggestions referring to the improvement of activities</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The meaning of the score corresponding to each evaluation level in the questionnaire is the following: 0 – inexistent practices within the organization; 1 – weakly represented (there is certain evidence); 2 – satisfying represented (there is evidence); 3 – greatly represented (clear evidence); and 4 – totally represented (comprehensive evidence).

Each of the objectives attributed to a sub-criterion of the model is considered to be fulfilled, in this way:

- Unaccomplished, if the practices are fulfilled in a proportion lower than 15% \((\text{Scc}_j \leq 0.75)\);
- Insufficient, if the practices are fulfilled in a proportion lower than 15%-35% \((0.75 < \text{Scc}_j \leq 1.75)\);
- To a small extent, if the practices are fulfilled in a proportion of 35%-60% \((1.75 < \text{Scc}_j \leq 3)\);
- To a great extent, if the practices are fulfilled in a proportion of 60%-85% \((3 < \text{Scc}_j \leq 4.25)\);
- Totally accomplished, if the practices are fulfilled in a proportion greater than 85% \((4.25 < \text{Scc}_j)\).

The weight of the components is the one recommended by the evaluation matrix RADAR.

**ESTABLISHMENT OF THE MULTIPLICATION FACTORS FOR DETERMINING THE GLOBAL PERFORMANCE INDICATOR FOR ORGANIZATIONS PROVIDING VOCATIONAL TRAINING**

For determining the global performance indicator \((I_{gp})\) of the organizations providing vocational training it has been suggested using a multiplication factor (variable \(F_{m}\), where \(m\) is the criterion for which the multiplication factor is applied) of the value computed for the reference model criteria (table 2). The value of these factors was determined on the basis of the EFQM’s values with the following explanations:

- “Leadership” criterion within the EFQM model was assimilated with the criteria “leadership”, “objectives and values” and “external verification” within the CQAF model;
- Criterion “strategy and planning” within the EFQM model was assimilated with the criteria “strategy and planning”, “planning and implementing the improvement actions” within the CQAF model;
- The criterion “partnership and resources” within the EFQM model was assimilated with the criteria “partnerships” and “financial aspects and resources” within the CQAF model.

**Table 2 Multiplication factors used in determining the global performance indicators of the organizations providing educational support**

<table>
<thead>
<tr>
<th>CQAF criteria</th>
<th>Suggested multiplication: (F_{m})</th>
<th>EFQM multiplication factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Leadership</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>1.2 Objectives and values</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>4.2 External verification</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>1.3 Strategy and planning</td>
<td>0.4</td>
<td></td>
</tr>
</tbody>
</table>
DETERMINING THE GLOBAL PERFORMANCE INDICATOR USING THE EXAMPLE OF ORGANIZATIONS PROVIDING VOCATIONAL TRAINING IN ROMANIA

The suggested global performance indicator (Igp) is computed using the following relation:

\[
Igp = \frac{\left( \sum_{i=1}^{9} Cfd_i \times Fm_{im} + \sum_{i=1}^{4} Cr_i \times Fm_{im} \right)}{10}
\]

The global performance indicator (Igp) can take values from 1 to 5. A value of the global performance indicator greater than 4.25 shows the total fulfillment of the CQAF model criteria. The CQAF criteria are fulfilled in „a large measure”, at a value of Igp between 3 and 4.25.

Using the data obtained, as a result of the study conducted on the basis of a questionnaire using the example of the organizations providing educational support in Romania, the global performance indicator (Igp) has been computed, determining an average on categories of organizations (depending on the number of employees), as it is shown in figure 1.

![Figure 1](image)

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According to the study conducted, the small and medium organizations providing educational support in Romania have an average of the global performance indicator (4,41 and 4,43), which shows the fulfillment in a „large measure” of the CQAF model criteria.
There is a significant gap against small organizations, with no more than 5 employees, whose determined performance indicator is much lower ($I_{gp}=3.50$). In order to fulfill the CQAF model criteria, in the case of these organizations, it is enforced that certain complex improvement plans are established.

The organizations with no more than 20 employees, fulfill in a large measure the CQAF model ($I_{gp}=4.01$). These are organizations in which, due to their flexibility and creative potential, the conformity with the CQAF model can be ensured with smaller efforts through their orientation towards the organization’s systematic evaluation, both internal and external and towards encouraging innovation and personnel’ creativity. The value of the global performance indicator must be correlated with the degree of conformity with the CQAF reference model criteria, to determine the maturity level of evaluated organization’s quality management system.

CONCLUSIONS

To determine a global performance indicator for the organizations providing educational support, an evaluation model of these organizations was preliminary defined, taking into consideration: the European auto-evaluation guide book for educational services and professional training suppliers; the American auto-evaluation model Malcolm Baldridge; the international standard ISO/IEC 15504-2:2003 software engineering – Process evaluation – part 2: effectuation of the evaluation; the evaluation system used in the competitions for awarding the European quality prize (model EFQM).

The questionnaire used comprised 65 questions related to the implementation practices of CQAF model, by the organizations providing educational support in Romania. The results obtained were processed on the basis of the correspondance between the questions and the sub-criteria of the CQAF reference model, being used in order to determine the global performance indicator of those organizations.

Determining the global performance indicator allows the management of these organizations to make use of an efficient instrument in order to identify the weaknesses, facilitating the establishment of the necessary measures for continuous improvement of the quality of the services performed.

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THE HYGIENE PACKAGE: NEW LEGISLATION IN FOODSTUFF SAFETY

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Abstract: The European legal framework regarding food safety is outlined in Regulation (EC) n. 178/2002 (“General Food Law”), which lays down the principles and general requisites of food law, sets up the European Food Safety Authority and establishes the procedures for the field of food safety, creating a completely new safety system aimed at achieving a high level of health protection.

With the approval of the “Hygiene Package”, consisting of four Regulations and a Directive, passed in 2004, but which came into force on 1st January 2006, the principles on which the European policy for food safety is based are reaffirmed and widened and the process of reorganising food safety, started in 1997 with the publication of the Green Paper, is completed.

The new laws constituting the “corpus iuris” on the subject of hygiene lay down, in line with reg. 178/2002, the measures, procedures and obligations in the field of hygiene for food products. The “hygiene package” allows for a united and integrated approach to the subject and is thus able to protect and reconcile the requirements of food safety, consumer protection and the free movement of goods. It extends the obligations already included in previous regulations (Directive 93/43 on self-regulation, adopted in Italy by Leg. Decree 155/97) and increases consumer protection.

Keywords: safety, foodstuff, hygiene, legislation

INTRODUCTION

This paper examines the new elements introduced in the “hygiene package”, which renews and reorganises the approach to hygiene-health food checks and consumer protection, putting into practice the new elements included in the European policy on food safety and hygiene.

The European legal framework regarding food safety is outlined in Regulation (EC) n. 178/2002 (“General Food Law”), which creates a completely new safety system aimed at achieving a high level of health protection.

The new EU strategy sets up a system of hygiene policy based on the principle of the so-called “from the field to the table” approach, and an integrated system of traceability, which distributes and defines areas of responsibility for all those involved along the line, from the farmer to those who distribute products to consumers, also including the catering industry.

This new approach to the organisation of food safety, which started with the publication of the Green Paper in 1997, followed by the White Paper in 2000 and by the Regulation 178/2002, was completed by the approval, in 2004, of the “Hygiene Package”, consisting of four Regulations and a Directive, which came into force on 1st January 2006, reaffirmed and widened the concepts on which the European Food Safety Policy is based.
The new laws constituting the “corpus iuris” on the subject of hygiene lay down, in line with reg. 178/2002, the measures, procedures and obligations in the field of hygiene for food products. The hygiene package extends the obligations already included in previous regulations and increases protection for consumers and for the free movement of goods, completing the development of legislation in the field of food safety.

THE HYGIENE PACKAGE

When discussing the introduction of the new rules, which then became part of Regulation 178/2002, the Commission had already foreseen an all-embracing system known as the “hygiene package”. The proposal to pass a series of laws on the subject of food hygiene grew out of the need to bring coherence to the food hygiene rules, through a review and reorganisation of the complex food hygiene regulations, made up of vertical and horizontal Directives, frequently not adopted by member states, in order to guarantee uniformity also in the hygiene-health sector. The need for a “single” European system led to the Commission issuing five Regulations and a Directive, which organise and harmonise the laws in the fields of food product hygiene, veterinary checks and health inspections.

The new regulations concern: the hygiene of food products (Reg. 852/2004); specific rules for the hygiene of animal food products (Reg. 853/2004); the organisation of official inspections (Reg. 854/2004 e Reg. 882/2004); the hygiene of animal feedstuffs (Reg. 183/2005)1 and Directive 2004/41, which replaces or modifies a wide range of previous Directives.

These replace all the vertical European Directives previously in force in these sectors, as well as the horizontal ones, and they definitively clarify the Regulations of each sector, such as the one of animal food products, and the present legal framework.

The hygiene package supersedes European rules on the subject of self-regulation based on Directive 93/43/CEE, but nonetheless maintains the principles on which said Directive was based, setting out the Regulations according to certain fundamental points:

• the protection of human public health as the main precaution;
• identification of dangers and evaluation of risks in places of production;
• the adoption of microbiological and temperature control criteria;
• codes of good conduct on the subject of hygiene;
• checking of the hygiene of food products by the relevant authorities;
• the responsibility of those operating in the sector in all phases, including final sale.

The rewriting of the European hygiene laws tends to eliminate “grey areas”, not covered by regulations, which may favour bad practice and completes the development of EU legislation in the field of food safety. The “package”, which lays down the general hygiene rules for those operating in this sector, continues along the road followed by Directive 93/43/CEE, adopted in Italy by Legislative Decree n. 155/1997, and which is now

1 The aim of ensuring a high level of consumer protection concerning food safety cannot be achieved without rules on animal feedstuffs. Regulation 183/2005 sets out the requirements and general hygiene rules for feedstuffs, their traceability, registration and recognition of production facilities. The Regulation is applied to the whole chain of production of feedstuffs for animals raised for supplying food for humans, from primary production to placement on the market, including transportation and sale, and is also applied the import and export of feedstuffs to and from non-EU countries.
superseded by Regulation 852/2004 and Regulation 178/2002, on food safety, bringing about a change in mental approach rather than in the food safety system itself.

The first important change made concerns the extension of the principles of self-regulation and of producers’ responsibility to the sector of primary production, which was excluded by the previous Directive 93/43/CEE.

This Directive, which introduced corporate self-regulation to protect the production process and the HACCP (Hazard Analysis and Critical Control Point) system, concentrated the application of its hygiene rules on all phases of preparation, transformation, processing, conditioning, storage, transportation, distribution, manipulation, sale or supply of foodstuffs to final consumers. Although it was an important legal instrument, it suffered from the shortcoming that its rules applied to the “food industry”, in other words only those who produced or distributed “processed” agricultural products.

Hygiene-health safety is now enforced in accordance with Reg. 852/2004. Following on from Reg. 178/2002, it lays down the procedures and obligations in the field of food product hygiene on the basis of the consolidated principle that food safety must embrace all relevant stages of production, including handling at the place of production itself and later transportation and storage. European lawmakers have not yet imposed on the primary sector the obligation to put into place the HACCP system, as is the case in later phases of production, such as processing and distribution. This point will certainly be reviewed by the European Union in the future.

Those operating in the primary sector, who have the greatest responsibility for food safety, are obliged to adopt good agricultural practice so as to guarantee correct procedures with regard to hygiene, also by using manuals of correct hygiene procedure, which, although voluntary by nature, are considered to be instruments able to ensure hygienically correct behaviour and to control the possible risks at the farm level.

Regulation 852/2004 does not detail all the operational and technical steps needing to be taken in order to guarantee food safety, but rather it defines the objectives to be aimed for, leaving those operating in the sector with responsibility for adopting safety measures necessary to guarantee that food products are not dangerous. The Regulation, thus, pays more attention to the hygiene results achieved than to the methods used, leaving producers to study their production flows and, on the basis of these, to choose adequate and efficient instruments for the production of safe food products, while being able to demonstrate to inspectors that they have made the right choices.

The achievement of food safety objectives is subject to official control through audits, inspections, monitoring and surveillance, according to control plans designed on the basis of risk analysis, with the objective of guaranteeing that food safety is not compromised. The procedures, based on the HACCP principles, may be subject to review or modification, if changes are made to the product, in its processing or in any other phase; indeed, the procedures must be able to keep risk levels associated with food products under control. In particular, in primary production, there is the option of identifying the necessary safety thresholds without fixing precise standards; indeed, in enclosure I of Regulation 852/2004 dedicated to primary production, general expressions are often used, such as “within the limits of the possible…, according to reasonableness, where necessary…appropriate…suitable”, in accordance with a more flexible legislative technique, which shows the importance of the technical choices made by those working in this field.
The second new element regards the protection of traditional products. Regulation 852/2004, in paragraphs 15 and 16, revokes the position of Directive 93/43, which in practice blocked the circulation of all products obtained using method incompatible with HACCP, opening the system up to operational flexibility that allows “the uninterrupted use of traditional methods in any phase of production, processing or distribution of foods, provided the objectives of food safety are not compromised”.

The spirit of the law is that of protecting particular typical traditional food products in order to help firms working in disadvantaged geographical areas and that of imposing a system of self-regulation able to respect consumers’ health and the conformity of the product, on the basis of the “principle that what counts is the result and not the method by which it is achieved”.

This allows member states to ask for the approval of a national measure by which, with respect for the general requirements on the subject of hygiene, “traditional artisan” methods of production are allowed to continue, thus supporting producers of certain speciality foods subjected to territorial limits and protecting and preserving rural crafts and traditions as a kind of national gastronomic heritage.

This “moderate revolution”, brought about by European lawmakers, has also led to the drawing up of a law, Regulation 853/2004, which is specifically aimed at products of animal origin, more susceptible to infectious agents that can seriously damage people’s health.

**REGULATION 853/2004**

Regulation 853/2004 represents the most important new element in legislation, as it regulates the sector of products of animal origin, a sector previously subject to various disjointed regulations passed at various times and which did not deal with the sector coherently. Regulation 853/2004 is applied to products of animal origin, whether processed or not; that is to say cooked meats, UHT milk, fresh milk, fresh meat; on the other hand, it does not deal with foods containing products of vegetable origin together with processed foods of animal origin, for example sandwiches with cooked meats or cheese, pizza, take-away snacks, stuffed pastries, primary production for domestic use, the preparation, manipulation and preservation in the home of foods to be consumed in the home, nor the direct supply of small quantities of primary products or certain types of meat by the producer to the final consumer or to a shop connected to producer and selling locally, since this situation is sufficiently covered by the general rules laid down by Regulation 852/2004, relating to food hygiene.

Regulation 853/2004 lays down detailed rules for each one of the fifteen categories into which the sector is divided: meat from domesticated cattle, pigs, sheep and goats; meat from poultry, rabbits, domesticated hares, meat from game, molluscs, fish, milk and dairy-cheese products, eggs and egg products.

The new rules introduced regard factories handling products of animal origin, which must be registered or recognised by the relevant authorities in the member state. Registration takes place without any need for inspection beforehand of primary production, transportation, storage without compulsory temperature and retail sale. Recognition, on the other hand, takes place after inspection by the health authority. Compulsory inspection does not apply to factories which only deal with primary production, transportation, storage of products not requiring a controlled temperature or retail sales not subject to the Regulation. Member states must keep updated lists of recognised factories; moreover, in cases covered
by the Regulation, products of animal origin are labelled with a health stamp in accordance with Reg. 854/2004 or with an identification mark. This mark must be applied during or after production and must contain information relating to the country of origin and the recognition number of the factory.

In sort Regulation 853/2004 lays down the following:

- factories handling animal product processing must be recognised by the relevant national authorities. This obligation is not applied to factories dealing only with primary production, transportation, storage of products not subject to controlled temperature;
- products of animal origin must be labelled, when required, with an appropriate health stamp applied in accordance with Regulation 854/2004;
- a list must be drawn up of non-EU countries from which imports of animal products are allowed. The Regulation lays down the basic requirements for the inclusion of a country in this list; specific rules apply for the fish product imports; slaughterhouses must obtain information allowing the traceability of all the kinds of meat they handle, except for game;
- the conditions for processing, storage and transportation of the various kinds of products of animal origin are set out, also detailing the temperatures at which these operations must take place;
- there is an obligation for those operating in the “meat chain” to manage information on the conditions of rearing from the moment of birth to slaughter;
- there is a guarantee of operational flexibility, with a new approach of “adapting” legislation so as to take into account the objectives of the Regulation.


The hygiene package also includes Regulations 854/2004 and 882/2004, which lay down the rules relating to checks.

In particular, the former applies to those subject to regulation 853/2004, thus completing the regulation of food product and animal feedstuff hygiene set out in previous laws, and it lays down specific rules for official checks on products of animal origin, dictating the criteria and responsibilities for the recognition of factories (where necessary) and the carrying out of official checks on food products of animal origin in order to verify that the producer has respected Hygiene Regulations 852, 853/2004 and 1774/2002. It also leaves the burden of responsibility upon those operating in the food sector to ensure the safety of food products put on sale and it regulates inspections of these subjects, who must supply the relevant authorities with assistance and free access to premises, documents and registers. Official checks consist of audits of GMP (Good manufacturing practice) and HACCP procedures, inspections and tests. The audits are defined by the Regulation as “a systematic and independent examination to ascertain whether certain activities and correlated results conform to the rules and whether these rules are applied effectively and adequately in order to achieve certain objectives”.

European Parliament and Council Regulation CE 1774/2002 of 3rd October 2002, containing health regulations relating to sub-products of animal origin not intended for human consumption, came into force on 01/11/2002, but was only effectively applied from 1st May 2003. It lays down that all factories and storage facilities operating in the relevant field must be recognised by the relevant authorities within the established time limit.
In particular, Regulation 854/2004 sets out:

- the requirements for the recognition of factories by the relevant authorities;
- the obligation for those operating in the food sector to supply the authorities with all the necessary assistance in carrying out checks;
- checks based on the principles of the HACCP system;
- the tasks and responsibilities of the official veterinary officer in checking fresh meats;
- the methods and frequency of checks by the relevant authorities regarding foods of animal origin, molluscs and live shellfish, fish products, milk and derivatives;
- the sanctions for failure to comply with the obligations laid down in the Regulation;
- the completion of the rules for importing products of animal origin from non-EU countries set out in Regulation 853/2004.

Regulation 882/2004, on the other hand, relates to the official checks aimed at verifying that feedstuffs and foods conform to legislation in this field and in that of the health and well-being of animals; it sets out the responsibilities of the European Union regarding the organisation of checks and the dispositions that national authorities responsible for official checks have to respect, including the rules to be followed if European legislation is not applied. European legislators have thus also set up a harmonised framework of rules for the organisation of the above checks, with the inclusion of the health and well-being of animals and checks on products coming from non-EU countries, so as to prevent the arrival or spread of animal diseases within the EU. This Regulation closes the loopholes in previous legislation relating to official checks on feedstuffs and foods and on the health and well-being of livestock.

The objectives of Regulation 882/2004 are: to prevent or reduce to an acceptable level the environmental risks to human and animal health; to ensure transparency in the food and feedstuff market, and to protect consumer interests.

In particular, the Regulation lays down:

- the obligations for EU countries and the aims of official checks in the field of feedstuffs and foods;
- the operational criteria for the authorities responsible for checks designated by the member countries of the European Union;
- the accessibility of information of public interest;
- the protection of reserved information;
- the requirements for sampling and analysis methods;
- the measures to be taken if checks reveal risks to human or animal health;
- the final dispositions of Directive 97/78/CEE on the subject of checks on animal products from non-EU countries, with reference to feedstuffs and products of non-animal origin imported from countries that are not members of the European Union;
- the creation of EU laboratories to which national laboratories can refer as part of their activities;
- administrative measures regarding: the drawing up of national control plans, the training of staff responsible for checks, the checks to be carried out in EU countries and in those outside the EU, the penalties to be applied in the EU. Official checks consist of periodical audits, based risk evaluation, historical data and any other relevant information.
CONCLUSIONS

The “hygiene package” is a well thought-out collection of specific rules for the management of food safety, carried through with the involvement of all those operating in the food chain, making them responsible within the integrated total control strategy “from the field to the table”. Such a comprehensive system of rules underlined the desire of European lawmakers to “unify” the complex system of organisation rules on food hygiene and shows how a high level of food safety depends on a series of rules and procedures regarding the health and welfare of animals, important factors for food quality and safety, and on a harmonised system of checks.

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Abstract: the paper marks out some of the imperatives of the environment management and of the pro-environment concepts that will be found in the following production principles and, obviously, will influence the structure and quality of the merchandise offer of the more or less near future. we consider aspects that refer to the developing strategies, the protection of the basic resources, as well as maintaining a balance between the high rhythm of request development and the slower rhythm of the offer alignment.

Keywords: environment, environment - quality, ecological market, education

INTRODUCTION

The continuous increase of the population, the globalization of the people and goods flows, the intersection and conversion of the life ways are only a few of the great obvious phenomenon that impose high social and individual responsibility. The consumption and resources, the development and the limits of the resources, the life way and the horizon of the options become themes that advise to thinking and attitude. The present paper rounds up some of the imperatives of the environment management that will affect the future market, especially the merchandise offer – goods and services.

ENVIRONMENT MANAGEMENT – CURRENT AND FUTURE IMPERATIVES

In the last decades, the companies that realized the necessity of paying more attention to administrating the impact of the developed activity on the environment are multiple.

The experiences proved that applying the international environment standards marked an important change in mentality and professional/managerial culture. The companies that make a detailed analysis of the way they develop their activities have the chance to see that the results of going from traditional practices regarding the environment protection to a systemic environment management are remarkable, concerning not only the environment performance, but also the economical-financial performances of the company.

On international level the imperatives are the adequate administration of the environment aspects under the conditions of the increase of costs and investments necessary in this field and keeping the environment risk due to old technologies under control.

The environmental management and audit scheme (EMAS) allows the voluntary participation of the companies that operate in the European Union and the European Economic Area in an unitary environment management system. The scheme is operated since April 1995 and its objective is to promote the continuous evaluation and improvement of the environment performance of the participating companies.
The ISO 14001 standard’s general official purpose is to sustain the environment protection and the pollution prevention, balanced with the social-economical necessities.

EMAS goes further than ISO 14001 in many regards, its request being to perform an initial environment analysis, to actively involve the employees in implementing EMAS and to publish the relevant information for public and other interested parties.

The administration of an environment management system enforce the administration of the companies to reconsider all their activity sectors that have an impact over the environment from a strategic point of view, offering the following advantages: insuring low costs for the waste administration; making savings on electricity, water, raw materials consumption; low costs for products distribution; insuring a favorable image of the company regarding the authorities, clients and public; insuring a frame for the permanent improvement of the performance regarding the protection of the environment.

These current imperatives are more and more obvious in the normative materials elaborated on the level of the international and regional forums and they are developed simultaneously in the national legislations.

The legislation plays an important role in the pollution control, but allows a slight flexibility and is more concentrated on the regulated spread of the pollution, than on the causes that determine it, as a result of the force of the tradition in the field.

The traditional approach of the environment protection and management involved the control of the pollution of the environment agents (waste generation, atmospheric emissions and residual water evacuations) after it was produced and the reduction to minimum of the impact over the environment by applying accurate manipulation, treating and elimination practices.

A series of future imperatives gather more and more way in the European Union, where changing the approach is required, from the “on the edge of the pipe” treating technologies (in the case of the pollution control), towards avoiding the issue of pollutants by adopting measures considered to be the best that are available in this moment – technically and economically feasible – for the realization of the level for environment and human health protection regarded by the regulation.

For the realization of the environment objectives it is recommended that the environment management system to encourage the companies to apply the best available technology, if it is adequate and viable from the economic point of view.

For the determination of the best available techniques, one must consider the following:

- the technology that produces less wastes;
- the use of less dangerous substances/materials;
- the highest recovery and recycling rate for the substances/materials generated and used in the process, as well as for the wastes;
- processes, installations and methods that can be tested on industrial level;
- consistent and pertinent information regarding the consumptions of raw materials, utilities (water, electricity), equipment (technical level, using risks) and pollutant emissions (nature, quantity, involved risks);
- the information published by the Commission of the European Union or international organizations.

The idea of using SMM is sustained from a political point of view by the European Union. The fifth Action Program regarding the reorganization of the legislation could not solve all the problems of the environment and other mechanisms, being necessary to
perform a durable development. This Program includes basic instruments of the market, as well as bilateral agreements: SMM, eco-audit, and eco-characterization.

CONTINGENCES ENVIRONMENT – QUALITY MANAGEMENT

One of the most important requests of the integration in the European space is the alignment to the European quality standards.

The organizations can use an existent management system that corresponds to the series of standards ISO 9000, as a basis of their environment management system.

The basic elements of a quality management system and respectively an environment management system correspond, as they are the following: the policy (quality/environment), the planning, the implementation and functioning, the verification and corrective action, the analysis of the management.

While the quality management systems approach the necessities of the clients, the environment management systems answer to the necessities of a large number of interested parties and to the increasing requests of the company and of the environment protection. Additionally, the ISO 14001 standard has some principles of the management system from the quality system standards of the series ISO 9000.

The environment management covers an ensemble of problems, including the ones with strategic and competition implications. A company must continuously evaluate its environmental performance and the performance of the processes inside it to discover any resource that can be capitalized and that can constitute improvement opportunities.

More and more accent in evaluating the quality of a company is put on the considerations that mark out the clean character of the activity/business, marking many points of view that extend the significance of the term “clean” far beyond the conventional semantic meaning. None the less, exactly the limits of the conventional meaning of the term meet an enlargement generated by suspicions regarding the possible risks that various products, services and technologies that are still in the category of the clean goods or are tolerated with clean goods can present in the future.

PROJECTIONS REGARDING FUTURE MERCHANDISE

The merchandise, large category of the goods that are sold and bought, meet, in the context shown at the begging of the paper, a regime that helps their unconfined circulation on planetary level.

In this process one must also consider the possible critical areas and moments, in which the great flows of merchandise may generate ecological problems, with severe and of wide scope implications (the insertion in virgin natural areas of agents with severe impact over the local natural elements, its effect being the contamination of the environmental resources, the alteration of the biotypes, modifications of human health etc).

The merchandise of the next decades will be produced in authorized facilities, the authorization procedure having as basis the concept of the best available technique. “The integrated authorizations” presume that they consider the entire environment performance of the facility, that is the emissions in the air, water and soil, wastes generation, using the raw materials, energetic efficiency, sound/chemical (heavy metals)/electromagnetic (wireless equipment radiations)/radiological (nuclear energy, irradiation techniques for the merchandise conservation) pollution, accident prevention, risk management etc.
The future merchandises must be designed on clean principles which, although on the level of the actual technologies are still not capable, with small efficiencies, will have to be developed as a result of the deepening of the knowledge and application research.

Large series of future merchandise will be realized out of wastes (ethanol, bio-diesel, biogas) thus solving the large accumulations of recyclable materials and applying clean procedures, from the category of the soft biotechnologies and technologies that do not consume a lot of energy.

Many chemical merchandise which are considered very dangerous (pesticides and others) will be replaced by others, which will capitalize biological principles, non-aggressive to the environment.

The regional, traditional production merchandise will increase, and they will capitalize raw materials of local importance and traditional technologies, which do not consume a lot of energy, bringing ecological products, with great cultural value in the offer again.

Many other mutations and phenomenon will generate a major re-structuring of the future type of merchandise, greatly a result of the application of the measures for the protection of the natural and social environment.

CONCLUSION

The protection of the natural environment and the humanized space becomes a problem of global interest under the conditions of market globalization.

This state of fact imposes principles and norms that will have as a result a reconfiguration of the future merchandise offer and, in the same time, an intensification of the ecological education on the level of all communities and individuals.

REFERENCES

ELEMENTS OF CHANGE MANAGEMENT APPLICABLE TO THE INTEGRATED QUALITY-SECURITY-ENVIRONMENT SYSTEMS

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Abstract: The organizational change can not be done just for the sake of it. The organizational change can be determined by a series of major causes, like: chronic lack of financial resources, decrease of the competitive force in a direct report with the main competitors, the necessity of a substantial improvement of the work productivity, of the profitability or the prestige. In realizing an organizational change different approaches may be taken into account, out of which we can exhibit two, total opposites, from the point of view of the practices used, but also of the reasoning which creates the basis of the orientation of the process as a whole.

Keywords: sustainable development, environment, rural area, Ecotourism, Change Management

INTRODUCTION

Successful change, however, requires more than a new process, technology or public policy. Successful change requires the engagement and participation of the people involved. Change management provides a framework for managing the people side of these changes. The most recent research points to a combination of organizational change management tools and individual change management models for effective change to take place.

Organizational change management includes processes and tools for managing the people side of the change at an organizational level. These tools include a structured approach that can be used to effectively transition groups or organizations through change. When combined with an understanding of individual change management, these tools provide a framework for managing the people side of change.

The Copenhagen Summit (March 1995) had stressed on the need of combating the social exclusion and of the public health protection. The Treaty from Amsterdam referred especially to the sustainable development. Thus, only at the European Council in Goteborg, in June 2001 there was established a strategy for sustainable development, which offers a third dimension, for environment, to the strategy from Lisbon and establishes a new approach of the policies.

The European Council identified a number of objectives and measures in all four primary areas of the future EU development policy: The Control of the Climate Changes; The Indemnity of the Sustainable Development; Public Health; The Responsible Management of Natural Resources. The European Council from Laeken, from December 2001 saluted the creation of the European Alimentation Authority, of the European Agency for Air Security and of the European Agency for the Marine Security.
The European Council from Barcelona, in March 2002 stated that in spring 2003 the strategy regarding the sustainable development will be revising, stressing the application in practice of the results of the World Summit on Sustainable Development.

The rural sustainable development is based on the fundament of the objectives and strategies which vary in terms of time, space, and available resources, under many alternatives. In the perspective of the sustainable development of agriculture, the sustainable development of the rural space and the rural community implies taking into account and understanding the necessity of planning the development and the correct evaluation of the strengths and weaknesses of a certain rural community, of the existent and potential opportunities and risks, which will determine short and long term activities for each rural community. Therefore, the spirit of initiative and responsibility of the inhabitants of rural area are defining elements for the rural communities.

Today, the development of agriculture and of the rural area is approached in the unity of these two dimensions of PAC, which met new moments of improvement after 2000, and which will be stressed after 2007.

The low integration of rural economy in the structures of market economy, the difficult access to alternative income resources, make the social situation of an important part of the rural population to depend exclusively on the economic power of the agricultural fields, whose economic stage is affected by the natural-clime and economic factors evolution, specific to the market. Therefore, inside rural communities the poverty phenomenon is manifested in a large proportion, affecting the health of the human factor, and its quality.

