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**ABSTRACT OF PHD THESIS**

**MARKETING AUDIT IN THE AGRO FOOD  
INDUSTRY**

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**CLUJ-NAPOCA  
2012**

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## INTRODUCTION

Appeared as a stand-alone concept in 1959, marketing audit was approached in various ways, its practical utility being highlighted only after a comprehensive literature review, opinions concerning it are very different. Thus the main benefits of a marketing audit are:

- Evaluating and improving a company's marketing operations;
- Facilitate corrective action by the company as a result of the diagnosis;
- Useful to implement market-oriented strategy;
- Providing comprehensive and objective information to perform corrective actions useful in achieving organizational objectives related to market share;
- Identifying basic marketing skills and exploring new business opportunities,
- Achieving a sustained competitive advantage by creating value for both consumers and company employees,
- Providing a viable plan of action in accordance with internal company needs and resources.

The agricultural sector is the most important for the economy of any country being the main source of food. Its systemic approach emphasizes the central importance of the agro food industry. This is closer to the consumer due to welfare issues and public health therefore requires a strong marketing orientation at all its levels. A viable marketing orientation is required to be audited in terms of marketing, in order to identify existing opportunities and threats.

The major objectives of research are:

- Evaluating the progress of development of marketing audit among agro food companies from Cluj County.
- Develop a customer marketing audit tool useful to the agro food companies for a regular customer audit.

Although apparently the two proposed targets are separated, there is a strong connection between them. The main problem of the marketing audit process is the lack of marketing audit tools that can be used by the company. Thus was born the idea of building an audit tool for the companies to conduct a customer marketing audit. The food industry was analyzed in general, then in particular using a concrete case study.

Research motivation lies in the novelty of research topic investigated. Marketing Audit appeared in the second half of the twentieth century, but in our country due to political and economical context it could not be used until 1990, after the transition to capitalist economy.

Usefulness of research concerns in the conduct of a study among agro food companies from Cluj County using a questionnaire. This tool was useful to identifying how notorious the marketing audit process and its benefits are, how to carry out a marketing audit and what are the main problems faced by companies in its achievement, the opportunity of marketing audit specialized firms and the opportunity to create a distinct profession, the marketing auditor, given the importance of this process and its benefits.

The major practical utility of this research lies in the marketing audit tool designed to provide companies in the food industry the opportunity to audit their clients. With this tool agro food firms obtain a true contact with the market, with customers, in order to quickly detect any changes at its level and act in order to maintain a competitive advantage.

The customer marketing audit tool was designed and pre-tested in the context of ERASMUS Internship obtained from the University of Ghent, Belgium, Department of Agricultural Economics, Faculty of Engineering and Life Sciences (September-December 2011), under the guidance of Prof. Dr. Ing . Wim Verbeke.

## **PART I. LITTERATURE REVIEW**

### **CHAPTER 1. THEORETICAL APPROACH OF MARKETING AUDIT PROCESS IN THE SCIENTIFIC LITTERATURE**

Audit evolution along history can be structured into three significant periods, namely:

- Until 1940, the main objective of the audit was to protect property and punish fraud;
- 1940-1970 is the period of development of its conceptual framework;
- From 1970 until now, characterized by the emergence of new types of audits.

The audit means a professional verification of information by a person qualified in this area using audit quality criteria or standards in order to offer a relevant opinion, independent and responsible, useful to a wide range of users and professional recommendations for future action.

ZECHERU (2003) identified seven criteria that can be classified as audit: audit area, significant elements, the professional domain, moment of the audit, the degree of generalization of the audit, the extent of the areas examined and the degree of independence namely the membership or nonmembership of the expert system to the audited organization.

Marketing audit is a comprehensive examination, systematic, independent and periodic - the company or strategic units - marketing environment, objectives, strategies and activities in order to identify the main opportunities and threats and to recommend an action plan to improve its marketing performance (Kotler et al. 2005).

CHIRLA et al. (2010) analyzed the usefulness of the marketing audit for companies considering that the main reason why it is useful lies in its ability to scan the marketing environment where the company acts and to highlight the key opportunities and threats.

Marketing audit areas are: marketing environment audit, marketing audit strategy, marketing organization audit, marketing systems audit, marketing productivity audit and marketing function audit.