Ecologic agriculture in Romania represents a new sector, in fully expansion and affirmation, an expression of the process of sustainable development of the agriculture and rural areas. This sector of the agriculture contributes to the enhancement of the plants and animals biological diversity, to the growth of the soil biological long term maintenance, of its fertility, to the recycling from the agriculture production, and of a healthy use of soil, water, air and biodiversity, to the production of clear products, through the reduction to the minimum of the pollution of the environment, thus protecting the health of people and animals.

Also, it must be taken into account that ecological agriculture needs important financial efforts, but which can be recuperated through stimulated selling prices, and a high responsibility in exercising the ecological agriculture. For Romania, to accept the sustainable development doctrine is not a possible benevolence option, but a unique responsible and efficient way to project long term economic-social development, in concordance with the national interest, with the requests of international collaboration and with the trend of the globalization.

In this general context, it would be wrong to say that once with the date of E.U. integration sudden, new and radical changes will appear, durable in the Romanian economy and society, inclusive in the rural environment. Mutations are visible even from now, others are about to appear on medium and long term, and will be felt by the population gradually, with the sustainable consolidation of the whole national economy, inclusive the rural one.

By rural tourism and agro-tourism (better known in our country) we understand passing a holiday in a local rural community, respectively in a rural household. The tourist can involve himself more or less in the traditional activities of that area or household. In this way he can take part to the collection of ripe grapes, milking of sheep or apple crops...The real agro-tourism takes place in households which are very close to the architecture and way of living of that area.
The ecotourism offers a large variety of nature experiences which lead to a better understanding, appreciation, joy to discover, protection of the nature and local traditional culture both for the visitors and or the local community. The ecotourism products attract the tourists which want to interact with the natural environment and in different extents allow the broadening of the level of knowledge, understanding, appreciation and pleasure. The level and type of the interpretation can be planned, projected and offered so that it could rise up to the interests, needs and hopes of the client, including a large variety of interpretations personal or non-personal.

The ecotourism activities and their planning should offer the best tourism and planning practices regarding the nature preservation and sustainable development. The tourism activity should be planned and conducted so that it would reduce the impact on nature. The ecotourism product is taking place and is conducted so that it would conserve and give great value to the natural and cultural environment by acknowledging and applicability of the specific characteristics of sustainable tourism. The ecotourism contributes positively to the preservation of natural areas. The ecotourism implies the participation to the preservation of the visited natural areas, offering constructive ways for better management and conservation of these natural areas (e.g. offering financial help to rehabilitate natural areas, taking out the disposable waste left by the tourists and the contribution to the preserving organizations).

Tourism will basically have a strong economic contribution to the sustainable development of the rural communities and will bring important social and economic changes. Intensive research on the ecotourism models available should develop as the mindset of local communities and tourists as it shall allow them to see new ways of approaching the ecotourism from the point of view of economic development (new jobs, new professions, the revival of handicraft and better skills in the utilization of raw materials) as well as from the point of view of sustainable growth (a stronger concern for the environment and the preoccupation for preserving the resources and tradition as good as possible).

At present, a wide range of Romanian service providers are showing interest for the long term development of tourism and ecotourism: hostel owners, administrators of natural monuments, the administration of natural and national parks, stud owners and all kinds of folk artists are widely spread and concentrated in different areas depending on the scope of tourist flows.

In the same time, we should look into applying as many social and economic models during the process of joining the EU. The best examples in ecotourism are North and South America and Australia, but the European experience is also strong, and Europeans are very well organized when it comes to rural collectivities.

CONCLUSION

Romania’s integration in the European Union creates the possibility of development of the ecotourism part of the total Romanian tourism production, which basing on its specific has the possibility to enter common market. This offers a survival chance for the small and medium enterprises in the hotel business and also for launching again the economic activities of the local small rural communities. In order to meet the requirements imposed under the process of joining the European Union, the local rural communities are being challenged to bring their technological equipments and activities up to the standards of sustainable business and development. At the same time, they must create the necessary
conditions for an ongoing training of the personnel performing in the areas of service and production until they have reached a high level of competence in their field. Also, the rural communities must learn as soon as possible how they can implement solutions that can lead to long term development.

REFERENCES


Abstract: The problem of waste disposal, over and above its economic, social and environmental implications, has taken on considerable importance as a notable source of both legal and illegal profits. In the 1980s the ever more stringent rules governing waste management led to the rise of the phenomenon of illegal disposal. The need to cover production costs and to limit the expense of the disposal process induced unscrupulous entrepreneurs to consider waste disposal solely from the point of view of cheapness, even if this meant using illegal methods.

This paper aims to analyze the phenomenon of illegal waste disposal, particularly the disposal of “Hi-Tech” waste.

Keywords: waste, illegal market, environment, disposal

INTRODUCTION

The problem of waste disposal, over and above its economic, social and environmental implications, has taken on considerable importance as a notable source of both legal and illegal profits.

In the early 1970s, when waste disposal first became the subject of debate, only the most combative ecologists took an interest in it. Only later, once environmental conscience had grown, did lawmakers begin to deal with the problem and feel it necessary to adopt effective and efficient instruments in order to control and reduce the negative aspects arising from the movement and disposal of refuse.

In the 1980s the waste problem exploded onto the scene with devastating effect. Countries experiencing a high rate of technological development found themselves forced to face up to the phenomenon of the disposal of an ever growing quantity of refuse, which could no longer be managed using traditional systems. Environmental awareness was growing, a phase of rapid industrialisation at all costs, aimed at creating jobs and wealth at the expense of the environment, was giving way to a more sustainable form of development, to the relocation of industries posing a threat to the environment and to the post-industrial transformation of production, with a tendency to move towards tertiary activities based on logistics, on information technology and on services, in other words on activities that apparently offered more sustainable opportunities.

This necessary transformation was made possible not only by the widespread use of Best Available Technologies, which the more serious businesses have continually developed, but also thanks to the strong community protests, inspired by the principle of “NIMBY- Not In My Backyard”, against all those activities that could have negative effects on the environment and on people’s health.
At the same time, considerable changes have been made in Italian law, indeed, sentence nr. 641 of the Constitutional Court in 1987 changed the concept of “environment” from that of a legitimate interest to that of an outright subjective right, with recognition of its characteristic of diffusivity.

Under pressure from this cultural change, large companies have had to evaluate not only the convenience of developing new production strategies which pay greater attention to employees’ health, but also that of developing new waste disposal strategies guaranteeing a perfect balance between cheapness and ecological considerations.

ILLEGAL WASTE DISPOSAL

The traceability of waste, the need to reorganise collection services and to dispose of industrial waste correctly have led to an increase in social cost and, thus, to the need for those responsible for production processes to undertake cost limitation exercises.

As part of this process, the European Union has passed a great deal of legislation with the aim of respecting the wishes of the population, as well as satisfying the needs of industry. From this point of view, the principle of extended shared responsibility, the principle of prevention and Life Cycle Thinking represent important guidelines for the organisation of an integrated waste disposal system.

In the 1980s, the ever more stringent regulations for waste management brought about the birth of the phenomenon of illegal disposal. The need to cover production costs and to limit spending on waste disposal induced unscrupulous entrepreneurs to evaluate the convenience of disposing of their waste on the basis solely of cheapness, even if this meant breaking the law.

Indeed, in the late 1980s, the cost of disposing of a ton of hazardous waste in western nations varied between $100 and $2,000, while the same type of material could be disposed of in Africa at a much lower cost varying between $2.50 per ton and $50 per ton.

At that time, of the 300 million tons of hazardous waste produced in developed countries every year, 50 million were disposed of in Africa, without any consideration for the consequences on the environment or the local population. UN sources reported at the time that about fifteen African nations had been contacted and offered generous payments in return for supplying land for the dumping of all kinds of uncontrolled waste. According to Greenpeace data, moreover, in 1998/99 alone more than 100,000 tons of unauthorised waste entered India. Police investigations in various European countries have ascertained that waste products often follow complex roundabout routes, ending up in developing countries, where they are dumped or turned into further sources of illegal profit. Let us take Somalia as a case in point. In this extremely poor country the arrival of metal waste from wrecked vehicles is turned into an excellent market for spare parts. An engine which has been “wrecked” in Europe and considered unusable becomes a treasure trove in the Horn of Africa, where it can be worth several thousand Euros.

Likewise, vehicles that have been stolen and cut in half in order to be passed through customs as metal waste, once at their destination, are turned back into brand new cars, which are put back onto the road without regard to safety.

It is thus easy to see how developing countries have become the largest and cheapest way of disposing of waste.
The Basle\(^1\) and Lomé Conventions, the spirit of which is wholly integrated into European regulations, have attempted to limit this phenomenon and its devastating environmental impact.

In the light of the situation described above, it must be mentioned that the efforts of numerous lobby groups, both foreign and domestic, have been directed at limiting as much as possible the quantity of waste requiring disposal by modifying the “status” of waste, as legislation has changed over time. According to EU directives waste, especially hazardous waste, must be rigorously traced from its origin to its final disposal. This involves considerable cost. However, if the same waste is transformed into secondary material, through a partial recovery process, costs can be contained and profit may even be produced. The secondary material is a kind of sub-product that can be reintroduced into production cycles. If, however, the transformation and recovery process only happens fictitiously, in other words through the falsification of documents, a crime is committed and the profits will be even higher.

The waste remains as such but, on paper, it is now a secondary material that only requires a shipping document and not a waste identification form, the so-called “ecological bill”\(^2\).

In the absence of an “ecological bill”, the disposal service has a lower cost because the waste is not disposed of at an authorised site, but can be casually dumped in a field, in a nearby canal or illegally disposed of.

The producer, whether aware or not of what has happened, will receive a false FIR (Waste Identification Form), showing legal disposal that, in reality, has not taken place.

In the waste disposal sector there is still undeniably a sort of “far west”. Despite the stringent regulations laid down by more advanced nations, the command and control system is still full of loopholes. In Italy, for example, inspections are often more a question of form than of substance and, except for the offence of illegal trafficking recently introduced under art.260 of Legislative Decree 152/2006, the system of penalties is not sufficiently severe.

**ILLEGAL WASTE TRAFFIC: CHINA, A CASE IN POINT**

As can be seen from the above reflections, illegal waste trafficking is becoming the most lucrative business of the new millennium.

The underlying reasons for this problem are based on the simple market rule of the relationship between supply and demand.

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1 The Basel Convention on controlling the transfer of dangerous waste was adopted in 1989 and came into force in 1992. Its objective was to prevent the transfer of waste from rich countries to poor ones. Under the terms of the Convention waste can only be transferred if the country holding it does not possess adequate waste management technology and only if it can be established that the country receiving it is able to treat it in an environmentally acceptable way. The Convention defines as “environmentally acceptable” those procedures that guarantee that the hazardous waste is managed in such a way as not to damage people’s health or the environment or to cause other damage. An authorisation system, known as PIC (Prior Informed Consent) is foreseen.

2 The ecological bill is a document accompanying the waste to be disposed of at an authorised site.
In the presence of emerging giants like India and China, desperate for resources, with incredible GDP growth rates, it is hardly surprising that illegal waste trafficking leads to these destinations.

The doorway into China is through the port of Hong Kong, where the regulations are less stringent and workers receive a daily wage of 1.5 dollars. This makes it extremely cheap to dispose of waste in China at a cost of about $160 per ton, rather than paying $4,000 to dispose of it properly in industrialised countries.

From October 2005 to March 2006, the Carabinieri of the NOE (Ecological Operations Squad), in collaboration with the Customs Service, confiscated 270 containers, mostly bound for China, containing about 4,600 tons of industrial waste, waste from plastic processing, metal scrap and scrap household appliances, with an estimated value of €2,700,000.

One of the most serious problems is undoubtedly that of the export of so-called “hi-tech” waste, because of its characteristics and the speed at which it is produced. In just a few years China has become the world’s hi-tech graveyard, where technological waste from Europe and the USA is dismantled and recycled by the local labour force. Thus, the apparent environmental advantage of recycling these products, theoretically a valid alternative to dumping or burning them, no longer exists because of a complete lack of health and safety protection for workers, toxicity for the environment and profit for organised crime.

A good example is that of the Chinese city of Guiyu, which has become a prime example of a “toxic city”. Since 1995 it has been transformed from a poor rural area into an important centre for the “treatment” of “hi-tech” waste. After dismantling the waste, the parts that are of no use are burnt, with unimaginable consequences for air quality and people’s health, with absolutely inadequate conditions for the workers, mainly consisting of women and children.

In a system structured in this way, there is no doubt that organised crime infiltrates the system and that unscrupulous entrepreneurs take advantage of illegal dumping in order to resolve the problem of waste disposal. From an international strategic point of view, China’s willingness to accept this waste characterises the routes taken by waste in search of cheap means of disposal. Paradoxically, China is one of the signatories of the Basel Convention and Chinese law prohibits the import of electronic waste.

The “Computer Trade Association” has however estimated that, in China alone, in 2002, 2.3 million PCs, 2.7 million displays and 1.35 million printers were "eliminated": copper is recovered from the electrical wiring, the printed circuits are placed in an acid bath in order to separate the precious metals (including gold and palladium) and the plastic is recovered or burned in order to separate it from pieces of metal. Smoke, ash and other substances are released into the air and the soil. The environmental damage caused is immense and the processes are carried out, as we have said, without any attention at all paid to health and safety or environmental protection regulations.

It is clear that such a perverse system guarantees very high profits, in that it responds to ruthless market laws.

The experience of specialised units, such as the Carabinieri of the NOE, has shown over the last four years, since the Ronchi ordinance, and then ordinance 152/2006, came into effect, that the phenomenon of waste trafficking is a nationwide problem in Italy and is not restricted to the southern regions. The EU, so far, has adopted regulation 259/93 for the supervision and control of waste transportation by sea in and out of the EU. This regulation, which was immediately binding on all Member States, has recently been replaced by EC
Regulation 1013/2006, based on the international treaties of Basel and Lomé, as well as on decisions taken by the OECD, forbidding the export of waste from the EU to developing countries.

The regulation has three aims: to supervise and control waste transportation, to protect the environment and to implement the principle of proximity, giving priority to the recycling of waste.

Waste to be disposed of is divided into three lists, according to the hazard it poses and to the reason for its transportation (final disposal, reuse or recycling), expensive sureties are set and these are returned once it is firmly established that the waste has indeed been disposed of, reused or recycled.

Discouraging illegal waste trafficking is also the best way of protecting the safety of European consumers and avoiding the return of products made from this “waste” to Europe in the shape of finished or semi-finished goods, which are difficult to intercept through customs controls.

CONCLUSIONS

The analysis undertaken shows how pressing and urgent it is to undertake a reorganisation of the integrated system of waste management. In particular, greater attention should be paid to the reduction of waste production. In the field of electrical and electronic products, the EU has taken action through the issuing of the WEEE and ROHS Directive in 2003 and the recent Directive 225/32/CE on the ecological design of energy using products. These actions are an excellent starting point but are not a solution to the problem since there are numerous obsolete products crowding the “cheap disposal routes”, producing profits for those who illegally transport waste, but leaving the countries of destination worse off and exacerbating the environmental impact.

REFERENCES

22 Marzo Personal contacts with NOE Carabinieri group

3 We need only remember, for example, that 10,000 containers pass through the port of Naples every week and Gioia Tauro is a landing stage for ships arriving from China. The port of Anversa handles 167 million tons of goods per year.
DYNAMIC APPROACH REGARDING THE ORGANIZATION GLOBAL PERFORMANCE

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Abstract: The paper discusses a methodology for determining a scoring system for evaluating the fulfillment of the European Common Quality Assurance Framework (CQAF) criteria by the organizations providing vocational training in Romania. An important core objective of this paper is also to develop a strategic assessment tool to determine the organization’s maturity and to establish objectives for the organization’s performance improvement and further development. For this purpose an evaluation model adapted to organizations providing vocational training was defined, as a basis for determining the scoring system.

Keywords: organization’s maturity; strategic assessment tool, European Common Quality Assurance Framework

INTRODUCTION

Organizations today need performance measures to drive long-term strategies and organizational change, to manage resources, and to operate processes effectively and continuously improve. A supply of consistent, accurate, and timely data across all functional areas of business provides organizations with real-time information for the evaluation, control, and improvement of its processes, products and services to meet both business objectives and rapidly changing customer needs (Evans and Lindsay, 2005).

It is no longer enough for organizations to just make profits for their shareholders and to obey the law. They are increasingly accountable to more environmentally and socially aware shareholders, to civil society in general, to employees, to customers, to partners and to a variety of other stakeholders (Bovee et al, 2005). The creation and sustainable development of organizations is now central to our economic and social lives (Bieker, 2004).

In order for an organization to determine its overall progress and process performance, it should perform an assessment of its strategy and operations and determine its maturity level (ISO 9004:2000). The use of such an assessment tool should enable an organization to identify specific areas for improvement and to establish any action plans needed for the organization’s further development.

STRATEGIC ASSESSMENT TOOL

The organization’s strategic assessment is an activity that should be performed annually by the top management, in order for it to obtain a quick overview on the organization’s maturity and performance. According to the international standard ISO 9004, it should be focused on the four critical criteria: a) The organization’s context and the
strategic deployment; b) The organization’s process management and resources; c) The organization’s results measurement and analysis; and d) The organization’s learning, improvement and innovation system.

Table 1 exhibits an example of an assessment tool for organization’s strategy. The questionnaire has been developed taking into consideration the recommendations of the ISO 9000 series of international standards.

**Table 1 Organization’s Strategic Assessment Tool**

<table>
<thead>
<tr>
<th>Focus area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization’s context and the strategic deployment</td>
<td>1.1. Is the external environment in which the organization operates periodically monitored and analyzed?</td>
</tr>
<tr>
<td></td>
<td>1.2. Does the organization analyze its internal environment constantly?</td>
</tr>
<tr>
<td></td>
<td>1.3. Does the organization collect ongoing data and information about its external and internal environment, necessary to enable decisions for organisational change?</td>
</tr>
<tr>
<td></td>
<td>1.4. Does the organization determine its current and future capabilities needed for sustainability, based on external and internal environment analyses?</td>
</tr>
<tr>
<td></td>
<td>1.5. Does the organization develop strategic orientations based on the risks and opportunities identified?</td>
</tr>
<tr>
<td>Process management and resources</td>
<td>2.1. Does the organization identify the resources that are critical to its development and achievement of performance?</td>
</tr>
<tr>
<td></td>
<td>2.2. Does the organization develop a plan for providing, controlling, monitoring, protecting and developing its resources?</td>
</tr>
<tr>
<td></td>
<td>2.3. Does the organization assess its resources needs and establish priorities for the allocation of resources?</td>
</tr>
<tr>
<td></td>
<td>2.4. Does the organization use a ‘process approach’ to identify and manage all its processes necessary for achieving the organization’s objectives and define how these processes interrelate and interact?</td>
</tr>
<tr>
<td></td>
<td>2.5. Does the organization develop the interrelating strategic and operational processes necessary for the achievement of performance?</td>
</tr>
<tr>
<td></td>
<td>2.6. Does the organization appoint ‘process owners’ to ensure process responsibility and authority?</td>
</tr>
<tr>
<td>Results measurement and analysis</td>
<td>3.1. Does the organization monitor and measure systematically the performance of all its relevant processes?</td>
</tr>
<tr>
<td></td>
<td>3.2. Does the organization identify its key performance indicators?</td>
</tr>
<tr>
<td></td>
<td>3.3. Does the organization monitor the degree and speed at which it achieves its objectives?</td>
</tr>
<tr>
<td></td>
<td>3.4. Does the organization conduct internal audits or assessments to monitor the level of achievement of its objectives?</td>
</tr>
</tbody>
</table>
3.5. Does the organization use a systematic approach to reviewing and evaluating its processes, for performance improvement?

<table>
<thead>
<tr>
<th>Learning, improvement and innovation</th>
<th>4.1. Does the organization detect changes and trends (that could impact on its performance) in its business environment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2. Does the organization establish the culture of a learning organization?</td>
<td></td>
</tr>
<tr>
<td>4.3. Does the organization understand its core competence and competitive advantage?</td>
<td></td>
</tr>
<tr>
<td>4.4. Does the organization define objectives for the improvement of its products, processes and management system and seek to achieve these objectives?</td>
<td></td>
</tr>
<tr>
<td>4.5. Does the organization innovate in its capabilities and organizational constitution as necessary to ensure future success?</td>
<td></td>
</tr>
</tbody>
</table>

The completion of a strategic assessment in an organization should be recognized as an important step in identifying opportunities and areas for the future development and improvement of the organization. It should also be used as an input into the planning of future assessments or internal audits.

SCORING SYSTEM FOR THE EVALUATION OF FULFILLMENT OF THE CQAF CRITERIA BY THE ORGANIZATIONS PROVIDING VOCATIONAL TRAINING IN ROMANIA

For evaluating the fulfillment of the European Common Quality Assurance Framework (CAQF) criteria, in order to determine the global performance indicator ($I_{gp}$), we suggest using a scoring system similar to the one used in the case of EFQM model. For this purpose we suggest grouping the CAQF criteria on the two categories separated in case of EFQM model, respective determining factors and results (table 2).

| Table 2 Classification’ proposal of the CAQF model criteria, taking into consideration the EFQM model, for determining the organization’s performance indicator |
|---|---|
| **CAQF criteria related to determining factors** | **CAQF criteria related to results** |
| 1 | 3.1 Educational results |
| 1.1 Leadership | 3.1.a Evaluation of clients’ satisfaction |
| 1.1.a Leaders develop the mission, the vision, conduct norms within the organization and play an important role as a promoter of a culture of excellence | 3.1.b Achievements regarding the key performances of the educational process |
| 1.1.b Leaders involve themselves in assuring the implementation and continuous improvement of the management system | |
| 1.1.c Leaders involve themselves in the relationship with the clients and other | |
| 2 | **1.2 Objectives and values**  
1.2.a The organization’s objectives and values represent the basis for the activities carried out by the trainers, instructors and the administrative personnel  
1.2.b The organization’s values are promoted by the entire personnel | **3.2 Results regarding the personnel**  
3.2.a Evaluation of personnel’s satisfaction  
3.2.b Achievements regarding the personnel’s key performances |
|---|---|
| 3 | **1.3 Strategies and planning**  
1.3.a The strategies and implementation plans are based on the interested parties’ present and future necessities and expectations  
1.3.b The strategies and the plans are based on information resulted from the evaluation of the performances, as well as those resulted from the display of educational, research and innovation activities  
1.3.c The strategies and the plans are analyzed and recurrently updated  
1.3.d The strategies and the plans are communicated and implemented | **3.3 Results regarding the society and the labor market**  
3.3.a Evaluation of the impact on the society  
3.3.b Achievements regarding the labor market |
| 4 | **1.4 Partnerships**  
1.4.a Partnership management  
1.4.b Communication with interested parties | **3.4 Financial results**  
3.4.a Evaluation of financial results  
3.4.b Achievements regarding key financial performances of the organization |
| 5 | **1.5 Financial aspects and resources**  
1.5.a Financial management  
1.5.b Information and knowledge management  
1.5.c Technological management  
1.5.d Resource management (buildings, equipment, materials) |  |
| 6 | **2.1 Management of trainers, instructors and other categories of personnel**  
2.1.a The organization’s human resources are planned and administrated, ensuring the personnel’s motivation and empowerment  
2.1.b The competences and knowledge of trainers, instructors are monitored and developed on a continual basis |  |
2.2 Process management
2.2.a The processes are projected, implemented, led and improved in order to satisfy the clients and other interested parties’ requirements
2.2.b The educational support, including the one for developing and perfecting the personnel, as well as support services are projected on the basis of the clients’ necessities and expectations
2.2.c The educational services, including internal ones, are developed and provided in conformity with the clients’ requirements

4.1 Planning and implementation of the improvement actions
4.1.a Evaluation and improvement of the main processes’ efficiency
4.1.b The management of change, in order to continually improve the processes

4.2 External verification
4.2.a The authentication of auto-evaluation
4.2.b Inspection and credential

For the evaluation of fulfillment of the 9 criteria related to the determinant factors (variable Cfd_{k}, where “k” is the code of the criterion,) the average of the value of the sub-criteria related to those criteria is computed. For example, criterion 1.4 – Partnerships has two sub-criteria, namely 1.4 a – Partnership management and 1.4 b – Communication with interested

\[
Cfd_{1.4} = \frac{(Scc_{1.4.a} + Scc_{1.4.b})}{2}
\]

For evaluation of fulfillment of the four criteria related to results (variable Cr_{l}, where “l” is the code of the criterion), the weighted average of the values of sub-criteria related to those criteria, having the weight established as in table 3.

Table 3 Determination of the weight of sub-criteria related to the results for determining the global performance indicator of the organization

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Sub-criterion</th>
<th>The weight of sub-criteria</th>
</tr>
</thead>
</table>
| 3.1 Learning process results | 3.1.a Evaluation of clients’ satisfaction  
3.1.b Achievements regarding the key performances of the educational process | 75%  
25% |
| 3.2 Human resources results | 3.2.a Evaluation of personnel satisfaction  
3.2.b Achievements regarding the personnel’s key performances | 75%  
25% |
3.3 Society results

<table>
<thead>
<tr>
<th>Sub-criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3.a Evaluation of the impact on society</td>
<td>75%</td>
</tr>
<tr>
<td>3.3.b Achievements regarding the labour market</td>
<td>25%</td>
</tr>
</tbody>
</table>

3.4 Financial results

<table>
<thead>
<tr>
<th>Sub-criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.a Evaluation of financial results</td>
<td>50%</td>
</tr>
<tr>
<td>3.4.b Achievements regarding key financial performances</td>
<td>50%</td>
</tr>
</tbody>
</table>

For example, criterion 3.1 – Results of the educational process has two sub-criteria, namely 3.1a Evaluation of clients’ satisfaction with the weight of 75 % and 3.1b Achievements regarding the key performances of the educational process with the weight of 25%.

\[ \text{Cr}_{3.1} = \text{Sc}_{3.1a} \times 0.75 + \text{Sc}_{3.1b} \times 0.25 \]

CONCLUSIONS

The paper introduces a strategic assessment tool to determine the organization’s maturity and to establish objectives for its processes performance improvement and future development. Determining the global performance indicator allows the management of these organizations to make use of an efficient instrument in order to identify the weaknesses, facilitating the establishment of the necessary measures for continuous improvement of the quality of the services performed.

A future prospective research will be focused on testing extend to which Romanian SMEs consider these criteria to assess their performance and determine their processes maturity, and also extend to which they use a scoring system for evaluating the fulfillment of the European Common Quality Assurance Framework (CQAF).

REFERENCES


PRIORITIES OF THE ROMANIAN ORGANIZATIONS PROVIDING SQAM SERVICES

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Abstract: The main instruments that ensure the free movement of goods on the big European market are the European directives, harmonized standards, accreditation, conformity assessment, testing and metrology. The rendition or setting up of these instruments do not signify that the economic agents are immediately capable to use them in an optimal way. It is necessary to build a national infrastructure, aligned with the European and international practices, that can carry out SQAM services for the economic agents so that they can put into practice these instruments, vital for efficiency and competitively. The SQAM services refer to standardization, quality insurance and conformity assessment, accreditation and metrology.

Keywords: standardization, accreditation, conformity assessment, metrology

THE NATIONAL INFRASTRUCTURE PROVIDING SQAM SERVICES

The organizations that ensure SQAM services are part of the quality infrastructure which is based on the following activities: standardization, accreditation, metrology and conformity assessment formed of: certification, testing out and inspection.

The Romanian organizations as part of the national system of SQAM services, are:
- The national standardization organization – The Romanian Standardization Association (ASRO);
- The national accreditation organization – The Romanian Accreditation Association (RENAR);
- The Romanian Legal Metrology Office (BRML);
- The infrastructure for the conformity assessment and certification formed of: Certification bodies: management systems, products, services, personnel; Testing/Calibrating laboratories; Inspection bodies.

The Romanian Standardization Association (ASRO) administers its own collection of standards and has access to the collections of other institutions. It also ensures access to the collection for the economic agents and offers a wide range of services that include: instruments and information services for standard identification or for announcing new standards: catalogues, information magazines, web servers, promotional materials, etc.; services for the access to the standards’ text in different formats: subscriptions, paper format, CD-ROM, online; notification or subscription services for up to date information: newsletter, dedicated e-mails etc.; on request, it grants the national conformity marks SR and SR – S; consulting and research services.

The Romanian Accreditation Association (RENAR) is qualified by the Government of Romania to operate in the accreditation domain in its behalf, as the administrator of the
national accreditation mark, product of great added value, instating to the clients a national, European and global recognition.

According to its status, RENAR carries on activities in both the regulated and unregulated domain, accrediting: testing laboratories, calibrating laboratories, product/services certification organizations, management systems certification organizations, personnel and inspection certification organizations.

In Romania, the Romanian Legal Metrology Office (BRML) is specialty organization responsible with the insurance of the metrological regulations regarding the technical measuring means and the national actions necessary in order to obtain the credibility of the measurement results.

Under the BRML work 41 Legal Metrology County Offices (BJML) as well as the National Metrology Institute (INM). BRML and the organisms that work under it insure, amongst others, the transmission of the units of measurement and attest the standards of the national specialty system, insures the market supervision through means of measurement, evaluates and attests the metrology laboratories, exercises the metrological control of the state on the measurements. Also, it executes the controls of the measuring operations in the public interest domains: commercial transactions, environment protection, health, work protection etc.

The range of services offered by the INM is quite large, referring mainly to standard calibrations, testing metrological apparatus and specialty assistance.

The infrastructure for the conformity assessment and certification is formed of: certification organizations: management systems (quality, environment, food safety, occupational security and informational security), products, services, personnel; testing/calibrating laboratories and inspection organizations. As it results from their titles they realize certification, testing, calibrating and inspection activities.

PRIORIES OF THE ORGANIZATIONS PROVIDING SQAM SERVICES

In conformity with the study “Increasing through quality of the Romanian industry competitiveness”, carried out by Fiatest TQM and UGIR 1903, during the period 2007 – 2010, it is supposed an increase of the demand for the products having CE mark an increase of the number certified SMC and SMM companies. This fact imposes a set of priorities in developing the activity of the Romanian bodies providing SQAM services. (table 1)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number. of CE certified products</th>
<th>Number of certified SMC companies</th>
<th>Number of certified SMM companies</th>
<th>Number of certified SMC auditors</th>
<th>Number of certified SMM auditors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>3000</td>
<td>8000</td>
<td>350</td>
<td>270</td>
<td>50</td>
</tr>
<tr>
<td>2010</td>
<td>15.000</td>
<td>11000</td>
<td>1000</td>
<td>400</td>
<td>120</td>
</tr>
</tbody>
</table>

**a) ASRO Priorities**

- the increase of ASRO’s relevance on the market;
- the improvement of the communication process on a national and international level and providing relevant information;
to make familiar to the managers, engineers and economists with the way that standardization penetrates the entire range of activities on specific domains and identifying the range of knowledge that should be transferred to them for promoting the thorough knowledge of standardization, of its implications and effects on markets and companies;
  - the optimization of resources using;
  - the development of the system for products’ conformity mark allocation;
  - impelling the orientation towards voluntary certification.

b) RENAR Priorities
- the elaboration of a national program for improving performances of the testing laboratories that are eligible for conformity evaluation operations, together with BRML and MEC;
- creating sector committees in the settled domains in order to ensure a meaningful development of the accreditation procedure;
- the development of the expertise field in the comparison between laboratories domain;
- the expansion and thorough studying of the expertise of the personnel involved in the accreditation evaluation;
- participating to common evaluations for accreditation with the accreditation organizations in the EU.

c) BRML Priorities
- the reinforcement of the metrological infrastructure and its capacity to survey the market;
- evaluating the needs to reach a level of performance similar to the one of similar structures existing on a European and international level;
- establishing the methods and procedures necessary to ensure the tracing of the national etalons with the international etalons;
- obtaining the testing standards for verifying the measuring instruments used in high importance domain such as: medical field, environment protection, telecommunications and nuclear field.

d) Priorities for the certification organizations, testing laboratories and inspection organization:
- the awareness of the economic agents regarding the responsibilities which arise from the chapter “Free movement of goods”, negotiated with the EU, regarding the CE mark and the acceleration of the implementation and certification of the management systems;
- elaborating rules for the compulsoriness that public/private organizations for professional competences certification to work in the framework of a quality management system;
- eliminating the duplication between the settlements of different ministries/agencies regarding the evaluation and certification of products’ conformity and harmonizing them with Law nr. 608/2001.

For each organization that provides SQAM services the problem of implementing an informational system for the marketing strategy has a major importance. This type of system must include the following informational areas: market information, economic
information, competition information, information about the demand for SQAM services and information about the European and international organizations in the domain.

THE ADVANTAGES OF THE SQAM SERVICES FOR THE ROMANIAN COMPANIES

- Applying the principle “One testing – One certification – One accreditation” in the domain of conformity assessment and certification, recognized both in the country and in the European Union, makes the price of the Romanian products offered on the national, European and international market lower, relieving the Romanian producers of the additional costs of multiple testing and certification.

Also, through partnerships between the Romanian organizations and the similar ones from the EU countries will decrease costs for testing and certification. The decrease of the price of Romanian products will contribute to the substantial growth of the competitiveness in the export, which will have beneficial effects on the profit of Romanian companies.

- Implementing and certifying the management system (mainly the quality management one) will lead to an increase of professional and managerial performances in the Romanian companies and will allow them to occupy a competitive position on the European internal market and the international one. In the same time, they will optimize the quality/price report assuring that the products satisfy de quality demands.

- Connecting the SQAM services to the European and international practices will ensure: the free movement of Romanian products and services on the European and international market; the increase of products and services’ quality; a better satisfaction of internal and external customers; the substantial growth of the Romanian products’ exports; rights and interests protection consumers’; environment, food, occupational and information safety protection

CONCLUSION

At a national level, both the legislative and the institutional framework from the SQAM services infrastructure are well structured and connected to the European and international principles.

The main efforts are directed to: developing the structure network for assessment and certification and the inspection one; applying and using the existent resources; broadening the certification area for the management systems especially in the food, occupational and information security domain but also in the companies’ social responsibilities domain; increasing the economic agents’ awareness, especially those from the counties of the country; developing the information, instruction and consulting associations in the quality domain.

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THE AESTHETICS OF COMMODITY
AS PERCEIVED BY THE USER INTERESTED IN VALUE

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Abstract: The commodity is defined as consumption goods (goods that meet the people’s needs and wishes), as the obtained satisfaction have in view both the manufacturer’s interests, and the consumer’s, as well. A particular characteristic of the contemporary commodity phenomenology to be more and more obviously noticed recently relates to the commodity personalization aspect depending on the social – spatial – time environment where the trade takes place, which triggers the necessity to present the commodity from the quantity and quality point of view that would thus represent and symbolize specific preferences. The commodity value can be perceived by the consumer by like or dislike feelings that the respective commodity gives birth to; the commodity value can be perceived by the manufacturer by the success that this one registers on the market. Both the manufacturing process and the market face with an enormous boom of new products that have appeared as the result of aesthetics; this has an impact on the companies’ activities while offering them multiple benefits. On the other hand, intelligent companies have the capability to identify the impact of value on the consumers’ basic reactions and to develop feed-back mechanisms to determine their needs and satisfaction.

Keywords: consumer satisfaction, design and aesthetics of good, added value, quality, psychological commodity

INTRODUCTION

In the context of the significant mutations that influence the contemporary universe, the consumer keeps his position as the main and central axis of all the activities whose target is to meet, as thoroughly as possible, the consumer’s wishes, exigencies, preferences and needs. This satisfaction stands for the essence of the achieved economic actions. On the other hand, the consumer has become prudent, exigent and determined while selecting the goods, and this is due to the fact that he has acquired extensive knowledge on the issue that allows him to use an adequate competence level to be able to set the directions that mostly fit his interests.

As according to the modern education standards the consumer’s competence is the result of a rational and well-balanced mixture of the triad elements “knowledge – habits - attitudes”, it means that, to improve the consumers’ competence, it is imperiously necessary to work on them (usually, knowledge not only comes before, but also determines habits and attitudes). The knowledge process is influenced by the information process, but,
to be more efficient, information must be perceived and rendered profitable to the utmost so that the information level and quality directly set the sales level.

**CONSUMER – ECONOMIC AGENT: CONVERGENT INTERESTS AGAINST THE PRODUCT VALUE**

By tradition, and based on the civilization evolution, the consumer’s options are in favor of, and support the economic – usefulness – operational criteria while, however, the process to render the human being more sensitive results in increased attention granted to the aesthetics of goods.

To render operational the commodity quality concept depending on the consumer’s needs shall be achieved by means of the quality characteristics (J. M. Juran), and as concerns the quality tetrahedron, the aesthetics characteristics occupy and share an important position together with the constructive, economic and sano-genetic ones.

The specialists in the domain consider that the consumer’s options have evolved from the product attributes that bring him significant benefits, and there is a general tendency to step away from these attributes and to get closer to the life styles or to the value systems. The client develops options based on the way in which the product matches, or not, his life style, or further to the fact that the product represents a new and interesting concept, an appealing experience.

The elements that characterize the *perceptive reaction* to the product, and that trigger, or not, an aesthetic emotion apply to different factors: purely emotional factors, cognitive factors (as the aesthetic feeling is influenced by a man’s knowledge, by his personal approach of knowledge, by culture), intellectual factors (the logical satisfaction to understanding the product), psychological factors (as the aesthetic pleasure is influenced by the quality of a man’s sensations, by the perception psychological limits, by the personal psychological status).

Irrespective of the commodity classification criteria, and from the point of view of: (a) origin; (b) technological processing degree; (c) destination; (d) purpose; (e) durability; (f) tangibility; (g) way in which it participates in the production process and their value; (h) purchase habits, the aesthetics represents the most powerful method to set the difference in the consumer’s mind. *The function, form, structure, line, drawing, adornment, style, color, symmetry, proportion, harmony and contrast* represent aesthetic categories by means of which the commodity shall be judged from the aesthetic point of view; the concordance and the cohesion of the above mentioned elements, the association between form and function make up a harmonious assembly that puts together all the efforts that have been deployed to achieve the aesthetics aspect of commodities.

The general tendency with reference to obtaining the industrial product form has in view its simplicity, therefore, its conception methods so that the products be easily perceived, be easily detected, be logical, be clearly understood and acquire a maximum information value. „*The complicated and useless forms are nothing more than a designer’s escapade ... (in) ... his own way of expressing himself*” – this was Dieter Rams’s assertion back in 1984.

Sometimes, as a necessity, form acquires a complex nature that, in the specialists’ opinion, can be easily perceived due to the large experience the human mind has to perceive and acquire complicated information. Nevertheless, the complex form should have, to the extent it is possible, a logical and understandable nature with the purpose to reduce to the maximum the intensity of the perception efforts. According to and based on
the psychologists’ studies, the main element that triggers the visual attractiveness to the form of an object is not represented by its intrinsic complexity, but by the complexity of the observer’s perception. This way, a complex product can be perceived as being a simple one by those who are accustomed to it. At the same time, any repeated display of a complex object shall finally make it attractive as it becomes a familiar presence.

In spite of the fact that the technical forms highly depend on the technical – operational particularities of the object, the technical form has a relative autonomous nature which constructively determines a series of solutions, while at the appreciative plan, it determines a certain graduation if related to the aesthetic ideal that governs the society, the community or any individual taken apart.

A modern approach shall depict the commodity as representing „the total of the objects and subjects the designer brings his contribution to in order to create the so-called added value”’1. The value that has been added to the commodity is given by the assembly of perceived and not-perceived qualities of the respective commodity, including here the ones that relate to the social and cultural nature, which, as far as the commodity modification process is concerned, leads to selecting it and influences the consumer’s preferences, finally modifying the exchange value and drawing the attention particularly to the aesthetics of the respective commodity.

Material goods, services and immaterial goods, in general (persons, ideas and feelings) can become an exchange object on the market. All above represent the contemporary commodity. The time, environment and cultural conditions to be registered at a certain moment make it possible that this concept become a real one. To have a long life on the market, any commodity must „persuade” based on its physical aspect, must „last” based on its characteristics, and must „seduce” based on its style.

Each consumer has the capacity to measure the usefulness of a product or the welfare that results from having consumed the respective product. The consumer’s actions are based on his reasoning as he has the capability to choose a combination of goods and services that would maximize the final usefulness of the selected product. The high attention that the consumers grant, under certain circumstances, to the qualitative characteristics of the commodities should not be taken for their capacity to really appreciate the commodities: the consumers grant attention to the commodity quality based on reasons related to health, or based on the idea that the respective commodities are consumed at special social meetings, or based on the idea that they are just in fashion. From this point of view, it is necessary that the consumers be adequately informed as the purpose consists in persuading the consumers to reach a well-motivated decision and make a good choice.

Nowadays, the contemporary commodities are known as „psychological objects”, as well. They can be defined as a synthesis of attributes and purposes that are related to social patterns and to aspiration levels. The commodity can be considered, on one hand, as a means to satisfy particular needs resulting from the individual’ subjective wishes and aspirations, and on the other hand, as a system of production means resulting from the social consumption system.

The commodity value can be determined based on the multitude of options offered by the respective commodity, based on the way in which the commodities behave and become known, based on resources and activities, as well as on the results to be transferred to the beneficiary in space and time. One of the elements that greatly influence the exchange

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value of the contemporary commodity on the market is the capacity the respective commodity has to visually become known to the consumer. There can exist commodities to be characterized by a relevant market exchange value, value that, however, is not perceived as such by the consumer as this one has not the necessary knowledge to perceive the commodity potential.

At the opening of this millennium, the modern products are so complex that, to bring them to the market and even to assure their consumption, it is necessary to display a large range of knowledge associated with steps to grant their success on the market, and, further more, their contribution to the future economic development.

The modern product success on the market is triggered by the simultaneous use (which means conception and distribution) of a large range of knowledge, methods and managerial tools, not only in a systemic and systematic approach, but also in a global one, too.

The necessity to launch a complete and proper range of products on the market is agreed upon depending on the distribution network, on the market segment, and on the competitors’ product or brand. It has been concluded that a company’s success is greater only if the company applies to an international approach in drawing up and inventing new products.

There are three methods by means of which a company can provide more value than the competition: the respective company can (a) set and charge a lower price; (b) assist the buyer in cutting down other costs; (c) add benefits that would make the offer more attractive. The companies develop products and provide services that would meet the consumer’s more and more exigent needs and requests by including functionality, technological innovation, high quality and special design in one product; the consumers shall point to a product and select it based on the variety of options this one offers.

To understand the consumer’s needs and to meet them has become a challenge both for the manufacturers, and for the traders, as well.

CONCLUSIONS

To anticipate future and determine the commodities that should match the changes to occur within the consumers’ behavior, requests and tastes, as well as to permanently adapt the above mentioned to the evolution of competition – these are vital elements for a company to survive.

The differentiation implies a multitude of design solutions and aesthetics finalization, modifications, fashion aspects, styles, any resumption of the design process and variations of this one within a range of products that may be, thus, suggested to certain segments of the market.

In this context, the aesthetics of products has become an advantage in the fight against competition, elements to really differentiate products, irrespective of their nature. The imperative to improve the product aesthetic status compels us to think about the synchronism that should exist between the tastes of those who make their options towards a product and the tastes of those who achieve the respective product.

The attitude (the consumer’s behavior and reaction) to the exterior side of the commodity can be:

• selective, when a lot of products of the same type are displayed in front of the consumer;
• comparative, when only two or three products of the same type are displayed in front of the consumer;
• examination (in detail), when only one product is displayed in front of the consumer, and this examination is followed by acceptance (no attitude of reserve, or with reservations) or rejection.

Under such circumstances, with reference to the acquired product, the purchaser can „have” feelings of: full satisfaction, satisfaction with reserves or even lack of satisfaction.

The concern to offer the client maximum satisfaction is implicitly a preoccupation to achieve a more adequately aesthetical organization of the product, taking into account the human perception specifics. At the same time, companies have the possibility to provide to their clients a note-worthly sensorial experience that these ones connect to the position and personalization of the company, of the product or of the provided service. The sensorial experience promotion is oriented both towards the product that has been defined by its inherent qualities and structural characteristics, and also towards the aesthetical image of the organization and trade mark that has been defined by the commercial environment and by its advertisement graphic.

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QUALITY MANAGEMENT ELEMENTS
IN THE RETAIL ACTIVITIES

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Abstract: The entrance of a quality assurance system (SAQ) in a firm frame represent at the moment a necessity of the actual development context. The retail field present several particularities that impose the quality management application manner adaptation. A special attention must be given in this respect to the human resources management involved in the quality assurance (AQ) activities, the human vector representing a major important item due to the activities specificity. The present paper aims to analyze the real possibility to apply the SAQ in the retail activities and the sketching of the main steps of this approach.

Keywords: Quality Assurance System, Total Quality Management, retail activities, customers

INTRODUCTION

Businesses have like main resources: capital, physical, and human ones. Companies in global competitor’s countries have been forced to develop their competitive edge primarily through the human resource, essential for retail activities. The human resources is the only one that competitors cannot copy, the only one that can synergize, that produce output whose value is greater than the sum of its parts. The objective of big retailers is to serve customers and their own employees. They are learning every day that to satisfy customers, they must first satisfy employees. The role of human beings at work has changed as business and labor have changed over the years. Skilled craft people prior to the industrialization had a major stake in the quality of their products because their families’ lively hoods depended on the sale of the products. They were motivated by pride in their work as well as the need for survival.

The Taylor system philosophy assumes that:
• people are part of the process;
• the process needs to be controlled externally to be productive;
• managers have to control carefully what people do;

Recently, managers have begun to realize that these human resource practices no longer work very well. The new thinking is that:
• people design and improve the process;
• workers who run the process must control it;
• managers must obtain the commitment of people to design, control, and improve processes so that they can remain productive.
Thus, human resource management has shifted from a “control philosophy” to a “commitment philosophy”. Studies have shown that such a shift results in higher quality, lower costs, better utilization, increased capacity, reduced turnover and absenteeism, faster implementation of change, greater human skill development, and better individual self-esteem. However, managers are faced with such new responsibilities as investing extra effort, developing new skills and relationships, coping with higher levels of ambiguity and uncertainty as well as obsolete skills and careers that are casualties of change. Workers also face discomfort caused by changing attitudes and skill requirements and increased responsibility.

PERFORMANCE APPRAISAL

Performance appraisal is an exceedingly difficult HRM (Human Resources Management) activity. Organizations typically use performance appraisals for a number of reasons:

- Appraisals provide feedback to employees who can then recognize and build on their strengths and work on their weaknesses;
- Appraisals are used to determine salary increases;
- Appraisals identify people for promotion;
- Appraisals are used to deal with human resource legalities. As such, they can provide a paper trail to fight wrongful-discharge suits and act as a formal warning system to marginal employees.

Conventional appraisal processes typically involve a manager or supervisor evaluating the work of a subordinate for a given time period. Steps and characteristics of these processes may include some or all of the following:

- Objectives for a certain period of time are set unilaterally or jointly by the manager with his or her subordinate.
- At the end of the review period, the manager sits down with the subordinate and reviews accomplishments, strengths and weaknesses, and/or personal characteristics of the subordinate related to the job.
- Frequently, the form used for performance rating has 10 to 15 tangible and intangible categories, such as quantity of work, quality of work, works well with others, takes initiative, to be rated on a five-or seven-point scale from “excellent” to “unsatisfactory” or “poor”.
- Usually, the manager appraises employees according to ratings distribution, based on company policies, such as “no more than 10 percent of any departments employees, may be rated as excellent” or “merit raises or bonuses will only be paid to employees who are rated as excellent or very good”.
- The standard form generally asks the rater to evaluate the rate’s capacity to handle greater responsibility and/or readiness for promotion.
- Often, the performance appraisal interview is accompanied by announcements of raises, bonuses, and/or promotions.

Dissatisfaction with conventional performance appraisal systems is common among both managers, who are the appraisers, and workers, who are the appraises. Many managers are inclined to give higher ratings because of potential negative impacts. Numerous research studies over the past several decades have pointed out the problems and pitfalls of performance appraisals.
Appraisals nourish short-term performance and destroy long-term planning, discourage teamwork, foster mediocrity for those who meet or exceed performance expectations, assume that individuals are responsible for all result, are highly subjective and not measurable, and focus on detection rather than prevention. As such, they are contrary to fundamental TQM principles.

W. E. Deming strongly condemned the performance appraisal process, because it is statistically unsound. For example, many salespersons’ compensation is based on a sales quota. However, sales depend on more than the individual’s contribution. Factors such as the economy, competition, customer interaction with other aspects of the company, and prior relationships all affect sales.

TQM assumes that people want to do better, and will if they are properly motivated and are given the opportunity to participate, along with adequate training and tools. From a shared vision of quality that goes beyond one’s own workplace emerges a team concept in which trust, effective communication, and cooperation are necessary to achieve success. Performance appraisals are most effective when they are based on the objectives of the work teams that support the organization. In this respect, they act as a diagnostic tool and review process for individual, team, and organizational development and achievement. The performance appraisal can also be a motivator when it is developed and used by the work team itself. Team efforts are harnessed when team members are empowered to monitor their own workplace activities.

In a TQM culture, quality improvement is one of the major dimensions on which employees are evaluated.

In the spirit of Deming, many companies are replacing performance evaluation altogether with personal planning and development systems.

TRAINING AND EDUCATION

Training is one of the largest initial costs in a total quality initiative, and not surprisingly, one in which many companies are reluctant to invest. Quality and related training and education provide and/or enhance the knowledge and skills employees need to do their jobs effectively and efficiently. Training includes quality awareness, leadership, project management, communications, teamwork, problem solving, interpreting and using data, meeting customer requirements, process analysis, process simplification, waste reduction, cycle time reduction, error-proofing, and other educational issues that affect employee effectiveness, efficiency, and safety. In many cases education also provides job enrichment skills and job rotation that enhance employees’ career opportunities. Sometimes, training in basic skills such as reading, writing, language, and basic mathematics is needed for quality and operational performance improvement.

Companies should assess the specific training needs of different employees. All employees need basic skills and quality orientation. However, advanced topics differ among employee categories and functions.

The leaders in quality (Deming, Juran, Crosby etc.) actively promoted quality training and education. Two of Deming’s 14 Points, for example, are devoted to these issues. The approaches of quality leaders are not based on sophisticated statistics or new technologies. Rather, they are focused on the philosophical importance of quality and simple tools and techniques that are easily applied and understood. Once the basics are in place, more advanced statistical methods can be taught and applied.
Companies committed to TQM invest heavily in training. Specific approaches vary by company. Most large companies have in-house training staffs with state-of-the-art facilities. Smaller companies often use outside consultants. The content should be customized to the company’s needs; “packaged” seminars are often a waste of time. Continual reinforcement of lessons learned in training programs is essential. Many companies send employees to courses, but then allow the knowledge to slip away. New knowledge can be reinforced in several ways.

Finally, companies need an approach for evaluating training effectiveness.

RECOGNITION AND REWARD

The topic rewards has already been introduced in the context of performance appraisal. Motivation, leadership, performance review, training, and development all ultimately lead to the question of “What’s in it for me?” for each individual in every organization. Without willing, sustained individual effort, coordinated team efforts, and the sum total of the individual efforts that meet organizational goals, TQM is an impossible dream. Recognition and rewards should reinforce quality relative to short-term financial considerations. They can be monetary or non-monetary, formal or informal, individual or group. Employees should contribute to the company’s performance and recognition approaches. Awards provide a visible means of promoting quality efforts and tell employees that the organization values their efforts, increasing their motivation to improve. Most importantly, rewards should lead to behaviors that increase customer satisfaction.

Extrinsic and intrinsic rewards are the key to sustained individual efforts. A well-designed pay and benefit system, which is discussed in the next section, can provide excellent extrinsic motivation. Other reward systems are non-monetary.

Certain key practices lead to effective employee recognition and rewards:

- Giving both individual and team awards;
- Involving everyone;
- Tying rewards to quality based on measurable objectives;
- Allowing peers and customers to nominate and recognize superior performance;
- Publicizing extensively;
- Making recognition fun.

COMPENSATION

Compensation is always a sticky issue and ties closely to subject of motivation. Money is a motivator when people are at the bottom of Maslow’s hierarchy. Pay for performance can diminish intrinsic motivation. It causes most employees to believe they are being treated unfairly, and forces managers to deliver negative messages. Eventually, it creates win/lose situations. The objectives of a good compensation system should be to attract, retain, and not demotivate employees. Other objectives include reducing unexplainable variation in pay (think about Deming’s principles) and encouraging internal cooperation rather than competition.

Many TQM-focused companies now base compensation on the market rate for an individual with proven capabilities, and then make adjustments as capabilities are increased, along with enhanced responsibilities, seniority, and business result.

One method often used to separate individual compensation from performance appraisal is gain sharing, an approach in which all employees share savings equally.
Finally, in system development and organizational improvement, HRM managers must encourage individual development activities that support and enhance the systems.

CONCLUSIONS

Motivation and human behavior are major elements of Deming’s Profound Knowledge. Quality depends on employee commitment at every level of the organization. If employees are not provided with the proper motivating climate to align their efforts to meet organizational goals, the result can be conflict, poor performance, and low quality levels.

Managers must understand that there is no such thing as an unmotivated employee. The system within which employees work can seriously affect intrinsic motivation. Although thousands of studies have been performed over the years on human and animal subjects in attempts to define and refine the concept of motivation, it remains an extremely complex phenomenon that still is not fully understood. This section briefly reviews the major theories, models, and approaches, and their implications to TQM.

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FLAWS IN ROMANIAN MARKET ETHICS

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Abstract: In our present days, there is a huge liberty in the choice and utilization of the recipes, but not always all these recipes lead to the appearance of products of a superior quality. Injected poultry acquire a more attractive commercial look, but we should not overlook the fact that a mere liquid, which is thrown away after defrosting, is paid at the price of the meat.

Keywords: counterfeit and contaminated goods; meat paste; salty solution injection; additives

Every moment, the specialists in the field of advertising, politicians, mass-media, producers etc. overuse of the word „quality”; the idea that „quality is a career in itself” being more and more encountered. Quality defines the ability to produce and to compete on the international markets, being proud of your work and of the used management systems. It legitimates the goods and services deliverers and it is the way to exist as an economic agent.

The way to making a company profitable is very difficult and it depends not only on quality but on much more things like: continuous improvement of quality, internal and external customers’ satisfaction, low costs, few failures, marketing, research-development activity and many other important things.

This is the theory and it is very touching and sublime, but real life and the real practices on the market are completely different. That’s why in the last decades the issue of the consumers has always been in the centre of the theory and practice attention, from the point of view of economic and legal way all over the world.

Day after day, the Romanian consumers are confronting with more and more complex problems of the purchased goods, the Romanian market being full of counterfeit and contaminated goods. Scandals regarding contaminated and counterfeit goods are of public notoriety and the newspapers describe more and more accidents due to the use of some home appliances.

The reality is that the producers and the tradesmen choose profits and extra profits over doing what they should. Product counterfeiting and the pirating of intellectual property are no longer “cottage industries” but vast global businesses controlled by networks of crime syndicates in Asia, Eastern and Western Europe, Middle East, Africa, Latin America, and North America and one of their market is the Romanian one [1].

The types of goods being counterfeited and pirated are staggering. Some examples are: computer software, audio/video tapes, products of well-known brands, electrical/electronic appliances and components, building materials; food; wines and spirits; pharmaceuticals (faked pharmaceutical products, for example, not only fail to cure but have also caused deaths), cosmetics and toiletries; branded fashion wear and their accessories, textbooks; toys, etc.
While considering the products’ counterfeiting in general, counterfeiting of food products is more dangerous because its effects don’t refer only to consumers’ fraud but it endangers their life and health.

Chocolate is also often counterfeited. Most of the cases are related to misleading the consumer by means of the packaging. Thus, the packaging of various brands of chocolate presents various fruits: apples, bananas, morello cherries etc., very attractively coloured, thus suggesting the presence of these fruits inside the chocolate. Actually, when it comes to “contents”, what is specified is “identical to natural flavour”, in very small letters. The law is very clear in this field, forbidding the fruit illustrations unless they perceptibly influence the organoleptic or nutritional characteristics of the product [2].

One of the most serious problems is that of using food additives of low quality and at the same time exceeding the maximum levels admitted, factors which allow the production and the selling of products of doubtful quality, yet particularly tasty.

Alcoholic drinks (wines, brandy, liqueurs etc.), made in accordance with their recipes, do not need additives, yet, most of them are counterfeited by means of food additives. The same goes for jams and compotes which providing the ingredients are correctly used, do not require any preserver, the role of the preserver being played by sugar and by the natural acid existing in the very fruits processed. In spite of this, jams being declared as 100% natural contain E-330 (citric acid) as a preserver. Also, though this is forbidden, the tomato pastes are full of starch and colouring agents with the purpose of thickening and intensively colouring the composition, these substances causing liver ailments and stomach cancer.

Low quality additives are omnipresent in juices, sweets of all kinds, sausages, salamis etc., and the big problem being that the additives are mixed in the goods and these mixtures may produce symptoms that vary from those caused by a single compound under laboratory conditions. The big problem is that the inspection bodies do not have the necessary apparatus for the quantitative analysis of additives - a fact because of which the producers are taken at their word as regards the recipe used.

In our days, the Romanian producers frequently use in some products meat paste as a substitute for meat. This substitute is obtained by a mechanical extraction of bones. According to some opinions, 90% of U.E. production of this paste is exported to the countries situated in Eastern Europe, where, because of the low standard of living, cheap meat products, of a low quality, prevail on the market (to Romania, every year, about 15,000 tones of such meat paste are imported). The utilization of this paste (the luncheonmeat contains about 80% meat paste), besides being a fraud, also presents a lot of risk for the consumers’ health, like the increase of the risk of Salmonella contamination; it can also lead to risk in the physical development of the children because of the high level of calcium contents (when mechanical extraction of bones is executed with non-performing equipment). It is worth mentioning that on the U.E. market, this paste can be used only by the producers and only in a proportion of maximum 3-5% and on the Romanian market, before 1989, the laws allowed the utilization of this product as a substitute for meat only in a proportion of 5-10%.

Another method of counterfeiting of the poultry (legs, breast or whole chicken) is to be found with some Romanian producers: on the label it is written, with big letter “Poultry, first quality”, and underneath, with very small letters: “half-prepared poultry made by injection: E-640 - glycine, E-621 - monosodium glutamate, saccharose, glucose and E-330 - citric acid, on a salt support, water”. It is considered that 95% of the Romanian producers use the artificial growth of poultry weight, up to 30%, by immersion or by injection. Besides the growth of weight, an appearance of a false freshness and a possible risk of
contamination with different bacteria are created. At the same time, this method of water injection and the use of food additives are also used to cover all the breaches of food rules and norms.

On the surface of the poultry injected and submitted to my test, I could notice, especially on the legs and on the breast, traces of shots (between 12 and 21). It is true that the products acquire a more attractive commercial look, but we should not overlook the fact that a mere liquid, which is thrown away after defrosting, is paid at the price of the meat.

The same goes for the three food additives present which also lead to an increase in the weight of the chicken; two of these, monosodium glutamate and citric acid are highly controversial within the international scientific community at present, being susceptible of causing cancer.

The studies made on samples of such products within the Centre of Research and Report on Foodstuffs in the Academy of Economic Studies of Bucharest resulted in the situation presented in Table 1.

This situation shows that a consumer pays 11.81% of the gross weight of the products purchased at an average price of 10.18 lei/kg, and implicitly 11.81% of the total value of the poultry for something that is removed from the frozen product, respectively the injected liquid.

<table>
<thead>
<tr>
<th>Sample no.</th>
<th>Type of the product</th>
<th>Weight of the frozen product (gram)</th>
<th>Weight of the injected liquid obtained after defrosting (g)</th>
<th>% of weight of the liquid given the weight of the frozen product</th>
<th>Price of the frozen product (lei/kg)</th>
<th>Price paid by the consumer for the product (lei)</th>
<th>Price paid by the consumer for the defrosted liquid (lei)</th>
<th>% of product price paid for the defrosted liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poultry leg</td>
<td>1.880</td>
<td>0.280</td>
<td>15,84%</td>
<td>10.18</td>
<td>15.23</td>
<td>9.59</td>
<td>6.64%</td>
</tr>
<tr>
<td>2</td>
<td>Poultry leg</td>
<td>1.880</td>
<td>0.280</td>
<td>15,54%</td>
<td>10.18</td>
<td>14.95</td>
<td>9.59</td>
<td>6.36%</td>
</tr>
<tr>
<td>3</td>
<td>Poultry leg</td>
<td>1.880</td>
<td>0.280</td>
<td>15,04%</td>
<td>10.18</td>
<td>13.98</td>
<td>9.59</td>
<td>5.39%</td>
</tr>
<tr>
<td>4</td>
<td>Poultry breast with breast</td>
<td>1.880</td>
<td>0.280</td>
<td>120.8%</td>
<td>10.18</td>
<td>15.90</td>
<td>11.00</td>
<td>7.22%</td>
</tr>
<tr>
<td>5</td>
<td>Poultry breast</td>
<td>1.880</td>
<td>0.280</td>
<td>11,11%</td>
<td>10.18</td>
<td>13.82</td>
<td>11.00</td>
<td>8.22%</td>
</tr>
<tr>
<td>Total/average</td>
<td></td>
<td>1.880</td>
<td>0.280</td>
<td>11,95%</td>
<td>10.18</td>
<td>15.84</td>
<td>11.18</td>
<td>6.91%</td>
</tr>
</tbody>
</table>

In fact, the contents of water in the poultry is even higher as a result of adding the salt and the salt substitute, E-621, which retain the water.