## **CHAPTER 2. STUDIES REGARDING MARKETING AUDIT**

In the studies conducted in the field of marketing audit it can be concluded that one of the concerns was the standardization of marketing audit procedures especially its specialization in different sectors WU & FU (2009). Other studies have approached the growth of company performance that are conducting marketing audit, offering repeated recommendations of such studies in countries with different business cultures and levels of development. Studies related to increasing the effectiveness of the marketing practice using a marketing audit, emphasizes the need to introduce it among other audits that have become implicit such as financial audit, environment audit, human resources etc. (TAGHIAN & SHAW, 2008).

It is considered that an organization's performance can be improved by using marketing audit. Concrete examples of practical application of marketing audit are few and this is caused by the relative confidentiality of audit reports but also because audits are made mainly by marketing consulting firms.

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CRAWFORD (2006) supports the idea of a strong marketing orientation in the activity of any company but especially in the food sector. This requires that agro food companies to focus their efforts towards ensuring a high consumer satisfaction which through their fidelity will indirectly contribute to sustainability and achieving high profit.

Agro food sector is considered as a system composed of four subsystems: production, distribution, consumption and regulatory. It can be said that the agro food industry is in the center of the subsystems and is the connection element between the four components of the entire marketing system. Its role is to link the agricultural sector represented by farmers, fishermen, farmers with consumers' needs (Figure 1).

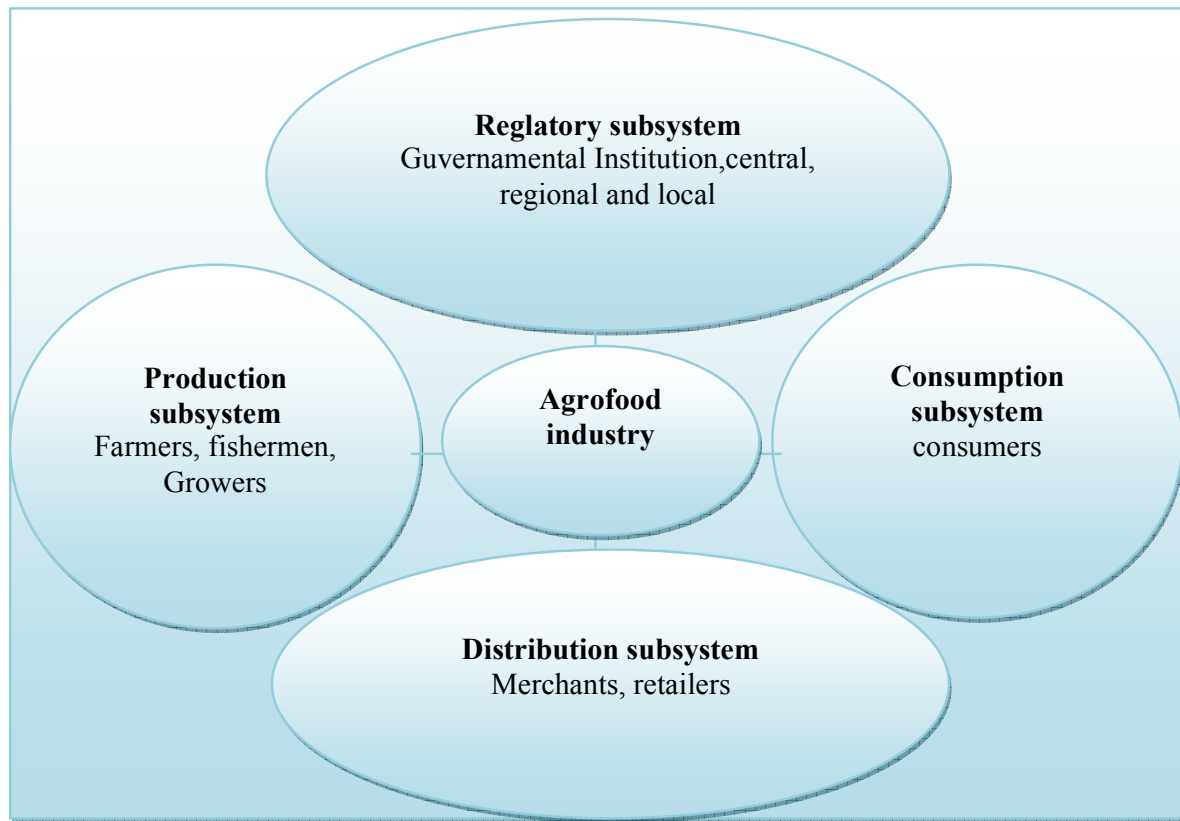


Fig. 1. The subsystems of a marketing system and the highlight of the agro food industry

Source:

Source: After CRAWFORD, 2006 and completed by the author

Agro food industry importance for the European Union Member States is relevant primarily due to the share in the Europe's GDP by 2% and secondly because of the high social role, 13, 5% of EU jobs are being held by the manufacturing industry (Report EC, 2010).