An important problem is also the fact that injected products lay their stamp upon the marketed product which presents a higher content of salt which is not accepted by aged persons and by the people with a high blood pressure. The utilization of injection systems leads to the extension of the expiry date up to 1 year, as the producer states, and it also facilitates a less severe use of the freezer chain between the producer and the commercial network (the salt also playing the role of a preserver).
CONCLUSIONS

During my research, I was surprised to realize that even the samples left in the fridge at a temperature of 3-5°C for 24 hours allowed the development of some microorganisms which made the product inadequate for preparation (the products' volume increased unacceptably, its aspects becoming spongy and the smell unpleasant).

This proves that the treatment with a salty solution allows the penetration of pathogenic germs which constitute a real danger for the consumers' health. Besides, the humid environment favours the development of microorganisms. I intend to extend the research and include the finding of the pathogenic agents which may appear and I consider it necessary that the producer should give up the methods by which the consumer is cheated both in the quality of the product be purchases and in the price which does not correctly reflect the real quantity.

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THEORETICAL ELEMENTS ABOUT QUALITY OF WEBSITES – A GENERAL SYSTEMS THEORY APPROACH

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Abstract: This approach must take into account certain particularities which do not appear in a regular modelling process. In the case of the e-commerce website an artificial reality will be built. Due to the complexity and representation techniques (obvious from case to case), our approach is based on the Systems Theory in a holistic vision. It will use the abstract approach in order to control the complexity of the goods, and the model will have to be validated through experimentation, comparison, by verifying if it will act exactly, or in a sufficient likeness to the modelled reality.

Keywords: website, quality, model, holism, complexity

INTRODUCTION

Due to the complexity and representation techniques (obvious from case to case), our approach is based on the Systems Theory in a holistic vision. In this case we could find:

• Diversity of products. When having products of a great diversity it is not always simple to extrapolate a set of given rules in order to obtain results.
• Complexity of the product
• Methodologies. A unique, given methodology, can be useful for certain products, but totally unsatisfactory for others (see food/non-food products). There are sometimes problems connected to the used methodology even for the same group of products.
• Standardisation. Although we tend to a general standardisation, universally accepted, this aspect affects the modelling (for the appraisal of quality, for example) through levels of quality characteristics different from country to country.
• The Abstract approach. Considering that abstract in modelling is essential, we will try to support the way in which we can find out if a model is correct.
• The virtual space. The new dimensions of merchandise in the era of Internet require a transplant of the physical elements into virtual space. Here we meet a series of particularities due to the restrictive elements of the Internet, especially limits related to its virtual nature. That is the case for example of the electronic commerce, where the consumer who wishes to buy the products on-line does not have the possibility to touch the products themselves.

THE SITE AS A MODEL

A site represents a series of pages (in html or other format) arranged, ordered in interdependence relationships, which cooperate in the purpose of producing the results expected by the owners of the site.

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The site represents a holistic approach to the organisation (or the person), a representation in continuous movement, dynamic, given by the manner in which it performs. The efficiency of the site is also the result of the degree in which it adapts to the orientations or necessities of the users, especially when unexpected factors arise.

**THE HOLISTIC APPROACH**

The use of the site as a conceptual model involving the Systems Theory has the role of emphasizing the holistic approach of the site, as an open system, alive in the quest for its objective. The treatment based on the Systems Theory can be seen as a design methodology, a conceptual framework or a scientific method (after van Gigh, 1991). The defining of the system only emphasizes this thing. The site (as any other merchandise) must not be regarded in a simplistic manner, just as a system, but as an open system, a complex system. An open system has an environment and other systems with which it interacts. A site can be considered a living system as any open system. Even more, the site as an open system draws resources from the environment, transforms them and sends them back into the environment. This cycle is happening always, constantly. In the same time the site can be also considered a complex system which contains technological, informational, economic, cultural components, which it uses for the accomplishment of its purpose. We will continue by analysing shortly the fundamental characteristics of the Systems Theory and the manner of applying them in the site system/model.

1. **The relations and interdependencies between the objects composing the site.** A site is built out of a multitude of interrelated, interdependent interacting components (objects). We can talk then about content, text, images, aspect, links, menus and others.

2. **Holism.** This approach ensures the vision as a whole with its constitutive parts in action. The site must be seen in its whole complexity and not just by the simple interaction of some functional components.

3. **The purpose.** All the components that make the site interact with a purpose or in order to reach a point of balance. All the systems are oriented towards a purpose: profit, market share increase, prestige, others.

4. **Inputs and outputs.** All the systems depend on the inputs that will be transformed in outputs when reaching the objectives and the site is depending on them. The process can be oriented towards commerce, service, information, to accomplish an activity or just to exist.

5. **Transformation process.** All the systems transform the inputs into outputs. In order to function, the system must have permanent outputs (see entropy) otherwise it will decay and disappear.

6. **Entropy.** In each system there is a certain degree of disorder. The entropy is reflected by the natural tendency of every system to pass in a state of disorder. The entropy is larger where no permanent interaction with the external environment exists.

7. **Control.** The objects on the site must be checked from the interaction (between themselves) point of view and from the fulfilment of purpose point of view. For this we have a large number of control methods (user number counter, user identification, computing equipment identification) who help with the process.

8. **Hierarchy.** Every site represents a hierarchic structure reflected by its organisation. The hierarchy can also refer to the purpose of the site, purpose that can be segmented in various parts: electronic commerce, service providing, public relations or others.

9. **Differentiation.** In the case of complex systems specialised parts fulfil various functions. The diversity is reflected in the types of sites.
10. Diversity. This characteristic refers to the fact that there are more possibilities to reach the same objective. The site can be built in various ways in order to reach its goals and for the designer is more difficult because he must draw the optimum object. The numerous variables linked to the design, the used technology, the aspect or the price are pretty hard to integrate in a model which should adapt to the necessities of a large and diverse number of users.

11. Synergy. Through the relationships between its components, the system can obtain a greater degree of success than each of his components taken individually.

THE SYSTEMIC PROCESSES IN A SITE

The process is made from an activity or a group of inter-related activities who suppose the transformation of one or more inputs in one or more outputs, more valuable or not depending on the necessities of the user (client) of the site. These users can be internal (less) or external (most of them) to the organization.

The consumers/users of the 21 century desire highly personalised sites, easy to access that would fulfil as much as possible their wishes. In this approach, the organizations must adapt to a constantly and rapidly changing environment, many times unexpected changes, in the conditions of limited resources.

QUALITY OF THE WEB SITES

Quality is one of the abstract terms that generated over the time a lot of debates regarding what it really means, how it may be evaluated. And it comes more difficult to express it, when related to a virtual product – the web site. In ISO 9001:2000 – the international standard for implementing quality management systems, quality is defined as the conformity of the product with the requirements of the client. In the Japanese quality oriented culture, quality it is regarded through its two aspects: Atarimae Hinshitsu: quality is when a product functions and produces the results it is created for. And Miryokuteki Hinshitsu: quality that fascinates, when using the product one is enchanted. Bringing quality in creating and developing web sites means to focus continuously on meeting the requirements of the individual users, and always trying to pleasantly surprise them when using the site, not forgetting the purpose of a web site: to maximise the benefits for the owner. Quality should function as a “voice” for the user, a reminder to the designers and developers that the site is designed for users outside the office.

QUALITY ASSURANCE OF THE WEB SITES

The term quality assurance, when applied to web sites, describes the process of enforcing quality control standards and working to improve the processes that are used in producing the web site and its components, infrastructure and content. Even the best designed and developed sites will experience problems and failures, so a good quality assurance team should set expectations - for the entire web site team and with management, for what QA can effectively accomplish.

When this process of quality assurance exists, a web site should see progressive improvement in terms of both lessening rate of defects and general increase in site usability and performance.
Questions like: “Are the tools used to create and maintain the website appropriate for their tasks? Can the tools be twisted to shorten the processes or eliminate some steps? Can some tests be incorporated earlier in the creation process? If the site has changing content, is the content checked after it is published, or before it is entered into the database? Are the reactions of the users monitored and is the information relevant for a further development? Do the site reach its purpose and how?” are well answered when the website is built and developed having quality as base.

CONCLUSION

The website becomes more and more the first interface between the organization and client. It is essential to take into account the fact that this virtual product bears very much the responsibility for the image of the organization, products, and services. Thus, considering the process of creation of a website in a simplistic, unidirectional way (we - the organization create the way we think it is good and you - the client will look and like) could lead to a failure. Systems Theory is the trans-disciplinary study of the abstract organization of phenomena, independent of their substance, type, or spatial or temporal scale of existence, and can be successfully applied to aid the process of decision making when creating or developing a website. The site is an open system that should be continuously focus on the reactions of the users, of the market and should react very fast to all the changes.

Quality, understood as “the requirements of the clients are reached and even over passed” is part of the organizational culture and it will reflect itself in the quality of the website, in the way it gives the most fitted information to the right users.

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THE QUALITY OF COSMETIC PRODUCTS: SAFETY AND CERTIFICATION

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Abstract: Cosmetics represent a wide and varied category of consumer products, which feed a growing market. Up to now consumers have mostly based their choices on the prestige of the brand and on the persuasive influence of advertising. Over the last few years, however, consumers have become more aware of safety and quality questions and now tend to include ethical and environmental requisites, even if they are not directly connected to the concept of the “suitability for use” of a product. These aspects, therefore, become part and parcel of the “quality” of a cosmetic product. The aim of this work is to analyse in general problems relating to quality, in all its aspects, in the cosmetics sector and to evaluate the opportunities and advantages offered to consumers by certification.

Keywords: quality, certification, cosmetic, safety, organic

INTRODUCTION

Cosmetics are a wide ranging and varied category of consumer products, which feed a growing market. For a long time consumers have been influenced in their choices by marketing strategies and loyalty to a brand name, rather than by real attention to product quality.

Over the years there have been numerous phases that have characterised the cosmetics market and have brought about growing liveliness and prosperity in this market, in response to changing consumer demands:

• in the 1950s/60s the arrival of cosmetics on the market, with particular attention on the phase of distribution;
• in the 1960s/70s cosmetics are associated with the concept of “quality”, in the narrow sense of “suitability for use” or “correspondence to specifications”;
• in the 1970s/80s the two earlier periods combine: the increased supply on the market makes it necessary to differentiate products in terms of packaging and, at the same time, pleasant appearance becomes an important aspect of quality;
• in the 1980s/90s consumer attention turns to the element of quality in the sense of “healthy” and “safe”;
• from the 1990s onwards the attention of the market is towards “ethics”, both with regard to eco-sustainability and equitable sustainability.

The “quality” of cosmetic products is a concept that embraces different market approaches, resulting from the greater attention paid by consumers towards the parameters that characterise their society and determine their purchasing choices.

On a market with supply exceeding demand, aspects such as safety, health, ecology and ethics become elements of “quality” and determine purchasing behaviour.
Voluntary certification also takes on a fundamental role in the field of cosmetics, alongside compulsory certification, giving a product added value in order to fully satisfy ever changing consumer demands.

In Europe article 1 of EEC Directive 76/768 defines cosmetic products as “all those substances or preparations intended for use in contact with various parts of the human body (skin, hair, nails, lips and external genitals) or with teeth and mucous membranes of the mouth, with the specific or principle objective of cleaning them, perfuming them, altering their appearance and/or altering their odour, or protecting them and keeping them in good condition” and then, in article 2, lays down a first clear parameter of quality: “the cosmetic product must not cause harm to health when it is applied in conditions of normal or reasonably predictable use”.

The parameter of safety is one of the main priorities of the regulation, above all because this category of products is intended for widespread, frequent and prolonged use; this makes it essential that safety over a long period of time should be evaluated.

Only rarely have cosmetics been associated with serious health risks; this, however, does not mean that they are risk free.

The ingredients of cosmetics may be:
• natural: of animal, vegetable or mineral origin
• synthetic or semi-synthetic.

Consumers are inclined to prefer products with natural ingredients because they consider them to be safer, underestimating, however, the potential risk of undesired allergic reactions and long-term damage.

THE SAFETY OF COSMETICS

Safety in the use of cosmetics is established in the EU by checking:
1. the ingredients;
2. their chemical composition;
3. toxicity profiles;
4. exposure factors.

The safety of cosmetics is based on the safety of the individual ingredients of the finished product, evaluated by means of toxicological tests. In the EU, those responsible for the safety of a cosmetic product are the producer, the distributor or the first importer onto the European market.

Currently the evaluation of the safety of cosmetic ingredients is entrusted to the SCCP (Scientific Committee on Consumer Products), which uses data obtained from studies on animals (in vivo), from experiments (in vitro), from clinical and epidemiological studies and from accident cases.

In recent years consumers have protested a great deal over the use of animals in experimentation. In Italy the Official Gazette of the Italian Republic (GURI) n. 66 on 20 March 1998 published the Health Minister’s Decree regarding the adoption of Community

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1 The Community Directive has been updated and expanded several times by the SCCP (Scientific Committee on Consumer Products), the body which deals with safety checks.

2 In 2006, for example, the EU Commission banned 22 substances contained in hair-dyes, at the request of the SCCP, following the publication of the conclusions of a scientific study, according to which the prolonged use of these dyes caused a potential risk of bladder cancer.
Directive 97/18/CE, which banned the use of cosmetics with ingredients or combinations of ingredients that had been tested on animals, but only on condition that it had been scientifically demonstrated that alternative experimental methods offered consumers an equal degree of protection.

More recently, in order to reduce the use of “in vivo” tests (Dir. 2003/15/EC- Seventh Amendment), which sacrifice a significant number of animals, the European Union has adopted the 3R approach (Refinement, Reduction, Replacement), making it compulsory to replace “in vivo” tests with valid alternative methods. This is also because from the 11 March 2009 “in vivo” tests on cosmetic ingredients will no longer be allowed, with the exception of repeated toxicity, toxic-kinetic and reproductive toxicity tests, which will be banned from 11 March 2013.

Cosmetics coming onto the European market must be provided with the following information:

- the qualitative and quantitative composition of the product;
- the physical, chemical and microbiological specifications of the raw materials and the finished product and the criteria for the microbiological testing of the finished product;
- the manufacturing method, in line with good practice, community directives and responsibility;
- evaluation of the safety of the finished product with reference to user categories and the areas of the body for which it is intended;
- the name and address of the qualified people responsible;
- existing data on the undesired effects resulting from use of the product;
- proof of the effects claimed by the product;
- data on animal tests carried out by the producer, relating to the development or to the safety evaluation of the product or of its ingredients, including all animal tests carried out to meet the legislative or regulatory requirements of non-EU countries.

This year the European Commission has started a consultation process with representatives of the cosmetics industry in order to create a simpler regulatory system and to cut costs. The new regulatory system should be introduced in 2010, replacing the 1976

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3 According to art. 6 par. 3 of the 7th Amendment of the Cosmetics Directive “the producer or whoever is responsible for putting a cosmetic onto the European market can point out on the packaging of the product or in any documents accompanying the product that it has been developed without using experiments on animals, only if the producer and his suppliers have not carried out experiments on animals for the finished product, its prototype, nor for any of its ingredients and they have not used ingredients subjected to animal testing by third parties in order to obtain new cosmetic products”. To avoid improper use of the claim “not tested on animals” or similar ones, the European Union issued a Commission Recommendation on 7 June 2006 (2006/406/CE), which provides non-binding guidelines for producers, in interpretation of art. 6. The principles that emerge are:

- the reference on the label to absence of animal testing is voluntary and can only be used if art. 6 has been respected;
- the use of these declarations must not deceive consumers but must supply them with information useful in making an informed choice;
- the use of these declarations must not create unfair competition on the market;
- it is up to the producer to prove the accuracy of the declarations.
Directive and creating a more modern legal framework. Moreover, from August 2007 onwards, it is compulsory for cosmetics firms to supply, at the request of consumers, supplementary information on the quantitative and qualitative composition of their products and on their possible side-effects; all this in favour of transparency of information and in order to allow consumers to make informed choices.

The procedure for evaluating the safety of cosmetic ingredients is based on a Risk Assessment analysis. This is formulated thus:

- **risk identification**: based on the results of “in vivo” and “in vitro” tests, clinical studies, accidents and human epidemiological studies. The intrinsic physical, chemical and toxicological properties of the molecules in question are studied in order to identify whether the substance can potentially damage human health;

- **dose-response evaluation**: the relationship between exposure and toxic response is studied. The NOAEL (Non Observed Adverse Effect Level- the dose at which no adverse effect is observed) is measured. If the NOAEL is not available, the LOAEL (Lowest Observed Adverse Effect Limit) is used, that is the lowest dose at which an adverse effect is observed. Obviously, this procedure is not required for those substances whose cancer-producing potential is already known;

- **exposure evaluation**: the quantity and frequency of human exposure to the substance are established, including potential specific groups at risk (children, pregnant women,...);

- **risk identification**: the probability that the molecule in question causes harm to human health and the level of risk are studied. If there is a threshold effect, the MoS (Margin of Safety) is calculated on the basis of the formula MoS= NOAEL/SED (Systemic Exposure Dosage). Risk identification is followed by risk management and by risk communication.

The safety evaluation dossier, therefore, must contain all the physical and chemical information regarding the cosmetic ingredients, in particular:

- **chemical identity**: the precise chemical nature of the ingredients must be indicated, along with their structural formula. In particular: the CAS (Chemical Abstract Service) number, the INCI (International Nomenclature of Cosmetic Ingredients), the

4 This obligation applies to all firms selling their products in Europe, even non-European ones. Moreover, COLIPA, the association representing European cosmetics companies, will create a “central public data bank” to which consumers can refer in order to contact companies.

5 In the event of “non threshold” effects, not correlated to a maximum concentration with no effect, risk is determined through the use of a “dose describer” defined as “the calculated quantity of a substance administered daily (mg per Kg of body weight per day) which, in the case of a non-threshold carcinogenic substance, increases the frequency of tumours, in a specific area, by a certain percentage (eg. T25- 25% increase in probability)”.

6 The INCI nomenclature lays down a common list and nomenclature of ingredients used in cosmetics. It is subdivided into two sections: a list of the ingredients used in cosmetics and a list of the aromatic raw materials and perfumes. This is not a list of authorised substances: if an ingredient has an INCI name, it must be shown on the packaging and the label; if it doesn’t, it is not automatically excluded. The importance lies in the fact that it is more easily identifiable. The list is updated periodically on the basis of specific priorities. The Commission Decision of 9 February 2006 (2006/257/CE) published the first update of the
EINECS (European Inventory of Existing Commercial Chemical Substances) number or the ELINCS (European List of Notified Chemical Substances) number. If there are ingredients that cannot be identified by formula, it is necessary to supply sufficient information on the preparation method and on the materials used in order to be able to establish their probable structure and activities;

- **physical form:** description of the form (powder, paste, gel, liquid...)
- **molecular weight**;
- **identification of purity:** the degree of purity must be defined, as well as the identification method;
- **identification of impurities and contamination:** small changes in the nature of impurities may considerably alter the toxicity of the substances;
- **solubility**;
- **partition coefficient:** the value of the coefficient between octanol and water at a given temperature must be indicated;
- **additional chemical and physical data:** physical state (solid, liquid, gas), organoleptic properties (colour, smell, taste), flash-point, properties dependent on the physical state (volatility).

As regards safety evaluation of finished cosmetics, however, the producers or importers of the products into the EU must draw up and present the TIF (Technical Information File) to relative authorities in the Member States, if requested.

Safety evaluation of finished products is based on the toxicological profile of each ingredient, on their chemical structure and on exposure levels. Safety evaluation of finished products also includes the way in which they are to be used (diluted application, absorption, rinsing, possibility of ingestion, exposure to radiation,...) information on the chemical and physical characteristics and on stability in order to ensure there are no changes in the state of the product during transportation, storage or use. All this information, along with the daily dose of the substance per Kg of body weight, is used to calculate the SED (Systemic Exposure Dosage) of the finished product. All the safety evaluation information is put into a report.

For all cosmetics which, under normal conditions of storage and use, may deteriorate and cause risks, quality control is compulsory, in order to protect consumers and to ensure the integrity of the product from the point of view of function, hygiene and quality. This quality control has to be periodical and is based on microbiological quality and the challenge test, which is a test of microbial stability.

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INCI list. The update was made necessary due to the new ingredients introduced into cosmetics, in order to eliminate substances that have been banned and in order to correct, update, modify or specify information on the basis of the indications supplied by COLIPA (European Cosmetic Toiletry and Perfumery Association).

7 On 13 December 2006, the European Parliament approved EC Regulation 1907/2006, which came into force on 1 June 2007, concerning the registration, evaluation, authorisation and restriction of chemical substances (REACH- Registration Evaluation Authorization of Chemicals). The new regulation introduced new rules on chemical substances, taking away legal force from the EINECS.

8 Exposure to certain factors (light, heat, humidity) may compromise quality and safety, thus the choice of the most appropriate packaging is of great importance.
ORGANIC COSMETIC CERTIFICATION

In recent years the world of cosmetics has been dealing with the problem of the “authenticity” of products, as the link between quality, environment and ethics has grown in importance. Indeed, the market for natural and organic cosmetics is in continual expansion; for this reason it is very important to provide consumers with accurate information on the real meaning of “organic-ecological cosmetics”. It is necessary to underline that “natural” and “organic” cannot be considered as synonyms. As we have already said, a natural ingredient means raw materials of animal, vegetable or mineral origin; organic ingredients, on the other hand, are those obtained in accordance with EEC Directive 2092/91.

This need has encouraged numerous organisations operating in Europe in the field of biological certification to take an interest in “non-food” sectors, including cosmetics, because of their commercial importance and their impact on consumers’ health.

Currently there is no European legislation defining and regulating natural organic cosmetics, although a procedure for harmonising national initiatives at a European level.

In Italy the body responsible is the ICEA (Institute for Ethical and Environmental Certification), a non-profit making consortium of associations and institutions operating in activities linked to durable, ethical and compatible development. Controls are carried out in the cosmetics industry in association with the AIAB (Italian Association for Biological Agriculture), which drew up, in 2002, a Code of Discipline for organic-ecological cosmetics, as a reference point for creating certifiable products. According to this Code of Discipline, organic-ecological products are defined as those obtained thus:

- without the use of genetically modified substances
- without experimentation on animals
- without use of ionised radiation
- according to national and international regulations in force in this field
- With the use of primary agricultural and animal products from certified organic agriculture (when foreseen in the formulation).

In the preparation of these products it is also necessary to pay attention to the choice of raw materials used, which must come from organic sources, certified if possible, and to the dermo-compatibility of the finished product, which must be safe for human health. Indeed, a natural cosmetic is not necessarily, by definition, an innocuous product, but is an “active” product, which could have hidden dangers.

Organic-ecological products must, therefore, be subjected to testing of tolerability and respect for the skin (patch test) and to microbiological testing (challenge test).

9 These include AIAB-ICEA in Italy; ECOCERT in France, which, in 2002, issued the logo “Cosmétique Biologique” to all cosmetics proved to contain a minimum of 95% natural ingredients, of which at least 50% organically certified; SOIL ASSOCIATION in Britain; ECOGARANTIE in Belgium; the BIDH (Federation for Industrial and Commercial Enterprises) drew up, in 1996, specifications for the certification of natural body care products, making Germany a leading country in natural cosmetics with the “Certified Natural Cosmetics” label.

10 The ICEA offers a certification service according to the principles of independence, transparency and impartiality capable of increasing suppliers’ and customers’ confidence in the certified product, declaring the correspondence of the product to voluntary or compulsory regulations.
The quality system put into place by the applying organisation must take into consideration the management and application of the following requisites:

- traceability and eventual withdrawal of products in the event of serious non-conformity;
- separation and identification of certified products from non-certified ones;
- management of complaints and quality registration.

Moreover, as in all other types of quality certification, the applying organisation must maintain the same conditions existing at the time of issue of the certificate for the whole duration of the validity of the same.

The certification process begins with an evaluation inspection in order to verify conformity to technical specifications and documentation (product tests). Subsequently, the dossier is passed on to the CoCerCosmetici (ICEA Cosmetics Certification Commission) which, in the event of approval, issues the conformity certificate, which is valid for 2 years, and authorises use of the logo (Figure 1). As with all other types of certification, the system is subject to control inspections.

Figure 1: ICEA AIAB Organic-Ecological Cosmetics Logo

CONCLUSIONS

The concept of quality for cosmetics means guaranteeing respect for adequate safety parameters. Consumers are asking for more and more protection and accurate information in their search for safe cosmetics made from clearly identifiable raw materials. In this context, certification is the best way of offering this protection.

It is, therefore desirable, that European organic specifications be able to create uniform information and, at the same time, resolve problems and contradictions that still characterise this sector. In particular, there is still much debate on the ethical problem, relating to animal testing, whereby it is banned for ingredients but not for the finished product. This problem is still widely debated, as priority is given to safety; undoubtedly, the future objective is that of using only one of the Rs, Replacement, and the EU approach is thus moving in this direction. Moreover, it is necessary to make sure of the information relating to the percentage of certified organic ingredients contained in the finished product, since this may vary greatly by the time of final formulation.

Through the use of organic ingredients, it is necessary to create formulations that are as effective as traditional ones. The future perspective is that of certifying the molecules obtained through chemical synthesis, as long as they are created by synthesis methods originally starting out with organic raw materials and which respect the 12 principles of green chemistry.
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FEATURES OF THE MANAGER OF QUALITY MANAGEMENT SYSTEM

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Abstract: The study evidences the prerogatives and features of management designed to coordinate the implementation and then the maintenance of quality management system. Becoming a frequently met system in our country, it generated a new art, a new leading appointment. The manager of quality management system must comprehend and apply the standards of quality, he must form or perfection his communication skills and it is necessary to have leader aptitudes. The approach based on a process or a project, PDCA methodology, statistical - mathematical methods are fundamental instruments, which he must assume and use currently.

Keywords: leader, quality, responsibility, process, project

INTRODUCTION

Consequence of a research made in enterprises, it reached the conclusion that features that characterize the success leaders are the powerful orientation towards responsibilities and plenary engagement in accomplishing the duties, tenacity in following the established purposes, courageous spirit and originality in solving the problems, intelligence, self-characterization, self certainty, powerful personality, availability for acceptance of the actions’ and decisions’ acceptance from other persons; promptitude in absorbing the stress and availability to tolerate the frustrations and delays, ability for influencing the others’ behaviour and structural ability of interpersonal relationships.

The manager of quality management system (QMS manager) must have leader features. He must be a model, to effectively imply and lead through personal example, meaning that he must be proactive.

He has to be a man full of information, be in on to any change from external environment, not to ignore the newly appeared situations, to try and learn himself and understand them, not to isolate the organization and not to loose development opportunities.

He has to establish equilibrium, taking into account the needs of all interested parties (colleagues, employees, trade-union, patronage, neighbours, community, suppliers etc.).

Together with general manager, he must be concerned about the future of the organization, to have a clear vision for it, to build together the strategy of the organization. Plans on long term have their part of motivation for the staff, contributing to strengthening of dependence that organization mobilizes to maintain itself on the market as long as it could and to evaluate.

QMS manager must implement strategies for realization the purposes and targets expressed by the general manager and which arise from the policy conceived by him.

He follows up the conformation to the mutual values and of ethics in all organization’s level, conferring an inherent example and initiating the realization of an internal regulation.
He has to guide the personnel, sometimes to educate them, to train them, from his own knowledge, as well as appealing to competent trainers from the outside of the organization. He is the one who conceives the annual plan of training on quality items. And things don’t have to be let in a formal stage. Within any organization the service of an employee to a course is analyzed, based on the grade obtained and on the certificate which attests him the preparation. Quality manager has also in his responsibility the evaluation of the employee’s knowledge based on simulations, on themes proposed for usage of knowledge acquired by the employee, the solutions proposed by them constituting in preventive actions or improvement proposals of the management system of organization. As soon as the management systems are built, it could be much better conceived the post cards and thought the charge of duties daily.

QMS manager has to let himself „helped” by the colleagues with proposals, improvement solutions, but this way he must eliminate fear, to win their trust, and to maintain it to them. He is the person who collect and synthesizes the proposals of employees, to propose the most adequate or necessary, to the general manager, for the improvement of system. Although he will not be able to be a good quality manager, if presents the solutions of the colleagues as being of his own, unless he admits the personnel’s contributions, unless he appreciate them for it, unless he encourage them. Therefore, he will have to promote an open and honest communication.

Justification of the purpose of continuously improving the processes of an organization is conferred by the wish and necessity that organizations to be competitive. The competitiveness comprises, beside the satisfaction of customers, the efficiency from the cost or productivity point of view, and flexibility, meaning the ability to adapt to the fluctuant request.

Together with general manager, he would have to find the necessary resources for the personnel to imply in the system. Unless an employee is implied, contributed to realization of any document of management system, uses them, considers their utility, it signifies that the quality management does not coordinate a whole functional and continuous system.

As the management of the highest level proved confidence and invested it with authority, by the decision of appointment in the quality manager post, and he should insure for the personnel the freedom to act with responsibility and burden, the responsibility of personnel being one of the key of success of the organization.

QMS manager is the person who has to create and to maintain the internal environment in which the personnel form a team, being fully implied in realizing of the quality purposes of organization.

The multitude of conceptions about leadership, as well as about partnership is an ideal to which it tends. The empowerment and team work sustain the idea of the partnership. Current orientation is to promote team leaders, who delegate the authority, notice the differences, search for talents, and stimulates the colleagues. Team leaders apportion the power and diminish their merits. They are flexible and adaptable, encouraging changes. They act as facilitators who evidence the best in others and inspire them the same time. The team style of the leadership is requested by the TQM system (Total Quality Management), because it requests information from the members of the team to realize the improvement.

The last period, it prefers an integrating approach in which it considers that the basic formation and experience of the leader, his ability to communicate and his perceptions with respect to employees, to situations which he confronts with and to himself, determine his ability to correctly diagnose situations and to adapt, consequently, the most appropriate behaviour. This ability, in his turn, determines the leader’s ability to motivate his subordinates and implicitly to stimulate their individual and the group’s performances.
Together with motivation, under its different specific influence forms, the power constitutes a basic source that could determine the efficient functioning of an organization.

The legal power is conferred to the QMS manager by his position in hierarchy, by his appointment decision and by the adequate authority of this post. He takes part in the organization management, and, additionally to his professional obligations, he has been mandated by top management/general manager to establish its orientation concerning quality, respecting the interest of the respective business.

The expert (specialist) power results from the specialty knowledge or from the specific aptitudes, skills, regarding performances from the working place of the person who was entitled as QMS manager. The subordinates accept easily to work together with him, due the recommendation that he may offer, because of his superior knowledge, information, specialization and experience that he possess and finally they revere him.

The charismatic power is based on admiration, identification, imitation. Some persons, adept of the leader, may react favourably because they identify to the leader, he possessing basic features, qualities or resembling attitudes to these persons. Charisma is the quality of a person able to influence or to inspire a big number of persons. He inspires loyalty and enthusiasm.

The coerce power (sanctification, compulsion) is not to be used within the quality management system, because is demobilizes. It is preferred to call into requisition to recompense conferred to the persons with special results on site.

A QMS manager must have authority, this representing the plurality of the formal rights, of duties and responsibilities associated to the manager position.

The authority, which supposes the right to dispose certain acts, is the legitimate power, acknowledged by everybody. The sources of this power are based on norms, procedures, traditions and they establish the limitations within which an individual has the right to dispose.

Good coordination of the system implies the necessity of identification of the processes of organization, of interaction between them and their succession. It must be proved the accession of value and utility of the work of each person. The simple transmission of charges from one level to another, without adding value and without the proof of contribution brought could not be accepted within an organization that must approach the activities of process type, therefore stressing the importance of comprehension and satisfaction of requests, necessities to consider the processes depending on the added value; obtaining of results regarding the performance and efficiency of the process and continuous improvement of processes based on objective measurements.

QMS manager keeps a close look-out for the processes be customer oriented, to add value, to be under the clearly defined responsibility of a person, to be comprehended by the persons who work within them, to be correctly measures and continuously improved.

Because to objectiveness in appreciation of own products is more difficult to administrate, it considered that it is more pragmatically and unanimously accepted currently to follow as a general purpose the satisfaction of the customer, meaning his perception about the measure that the requests have been fulfilled to it.

QMS manager has to insure the fact that conscientiousness of customer’s requests is promoted within the organization. From the most recent approaches that QMS managers appreciate is the approach based on project. This focuses on profit, not only on the satisfaction of customers. Therefore, it is a more justifying priority for the top management.
The great majority of management systems suffered due to the lack of top motivation of management, being seen as big consumers of resources (for implementation, audit, certification, consultancy etc.)

The approach based on project has as an objective the improvement of competitiveness of organization and its products, not only by engaging some specialized organs, but valuing the competence, knowledge, experience of its own employees, who put their creativity in the company’s benefit, the cooperation spirit taking place to the existing indifference and to resistance to change. The project also generates value, multiplied towards the existing value and not only added, as the case of the approach based on process.

The attitude towards the approach based on the project management reflects the maturity level of the managerial culture, as a whole.

QMS managers have to apply the two types of approaches, based on process or project for the benefit of functioning of the system that he coordinate.

CONCLUSION

To a QMS manager, who, at any rate, accomplishes the planning, organization, leading and control appointments, it is important to have a flair to a leader features, meaning to the capacity to convince the others, to be proactive, professional and human.

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LUXURY GOODS: NEW RULES IN DEMAND AND SUPPLY

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Abstract: Luxury is a subjective concept: generally it means the enjoyment of expensive and exclusive goods and services, those which are not available to everybody. However, even the time at one’s disposition is considered to be a luxury and even silence has started to be associated with the other commodities in the luxury “basket”.

Keywords: good, luxury goods, demand, supply

INTRODUCTION

Luxury goods can be defined as those commodities (material or not, possibly numbered) which are relatively rare (or even produced in limited numbers) and, thus, expensive and reserved for customers who consider themselves a select elite: the only ones with the right to set foot in the impressive, elegant and much sought after temple of the luxury goods industry. The cost of “luxury goods” means that those who possess them achieve a positive image and encourage the phenomenon of emulation and, therefore, of falsification. Showing off “luxury goods” does not only mean demonstrating social status, but is in any case also a form of cultural distinction. (T. Paquot, Elogio del lusso, Castelvecchi, 2007)

THE SUPPLY AND DEMAND FOR “LUXURY GOODS” PARADOXES

The supply of and demand for “luxury goods” seem to be characterised by at least five paradoxes:

• The demand paradox. Consumers’ “dreams” of luxury goods tend to self-destruct once they become reality and demand turns to another kind of commodity. In short, in the luxury category, satisfaction does not automatically produce loyalty, except for specific niche products.
• Demand does not stimulate supply, but rather the opposite.
• The price paradox. The imaginary value takes precedence over the real cost, without reference to so-called production costs.
• The distribution paradox. Distribution is selective rather than universal, entrusted to special categories of sellers and carried out on particular premises, where the purchaser is offered special treatment and, after purchase, distinctive packaging of the goods.
• The communications paradox. Thanks to its fame, the product ensures its own self-promotion.

The luxury economy, like the factors that determine the “desire for luxury”, has some contradictory aspects and does not respect the principles of rationality. The supply of luxury goods mostly creates its own demand, also thanks to promotion and advertising which, in this sector, far exceed the cost of both raw materials and production. As for
demand, it is generally split between two types of consumers. The first is that of traditional regular customers, that is to say people with high incomes from the USA, Europe, the Middle East and Japan. The second type is that of new customers, coming from emerging classes all over the world. The first type possesses a luxury culture acquired by birth, tradition and social class. The second type is a clear example of the phenomenon of imitation. The first category displays greater loyalty to products and their suppliers, at least with reference to niche products. The second group is composed of more unpredictable consumers who are much more easily susceptible to the advertising and promotional campaigns mentioned above.

According to a survey carried out during the fourth edition of De Luxe, a seminar on the luxury goods industry held at Porto Cervo in Sardinia (“L’Unità, 2-7-07), the market for “luxury goods” is flourishing in Italy, with purchases totalling 10 billion Euros. In 2006 more than 14 million customers regularly purchased luxury goods or services, 7 percent more than the previous year, about 28 percent of the population over the age of 15. Luxury consumers increased by 1 million compared with 2005 (when they represented 26 percent of the population). The prospects for 2007 are also good and a further increase in regular customers is expected, possibly passing the 15 million mark, reaching a level of 30 percent of the population.

Luxury goods and services range from fashion to jewellery, from yachts to watches, from cars to champagne. The growth trend of luxury goods has been continuing for several years now, following the crisis suffered in 2003, when the number of luxury consumers fell below ten million. Over the following three years (2004-2006) the luxury market was “rediscovered” by 4.2 million consumers. The total number of luxury “fans” in Italy can be estimated at around 29 million.

In Italy, it is useful to remember, there are only 2,000 individuals with a total available wealth of more than 30 million dollars and 206,000 people possess a total wealth of over 1 million dollars (“La Repubblica”, 28.6.2007). Just 1 percent of taxpayers declare a disposable income of more than 100,000 Euros, but 250,000 luxury cars are sold in Italy each year. There is, therefore, a clear process of “democratisation” of luxury and, at the same time, of “globalisation”.

“Democratisation” and “globalisation” have widened the market for luxury goods. Experts on the luxury sector are noticing a new trend (T.Paquot, Elogio del lusso, Castelvecchi, p. 109 e sgg.). The artisan phase seems to be in decline for luxury goods: that is the production by hand of unique very high quality tailor made products. The phase of promotion by “word of mouth”, more like a conspiracy than an advertising campaign, has also come to an end. Once the wait for the arrival of a product increased the desire for said product in direct proportion to the length of the wait, indeed for some kinds of product this waiting time is artificially extended so as to add even more value to the product, but many also consider this phase to be a thing of the past, though opinions vary on the subject. The consumer, thus, does not only purchase a product, but also the image that this creates of him/her.

Obviously, the various phases exist alongside one another. Paquot writes: “old-fashioned luxury goes on its way and grows old with its customers, renewing itself very slowly and maintaining its traditions.

New luxury tries to be accessible to all, it knows no frontiers, it continues to win over possible new purchasers and tries to seem more and more modern”. (op. cit. p. 110).

How is luxury market going to develop?
The firms in this sector will tend to converge even more and will thus pour their products onto the market through various networks. However, there will also be a few luxury artisans who will continue to rely on high quality materials, the uniqueness and limited editions of their products, the fact that they are tailor made for the individual and on their particular local skills.

There is one last phenomenon worth mentioning: that of so-called “cheap and chic”. This is the ever more common mixture between luxury and low cost, in which consumers are becoming more and more attentive and demanding, as well as more expert and well informed, leading them to choose and mix luxury goods and services with low cost ones with the greatest of ease.

Global consumers move easily from luxury to hard discount in order to satisfy above all emotional needs linked to their well-being, social identity and personal care.

They are willing to trade down in numerous categories from which they choose cheaper products, so as to be able to trade up in other categories. Since we are witnessing a polarisation of consumption in the various categories of goods and a growth of the extremes, the demand is growing – and consequently also profit margins – for luxury goods and discount products, while the range of goods in the middle is diminishing. This is what we mean by “cheap and chic”.

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ECO-LABELS FOR COSMETICS: SOAPS AND SHAMPOO

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Abstract: The cosmetics industry is a sector with good development prospects on a global level, but which also has considerable environmental impact. For a long time this sector paid little attention to the environmental implications of its activities, but is now changing its behaviour, also as a result of pressure from consumers who have increasing ecological awareness and now include environmental characteristics in their choice of product, tending towards natural products and ecological cosmetics. This has led to the European Commission laying down ecological criteria for the cleansing cosmetics sector. Soaps and shampoos are the 24th group of products for which the label can be requested; the ecological criteria are based on Regulation 1980/2000 and are valid for 3 years. In this paper we examine and discuss the Eco-label ecological criteria, which have recently been approved and published.

Keywords: cosmetic, environment, certification, Ecolabel

INTRODUCTION

Environmental problems are now recognised as being one of the most important political questions to be faced by all countries. The perception that resources are not inexhaustible and that the current model of development is incapable of self-regulation has caused a crisis in natural dynamics and underlines the fact that future development depends on respect for natural equilibria. All sectors of production are interested and involved in this problem.

For a long time the cosmetics sector paid little attention to the environmental implications of its activities, but is now changing its behaviour, also as a result of pressure from consumers who have increasing ecological awareness and now include environmental characteristics in their choice of product, tending towards natural products and ecological cosmetics.

Cosmetics, along with pharmaceutical compounds, constitute the so-called PPCPs (Pharmaceutical and Personal Care Products), emerging pollutants receiving new environmental attention. Cosmetics contain numerous components that include a wide range of chemical substances (musk used for perfumes, aromatic compounds), which are dispersed into the environment, provoking considerable negative environmental impact. Currently, there is no specific environmental regulation for these substances, although some of them are due to be classified in European laws as water contaminants¹.

PPCPs are washed away in waste water in very high quantities and are not completely broken down in water purification plants. One of the characteristics of these pollutants is

¹ In the EU Directive on water – precaution principles – some were included in the dynamic list, updated every 4 years, at the time of the latest update in 2004.
their persistence; in cosmetics, in particular, we speak of pseudo-persistence, because some molecules are unstable. Moreover, many of these pollutants are characterised by the phenomenon of bioaccumulation, with serious consequences for the endocrine system and potential generational and synergic effects.

It is, therefore, evidently necessary to carry out constant monitoring of water quality, although the problem is a complex one because PPCPs belong to various classes of chemicals and are present at in trace amounts (ng/l); without methodological specifications for analytical control, it is possible to underestimate the problem. Effective management of this problem might include the following actions:

- on the most extreme level, a reduction in the consumption of cosmetics, which is obviously not an easy thing to achieve;
- improvement in the breaking down capacity of water purification plants;
- limiting the presence of particular substances in the production of cosmetics.

The European system of ecological labelling for soaps and shampoo may be able to make a contribution to the solution of this problem.

**ECO-LABEL FOR SOAPS AND SHAMPOO**

The cosmetics industry is a production sector with good development potential on a global level. In the 25 EU countries, the cosmetics market can be quantified in 2 million tons per year, corresponding to a daily consumption of about 5,100 tons. This figure shows the enormous quantity of non-biodegradable and dangerous substances that end up in the environment every day and the absolute need to deal with their environmental impact.

The European Commission has undertaken the task of ecological certification for cosmetic detergents, following on from the experience gained in the sector of household detergents, given the great similarities between the two types of product, both in composition and use. Indeed, for a long time the cosmetic detergent sector was not considered to be “of high environmental impact”, as happened in the case of household detergents, probably because they are products tested for safety in that they come into direct contact with humans and, thus, are associated with a reduced level of environmental impact. In reality, soaps and shampoo have a considerable environmental impact and can cause extensive damage in the long term.

According to a survey by Eurobarometer, in the period 1999-2001 EU citizens acquired a greater awareness of the environmental question in general and of the relationship between cosmetics and environment in particular. Given that it is completely impossible to block the use of cosmetic detergents, the drawing up of Eco-label ecological criteria has the objective of filling an important gap in the environmental management of this sector and, at the same time, link cosmetics to environmental added value.

Soaps and shampoo are the 24th group of products for which the label can be requested; the ecological criteria are based on Regulation 1980/2000 and are valid for three years. The process of drawing up the criteria has been quite difficult; indeed, two attempts had already been made but had not succeeded because of firm opposition from certain companies operating in this sector. High levels of consumption and greater sensitivity towards the

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2 As we have said, these substances are the so-called emerging pollutants. In Italy, for example, high levels of chemical substances are found in mud, about 6-14 thousand mg/l.

3 For example, one of the biggest problems met with is the one relating to perfume. The formulation of perfumes cause considerable problems for environmental impact, but they
problems of the sector have made it necessary to regulate cosmetics through a strong instrument like the Eco-label. The selectivity of this label is so high that only 30% of products conform to the criteria. The criteria are scientifically reliable and credible from an ecological point of view, thus guaranteeing a long-term return.

The ecological criteria for soaps and shampoo have been decided and were published in the Commission Decision of 21 June 2007. The ecological label can be applied to all products that come into contact with human skin and can be removed through rinsing, whether for domestic or professional use. Evaluation of the ingredients is carried out with reference to the NEW DID LIST (Detergent Ingredient Database) of 30 June 2004, which includes about 180 families of ingredients for which acute and chronic toxicity and degradability is evaluated. Updated information and data can be supplied by REACH (Registration Evaluation Authorization of Chemicals).

The ecological criteria set out to:
• reduce water pollution, limiting the most dangerous ingredients and the overall toxicity of the product;
• reduce the production of waste through the re-design of packaging;
• put into place forms of prevention of environmental impact at source;
• fulfil an “ethical” role, as they contain innovative aspects that characterise new market requirements.

The foundations on which the formulation of the Eco-label criteria based are: the spreadsheet and the quality tests on the product.

In the cosmetics field there are no single analytical tests for evaluation and measuring effectiveness, as there are numerous variables to be taken into consideration (skin or hair type, frequency of use, etc.). On the basis of the European Decision of 21 February 2006, it is possible to evaluate the effectiveness of the performance of soaps, shampoo, balsam etc, through tests carried out with consumers.

For this reason, and also in order to satisfy art. 1 of Regulation 1980/2000, that is say that the product must be ecological but also have a good performance, quality tests are carried out in the form of consumer tests. Indeed, there could be certain reluctance from consumers towards a product applying for the label, since consumer choices normally are one of the most important organoleptic characteristics in purchasing choices and consequent market success. In determining the criteria it was decided not to admit perfumes but the problem remains of undertaking persuasive marketing strategies in order to overcome market obstacles.

4 It is very important to consider chronic toxicity, that is the insidious effect that accumulates over time, by which the behaviour of the ingredient over the long term is analysed. The NOEC (maximum concentration of a substance at which no effect is observed); the Safety Factor (SF – index of the entity of the available environmental toxicological data), the Toxicity Factor (TF- relationship between experimentally obtained toxicity values and the SF) and the MACT (Maximum Acceptable Toxicant Concentration) are all very important.

5 The foundations of REACH are: implementation of a registration and authorisation system for substances placed on the market; moving the burden of proof onto the producer; setting up of a European Agency for Chemical Substances, with responsibility for management and control of the system. The new Regulation aims to protect human health and the environment, guaranteeing both competitiveness and transparency.

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determine loyalty to a brand and repetitiveness in purchases. In order to overcome this reluctance, consumers are involved in the certification process; the product is subjected to consumers’ judgement; this judgement, therefore, becomes a criterion to be satisfied and the product can continue the certification process only if it receives a positive judgement.

To this end a target group is selected, defined as users of the product category, who are asked to express their opinion about the product and to identify the strengths and weaknesses in comparison with another product, generally a market leader, which is presented as a “blind” product, in order to avoid any distortion of opinion. The target group is selected, choosing one of four leading products on the market.

Opinions must be expressed after 5 test uses, carried out in a monadic sequence, both on the product in question and on the leading brand product. Fundamentally, the consumer test evaluates and measures:

- consumer satisfaction;
- the strengths and weaknesses identified by consumers: ease of application, ease of dosage, rinsing, etc.;
- inclination to purchase;
- the influence of price on inclination.

The product under examination is considered suitable if at least 80% of the target group are equally or more satisfied with it in comparison to the market leader. If the product is not considered suitable, the test still allows the weaknesses to be highlighted, thus suggesting appropriate improvements. More specifically, as regards the other criteria, reference is made to the functional unit, which is represented by 1 grammi of active substance (AC), excluding water, in order to avoid the dilution of products, and abrasive substances. All the substances present, even as impurities of raw materials, in quantities above 0.010% of the weight of the finished product must be taken into consideration.

Another parameter to consider is the CDV (Critical Dilution Volume). In order to calculate the CDV, the ingredients are included in the spreadsheet; the toxicity factor of the substance is calculated on the basis of its concentration.

For the various types of cosmetics the CDV limits are:

- Shampoo, shower products and liquid soaps 20,000 l/g AC,
- Solid soaps 3,500 l/g AC,
- Conditioner 30,000 l/g AC.

The surfactants must be easily biodegradable; very small amounts of non-surface-active agents are allowed in aerobiotic conditions within these limits.

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6 One of the objections that has been raised is that of the choice of the market leader, which is carried out on a national level, while the product applying for the Eco-label will be sold in Europe. According to some, this choice may not allow for a fully developed judgement, and make the ecological label too closely tied to the national context. This is a point which will be considered when the criteria are revised in the future.

7 The choice depended on the Northern European countries due to the similarity with the national ecological label “White Swan”.

8 The formula for the calculation of the CDV tox is: p x DF (Dilution Factor)/TF (Toxicity Factor) x 1000 (the weight of the substance is multiplied by the biodegradability factor, divided by the toxicity factor and the result is multiplies by 1000).

9 Non-biodegradable surfactants have a value of 0 in the spreadsheet, since they are not allowed.
• Shampoo, shower products and liquid soaps 30 mg/g AC,
• Solid soaps 15 mg/g AC,
• Conditioner 50 mg/g AC.

Substances that are not anaerobiotically biodegradable are allowed within these limits:
• Shampoo, shower products and liquid soaps 25 mg/g AC,
• Solid soaps 15 mg/g AC,
• Conditioner 50 mg/g AC.

The perfumes in the product must have IFRA certification and must not contain allergens in quantities above 0.010%; certain specific substances, such as polycyclic musk and nitromusk, are excluded.

Food colorants are allowed without need for certification, while non-food ones must be provided with bioaccumulation data. Phosphates are allowed only in the formulation of solid soaps and only up to a limit of 0.6 mg/g AC.

In evaluating the ecological characteristics of cosmetics it is also important to take into consideration the packaging. This is so because it can supply an excellent quality of use and facilitate dosage and more ecological use of the product, because the material of which it is made and the potential for recycling are fundamental parameters for evaluating the awarding of the Eco-label. The calculation, for the packaging, refers to the WCR (weight/content relation). For each gram of product a value of 0.03 g of packaging is calculated. Packaging must be marked DIN 6120, must not contain cadmium or mercury and must be designed in such a way as to facilitate dosage. From the spreadsheet it has been found that products packaged in glass cannot be awarded the label because, being heavy, they make transportation onerous from an environmental point of view.

CONCLUSIONS

The ecological brand Eco-label has the objective of conciliating the need for cleanliness and beauty with respect for the environment.

The ecological criteria on which it is based aim to reduce water pollution, limiting the potentially dangerous ingredients and evaluating the overall long-term toxicity of products and the characteristics of the packaging. Indeed, it is necessary to consider the impact of primary and secondary packaging, evaluating not only the material but also the design, which can influence the phases of distribution and use. The system is certainly complex but the presence of the Eco-label brand, in this sector, represents added value and a boost for enterprises that want to emerge and it reassures consumers with clear, correct, measurable and certified information and the benefits that certified products bring: less impact on the water system; reduction of waste packaging and satisfaction of severe environmental criteria.

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ESSENTIAL MUTATIONS TO EVALUATE FOODSTUFFS

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Abstract: The evolution and boom of the food stuff request on the national and international markets have triggered the necessity to stabilize the food stuffs to the highest possible level, and, simultaneously to continuously enlarge the assortment structure. As a result, the fact that the consumers accept the food stuffs not only implies, but also leads to a modern evaluation of the food stuffs. The modern food stuff acceptability, attractiveness, appetence level and stability depend on the modern technologies, on using alimentary additives, and also to a higher extent on bio-technologies. With reference to the above, a series of essential mutations is under microscope to evaluate the food stuffs. A most important position is dedicated to the synergetic consequences which are determined by the simultaneous use of certain substances that are included in products to meet various targets.

Keywords: food stuffs, evaluation, consumer, additives, synergy

INTRODUCTION

Further to the more and more diversified request for food stuffs, a series of alimentary products has been launched on the market; they belong to: (a) the traditional product category; (b) the traditional product category that have been enriched and modifies; (c) the new brand of products. This resulted in an unprecedented enlargement of the alimentary product assortment to be compared to a real explosion.

The preoccupation oriented towards the nourishing benefits of food stuffs has persuaded the alimentary industry producers to use as many food sources as possible, to apply as various processing methods as possible. However, these preoccupations shall be based on the extent to which the food stuffs are accepted by the consumers who are supposed to ask for and impose modern evaluation methods of the food stuffs.

Although the mass-media of today is able to acknowledge, almost simultaneously, all the categories of consumers on the appearance of a new product on the market, the process to adapt and accept for consumption the new product is time consuming and differentiated depending on each individual apart, as the option for the new product is an intellectual selection process, conscientiously experienced that comes as a result of the psychological particularities of each person (Fig. 1).
These findings imply a special approach of the activity to evaluate the new alimentary products, including here those products that have been obtained, partially or totally, from non-conventional raw materials.

It is obvious that the variety of food stuffs shall increase, so shall their quality level; at the same time the processing level shall develop, as well. The alimentary industry shall offer to the consumers more and more semi-products or processed products that shall imply limited preparation operations in view of consumption, products that shall be thus produced so as to meet and match the various requests placed by the population [2]. An even greater number of products containing a high level of water shall be processed with a purpose to obtain food concentrates as well as instant-type food. The advantages are: reduced depositing spaces, transportation, safe keeping. All the same, the food stuff preservation shall extend by using alimentary additives, by improving the possibilities to preserve the food stuffs, by modernizing the packages, and by up-dating the cooling installations.

The selection and the use of raw material resources is related to turning them to good use, and the possibilities to improve them relate to quality and quantity, but, however, they have in view the new usefulness directions. The traditional agro-alimentary resources are
the topics of priority preoccupations, but, at the same time, new unconventional resources are discovered, harvested or reproduced and their biological, technological and commodity science potential shall be quickly explored. They shall probably be used at a larger and larger scale, selectively and associatively, with the purpose to supplement and diversify people’s nourishment [2].

As far as the future is concerned, the food stuff-related exigencies shall increase, coming closer to the ones that are similar to the pharmaceutical products, at least as concerns the volume of information that is related to the specifics of the use value, of the preservation and use method, for the very simple reason that the dose issue and the administration mode are valid in both cases [2]. The influence of the new products – based on a complex recipe and balanced from the nourishing point of view – has increased as assortment structure of the food stuffs offer. The new products are destined to selectively meet the nourishing requests of well defined segments of consumers. This way, the range of alimentary products has suffered significant modifications during the past decades as the modern food stuffs can be characterized by: superior qualitative characteristics; higher possibilities to adapt to the consumers’ requests; higher stability in time; quick and easy preparation which is time saving, not to mention that it results in saving resources, as well.

The improvement of the psycho-sensorial features of the food stuffs, on the one hand, and the production of concentrates and refined food stuffs, on the other hand, triggered a lack of balance with reference to the food stuffs consumption. This way, the consumer is no longer interested only in satisfying the nourishment needs, but he also neglects the food stuffs nourishing dominant feature and places the accent on their psycho-sensorial characteristics. This is the reason for which, the use of alimentary additives has registered an even greater development, sometimes even without taking into account their negative consequences on the human body.

The food stuffs evaluation process must take into account the fact that the increase of the appetite level is basically founded on using alimentary additives in maximum doses and in association.

The alimentary additive sector represents a major source of secondary or auxiliary materials for the international market of the processed food stuffs. The positive direction to use the alimentary additives is well known, both theoretically, and practically, too; the purpose of the additives is to enrich the food stuffs, and the result would be to extend their preservation duration; the explanation relates to improving the food stuffs psycho-sensorial and technological characteristics. As of the present moment, the additives are being used at a large scale within the alimentary industry, sometimes even abusively, while not observing the maximum admitted doses or the domain they have been designed for. For this particular reason, it has become necessary and compulsory that their production and use be monitored and re-evaluated by authorized legal control officers of national and international organizations to certify that the food stuffs hygienic norms have been abided by, the target consisting in assuring the population’s health and welfare [4].

The taking into account of the health issue – as a major aspect – raises real problems that are related to the synergetic consequences triggered by the use of several substances incorporated inside the same product, but, at the same time, it plays a special part due to the greater interest a group of consumers has to improve their health by means of a diet. Of approximately 300 additives that have been approved by the Romanian and international laws, the greatest part are synthetic additives, obtained by chemical synthesis; the advantage is that they can be accessed in large quantities, they are cheap and easy to procure. The problem of the limits related to using them inside food stuffs has appeared
when some of them have been proven to be toxic (as a result of long term studies, not
during their homologation process), or to have modified the psycho-sensorial features of the
raw materials. As concerns the developed countries, and particularly the United States of
America, there has appeared the concept of “functional food” that has covered extensive
areas and has acquired a significant importance within the alimentary industry; the goal
consists in obtaining both (a) food stuffs that can preserve the psycho-sensorial qualities of
the raw materials for as long as possible, while the processing shall not significantly affect
them and the component nourishing elements shall maintain their metabolic functionality
[4], and (b) special products that would meet the requests of segments consisting in well-
defined consumers (dietetic, hypo-glucide and hypo-caloric products).

The use of alimentary additives is not connected only to the increase of the appetite
level of the food stuffs, but also to the increase of the food stuffs preservation duration. This
way, the series of alimentary preservatives shall be added to the additives that enrich the
psycho-sensorial features. Therefore, there shall be outlined an essential side of the food
stuffs evaluation that would underline the consequences of cumulated additive doses
inside the same food stuff. The use of the additives can be placed at the intersection
between necessity and risk, thus a very strict quality and toxicity control shall become
compulsory. The expansion of the enriched, modified, transformed and new products lead
to the necessity of taking more serious measures to check and monitor their quality and the
consequences on the consumers’ health, while taking into account: to guaranty the product
innocuousness, to correctly acknowledge the consumers by means of the application of new
regulations and quality norms; to evaluate the potential risks on the population’s health by
means of toxicology studies; to determine their nourishing value by means of dedicated
studies.

Another direction of the food stuffs evaluation process should take into account the
use of genetically modified organisms in the alimentary industry. The genetic
engineering has encouraged the gate-way to new and multiple possibilities related to the
alimentary industry. The targets of the genetic engineering do not imply only the insertion
or the elimination of genes, but also the metabolism manipulation. Generally speaking, the
looked-for advantages of the genetic engineering are miscellaneous and numerous, and the
range extends from increasing the plant productivity and quality to reducing the need for
agro-chemical substances and the new raw material consumption. Against such a
perspective, that modifies the food-related concept, there have appeared problems that are
related to the consumer’s safety and protection, as well as to the correct and adequate
information of the consumer on the products he is going to purchase while the genetically
modified organism producers are keen on defending the professional secret against
disclosure [1.5].

This situation can be solved only by means of adapting the legislation that has already
been exceeded by the reality, meaning to introduce and apply a more rigorous control on
trading the products that contain genetically modified organisms. The possibility to launch
such products on the market should alert the authorities that are responsible with the
consumers’ protection as the reference is made to new plants and substances that are the
result of laboratory research whose effects on the people’s health should be extremely
carefully studied and analyzed. The genetically modified organisms represent, in fact,
plants, seeds, new substances that have been obtained by genetic manipulations. In spite of
the numerous advertisement campaigns, organized specially in Europe, in the attempt to
win the consumers’ interest and acceptance, a larger and larger part of these ones, not to
mention the specialists in the domain, are still reluctant to such products.
CONCLUSIONS

The food stuffs evaluation should take into account: (a) the nourishing value that is adapted to the consumers’ requests; (b) the high innocuousness aspect; (c) the stability to extended preservation situations; (d) the adequate packing; (e) the most accurate information of the consumers by means of correct, complete labels; (f) the least possible, time-saving efforts to prepare the products. The essential mutations to evaluate the food stuffs are dictated by outlying and underlying the new criteria to appreciate the nourishing phenomenon and the food stuffs as imposed by: (a) to reconsider the natural, the biological, the ecological aspects; (b) to re-evaluate the consequences of turning the food stuffs into chemical products; (c) to carefully analyze the nourishing value of the food stuffs with reference to its four inseparable sides: psycho –sensorial, energetic, biological and hygienic value; (d) the nourishing and ecologic design of the food stuffs; (e) correlation of the nourishing value of the food stuffs with the body’s needs as determined by the contemporary life style (stress, sedentary life).

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THE TRADITIONAL HUMAN EATING BEHAVIOUR IN THE ROMANIAN BOARDINGHOUSES

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Abstract: The human eating behavior is defined by the total variety of reactions of the human body when interacting with food or rather, by the attitude of the human being towards food and is influenced by a series of factors, like: sensorial quality of the food product; the physiological state of the consumer; traditions, religion and habits. (4) According to the different geographic areas in which the Romanian society has evolved, the eating behavior of Romanians has certain peculiarities. The descriptions that are available at this moment of our traditional ways of feeding are modest. But, given the various geographic conditions, the given resources, sometimes quite abundant, modest at other times, the troubled history of the Romanian people, it is easy to comprehend how the lifestyle and culinary customs have been modeled throughout history.

Keywords: traditional food, eating behavior, food resources

INTRODUCTION

Sure enough, our ancestors were feeding themselves with the specific resources of the ecosystems in which they lived - resources that they either gathered or hunted or produced themselves. The food they prepared had to satisfy their daily needs, determined by the climate, working and living conditions. At the beginnings, they fed themselves with forest fruits, mushrooms, roots, honey, seeds, venison, grapes, fish, mountain, plain and water birds. Later in time, when agriculture developed, cereals, milk and milk products, vegetables, eggs and meat of the animals that they bred themselves, were included in their diet. Of great importance was the extended farming of the maize, which soon became a vital source and traditional nourishment for humans and animals that man was then breeding for food. Sometimes evident sometimes unnoticeable, those feeding habits have left unique distinguishing characteristics on the folkloric and popular traditions, on the Romanian eating behavior, cooking style and culinary habits.

Through history, the different lifestyles, which occasionally meant exile or taking shelter into the forests, all sorts of restraints and constraints could not yet destroy the Romanian culinary tradition. We know the way food was prepared in the past. But culinary traditions have constantly evolved. Thus, the culinary habits in the times of Stephan the Great (late 15th century) are highly contrasting with those of the mid-19th century, of the 20th century and even with those existing nowadays. Over the centuries the Romanian cooking was influenced by the numerous dishes of its neighbors and other countries. But these cooking imports have not remained exactly the same. To some degree, many have suffered profound changes and adjustments, and as a result, one could hardly recognize the original in the Romanian version. The Romanian creativity, gift and love of traditions have contributed to the continuous improvement of their cooking and have permanently shaped the eating behavior of this people.
FOOD RESOURCES IN ROMANIA

The most spectacular and peculiar dishes to be found in the Romanian cooking were created centuries ago by isolated fishermen in the Danube Delta and the solitary shepherds from the Carpathians heights. (1) Many culinary dishes evolved in times of exile, when the people were forced to leave their villages and households and take refuge into the mountains or forests, into the marshes where the invaders who attacked the land could not find them. Romanians relied on their food resources as much as they relied on their forest shelters.

From the food resources available in this country, the following are worth mentioning:

- **Fish**: Species that are fished in the territorial waters and the sea: sturgeon, Danube mackerel, carp, sheath fish, pike, perch, știuca (Esox Lucius), tench, crucian, blue herring, sea gudgeon, grey mullet; **Trout species**: mountain trout and rainbow trout available in the fisheries.
- **Wild animals**: birds (coot, wild duck, wild goose, partridge, quail, pheasant), animals (hare, deer, stag, chamois, wild boar, bear);
- **Butcher’s Meat**: veal, beef, pork, mutton; fowl;
- **Milk** from cows, buffalo, goat, sheep;
- **Eggs from** hens, partridges, ducks;
- **Vegetables**: a whole variety;
- **Cereals**: wheat, maize, rye;
- **Wine**;
- **Mineral water**;
- **Others**: roe, honey, snails, frogs.

All these food resources are available and can be used at preparing a wide variety of traditional Romanian dishes and can contribute to individualize and particularize the culinary offer of the Romanian boardinghouses.

THE EVOLUTION OF THE EATING BEHAVIOR

Feeding behavior like all the other types of behavior is a complex phenotype. The environment plays an essential part in developing and educating the ways of feeding, taking into account the following factors as well: the place where the individual lives; the life he lives and the society he lives in; religion; cultural inheritance; working conditions; the time allocated to feeding; the genetic characteristics of the individual.

Numerous molecules of peptides or proteins intervene in the food behavior of humans. Genes also, as they govern the synthesis of these proteins indispensable to life. The evolution of feeding behavior is due to the mutations which have occurred during the centuries, in which the society evolved from gatherers and hunters to cultivators of cereals and solitary breeders of livestock, to village communities producing foodstuffs, to specialized producers of agro-food resources. In the last 50 years most mutations have happened because of the urbanization of the population and industrialization of the processes of production of the agro-food resources. At different times, during the history of eating behavior evolution, there were periods marked by the cultivation of cereals and vegetables and breeding of livestock in individual households. Recent studies show that:

- social and economic changes started to determine a deviation from traditional food styles, characterized by naturalness, simplicity and good taste;
• the food behavior to which the modern man is driven, and the young people are most affected, does not entirely correspond to the traditional eating behavior.

Due to an increase in the number of urban population, of people depending entirely on industrial food products, the following changes have been unavoidable:

• a raise in the consumption of highly processed foods, highly refined products, treated with flavorings and preservatives for a longer shelf-life but lacking in vitamin, mineral and nutrient content;

• an expansion of the fast-food chains with meals which are uncommon to the Romanian eating behavior;

• a raise in the consumption of foods with high energetic levels (fats, sugar, farinaceous, spirits etc), whilst people are living under pressure and under a high level of stress, in an ever polluted environment.

TRADITIONAL ROMANIAN ACTIVITIES THAT INFLUENCE EATING BEHAVIOUR

Certain food manufacturing activities can still be considered traditional and are influencing and shaping the Romanian eating behavior:

• Bakery – the making of bread and of bakery products of wheat and rye;

• Winery – the wine making –;

• Meat preparation – from wild animals or livestock bred in individual households or farms;

• Milk preparation and processing;

• Fish preparation;

• Preservation of fruits and vegetables.

• Bakery - a common craft in Romania

Bakery and the making of bakery products (bread, rolls and loaves, etc) represents one of the oldest habits of our ancestors and at the same time one of the major components of the food production today. Bread is a basic food consumed on a daily basis and so its making, together with the making of other cereal products has been an essential preoccupation in our society. Today as always, Romanian bakers obtain a variety of products to serve the increased and more diverse demand of the consumers. These bakery products are normally made of a mixture (or not) of black flour, half-white or white flour, of wheat or rye.

From our traditional wheat products there are:

− Paini, breads, very large ones, (weighing 2 kilos each in some areas of the country and 3 - 4 kilos in other areas). Sometimes bakers add smashed potatoes when they make this bread (or potatoe flakes (2) as a true sign of modernism);

− Colaci, rolls of different shapes and dimensions, with specific names are made for daily consumption or for the Easter Holiday and for other different occasions, like: religious holidays, commemorations, anniversaries, special events and feasts. Here should also be mentioned the traditional Christmas rolls „Colaci de Crăciun” or „Crăciunie”, with their holy meaning, which are consumed at ritual dinners or offered at Christmas Eve to those who come to carol, or as handouts for the soul of the dead (1) .

− Franzele, loaves, all the different types, shapes and names;
− **Covrigi**, rings available in a wide assortment, their sort depending on the specific of different areas, on the customs in different parts of the country and the different locations;

− **Traditional pastry**: specific to the whole country (cozonac, pască, turtă); specific to some areas of the country (cheese pie „Poale-n brâu,” și „Scutecele lui Hristos” in Moldova); „Placinte dobrogene” in Dobrogea; „lîchiu” in Central Transilvania, etc.

In order to increase consumers’ satisfaction, besides the traditional products mentioned above, modern products should be added to the present assortment. These products appeared as a consequence of the technical evolution, which casts some negative effects on quality and diversity. Along with the introduction of new, modern equipments, namely of the tunnel ovens with conveyor belts, but not only, the large production units started to replace the small, traditional bakeries, which, in turn, determined:

− The changing of assortment structure;
− A decrease in the variety of products;
− A production concentrated mainly in specialized product lines;
− A change in the taste of the original products due to the introduction of ameliorators in production;
− Products of special origin are rarely produced on a large scale.

• **Winery and the traditional feeding behavior**

Wine production is also a traditional craft. Vine cultivation enjoys a favorable climate throughout the country, mostly on the hills in the East and South of the Carpathians ridge, in Transilvania and Dobrogea; in the West side, as well, and it makes Romania a big wine producer.

The climate, the soil and the sun exposure, throughout the Romanian territory, are decisive factors for successful vine cultivation and good quality wines. The farming of vine can be practiced all over Romania, from the Danube in the South to Botosani and Maramures counties in the North.

Moldova holds a third part of the total vineyard surface of the country. If we look at the vineyard map of Moldova region, going down from North to South, we shall find twelve famous vineyards right here:

− **Podgoria Cotnari**, Cotnari Vineyard in the county of Iași;
− **Podgoria Iaşilor**, Iași Vineyard, situated in the same county, with the vineyards centres of Copou, Bucium, Uricani and Comarna, and two other independent centres in Plugar and Probota;
− **Podgoria Huşilor**, Huşi Vineyard situated in the South of Iaşi county but also stretching throughout Vaslui county. Huşi Vineyard includes four production centers, namely: Bohotin, Avereşti, Huşi and Murgeni;
− **Podgoria “Colinele Tutovei”**, “Colinele Tutovei” Vineyard, situated partly in Vaslui county and partly in Galati county, which includes three centres: Iana, Tutova (in Vaslui county) and Bălăbăneşti (in Galati county);
− **Podgoria Zeletin**, Zeletin Vineyard in Bacău county, with vineyards situated in Zeletin, Dealul Morii, Paricea, Târnăsoaia and Gohor;
− **Podgoria “Dealul Bujorului”**, “Dealul Bujorului” Vineyard, situated in Galaţi county, which includes four centres: Bujorul, Smulţii, Oancea and Bereşti;
− **Podgoria Nicoreştii**, Nicoreşti Vineyard, situated in Galaţi county, which includes the centres of Nicoreşti and Buciumeni;
• **Traditional Romanian products made of processed milk**
  Breeding animals for obtaining milk is a traditional activity all over Romania. By milk processing, a wide variety of milk products is obtained, and some of them can be considered traditional:
  - **cașcavalul de Dobrogea**, Dobrogea pressed cheese, a cheese made from sheep milk and a boiled paste, with a hard consistency, a little flexible, stratified structure, pleasant taste, specific to fermented cheeses;
  - **cașcaval de Brădet și cașcaval de Vrancea**, Bradet pressed cheese and Vrancea pressed cheese, cheese made of whey, obtained from cow milk, which is smoked and matured in special conditions;
  - **cașcaval Teleorman**, Teleorman pressed cheese, cheese with boiled pasta, made of a mix of sheep milk and cow milk 3:1;
  - **brânză telemea**, a feta cheese made of cow milk, sheep milk or buffalo cow milk which is consumed fresh, matured, or preserved in a salty solution of acidified whey.

• **Traditional Romanian products made of processed meat**
  Traditional can be considered all meat products made in individual households: pork sausages, black pudding, smoked ham, smoked chops, bacon, meat roll, greaves, sheep or goat pastrami etc.

• **Traditional Romanian products made of processed fish**
  Traditional can be considered all fish products manufactured by smoking and salting of the fish.

• **Traditional Romanian products made of processed fruits and vegetables**
  Traditional can be considered the processing of fruits:
  - pickles made by lactic fermentation of vegetables (varză, pepeni, gogonele, castrateș etc.)
  - **Magia de prune**, plum jam, dried plums, dried apples, dried apricots

• **Traditional Culinary products**
  There is a wide variety of traditional culinary products specific to the different regions of which we can mention the following:
  - in Transylvania and Banat, culinary products made of pork are predominant and of these we can name: roast pork, „sarmalele ardelenești”, forcemeat rolls of cabbage, soups dressed with sour milk, „ciorba de fasole uscată cu costisă afumată”, a bean soup with smoked chops, etc;
  - In Moldova, culinary products made of fowl are predominant: roast turkey, duckling, or gosling on cabbage, „tochitura modovenească”, Moldavian minced meat;
- In Muntenia and Oltenia, traditional culinary products are mainly made of vegetables: greengrocery soups, vegetable hotchpotch, with porridge without meat;
- In the South part of the country, traditional culinary products are made of fish. Veal and beef is preferred;
- In Dobrogea, lamb and wether (batal) is preferred.
- Throughout the country, „mititeii”, grilled meat balls and „patricienii”, grilled sausages are very much enjoyed.

CONCLUSION

By definition, rural tourism and agro-tourism, is only applied to rural areas. It is a small scale tourism, which includes visiting the natural sights and cultural attractions, and respecting/taking part in traditional rural activities/customs.

Tourists are mainly attracted to this type of tourism because of the beauty of the natural landscape, and normally look for a decent accommodation in houses which respect the architectural tradition, the traditional meals, and are close to cultural and historic places.

Therefore, traditional food behavior and the beauty of landscape are key elements when promoting the Romanian boarding houses from the rural area.

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THE ROLE OF COMMUNICATION AS PART OF MARKETING MIX AND IT'S IMPLICATION ON QUALITY OF THE HEALTH SERVICES

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Abstract: The paper first underlines the particularity of health communication and than its roles in this area. The main issue remain the breaking continues in patient-physician’s communication, with a position of inferiority for the patient in stead of partner with an active role in own health decision. This phenomenon has many effects on patient’ satisfaction, quality of services, number of complains and malpractice charges. An efficient communication will give most than half of information for diagnosis and it has major benefits for physician and patient. The direct communication, physician-patient is the center of communicational system. Our conclusion is simple: the communication in health is a necessity not an option.

Keywords: health services, communication, patient/consumer, quality

The Lovelock’s service classification¹ includes healthcare services into the group of services, in which the element submitted to processing is the body, but they are based equally on information obtained from the patient/consumer, without the supplier can not do its activity. The conceptual changes on health and illness condition have changed the healthcare system. It must be focused on consumers and they must be considered the core of the system. The patient must acquire a new position, going over from the position of inferiority as a simply accomplisher in relationship with the physician, to the one of partner for all parts involved in health decisions. For this reason the attention allotted to the communicational process becomes a priority. The studies have proved that 60-80% of information necessary for the diagnosis is obtained during the interview with the patient².

The Toronto consensus, published in 1991, has showed precisely that the communication problems exist and are frequently³. So, it is a fact that the quality of communication has an important role on health outcomes and the traditional medical education is deficient on communication. This phenomenon has as effects the on patient’ satisfaction, quality of services, number of complains and malpractice charges, the abandonment of therapy.

The communication in health services has some particularities: the right of information, the patient’s well-informed consent, the confidentiality and the privileged communication.

The role of communication in health services is point out by the functions of communication and refers at:

1 Olteanu, V., 2000, Marketingul serviciilor, Ed. Uranus, Bucharest
2 Păcurar, A., Comunicarea medic-pacient, Pharma-bussiness
• **Understanding and knowledge**: the patient must be informed correct, complete and at an accessible level because they need medical information to participate as partner next to the physician at the healthcare decision. The absence of information produces confusion and if the patient does not receive the request information he/she can have different reaction: dissatisfaction and dropping health service fear and an exaggerate attitude or on the contrary indifference against an important health problem.

The health literacy represent a new communication activity that refers as individual capacity to look for and obtain information regarding their health status in an active way, because the physician did not have the monopoly for health information today. For now, in Romania the health literacy remains a desideratum because the evaluation showed that 95% of women who have a family doctor did not do a preventive free control for breast or cervix cancer, in 2002.

• **Consistent relationship**: in medicine a good relationship physician/supplier-patient/consumer involves a deep patient knowledge, including some non-medical aspects (family, work and social environment, alimentary habits life still). A consistent relationship is obligatory to build the trust between patient and physician. The importance of trust is derived from the high-perceived risk of health services; the health is an invaluable thing and the physicians have not only the medical responsibility but moral and social responsibility too. The communication is an interactive process and the physician must help the patient to learn this thing and to stimulate them to ask questions and clarify all their doubts concerning their health, diseases, treatment, and options.

• **Influence and persuasion**: the communication role is important in the health area especially when the supplier (the physician, the pharmacist) try to convince the consumer to adopt a specific behavior, a therapeutic decision based on their knowledge. In fact the communication must be focused on the exchange of information between the physician and patient that lead to *mutual accepted decisions*. The communication skills do ‘influence power’ on patient with the mention that the patient interest must be over the supplier’s.

The **communication** is essential in health field at all **levels** how long the patient is involved. We justify the importance of communication at each level in health field below:

• **Intrapersonal communication** seems to be a paradoxical approach for healthcare but in fact it becomes to have important application in chronic diseases (diabetes mellitus, cancer, chronic pulmonary diseases). The patient role is important by the self-evaluation of their symptomatologies and an active participation on therapeutic decision. So the healthcare is more efficiently, with low costs because of decrease of hospital admissions and an increase of patient’s responsibility. We know the fact that a diabetic patient can change alone the insulin doses relying on their activity, alimentation and life stile with a good glycaemic control, without hypo or hyperglycemia episodes.

• **Interpersonal communication** is the most widespread form of communication in healthcare by the direct relationship between patient and physician in medical consultation time. The communication patient-physician is the core of the communicational system in healthcare because is the source of building the trust, exchange of information, knowledge and education.

Today, even if the physician is not the only who has medical information and there are other sources for patient’s information, without a good communication the physician can...
not obtain the needed information for an accurate diagnosis; they cannot 'produce' healthcare services.

An efficient communication does a proper distribution because without an adequate understanding and knowledge of medical information, we will confront with the decrease of compliance or non-adherence. So the offered service is not used with lower outcomes for the patient. Kaplan and & in an observational study, showed that the patients have the tendency to give up of physicians who can not involved them in medical decisions. A specifically application of communication technology, telemedicine, make an easier distribution of health services by reducing the time and space.

The physician-patient communication is responsible for the health service 'promoting' too. It is known that a satisfied patient will draw three others to the same health services while an unsatisfied patient drive away other eleven potential patients. An application of communication as promoting way in health is represented all activities known as health advocacy. This joint a combination of communicational techniques represented by individual and social actions do to win the political support, social acceptance and help for a health purpose or program.

- **Intragroup communication** is used successfully as better alternative to communicate and can be a better approach to an efficient healthcare of chronic patients. So, periodical meeting of patients with their physician have the specific purpose to speak about individual problems do a higher quality of patient’s life, a slower decrease of daily activities, a better patient’s satisfaction and a decrease of used health services. Other option of intragroup communication with major therapeutic implication but without supplier presence is represented by 'anonymous association of patients' with a specifically disease as the Anonymous Alcoholics; it has as purpose a better communication, support and understanding among patients. The patient can stay in the 'maintenance' stage of the new adopted behavior (stage presented in The Stages of Change by James O. Prochaska, Carlo C. DiClemente) and preventing the relapse.

- **Organizational communication** refers as informational exchange among all the organizations and thirds from exterior environment. In healthcare area the consumer/patient associations represent the organizational communication that involves the consumer. In Romania these are poorly represented in the health decisions and without efficient relationship between them and the other parts of health system (professional association, Ministry of Public Health etc.).

- **Mass communication** presumes the emission of messages to a large target, people and organizations. Especially public health specialists in health promotion domain use this kind of communication.

The health promotion represents the process that offers the possibility of each person to increases health control and improves their health status. Inside of health promotion, the health communication represents interpersonal or mass activities do to improve individual or population health status. The financial resources involved are important and the effects are quantifiable in long time.

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6 Holman, H., Loring, K., 2000, Patients as partners in managing chronic disease, British Medical Journal, 320: 526-527
All these things point out the essential role of communication in healthcare. There is also the idea that in healthcare the classical marketing mix is inadequate with the essential features of healthcare area. Some authors speak about the death of ‘the four Ps’ and the birth of ‘the four Rs’\(^7\), based more on functions and form of communication with the patient. The four Rs mean:

- **Relevance** – refer at knowing better the patients, their needs and interests, characteristics; these can be obtained by listening and understanding the patient.
- **Response** – refer at the creation and orchestration of healthcare services in accordance with patient needs and respecting their wishes.
- **Relationships** – refers at formal links between suppliers and patients.
- **Results** – refers at gaining new patients, offering a higher number of healthcare services.

However the concept of the ‘four Ps’ does not exclude the existence of the ‘four Ps’ in healthcare marketing. The concept of the ‘four Rs’ is only another approaches from a different marketing perspective for the healthcare services. Even we speak about the four ‘Ps’ or four ‘Rs’, the conclusion is simple the communication is very important in health area and it is a necessity not an option.

**CONCLUSIONS**

- The main roles of communication are the information exchange, knowledge and understanding, education, building trust that lead to the mutual accepted decisions.
- The patient-physician’s communication is the core of communicational system in healthcare services.
- The patient must to know all information concerning their health condition, only if they wish. The refuse can be an option for a patient.
- The patient must get from an inferior position in the relationship with their physician as partner with an active role in own health decision by improving the communication process.
- The communication in healthcare area is a necessity not an option.

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Using RFID Tags for Tracking Food Products

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Abstract: Food safety and traceability are currently at the forefront of both government and industry discussions around the world. Numerous initiatives designed to introduce various forms of tracking and tracing functionalities in food supply chain are underway. The introduction of EAN·UCC system is a solution for this problem. But the main disadvantage of EAN·UCC system is the fact that barcodes are carriers of data. By using RFID tags some of barcodes disadvantages were eliminated and also new facilities are available.

This paper presents a way for tracing agriculture, food and beverage products by using RFID tags and their advantages.

Keywords: consumer safety, traceability, RFID technology, RFID tag

Introduction

Consumer safety has become one of the most critical and priority issues for the food supply chain. Despite the best efforts by food products supply chain participants, food safety problems may never be completely excluded. However, an effective and cost-efficient traceability system can pinpoint such a problem to a specific region, packing facility, group of growers, a grower or even a field, rather than an entire commodity group. Narrowing the potential scope of a problem is in line with legal requirements and can reduce the negative economic impact on the supply chain participants who are not responsible for its occurrence.

Implementation of public and private traceability systems by means of automated data capture, electronic data processing and electronic communications can significantly improve accuracy and speed of access to information about the production and provenance of food. They can reduce risk and uncertainty both across the supply chain and between trading partners.

RFID Technology Presentation

Radiofrequency identification (RFID) is an important area of data carrier development, with new generation systems and products offering considerable potential for low-cost data carrier applications. RFID covers a range of data carrying technologies, for which the transfer of data from the data carrier is achieved via a radiofrequency link.

A basic RFID system consists of three components: an antenna, a reader (transceiver, decoder, and antenna) and a RF tag that is electronically programmed with unique information.
The antenna emits radio signals to activate the tag and read and write data to it. Antennas controls the system’s data acquisition and communication. Antennas are available in a variety of shapes and sizes; they can be built into a doorframe to receive tag data from persons or things passing through the door, or mounted on an access point to monitor traffic passing by on a freeway. The electromagnetic field produced by an antenna can be constantly present when multiple tags are expected continually. If constant interrogation is not required, a sensor device can activate the field.

Readers can be configured either as a handheld or a fixed-mount device. The reader emits radio waves in ranges of anywhere from one inch to 100 feet or more, depending upon its power output and the radio frequency used. When an RFID tag passes through the electromagnetic zone, it detects the reader’s activation signal. The reader decodes the data encoded in the tag’s integrated circuit and the data is passed to the host computer for processing.

RFID tags come in a wide variety of shapes and sizes. They are categorized as either active or passive. Active RFID tags are powered by an internal battery and are typically read/write, i.e., tag data can be rewritten and/or modified. An active tag’s memory size varies according to application requirements; some systems operate with up to 1MB of memory. In a typical read/write RFID work-in-process system, a tag might give a machine a set of instructions, and the machine would then report its performance to the tag. This encoded data would then become part of the tagged part’s history. The battery-supplied power of an active tag generally gives it a longer read range. The trade off is greater size, greater cost, and a limited operational life (which may yield a maximum of 10 years, depending upon operating temperatures and battery type).

Passive RFID tags operate without a separate external power source and obtain operating power generated from the reader. Passive tags are consequently much lighter than active tags, less expensive, and offer a virtually unlimited operational lifetime. The trade off is that they have shorter read ranges than active tags and require a higher-powered reader. Read-only tags are typically passive and are programmed with a unique set of data (usually 32 to 128 bits) that cannot be modified. Read-only tags most often operate as a license plate into a database, in the same way as linear barcodes reference a database containing modifiable product-specific information. [1]

Their frequency ranges also distinguish RFID systems. Low-frequency (30 KHz to 500 KHz) systems have short reading ranges and lower system costs. They are most commonly used in security access, asset tracking, and animal identification applications. High-frequency (850 MHz to 950 MHz and 2.4 GHz to 2.5 GHz) systems, offering long read ranges (greater than 90 feet) and high reading speeds, are used for such applications as railroad car tracking and automated toll collection. However, the higher performance of high-frequency RFID systems incurs higher system costs.

The significant advantage of all types of RFID systems is the non-contact, non-line-of-sight nature of the technology. Tags can be read through a variety of substances such as snow, fog, ice, paint, crusted grime, and other visually and environmentally challenging conditions, where barcodes or other optically read technologies would be useless. RFID tags can also be read in challenging circumstances at remarkable speeds, in most cases responding in less than 100 milliseconds. The read/write capability of an active RFID system is also a significant advantage in interactive applications such as work-in-process or maintenance tracking. Though it is a costlier technology (compared with barcode), RFID has become indispensable for a wide range of automated data collection and identification applications that would not be possible otherwise. [2]
TRACEABILITY OF AGRICULTURE, FOOD AND BEVERAGE PRODUCTS BY USING RFID TAGS

For the secondary identification a worldwide used system is EAN•UCC system. It carries data, which allow supply chain participants to track and trace products. The application of this system requires growers, packers, importers/exporters, carriers, distributors and retailers to keep records of serial numbers of logistics units (SSCC), identification numbers (GTIN) and attribute information of traded units and location numbers of their origin (GLN). When used in conjunction with databases containing accurate and timely records, EAN•UCC standards provide all supply chain participants with the technical capability to see the origin of a product, both in their own locations and across the entire supply chain. The main disadvantage of EAN•UCC system is the fact that barcodes are nowadays used as main carriers of data. [3,4]

Because barcodes are nowadays used by the EAN•UCC system as the main carrier of data, supply chain participants can not handle directly with other important information like: storage conditions (temperature, humidity) and product’s main characteristics. Without an access to the database where information are stored carriers, distributors and retailers can not use EAN•UCC system for products traceability. RFID tags have a memory with a capacity up to 1 MB; this capacity is enough for keeping in it all the information about the product. By using encryption algorithms or RFID tags with a ROM memory area, information’s security is assured. It is very difficult to counterfeit passive RFID tags but it is quite impossible to access and modify data encrypted in a RAM memory or written in a ROM memory. So all the information about product is safely stored in a RFID tag and it is easier to access it directly with a reader.

Within the food supply chain opportunities may be seen for applying RFID tags to palletized or container carriers of items for purposes of identifying container contents on a regular basis and re-writable to allow differing container contents to be identified without recourse to changing labels. Reuse in this way will amortize the cost.

A significant feature of new generation RFID tags is the ability to read a number of them when present in the interrogation or read zone at the same time. This feature is known as contention management whereby each tag can be read without the reader being overwhelmed or confused by the signal responses received. Such systems open up the opportunities for batch reading applications within the supply chain where, because of conditions or data capacity and transfer requirements, bar coding and other forms of identification would be inappropriate.

Applications where RFID is seen to have particular benefit include the tracking of carriers, pallets and vehicles under conditions where non-contact exchange of data is required. RFID tags are unaffected by the grease and humidity or the non-metallic vagaries of food handling environments.

Furthermore, active RFID tags may be redesigned to contain a small circuit for measuring temperature. This circuit is not difficult to achieve, occupies a small area on the chip and such RFID tag is not very expensive. The circuit contains a small diode or transistor working as a temperature sensor, an amplifier and a low cost analog-to-digital converter. By applying RFID tags with temperature sensors to palletized or container carriers of items, it is possible to track product’s temperature in every moment. Readers mounted in transportation vehicles and warehouses can activate the tags and write the measured temperature in its memory. At the destination the customer reads the temperature values and knows if the storage conditions were respected.
CONCLUSION

RFID technology can ensure that the right products are shipped to the right location at the right time and in the right conditions. It can enhance cargo security, lower shipping costs and reduce quality and out-of-stock incidents. As the costs of tags reduce and standards are produced, applications for RFID identification will undoubtedly expand.

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THE BERGAMOT – A CHARACTERISTIC
AND EXCLUSIVE CITRUS FRUIT FROM CALABRIA

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Abstract: The bergamot is a citrus fruit with a delicate and persistent fragrance, grown along the coast stretch of the province of Reggio Calabria, in the deep south of Italy, where the plant finds the ideal microclimate for its growth. The areas of land where the plant is grown, thanks to the beauty of the evergreen trees and their fragrant white flowers, are called gardens.

For centuries the essential oil has been extracted from the epicarp of the fruit, first manually and now mechanically, oil which is noted for its freshness and delicacy, capable of fixing and harmonising the ingredients of a perfume, creating a constant and characteristic bouquet, thus making it a valuable and irreplaceable ingredient in the quality perfume industry.

The bergamot was a profitable fruit to grow for many years but is now going through a period of deep crisis which could see its disappearance and that of its derivatives. In this paper we look at the reasons for this crisis and examine some possible solutions in order to defend and maintain the growing of this fruit, the quality of its industrial derivatives and its natural, historical, cultural and environmental value.

Keywords: bergamot. economic value, derivates

INTRODUCTION

The bergamot – Citrus bergamia, Risso –, a characteristic citrus fruit found only in Calabria, in the south of Italy, is of unknown origin and difficult to classify. Indeed, some consider it to be a variety of Citrus aurantium L of hybrid origin, the result of a crossing of lime with sour orange or of citron with sour orange. According to others, the bergamot derives from a spontaneous genetic mutation of another species. The natural hybrid from which the bergamot originated has led to the creation of three species by means of gemma mutation: “Communis” or “Vulgaris”, “Melarosa” and “Tolurosa”. “Vulgaris” is the only species grown in Calabria and exists in three varieties or cultivar: “Castagnaro”, “Femminello” and “Fantastico”, which differ in terms of productivity and the oleiferous glands in the flavedo. The Fantastico variety, because of its productive characteristics, represents about 90% of production in Calabria, having almost completely supplanted the other varieties.

The bergamot is an evergreen tree, no higher than 4 metres, with numerous regular branches, dark green leaves, white flowers (blossom) with an intense delightful fragrance and green spherical fruits, similar to those of other citrus fruits, which turn yellow when
ripe, with a smooth skin. The plant is very sensitive to temperature changes; it cannot stand temperatures below 3°C and those above 37°C, nor great differences between daytime and night-time temperatures. Excessive heat may cause an “early drop” of small unripe fruit. The fruit is grown almost exclusively along the coastal stretch of the Calabria Region, in the south of Italy, in particular in the province of Reggio Calabria, extending from Cannitello to Gioiosa Jonica, a distance of no more than 150 km and an average width inland of about 2 km. The growing areas are concentrated at attitudes below 200 metres above sea level, since the plant is suited to the coastal microclimate, good irrigation and southward exposure.

The bergamot was first implanted in Calabria in 1750. The new plant spread rapidly; the history of its development is closely linked to the creation of the so-called “Aqua admirabilis” by Paolo Feminis in 1704. This was a toilet water, later called eau de cologne in honour of the city in which it was produced, in which the essential ingredient was a fresh delicate essential oil obtained from the skin of the bergamot. Essential bergamot oil has been an irreplaceable ingredient in high class perfumes for centuries, thanks to its peculiar characteristic of harmonising the various ingredients, creating a constant and characteristic fragrance.

The success of this exclusive product from Calabria on international markets led to attempts to grow bergamots in other parts of the world; the best results were obtained in Ivory Coast, but the essential oil did not have the same olfactory characteristics as those produced in Calabria and the ambitious development programmes have been scaled down.

Bergamot growing has represented an important source of income for many years; a vital part of the regional economy feeding a flourishing industrial activity, the most important prestigious and profitable product of which is the essential oil extracted from the skin and exported all over the world. Currently this sector is passing through a period of deep crisis which, if adequate measures are not taken to enhance local production, could lead to an irreversible decline, with serious consequences for the economy of the region and its natural and cultural heritage.

DERIVATIVES OF BERGAMOT PROCESSING

The bergamot fruit, weighing between 60 and 300 grams, is picked from the end of November to March; from the outside to the inside, it is composed of:
• **epicarp or flavedo**, rich in pigments, which are green in unripe fruits and which gradually become yellow as the fruit ripens. In the epicarp there are numerous irregularly spaced utricles or oleiferous lacunas containing the essential oil;
• **mesocarp or albedo**, made up of irregularly shaped cells, white and with a sponge-like appearance, with large intercellular spaces. 20% of this layer is made up of pectic substances;
• **endocarp**, made up of segments lying around a central axis, having a similar composition to that of the albedo. The segments are wrapped in a thin membrane and inside contain the vescicles with the juice, which have very thin walls. In the endocarp, there are also the seeds, situated around the central axis.

The complex structure of the fruit, briefly described above, immediately gives an idea of the difficulties that are met in managing the industrial processing of the fruit.

The most profitable product of this processing is the essential oil obtained from the skins. However, despite the economic importance of this particular derivative, experience has clearly shown that a modern citrus fruit industry cannot be successful if the
The technological process on which it is based does not include exploitation of the whole fruit, with the joint production of several derivatives, able to set off new industrial initiatives and to find new market openings. Only thus will the future be less uncertain for the bergamot.

The main products of the industrial processing of the bergamot are: essential oil, juice and solid residues known as “pastazzo”. The technology for the extraction of the “cold pressed” essential oil is based on the use of traditional peeling machines, to which so far no valid alternatives have been found. The technology based on the use of supercritical fluids, experimented by numerous researchers in Italy and abroad, is not economically viable.

The extraction with peeling machines is carried out by total abrasion of the epicarp over the whole surface of the fruit. Fundamentally, the peeling machine can be considered a long horizontal tunnel, almost cylindrical, with rollers in the lower part fitted with abrading points, each one of which turns outwards on its own axis. A worm conveyor, also fitted with abrading points, moves the fruits from the supply point to discharge. During their passage from one side of the peeling machine to the other, strong jets of water emulsify and drag out the essential oils and fragments of skin. Sieves filter out the larger solid waste, while the essential oils are separated from the water and liquid residues by centrifugation.

It can be approximated that the industrial yield of essential oil extraction varies between 500 and 600 grams per quintal of fruit processed. The extraction of the essential oil is followed by that of the juice. The disoiled fruits, called “bocce”, which come from the peeling machine, enter the supply channel of a machine where two counter-rotating cylinders, with small points, push them against a horizontal knife, which cuts the fruit into two pieces. Then, the half fruit is dragged by a rotating drum along the squeezing channel. The channels have different profiles according to the variety of fruit being processed. After refining, the bergamot juice is mostly used as a blending product for other citrus juices; it is hoped that it may be used as a drinkable juice, but this is currently prevented by its bitter flavour, caused by the presence of naringin and limonin. The residues of processing (“pastazzo”), finally, are used fresh for feeding livestock, or are dried and used for pectin production.

The line of production and distribution has very unique characteristics; indeed, 90% of world production of the raw material is concentrated in a very limited geographical area, in part of the province of Reggio Calabria, while the demand for essential oil is distributed mainly in three countries: France, Switzerland and the USA, where most exports are sent. In these countries there are a limited number of high level producers who create quality perfumes, expertly mixing various essential oils. Bergamot essential oil, thanks to its great prestige, is normally only included in the highest quality perfumes and, thus, demand is strongly influenced by how much is included in the composition of these perfumes. Exports of bergamot oil have to be accompanied by a certificate guaranteeing its purity; to this end, the only authorised laboratory is the Experimental Station for citrus fruit essences and derivatives in Reggio Calabria. Only a small part of the bergamot essential oil production is sold on the home market.

**ESSENTIAL BERGAMOT OILS**

Essential bergamot oil is made up of a volatile fraction (93–96%) and a non-volatile residue (4–7%). The volatile fraction contains terpenic and sesquiterpenic hydrocarbons and their oxygenated derivatives as alcohols, aldehydes, esters, oxides. In particular, we should mention limonene (about one third of the total), linalool and linalil acetate, as well as numerous compounds (more than 350) in varying concentrations, most of which
contribute to the characteristic bouquet. The non-volatile fraction is mostly made up of compounds of the coumarin and psoralen families, including bergamotin, 5-geranyloxy-7-methoxycoumarin, citropten and bergapten, in quantities that vary according to the type of plant, the season etc.

A large number of studies have deepened our knowledge of the qualitative and quantitative composition of this essential oil. This has helped the production of synthetic and reconstructed essential oils which are more and more similar to natural ones and thus with growing difficulties of differentiation. These products come onto the market at highly competitive prices and have contributed to the decline of natural essential oil production.

Before being used in various types of industry, the essential bergamot oils usually undergo specific treatment, also on their destination market, aimed at eliminating certain particular undesirable components: for example, terpenes and sesquiterpenes, so as to increase their solubility in low grade alcohol and in water, to concentrate their fragrant ingredients and to increase their stability; furocoumarins (defurocoumarinization) because of their photosensitive properties on the skin.

Natural “cold pressed” essential oils are in demand from the perfume and cosmetics industries, as well as other industries, such pharmaceutics, detergents, foods, confectionery and those producing reconstructed essences.

The demand for essential bergamot oil is spread over four categories of product: natural essential oil; processed essential oil: terpenless, sesquiterpenless, concentrated and defurocoumarin free; synthetic essential oils: mixtures of the main components of the natural essential oil, some of which are obtained through synthesis; reconstructed essential oils; mixtures of natural and synthetic oils.

Synthetic and reconstructed essential oils, which tend to become more and more similar to natural essential oils, are produced by specialised companies, with well equipped laboratories. Reconstructed essential oils are, however, produced in the bergamot producing areas, but are characterised by greater proportions of natural oil. Nowadays demand is overwhelmingly for furocoumarin free essential oils. The process of defurocoumarinization of essential bergamot oil developed by the Experimental Station for citrus fruit essences and derivatives in Reggio Calabria, is based on treating the essential bergamot oil with alkaline water solution.

By operating according to various processing parameters, a furocoumarin free essence is obtained, with characteristics very similar to those of the natural essence, with the composition of the volatile fraction being unaltered, therefore the fragrance and quality of the essence are also unaltered. The recovery of the volatile fraction varies between 92-95%; in this, bergapten has only a trace presence and is never found in concentrations over 20 ppm. Alternative methods of defurocoumarinization, capable of satisfying even the most demanding customers, are being studied.

1 Natural essential oils are those which do not undergo any manipulation after being cold pressed. Processed natural essential oils are obtained by eliminating certain fractions of components: thus in terpen free essential oils the terpenic hydrocarbons and non-volatile residue are removed; in sesquiterpenless essential oils, the sesquiterpenic hydrocarbons are removed; in concentrated ones the monoterpenic hydrocarbons are totally or partially eliminated; in coumarinis free ones a percentage of the non-volatile residue and especially of the bergapten is removed.

In practice, essential bergamot oil concentrate is not marketed, given that in the natural essential oil the oxygenated substance content is rather high (35-55%).
The requirement for the defurocoumarinization of essential bergamot oil was born in the 1980s, as the result of a strong campaign against natural essential bergamot oil, which tried to get it banned from cosmetics and perfumes on the basis of the phototoxic characteristics of certain components of the non-volatile fraction of the essential oil; in particular 5-metoxypsoralen, or bergapten, causes skin cancer. The well conducted and persistent campaign caused a collapse in essential bergamot oil consumption in perfumes and cosmetics and a continual erosion of market share by synthetic essential oils, which were considered to be safe products, quantitatively and economically suited to demand. The reaction to this situation led to the creation of a Defence Committee for the bergamot, based in Paris. The Committee irrefutably demonstrated that the bergamot not only is neither harmful nor toxic, but indeed offers great opportunities in the pharmaceutical field, because of its proved antiviral properties and for its potential use in the cure of psoriasis, of vitiligo, and of multiple sclerosis. It was possible to authoritatively demonstrate that the accusations were untrue, but the damage had already been done and had been made worse by the arrival on the market of adulterated essential oils, ones that had been “blended” to increase their profitability, and by the widespread use of synthesis products. As a result, in 1976, bergamot was no longer included in a leading French perfume, in which it had been a long-standing traditional ingredient.

The bergamot market crisis has led, over the years, to a drastic reduction in the quantity of essential oil produced annually, which has gone down from about 1,500 quintals in the 1970s-80s to 500 quintals in recent years. The area dedicated to growing has been reduced to 1,000 hectares, just 1.5% of the citrus growing land in Italy. This reduction has happened to the benefit of the residential and tourist-hotel construction industries, which have occupied the land along the coast, profoundly altering the appearance of the landscape. The bergamot “gardens” have been turned into more profitable hotel and residential complexes.

In order to stop the continual reduction of bergamot growing land, it is essential to protect those suitable areas still used for this purpose. To this end there is great interest in the creation of a natural park for the protection of the bergamot (bergamot natural park), which would include the coastal stretch traditionally associated with growing and would bring together all the bergamot producers.

The Calabria Region passed a regional law n. 41 on 14th October 2002 in an attempt to encourage the maintenance of bergamot growing, also because of its landscape, environmental, historical and territorial protection functions, laying down rules to protect growing and the quality of derivatives. The law also regulated the activities of the Bergamot Consortium, a public body aimed at bringing together bergamot producers. The law is very comprehensive but has not had positive results. An important result has been reached in protecting the quality of the essential bergamot oil of Reggio Calabria and in enhancing this unique economic, environmental and cultural resource with the recognition of DOP (Protected Origin Denomination) “bergamot of Reggio Calabria - essential oil”, achieved with European Commission Regulation 509/2001 EC. This recognition guarantees the quality of the product but is strangely slow to get off the ground.

Despite attempts to solve it, the crisis in this sector is continuing. It is clear that solutions must be sought in defence of the quality and geographical origin of the product, including the precise taxonomic identification of the plants. The defence of quality can be achieved through the formation of co-operatives or other forms of consortium that include all those involved in the line of production (producers and processors), where nobody is in a dominant position, with the introduction of organic production, as laid down in European
regulations and relative certification procedures. It would, moreover, be of great use to set up a “bergamot land registry”, so as to establish exactly how many plants and varieties of bergamot fruit exist, thus allowing an annual estimate of the production of natural essence DOP. This would permit attempts to fight against the marketing of sophisticated essences or those not of natural origin.

CONCLUSIONS

The growing, production and marketing of essential bergamot oil, in crisis now for quite a while, have been a rare example of international level agricultural entrepreneurship for Calabria, producing economic initiatives which are still today of great importance in the global perfume industry. The extraordinary and exclusive location of bergamot growing in the coastal stretch of the province of Reggio Calabria means that this fruit brings great prestige to the whole of Calabria.

It is important to stress that, over and above the necessary measures to be taken in order to overcome the present difficulties in the management and commercial organisation system, it is necessary to recover, protect and enhance the natural, historical and environmental heritage of bergamot growing. Unfortunately, the potentialities of this heritage for local economic development are not adequately realised by the authorities and by entrepreneurs. In order to revive the fortunes of the bergamot, the most fragrant of citrus fruits, we need to rediscover the ability to be proud of the traditional products of our land.

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PROSPECTIVE STRATEGIES IN THE TECHNOLOGICAL RESEARCH IN THE
BAKERY AND WHEAT FLOUR PRODUCTS INDUSTRY IN ROMANIA

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Abstract: The products based on cereals are products consumed daily by most Romanians. The technological research plays a key role in obtaining high-quality products in the bakery industry. Specific strategies such as the technological process and food safety or those regarding the production and marketing of bakery products are representative of the bakery industry.

Keywords: strategy, bakery product, food safety, technology, research and development

INTRODUCTION

Cereal-based products, such as bread, biscuits, pasta and other bakery products are consumed daily by the majority of the population. Cereal consumption is recommended daily, in all nutritional guides. Moreover, a larger consumption is regarded as a healthy lifestyle.

The bread producing procedures at the current stage are based on intensifying the dough preparation and fermentation process, which has lead to obtaining bakery products with diminished sensorial characteristics in terms of taste, aroma and maintaining bread freshness in time. These characteristics can improve by using a bread producing technology in which we include a stage for the fermentation of a liquid environment, prepared on wheat flour support, to which we add fermenting substances, enzymes, minerals and bakery yeast in a ratio that ensures the yeasts viability to ferment the dough all along the bread producing cycle. Knowing the technological plans and processes which are implemented at present worldwide, in the bakery industry in Romania the large producers have introduced in the technological process the pre-fermentation procedure in producing bread. In implementing this procedure we must also take into account the existing equipment and technological lines, the raw material (wheat) quality as well as the national specificity for the bread taste. For example, in the United States there are procedures for the preparation of the pre-ferment without wheat flour (with water, yeast, milk, salt and yeast nutritive environment) and procedures in which the preparation of the preferment is done with a 10-20% flour out if the total amount.

In Russia and certain Eastern-European countries, the pre-ferment and liquid yeasts are prepared using a growth environment fermented with acid-lactic bacteria.
STRATEGIES REGARDING THE TECHNOLOGICAL PROCESS AND FOOD SAFETY

The bread production with pre-ferment procedure improves the sensorial quality of the bread by intensifying the aroma and taste, and the physical-chemical ones by increasing the volume, porosity and elasticity of the core, maintaining the freshness in time, prevents the bread contamination with Bacillus mesentericus.¹

In the period we are going through, the consumers of bakery products become more and more aware of the hygienic aspects of the market and of food supply, for these products to be safe for consumption they must observe both the technological requirements and the hygienic-sanitary ones.

In this field, the main strategic objectives target: the improvement in the products appearance and structure, the increase in their nutritive value, serving the consumers with products that are as natural as possible and have a positive influence on health, the diversification of the range of diet products through the superior use of the wheat grain using entirely it parts rich in vitamins, minerals and fibers, the diversification of the range of products targeting children and the youth, the assimilation of traditional and ecological products.

The consumer’s current trend towards the natural makes the bakery products producers move to a market philosophy based on obtaining low-fat products. Consequently, in the past few years, we notice important progress has been made related to the ways of using soy in bread and bakery products production. The supplementary soy flour increases the nutritive value of the flour product and at the same time it reduces the product cost once it increases its quality. In the United States of America, the thesis with which the bakers are convinced to use soy flour as a supplement is that of “creating a superior product at a lower cost”. The use of low-fat soy flour in the bread production presents advantages such as: it increases the capacity to maintain the water content; it prevents the loss in water content while baking; it increases the bread nutritive value; it improves bread quality; it reduces production costs. According to the type and chemical composition, the soy flour added in making bread can play certain roles, namely: strengthening proteins and implicitly the gluten; increasing the resistance to kneading and lengthening the bread viability; obtaining a dough with enzyme properties; crisp properties for the finite product; fine taste – similar to peanuts. The importance of this phenomenon in directing company strategies in the bakery industry has led to equipping the laboratories within trading companies with modern equipment for weighing the bakery products compositions, the diversity of products and the improvement in their quality.

STRATEGIES REGARDING THE PRODUCTION AND MARKETING OF BAKERY PRODUCTS

The production and marketing of bakery products are important domains in protecting the citizens’ health and economic interests, the public authorities having the responsibility for the higher safety requirements of the citizens by elaborating a legislation regarding the production and marketing thereof, which contains provisions relating to safety, in order to

¹ Voicu A., Preliminary Research on Bread Production Based on Pre-ferment, in the magazine Actualități în industria de morărit-panificație [Topical Issues in the Milling and Bakery Industry], no.2/2003, p.1-10
guarantee the quality thereof in compliance with the specific requirements, before they are put on the market.

The scientific research in the bakery industry, the strategies adopted by the main producers and distributors are mostly directed to finding solutions to reduce the duration of the technological process, the improvement in production quality, lengthening the duration of keeping the products and finally increasing food safety. The research results have been materialized in methods that can be used in order to accelerate flour maturation, a process which requires time and space in order to replace the classic, slow kneading with an intensive and fast kneading, in order to visibly reduce the dough fermentation period or even to exclude it, together with increasing bread quality.

Another strategic preoccupation, with special importance in improving the bakery products quality is represented by expanding the use of cold in bakery production, both in conserving the finite product and in the bread preparation technology by using a refrigerated or frozen dough. Refrigeration as a process consists in cooling the products down to temperatures close to freezing point, without the appearance of ice in the product. The technology of bread preparation by refrigerating the semi-products is based on slowing down the biochemical and microbiological processes as the temperature decreases. Through the technology of refrigerates semi-product preparation we use the refrigeration of leaven in bulk and of the pieces of dough shaped or partially leavened. The technology implies two stages: cooling and reheating. The operation consists in cooling the semi-products - leaven or dough – from their original temperature to the one of $20 – 10^0 C$.

The development of bakery products production and consumption has led to, in most companies, a change in the view on the technological processes to obtain them, aiming at moving from the classic technology to the one based on frozen dough. The new technology allows for the processing of production peaks, thus ensuring the fluency thereof, as well as the possibility to market the products where they are obtained. Although the products obtained from frozen dough have a higher cost, their marketing increases due to their freshness and the possibility for the consumer to see the way they are obtained.

The quality of the bread obtained through the frozen dough technology generally has a lower volume than the one obtained traditionally. In order to minimize this flaw, it is necessary to use appropriate quality flour, to increase the quantity of yeast and to introduce it towards the end of the leavening process, which must be more intense and at a lower temperature. In the technology of preparing bread based on frozen dough, the specialists consider it is not rational to freeze the undivided dough, because both freezing and defreezing require long periods of time.

A strategic direction of the large bakery producers and distributors in Romania is represented also by the preoccupation for maintaining these products for as long a period as possible, in which they keep their initial properties, ensure an increase in food safety through the use of modern packing technologies. Thus, packing the bread and bakery products using technologies such as: void packing, controlled atmosphere packing, modified atmosphere packing are basic strategies for the large companies in Romania. Of these technologies, the specialists think that modified atmosphere packing is closest to the

5 Niederauer Th., _Ergebnisse der Brotaromaforschung_, Die Mühle, nr.41, p.706-707, 1991
consumers’ requirements to have an unaltered product, which looks fresh, natural, without chemical additives, easy to use. The modified packing technique is used most frequently by the bakery products producers and distributors in Romania and it consists in replacing, when packing, the air contained in the packing material with a gas or a mixture of gases and the air-proof closure of the product in this environment. The packing materials used are gas-proof in order to avoid the exchange of gases with the atmosphere for the period of their being kept.

CONCLUSION

In essence, it can be stated that the main strategic directions of bakery products manufacturing and distribution companies in Romania are designed so that the products obtained meet the quality requirements imposed by the European Union norms, and face the globalised market competition.

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Abstract: To cope with the increase in illnesses from alimentation and alimentation and to restore the trust of the consumers in aliment safety, the European Commission released a decade ago a administrative restructure process, doubled by the establishment on the base of new laws, aspects regarding the safety of aliments. The new administrative approach leads to the creation in the Commission of the DG S ANCO (Health and Consumer Protection Directorate General) and of the Food Safety European Authority. The new legislative approach started by the publication of “The white book for food safety” followed by the appearance of “The new hygiene package” and of the regulations concerning its implementation.

In Romania, these changes manifested through the appearance of the Sanitary-Veterinary and Food Safety Authority and of the transpose of the communitarian acquits. The food processing industry in our country has begun the implementation of the communitarian requirements, the efforts made by each company, these being often doubled by those of the branch associations. The Authority has collaborated with the spokespersons of the food industry at some of the programs they carried out.

Keywords: foods, quality, control, Good Hygiene Practices - GHP, Hazard Analysis. Critical Control Points – HACCP.

INTRODUCTION

At the level of the European Commission, starting with January 2005, there have been existing new fundaments for the whole food legislation. These are reflected in the Romanian legislation. Law no.150/2004, revised and with several modifications, limits the general principles and obligations, which the operators in the food domain must submit to. Starting from this base there has been constituted a package of regulations called “New Hygiene Package”, applicable to all the levels of the food chain, which entered in use in January 2006 at the level of the European Community, respectively in 1 October in Romania. These regulations are:

- R CE nr. 852/2004 (food hygiene)
- R CE nr. 853/200 (animal origin foods hygiene)
- R CE nr. 854/2004 (official control of animal origin foods)
- R CE nr. 882-2004 (official control of foods and forages).
PARTICULARITY REGARDING FOOD SAFETY

The communitarian legislation concerning foods and forages is based on the principles that the operators, on all the production level, processing, depositing and distribution which are in their control domain, are responsible with insuring that the products and technological processes satisfy the requirements of the law for food and animal food safety, which are relevant for the activity they enterprise.

All the information regarding the application of the food safety management procedures, must be permanently available for governmental control. This applies to the information important for a good traceability.

**The Principles of the General Food Law are:**

- **Safety.** The operators with activity in the food field must guarantee that the foods satisfy the requirements of all the laws in the food field and must permanently implement, these requirements, for the marketing of safe foods only.

- **Fairness.** The operators with activity in the food field must not present or label the products in a confusing way for the consumers.

- **Responsibility.** The operators with activity in the food field are responsible with the safety of the aliments they produce, transport, deposit or sell.

- **Transparency.** The operators with activity in the food field must immediately inform the Competent Authority (The Veterinary Health and Food Safety ANSVSA) in the case in which they have reasons to consider that the aliments present a risk for public health.

- **Traceability.** The operators with activity in the food field must keep the record of the prime materials, auxiliary materials, labels etc., which enter the company and of the products they supply (excepting the final consumer), in the purpose to insure traceability and to be able to rapidly make these information available to the Competent Authority.

- **Retrieval.** The operators with activity in the food field must initiate the retrieval of unsafe aliments and must inform the consumers about the reasons of the retrieval, if it is the case. The operators must inform the ANSVSA through their territorial structures about such retrievals.

- **Collaboration.** The operators with activity in the food field will collaborate with the ANSVSA and other operators, to reduce or eliminate the risks regarding public health.

Currently, the insurance of hygiene in the food sector is based on specific regulations, among which, the most important are:

- **Governmental decisions nr. 924/2005,** which establishes the common requirements for all the operators in the food field.

- **Governmental decision nr. 954/2005,** which adds the additional requirements for manufacturing of animal origin foods.

These regulations cover all the steps of the food chain, including the primary production (farmers, anglers and hunters) and impose the same hygiene requirements for the food import.

**HG nr. 924/2005, which transposes the CE Regulation nr. 852/2004,** establishes the hygiene requirements, as following: general hygiene requirements; structure requirements; transport requirements; equipment requirements; food wastes; water supply; personnel hygiene; cross contamination prevention; pest control; prime material control; labeling and packaging of food products; requirements regarding temperature control; food safety
management system, based on the HACCP principles; the identifying and control of critical production points; training.

HG nr. 954/2005 which transposes CE Regulation nr. 853/2004, it establishes the additional requirements, as following: fresh meat (including wild game); crushed meat, meat foods; meat products; the delivery of animal fats; raw milk and milky products; eggs and egg products; living bi-valve mollusks; frog feet and snails; fish products; collagen; jelly; requirements regarding temperature control; Food Safety Management System, based on HACCP principles; the identifying and control of the critical production points; training; pest control; prime material control; the labeling and packaging of food products.

For the use of these Government Decisions, more precisely HG nr. 924/2005 and HG nr. 954/2005, an activity in the food field is understood as being an activity, which acts in any enterprise, as being profitable or not, as being private or belonging to the state, which includes any steps of food production, processing, depositing and distribution.

There are included the primary producers, the importers, the en-gross, transporters, detail tradesmen, restaurant owners, suppliers, kiosks, mobile trailers and everyone who effectuate operations of food import, export, manipulation, depositing, transportation, preparation and selling.

“An operator with activity in the food field is any physical or juridical person who is responsible for the accomplishment of the requirements of the law in the food field in the enterprise with a food profile which is under its control” - Law no. 412/2004.

FOOD SAFETY MANAGEMENT SYSTEM

All the activities in the food field must have a documented food safety management system, appropriate to the size and character of the activity, which must be based on the HACCP principles – Hazard Analysis. Critical Control Points. The operators must regularly identify and revise of their technological processes and must assure that in these points the control procedures are applied.

The operators with activity in the food field must demonstrate that they have a functional food safety management system, so they insure the production of foods or their safe selling. These systems must be based on the HACCP principles.

It will include the following elements:

• the identifying of the food safety hazards which are present or can appear in the activity;
• it must have implemented control procedures which will reduce to an acceptable level or will eliminate these hazards;
• must have clear procedures, which will be respected by the whole personnel;
• the records or documents must be in conformity with the activity made daily in the production units;
• must keep the records of the procedures and of the effectuated checking.

The personnel responsible with the food safety management system will have to be trained correspondingly.

The new regulations are supported by a Regulation regarding the microbiological criteria, like the CE Regulation nr. 2073/2005, which is being transposed. It will describe the allowed maximum levels for hazardous microorganisms (and products by associated metabolisms), as well as the obligations of the operators regarding the monitoring and actions, consequences of the results.
THE GOOD PRACTICES OF HYGIENE AND PRODUCTION

For the production of safe foods, the HACCP system must be developed on a solid base, constituted from preliminary programs. Each segment from the food industry must insure the conditions necessary for the protection of the foods while being under its control. This is usually made through the application of the Good Hygiene Practices (GHP), Good Manufacturing Practices (GMP). These conditions and operating practices and now considered preliminary for the efficient development and implementation of the HACCP program. These insure the operation environment necessary for the production of safe foods and proper for consumption. Beside the requirements specified by the law, the industry adopts several times practices and procedures specific to the production operations, which they make. The preliminary requirements have an impact for the safety of the foods, but they the include and other factors necessary to the production of foods proper for consumption.

Together with the evolution of the HACCP concept, an increased importance is accorded to the insurance of a corresponding base from which to start the development of such a system. The expression “preliminary conditions” describes the array of programmes necessary for this purpose. If these conditions are not implemented and if they do not function effectively, the HACCP system can be inefficient. The preliminary conditions simplify the development and maintaining of a HACCP plan. As mentioned earlier, HACCP is axed on the activities, which have a direct and substantial impact on the foods' safety.

The existence and efficiency of the preliminary programmes must be evaluated at the same time with the elaboration and implementation of each HACCP plan. The preliminary conditions are established and administrated separately from the HACCP plan. Although, certain aspects of a preliminary programme can be incorporated in the HACCP system. For example, many companies have preventive maintenance procedures for the processing equipment, for avoiding its malfunction and the loss of production. In the course of developing of a HACCP plan, the HACCP team can decide that the maintenance and routine calibration, of a furnace for example, are going to be included in the plan as a verifying activity. Thus, it will insure the reaching in that furnace of a minimal temperature necessary for the safe production of foods.

PRELIMINARY PROGRAMMES OR HACCP

The food safety management at the level of a company, which processes foods, imposes the use of GHP and GMP, together with the use of the HACCP system. The decision of including of a food safety management element in the frame of a preliminary programme or in the frame of the HACCP system is a key point and needs the balancing of numerous factors. The decision depends on the result of the risks analysis and the evaluating by the HACCP team of a potential hazard associated with danger.

The base difference between the preliminary programmes and elements covered by a HACCP plan are:

• the preliminary conditions and programmes can aim other aspects than the safety of the foods, while the HACCP plans are strictly for the production of safe foods;
• the preliminary programmes are general and can be applied to the level of the whole company, inclusively several production lines, while the HACCP are based on a risk analysis which is specific for a certain product and a certain production line;
the deviations from an established limit in the frame of a HACCP plan necessarily determine an action, which will eliminate the risk represented by the product, due to the high hazard for public health.

Certain activities, which are normally included in the preliminary programmes, can be occasionally in the HACCP plan. For example, the hygiene procedures are generally included in the preliminary programmes, but certain producers can choose to include hygiene procedures as critical control point (CCP) in their HACCP system. This division will depend on the results of the hazard analysis and of the identifying by the HACCP team of the most efficient measures, which can be applied for the control of the specific hazards. In regard of the preferences or the individual activities, the programmes will be made to correspond with the need of the company.

"The HACCP system is an instrument that helps the operators from the food industry so realize a higher food safety standard. The HACCP system must not be regarded as an auto-reglementation modality and it will not replace the official control" - R nr. 852/2004.

CONCLUSIONS

Benefits brought by the HACCP system application to the processor are:

- the systematic mode will insure the control of all the factors on which the food safety and that of the corrective actions necessary in the case of incidents are dependent.
- the mode which presumes the planning of activities permits that the possible hazards are anticipated and avoided or, in the case in which the succumb, rapidly resolved and with low costs
- taken in consideration the most important steps in the frame of the production process to realize an efficient food safety, economic and with the optimization of the use of personnel resources.
- the correct and complete records are evidence of an efficient food safety management
- the production personnel is motivated by the recognizing of their efforts in maintaining food safety;
- because HACCP is a system of food safety management, which is internationally recognized, the clients of the company can ask its implementation.

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Abstract: The focus of this study is to establish an institutional economics framework of interorganizational cooperation specific to supply chain management. In contrast to transaction cost economics, an institutional economics approach uses social institutions to explain transactions. This theory develops a framework using the causal relationships of interorganizational trust, individualism and collectivism, and JIT/TQM on interorganizational cooperation. Moreover, JIT/TQM is hypothesized to exert a superordinate goal effect over interorganizational trust and individualism and collectivism on interorganizational cooperation. This theory poses a new paradigm to explain the uneven adoption of interorganizational cooperation practices in the industrialized, newly industrialized, and post-communist societies.

Keywords: Cooperation, institutions, JIT, TQM, trust.

INTRODUCTION

Since their introduction to the European countries and the United States from Japan in the 1980s, interorganizational cooperation between buyers and suppliers has provided lower costs, shorter development and production cycles, higher quality, and other interorganizational synergies (e.g., Ansari & Modarress, 1986, Schonberger, 1982). Womack, Jones, and Roos (1990) identified the transition from adversarial supplier relations to interorganizational cooperation in the industrialized nations as a major improvement for organizational competitiveness. The principal purchasing philosophy change consisted of more cooperative, interdependent, and long-term relationships. Interorganizational cooperation may also serve as a potential vehicle for economic development in post-communist societies in Central and Eastern Europe, such as Romania, as well as in less developed countries, such as Mexico and Argentina. According to Hirschman (1958), key industries support a nation's or region's economic development by forging links between suppliers and buyers. Little is known, however, of interorganizational cooperation in nationally owned and managed firms in post communist and less developed countries. Interorganizational cooperation may be practiced in these countries largely by foreign firms only, and the expected synergies from a multilevel supply chain may not exist.

In the search for an organizational level theory to explain the phenomenon of interorganizational cooperation, a major quandary arises in the choice of the underlying theoretical framework. A framework that ignores social factors, such as trust and cultural norms, provides an inadequate explanation for interorganizational cooperation. Economic theory is incomplete without a social systems component (Parsons & Shils, 1951), and
Institutional Economics Theory

In the theoretical foundation of this research, institutional economics theory is proposed as a superior explanation of interorganizational cooperation. An analysis of institutions approach removes the assumption that individuals are calculative and motivated by a constant level of self-interest and opportunism.

Institutions and Institutional Change

North’s (1990) treatise on institutions and institutional change attempted to explain how institutions profoundly influence the structure of organizations. Institutions are analogous to the rules of a game. They provide the standards, constraints, and boundaries for human interaction (Sjöstrand, 1993). Institutions may be informal or formal. Informal institutions consist of the values, beliefs, rituals, customs, and paradigms held by a group of people. These informal institutions are not codified but are taught and learned in informal situations. They are commonly held conventions, but specific measurements and enforcement rules are avoided (North, 1990).

An Institutional Theory of Cooperation

Considering institutionalism’s macro view as one of its principal limitations, this research proposes the development of an organizational level institutional economics framework in which specific constructs are employed to predict interorganizational cooperation along the supply chain. The constructs used in this theoretical framework consist of interorganizational trust, individualism and collectivism, and the superordinate goal of just-in-time/total quality management (JIT/TQM).

Interorganizational Cooperation

Cooperation has been described by a variety of theorists. It represents the union of two or more entities, leading to a more complex combination, which has a greater chance of surviving environmental forces than as separate entities. Mead (1937), in studies of living primitive societies, found that cooperative social organization leads to higher affluence not found in a solely competitive social organization. In a political-historical analysis of civilizations, Eisler (1988) found variations between the social dominator model, in which societal exchange is carried out in hierarchical and competitive relationships, and the social partnership model, in which exchanges are made through cooperative relationships.

Interorganizational Trust

Trust is considered a causal factor for cooperation and exists at a variety of theoretical levels (Worchel, 1979). Trust is generally defined as the positive expectation of outcomes when people and groups interact with others under conditions of risk (Boon & Holmes, 1991). Understanding the influence of trust among organizations requires an understanding of social trust. Social trust is considered the accumulation of trust at a macrosocial level (Dasgupta, 1988). Social trust has no liquid value, but it permits value-added activities (Coleman, 1990) and is recognized throughout history as a major factor of social order (Shapin, 1994). Social trust facilitates the realization of objectives that, in its absence, are impossible. Social trust is created when human relationships are aligned to expedite performance.
Superordinate Goal of Just-In-Time/Total Quality Management

Superordinate goals refer to objectives requiring cooperative activity such that (a) the combined efforts of the involved groups are required to reach the goal and (b) the goal is of such value that group members are motivated to reach the goal. Superordinate goals also lead to greater communication, which further encourages cooperation. Key individuals who communicate between organizations are referred to as boundary spanners. The increased presence of boundary spanners in organizations increases communication and subsequent cooperation (Friedman & Podolny, 1992). Due to its symbolic nature, communication may also be considered as an element of cooperation (Sherif et al., 1961).

Contact and communication between organizations in the absence of superordinate goals, however, may not be sufficient to achieve cooperation. Factors such as equal status encounters among members of different organizations, intimate rather than casual exchanges, pleasurable exchange experiences, and interaction according to superordinate goals are required for interorganizational cooperation (Amir, 1969). The presence of a superordinate goal is necessary to induce cooperation among groups (Dawes & Thaler, 1988). Feger (1991) qualified the importance of a superordinate goal, which includes perceived interdependence, as the most important factor leading to cooperation.

CONCLUSION

In the context of this theory, JIT/TQM, an institution designed largely to improve quality and improve productivity, functions as the superordinating goal to foster interorganizational cooperation among buyer and supplier organizations. Thus, buyer organizations faced with changing quality, delivery time, and cost performance requirements may demand that their suppliers cooperate more closely, such that they become an extension of the buyer’s JIT/TQM capabilities. JIT/TQM refers here to a selection of organizational philosophies and practices consisting of just-in-time (JIT), total quality management (TQM), and their common infrastructure practices (CIP) for JIT/TQM (Flynn, Sakakibara, & Schroeder, 1995).

Just-in-time (JIT) is considered as both a philosophy and set of techniques to improve productivity by reducing waste and simplifying a firm’s processes (Goyal & Deshmukh, 1992). Total quality management (TQM) functions as a philosophy and system of practices to improve process and product quality. The common infrastructure practices (CIP) are associated with and support JIT and TQM. These practices provide (a) information feedback, (b) management support, (c) plant environment and cleanliness, and (d) workforce management.

Just-in-time/total quality management (JIT/TQM) has been described in the literature as a predictor of interorganizational cooperation and exerts a superordinate goal effect to bring the buyer and supplier into closer interorganizational cooperation relations. The use of JIT/TQM may also pose a contravening influence over low interorganizational trust or individualism/collectivism, if these work against closer interorganizational cooperation relations. The following research questions are posed: Is the superordinate goal of JIT/TQM, composed of just-in-time, total quality management, and their CIP for JIT/TQM, a significant predictor of interorganizational cooperation? Is the superordinate goal effect of JIT/TQM greater than the effect of interorganizational trust and indcol on the formation of interorganizational cooperation?
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CORPORATE SOCIAL RESPONSIBILITY - ASSESSMENT FROM THE CONSUMERS’ POINT OF VIEW

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Abstract: Corporate citizenship concerns the changing relationship of business and society. More than consumer, employee and supplier trust, or even broad stakeholder involvement, it encompasses the positive and negative aspects of corporate integration into society. Corporate citizenship goes to the heart of the UN appeal for global business and multinational corporations to honor their social responsibility, and moral duty, to use the power of markets to make globalization a positive force for all.

Keywords: sustainable consumption, standardisation of CSR, consumers

INTRODUCTION

Romanian Association for Consumers’ Protection supports the development of standards for the assessment of companies’ ecological and social behavior. The standardization of CSR at national and international level is a decisive step for promoting sustainable consumption. The general goal of standardization, i.e. transparency and trust in the standardized product property, would therefore also provide an objective, comparable yardstick for consumers with regard to the environmental and social compatibility of production processes. Compliance with other, difficult to assess, product and production criteria regarding environmental and social standards could be transparently and clearly communicated to consumers and other parties involved. This would also lay the cornerstone for far-reaching transparency of global production and distribution processes.

BACKGROUND: SUSTAINABLE CONSUMPTION FROM A CONSUMER POLICY PERSPECTIVE

Sustainability is a topic for consumer policy. On the one hand, because many consumers already set great store on goods and services being sustainable produced. On the other hand, because the politically recognized binding model of sustainability can only become reality through the collaboration of all social groups and players. Sustainability is defined as being the harmonization of ecological, social and economic goals. The ecological (careful use of natural resources) and social (abolishing poverty) dimensions of the term sustainability are decisive in discussions on the topic. Yet it is still rarely realized that sustainable consumption also opens up enormous potential from an economic point of view. Industry sees itself as being exposed “race to the bottom” in global competition. Environmental and social standards are perceived as cost burdens. In order to find a way out of this pure price competition, it will become increasingly important for consumers to choose sustainable produced goods and services. Standardization should therefore be grasped as an opportunity by Romanian industry. In order to secure a high wage level for the future, Romanian companies are already using process quality as an international...
competitive advantage. Yet at the same time, industry should give consumers the possibility to reward these investments. Transparency concerning the product and process quality of goods and services is indispensable for this. International standardization is a decisive step in promoting this transparency.

**FIVE REASONS FOR THE STANDARDIZATION OF CORPORATE SOCIAL RESPONSIBILITY**

a) **Strengthening the power of consumer demand**

Many consumers are already aware of their responsibility and want to use their demand power. To do this, they have to know what is hidden behind the goods and services offered. Other consumers are not interested in detailed information about sustainability topics, nevertheless they have an unexpressed expectation that the companies from which they buy products and services behave socially and ecologically responsible. If a company is associated with child labor or environmental scandals, consumers turn their back on it. The words “Mad-Cow-Disease” suffice to show that in acute crises situations, consumers can react very radically to unsustainable production methods, with total refusal and purchase boycotts. It is of equal interest to consumers and industry that consumer’s expectations for socially and ecologically responsible corporate management do not lead to such full-blown crises of confidence, but instead that continuous communication starts up between consumers and companies concerning sustainability matters. Until now, companies have barely succeeded in positively utilizing consumers’ expectations for sustainable corporate behavior, by actively developing a sustainable corporate management as a special quality characteristic. Industry has to deal with considerable credibility problems when it tries to convey to consumers that it provides particularly exemplary services for sustainable production methods. Consumers and the general public are unable to discern whether companies’ statements concerning their commitment are correct, whether important information is withheld, and how different companies compare with respect to their sustainability balances. This is where the standardization of CSR picks up. Collecting information about the sustainability of corporate management, and making it available to the public according to uniform criteria and in a checkable way, provides a way out of the current credibility dilemma. The fact that only a few consumers will concern themselves with the details of companies’ sustainability management does not diminish the consumer policy value of the standardization of CSR. Just like the other quality characteristics of products and services, consumers are not interested in the technical details of the topic of sustainability, but in a reliable overall opinion. The media and neutral bodies therefore have the task of reducing the complexity of the information and of communicating its essential core to consumers via CSR.

b) **The world trade law dimension**

The recognition of standards is of key importance, especially in world trade law, as environmental and social standards are frequently assessed as being a potential trade barrier. This is usually the case if standards are not based on a broad international consensus. The WTO’s world trade rules regularly prohibits member states from making trading policy decisions which are linked to production-related criteria and compliance with social standards. Even state-initiated labeling systems, which merely inform consumers and can therefore contribute to a conscious consumer decision taking into consideration social and ecological criteria, can thus be impermissible. On the other hand, the World Trade Organization cannot do without standards. Standards are of key importance in the
preservation and protection of public goods and for consumer information, for example regarding fitness for use and health protection. Although each standard brings with it a risk of misuse for protectionist purposes, due to their information value they have a considerable trade-promoting potential. The most important prerequisite for the implementation of such a standard is a high degree of trust and credibility vis-à-vis the organization setting the standard. The International Standards Organization, ISO, enjoys this trust. Therefore, the WTO technical barrier to trade agreement (TBT) not only concedes privileges to such international standards, but also expresses the supposition that international standards are not unnecessary barriers to trade. The standardization of CSR by ISO is therefore also suitable for increasing the scope for consumer-friendly, uniform labeling of sustainable produced and traded goods.

c) Fulfillment of the sustainability standard as a value determinant when rating publicly listed companies

Sustainability criteria are also playing an increasing role in financial investment decisions, because sustainable operating companies are more successful in the long-term. Generally recognized standardization could enable a uniform valuation or rating system to be created, which guarantees comparability within the scope of risk management and at the same time therefore contributes to risk minimization (less susceptibility to boycotts, image improvement, and “cleaner” companies). Those companies which espouse the cause of compliance with social-ethical aspects within their corporate activity would profit from this. CSR standards enable responsibly trading companies to clearly position themselves on the market and to utilize the competitive advantages associated with the image gain.

d) International provisions cannot replace standardization

Treaties under international law play an important role in the stipulation of binding environmental and social standards. However, they are no substitute for standardization when it comes to companies fulfilling their responsibility. This is firstly because there are few such treaties and those that do exist frequently only contain general obligations. Further, it is increasingly clear that environmental and socio-political treaties have little chance of influencing trading policy reality. For example, it is still unclear whether and to what extent multilateral environmental treaties and core time standards can be used as the basis of trading policy decisions. Ecological and social standards are thus frequently not a permissible differentiation criterion for international trading policies. Under the aspect of consumer sovereignty, it is therefore not enough to regulate environmental and social standards by law. Domestic laws do not satisfy the global dimension of ecological and social responsibility. And on an international level, globalization of industry and the anchoring of environmental and social standards in international law go their separate ways. International organizations and international law treaties deal with climate protection and core time standards while, as a “fundamental law”, world trade rules mostly remain unaffected by this development.

e) Standardization of CSR is possible

Standards for management systems can represent the fulfillment of corporate responsibility to man and the environment. This is shown by the ISO’s standards for quality and environmental management. That a link between the auditing of technical and ethical standards is also possible has been demonstrated by the TÜV, which claims that no children work in the 25,000 companies it has audited in Asia.

Summing up:

1 TÜV = German Technical Inspectorate

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Standardization is the decisive prerequisite for firmly establishing international corporate responsibility, thereby giving citizens the opportunity to fulfill their social responsibility in their role as consumers and to accept global responsibility with their consumer decision.

STANDARDIZATION CONTENT REQUIREMENTS

The standardization of CSR should fulfill certain minimum requirements. The following catalogue is not exhaustive, but it does contain several essential criteria from a consumer point of view.

ISO standards
- must be oriented to internationally recognized standards (UN, ILO OECD);
- where possible, should not merely describe (management) structures, but also describe the social and ecological reality;
- must be created through proportionate participation of those organizations, which represent public interest in sustainable development;
- must incorporate the relevant value-adding chain in the assessment, in order to document the responsibility for outsourced production processes too;

CONCLUSION

If corporate citizenship poses challenges for global business, it also raises issues for consumers. Consumers must be conscientious in their response to the demands they are making of corporate actors. Corporations will quickly defect from efforts to alter their conduct toward good corporate citizenship if those efforts are not recognized by the market. Individual consumers must use their power of purchase in ways that contribute to the social good. Price and quality are still the key determinants of daily shopping decisions, but ecological and social criteria must become increasingly relevant. Consumers cannot change company ethics until they put their money where their morals are.

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TQM RELATION AND THE QUALITY CULTURE OF UNIVERSITIES-INSTITUTIONAL STRATEGIES FOR LONG TERM DEVELOPMENT IN POST ADHERENCE PERIOD

Amalia Venera TODORUȚ, Ph.D.

Abstract: Universities need strategies which they can adopt according to the provided services and to the market they function on. That way the cost-management, differentiation and communication strategies allow a competitive advantage. The formation of a culture in this domain is an essential condition for the continual improvement of the quality and for introducing the system for quality management to a faculty or a university. The concept of quality culture expresses the totality of the knowledge acquired or recognized of the quality values on which the organization develops its own survival skills in the inner and outer environment and administrates its own internal affairs. The quality of university education has become a subject of major importance because the job’s market has become smaller and more demanding. On the quality of education are interested the students, as main clients, their parents, future business owners, the government, the society in general and also the entire university staff which are the ones that assure the quality of the educational process. Introducing the base principles of TQM in a university depends on the existence of an adequate culture of the entire staff.

Keywords: TQM, quality culture, team, strategy

INTRODUCTION

Introducing base principles of TQM in a university depends on the existence of an adequate quality culture of the entire staff. The institutional culture from the universities affects the application procedures in the context of quality strategies, although it does not appear directly but through its consequences. The culture integrates values, beliefs and behavior norms that have proved to be benefic for the university in its past and confer personality, fame and at the same time shape to the student life. That shape is the pleasure to learn. For example the well-known Oxford, Cambridge and Harvard universities have become famous not only through its academic results but also through its institutional culture. This shape matters a lot when appreciating those who have studied and have graduated from those universities.

The culture from a university represents its genetic environment, its unwritten but mandatory regulation. It is conservative through its nature and will oppose any innovation or major changes of management. And still, due to the major changes of our society even Harvard University is submitted to a continuous adaptation process which is done through a managerial system and through an adequate quality policy. Here where excellence in quality has represented and still represents the essence of university life.

1 At Harvard University have studied 6 USA presidents, 30 Nobel laureates, over 25 Pulitzer winners, over 200 Rhodes Scholarship beneficiaries, etc.
The re-establishment of a normal balance between the management of quality and institutional culture is done through:

- the implementation of new ways of thinking;
- the implementation of strategic management;
- the implementation of quality management.

The new thinking models must be focused on dynamics intelligence and creativity. The development of new thinking models leads to the acceptance of changes as normal and natural phenomena of permanent adaptation to the social and economic environment. Intelligence allows obtaining some more preferment solutions and therefore the creativity leads to new things. Using such models of thinking the knowledge can be assessed more and thus the models of behavior allow the evolution of the values into an incentive and competitive climate.

By implementing the strategic management an activation of the university and a protection of the developing needs on a period from 3 to 5 years are produced.

The mission of the universities is obvious, the fundamental objectives over which all its energies should be concentrated.

The third direction is the implementing of quality management which has the role to arrange the specific activities of the university and to concentrate on the students’ requests who are clients. Applying the three ways of change an institutional culture will take place, meaning the passing from a culture based on mediocrity and bureaucracy to a culture which aims the excellence and the performance.

THE STRATEGIC PLAN

Sometimes also named plan of collective or institutional development it details the measurements which the institution intends to take in order to achieve the mission.

It establishes a scale of time measurement on a medium term which is usually a period over 3 years. The goals are to give the institution the followed direction. Anyway the plan is not a rigid instrument and it should be modified if significant internal and external events require this. On a competitive market for education the elaboration of a strategic plan is very important. Without it the institution has no direction. The strategic plan contains a number of key problems. Any institution should decide the following objectives:

- The market identification
  This could be decisive for it. Therefore it should find out about the new markets which can be opened and of course about their nature. These data are essential for the strategic plan of the institution.
- The grade of penetration on the market
  Any institution should have a goal for a market quote which it tries to obtain.
- Its services portfolio
  This portfolio should be in connection with the identification of the market and the penetration on the market. Without an adequate portfolio of classes and programs the fixed objectives are impossible to achieve.
- Portfolio development
  If the institution has a lack of adopted programs its target market then it obviously needs a strategy and a scale of time measurement which develops them. The development will not include the programs but also the new and flexible means of transmitting the existent programs.
Institutional strategies developed on long-term

There is a number of generic strategies which organizations can adopt as soon as they have decided what services and on what markets they activate. There is a choice of three generic categories of market which any institution can follow. The first is the cost-leading strategy. This requires an organization to be the institution with the lowest cost inside its market. It can try to do this thing through the extensive organization of the rigorous techniques of cost. Although buying the cheapest does not guarantee the success. Many clients will pay more for quality. The quality should not be sacrificed to reduce the unitarian costs. An institution which is capable to control its cost or to economize will have supplementary sums of money to employ the staff as it wishes.

The difference is the second strategy which demands to be unique compared to its rivals and to have a certain distinct personality. In education the earnings are higher in the private sector so that they could attract more students and unique, distinct features can make it stronger in the action to attract extra capital. An obvious form of differentiation is the opportunity for some institutions to major in some domains. The quality is very important for any institution which can exploit this strategy, especially because those institutions become unique with a distinct strategy.

The third possible market strategy is called communication strategy. It involves a focus on a particular geographical area, a group of clients or a market segment. By fixing the objectives the institution will aim to develop its programs according to the target group rather than those of its rivals.

All strategies are used with the purpose of achieving a competitive advantage. The cost of this thing is re-instauration of the idea of operating on the entire market. Quality is necessary again for this strategy. Achieving the objectives will be done only if the quality satisfies the clients’ needs.

THE CULTURE OF QUALITY IN EDUCATION

In the theory of quality management system results that the first step is analyzing the culture of quality to find out if there is a possibility of introducing or not this new system which is based on the new leading and organizing philosophy, at which should participate the entire staff beginning with the top management and ending with the last employee. The concept of “quality culture” derived from that of “culture in general” and could be considered adequate for a social group, a society or for an organization (enterprise, public or private institutions or a university). This concept could be defined as being “the sum of acquired or recognized knowledge of values which refers to quality, on the base of which the organization develops its own capacity of survival in its external environment and administrates its own internal affairs.”

Forming a culture in this domain is an essential condition to keep improving the quality, to introduce the quality management system in a faculty or university. The specialists from the education system have demonstrated that not technology, technical endowment represents the key of improving the quality in the first place but the administration is that which should change the mentalities and form an adequate culture for the university’s specific to obtain performances in the domain of the education services quality compared to those similar to the competition. Therefore the quality management a very important matter for many universities which have adopted new methods of searching on the work control, organization and planning market, all considering the improvement of quality services in accordance with the clients’ requests.
For the specific traits of quality culture acknowledged by the majority of the specialists are:

- the existence of an old tradition cultivated at the same time through different methods specific to the country, zone or social groups.
- the changes in culture are on long-term depending on the existence of a tradition and on the methods used by the management at the society level from the institutions of state up to each organization.

“ZERO DEFECTIVES” STUDENTS

Because there are many universities which prepare graduates in the same domain is necessary to apply the same principle in education as in industry. A good knowledge of the market and the competition in order to overwhelm the standards of the accreditation and to always satisfy the clients. The implementation of a quality assurance system after ISO9000 to a university offers confidence to the students, the parents, the government and the society, but also the management of the university, meaning that the quality requirements are always accomplished. At the same time it offers the conditions for the accreditation and represents a saved domain for the accomplishment of the total quality objectives and “zero defectives” students.

Ph. Crosby launched the idea of “zero defectives” merchandise production from which the specialists in education have inspired to expand this movement among the students. When talking about the products quality of not having defects it is assumed that all the specifications are carried out. When talking about electronic products the aim is p.m, meaning a part from a million does not carry out specifications.

Beginning with this example universities should tell their clients: “If you want a student to know how to use a method (x) to find out the result (y) we can assure you that only one from a thousand will not know that.”It is known that the “zero defectives” movement when talking about products does not mean that this objective is always achieved but it will change the philosophy of quality by continuously aiming to a target, it changes the employees’ mentality which should not be satisfied with AQL (the limit of acceptable quality). So, “zero defectives” students does not mean that they are perfect, meaning that they know all that is being taught to them. They only satisfy requirements which are included in the analytical programs imposed by teachers. As it is known, not all quality’s characteristics are of maximum importance, critical, meaning that when they are missing it makes the product a rebut and impracticable. The next step is overcoming the client’s expectations, which is possible after accomplishing the specific requirements. Concerning universities, the “zero defectives” objectives can be established at different levels, meaning that the professor assesses a list of subjects or skills which all students must know by the end of the course. Teachers can assess the “zero defectives” objectives at the level of a theme for the graduation exam.

To realize a “zero defectives” product a lot of known techniques have been use along the time, as the statistic control of processes (SCP), TQM, the seven quality control instruments, QFD, etc. They can also be used in education, by registering the exams’ data, tests, homework, essays, laboratory tests etc. Typical errors can be registered in check lists and they can be organized with the Pareto diagram according to the frequency and their gravity. For example it has been determined that from 25 students, 10 have made a determination error which represents 28,4% from the total. Because this approximation has been considered a major quality characteristic an Ishikawa diagram was made to identify
the possible causes of the mistake. From this analysis it was concluded that in the following year the assistant must concentrate on explaining the determination and results’ interpretation. From the test given at the end of the semester concerning determination and result interpretation it came out that only 5% didn’t get the correct answer.

So, although the nominated objective “zero defectives” has never been achieved the measures taken represent a big step in that direction. Probably next year it will be possible to see that only one percent of the examined students failed to give the correct answer. Students can offer useful information about the quality of the teaching process by evaluating the course and examining their personal needs. But they can not establish requirements for the quality of a product. For example a second year student does not establish what he should know in a certain field in order to graduate. Experience shows us that renown universities know their clients expectations. In these universities are accepted excellent students and are given courses that reflect the real world’s needs. With this incorporated quality the graduate has no problem in finding a job.

REFERENCES
THE ECOLOGICAL TEXTILES
IN RELATIONSHIP WITH CONSUMER’S SAFETY

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Abstract: This paper presents the definition from ecolabel and some important aspects regarding the consumer’s perception on their. There are more types of ecolabels based on more than 240 different criteria. We approach the new modern concept of ecological textiles, its importance and its role on the international market. This new concept is focused on consumer’s protection against the potential nocive effects of some chemical substances remained as trace on goods. We present the main types of ecological labels by the issuers in concordance with the new modern concept and provided specifications.

Keywords: consumer, textile, ecolabel, safety, and consumer’s protection

INTRODUCTION

Ecological textiles are textile goods (fibers, threads, knitwear, and clothes) with a minimum impact on health and environment throughout the entire lifetime of the product. Textile goods are marked with an ecological label, usually Eco-Tex that must provide accurate information to the consumer concerning its ecological quality criteria.

The commercialization of ecological textiles are intended to limit the use of chemical substances that have harmful effects over water, soil and air; high risk of producing allergic, teratogenic, mutagenic and cancerous effects.

The criteria according to which the textile products are eco-labelled encourage the use of the best practices in order to protect both the consumer and the environment, and recycle materials. The consumers become more informed about ecological textiles, fact showed by many studies. The French study ADEME made by French Institute for Textile and Manufacture (ITFH) showed that:

• 22% of consumers known the ecological textiles;
• 20% of them known the ecological labels;
• 40% of consumers are sensitive to biotextile, especially those who are over 65 years old, followed by those who are 18-24 years old;
• 31% of them had knowledge about ecological textile and they considered them harmless for the environment.

The German studies concerning ecological textile made by Oto and GKF showed that after price the consumer is concerned about the textile impact on health. The notoriety of Eco-Tex brand had doubled in the last 3 years from 13% to 24%. It is estimated that the ecological labels are well known than its distributors.

In Romania the consumers are not informed about the ecological labeling and only now it is showed the nocive effects of some chemical substances on consumer’s health and safety. The number of factories that have obtained the Eco-Tex and Sanitized certificates is small. They use especially raw material, colorants, chemical goods needed to finish process.
from import (Germany, Italy, France, and Switzerland). This is the way by than they can adjust their technology to the Eco-Tex 100 standard. The Ecoeff study from ADEME program has identified over 60 ecological labels on international market based on 240 different criteria. This situation imposes a new approach of the ‘eco’ concept for the textiles. In addition to this we add the new direction for the development contented in European Technological Platform.

THE MODERN CONCEPT OF ECOLOGICAL TEXTILES

The concept of ecological textile has appeared as a request from individual or public consumers, in the last years. The consumers are responsive to the new tendencies concerning ecological fibers, alternative (functional) fibers made of corn, soy, milk, bamboo etc. they are interested about the wearing comfort because the relationship body-textile is essential. The sustained researches showed that the human temperature and perspiration ‘activate’ some substances present as trace on textiles and penetrate into the body affecting the consumer’s health. The ‘SHE’ concept means ‘Security-Health and Hygiene-Environment’. The main requirement is to produce textile products, which are not only highly qualitative but also safe for the consumer and not harming the environment.

The textile consumer’s protection on European level has determinate a politics that is periodical actualized concerning the quality and safety of goods. This refers at the ecological fibers, the admitted limits for chemical substances, and the limits for toxic residues and promoting only the durable goods. So, in 2002, the Eco-Tex 100 standard was modified concerning the formaldehyde content for goods from the first class (baby product) and it was harmonized with Japanese law. More, the biocide substances were forbidden with few exceptions, some substances included in a special Eco-Tex list. Eco-Tex label will be assigned only to finished products, treated with biological active produces and offer antimicrobial protection. So the new concept identifies 5 type of ecological label by 5 types of brands by criteria included in the specifications.

THE MAIN TYPES OF ECOLOGICAL LABEL IN ACCORDANCE WITH THE ISSUERS

1. *The ‘official’ labels* are elaborated at national or international level, from many years and exist in about 30 countries or regions. They can be:
   - Multicriteria; they refer at environmental aspects but in some different phases of lifetime cycle of goods.
   - Multiproducts; they refer at some type of goods.
   - Multifactorial; they refer at definition for criteria used in label classification but at the management of this system too.
   
   In the last category are included ecolabel for textile as the European, Japanese and Chinese ecolabel.

2. *Labels elaborated by certification organisms* are released by technical centers, research institutes or specialized organism on certification. The more known is Eco-Tex Standard 100 elaborated by Öko-Tex Association composed from 11 institutes as Institute of Textile Research from Austria, Hohenstein Institute from Germany, TESTEX from Switzerland, IFTH from France etc. and some prestigious labs (LGA, TUV). A French

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1 [www.dialogtextil.ro](http://www.dialogtextil.ro)
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project managed by ASQUAL concerning the effect of textile in contact with the skin is part of this new concept. This category regroups researcher organisms as Eco, Ino, and Krav etc., which base their paper on the control of European settlements in biological agriculture domain.

At annual meeting of managers from Őko-Tex Institutes they are showed the importance of inspection for the identification of some toxic substances along all production chain. In 2005 they visited 210 companies from 14 different countries and they controlled 313 Eco-Tex certificates. In Europe they were few complaints but 50% of companies from the Middle and Far East the tests needed to take again.

3. Labels emitted by association represent something new. The non-governmental organizations invest more money in commerce and put on their goods the own labels. The specifications refer especially to social issues as Demeter, Eco Fair Wear from Lamulamut.

4. Labels emitted by regrouped factories (federation) bring together some factories by specifications because they wish to define some specific aspects of their textiles (alternative fibers, biological cotton etc) but aspects of specifications too.

5. Labels emitted by factories, as ‘autodeclaration’ when they consider the ecoconception and the social problem as part of supplier specifications. They decide to communication type ‘durable development’. Another are oriented to distributors proving creativity, with many brands laid on their goods. The creativity in textile goods becomes from using eolian energy, recycled matters, matters based on cellulose from wood etc.

THE ECOCONCEPTION APPROACH OF TEXTILES IN TERMS OF CRITERIA EVOKE IN THE SPECIFICATIONS

We distinguish 5 types of brands and we identify 5 ecolabels as textile ecoconception. The ecoconception approach refers at:

1. Environment protection; this refers at one or more phases from lifetime cycle of goods. It was identified over 200 criteria. So it is identified a large area of potential improvement for whom conceives the label.

2. Consumer’s health and safety; on the textile market there are many goods identified as toxic effect on consumer, even some textile with cancerigenic effect. The consumer’s protection is assured by information based on hygienic problems of textiles. The Eco-Tex standard 100 reduces or extends the used of many dangerous substances.

3. Social conditions of production; the interval for this criterion are more restrictively. Usually it is used the international standards of International Organization of Labor. It is a more difficult approach and it is more often requested by public opinion.

4. The innovation; some labels are different by an innovator function compared to other labels. The new or alternative fibers are emphasized by the ecolabel.

5. The brand; whatever the product, category of products or assortment of products the factory extend the all commercial offer when use an ecoconception. It does that to accentuate the innovator characteristics or to segment the commercial offer.

The textile ecoconception is motivated by the consumer’s interest. So is important to know the criteria that were the fundament for the elaboration of the ecological labels. To do textile goods in concordance with Eco-Tex Standards 100 the main objective in the strategy of quality is the used of some ecological and natural raw materials. This imposes the usage

Information from Őko-Tex Association, novembre 2005
of fibers and materials without toxic substances for provide for the consumer’s health and the safety of the environment.

The intelligent ecotextile involve the existence of three components: ecological processing, the management of the technological processes and management of production. Using the computers it is possible to do socio-economic scenarios that allow their design and achievement.

The ecological management in textile domain showed the role of refuse as source to complete the fiber outfit. For 2010, the development strategy stipulates an increase of the quantity of textile refuse.

The textile ecoconception is an actual problem but for the future too. The future tendency for ecological textile is presented by the European Technological Platform, ‘to a zero impact on environment and to provide for the consumer’s health’.

The settlement base for European Eco-Tex labels is large and content some specifically or general law and normative. To obey the international legislation concerning the ecotextile and to assure some comparable results of tests there is necessary to build specialized labs. By them it is assured the qualitative level conform the international exigencies.

CONCLUSIONS

• The textile econception is an important problem for now and the future.
• The ecological textile will be a large part of the future international market of textile.
• The ecological textile represents a standard of excellence.
• The textile ecolabels promote the image of qualitative goods and assure the free circulation of goods.
• The knowledge of textile ecoconception by all economic agents will improve the consumer’s protection and protect the own interests.

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