## PART II. MATERIAL AND METHODS

### CHAPTER 3. MATERIAL

In Romania at the end of 2008 there were 13.803 firms activating in the food industry (BORG DESIGN, 2008). Taking into account the total number of agro food companies (772.259), it can be noticed that the agro food industry has a total share of 1, 78% in the total Romanian economy (BORG DESIGN, 2008). In the North-West Development Region is the highest number (1892) of agro food companies and within this Region the highest number of agro food companies is in Cluj County (551), chosen as a research field (Figure 2).

In order to illustrate the use of customer marketing audit tool was chosen the dairy company S.C. Napolact S.A. Cluj County. Of its products, was elected Moeciu cheese and its' main competitors: Hochland cheese (Hochland) and Dalia cheese (La Dorna). The motivation behind the choice of the three products was primarily their reputation. The main aim of the research was to build a tool of a customer marketing audit and to test its usefulness.

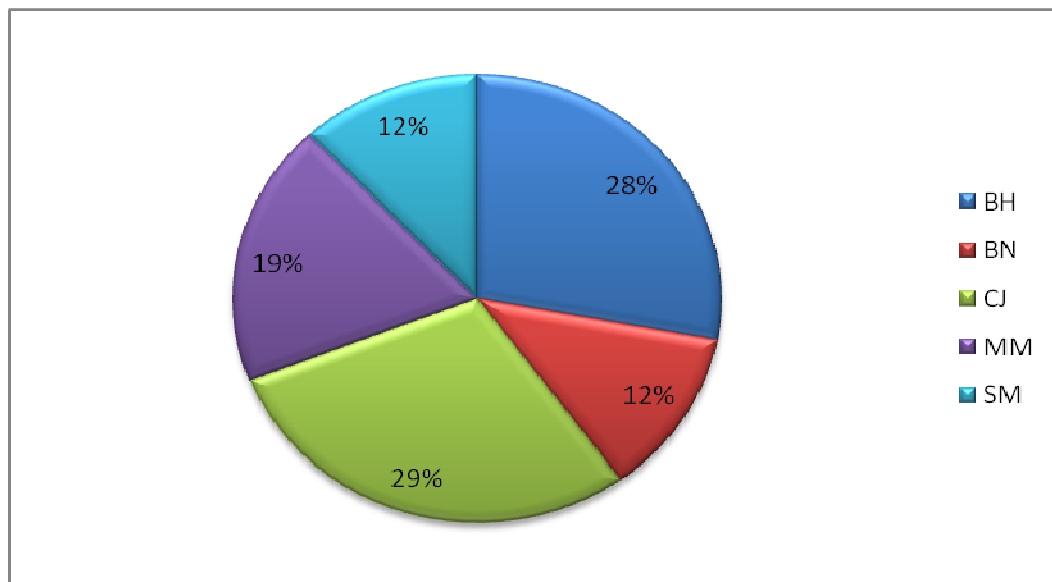


Fig. 2. The share of agro food companies in the Northern-Western region of development

Source: Own processing after BORG DESIGN, 2008

## **CHAPTER 4. METHODS OF COLLECTING AND ANALYZING DATA**

### **4.1. DEVELOPING THE INDUSTRIAL SURVEY WORKING TOOL**

The main goal of the research is to assess the state of development of the marketing audit among agro food companies from Cluj County. Therefore, 21 hypotheses have been established.

The tool is questionnaire, structured in three sections from the point of view of the respondents:

- Questions 1-13 are common to all respondents,
- Questions 14-19 are only for agro food companies that did not conduct a marketing audit
- Questions 19-32 are for those agro food companies that have conducted a marketing audit.

The pretest phase of the questionnaire was conducted during May-June 2011 on a sample of 22 companies.

### **4.2. DEVELOPING A TOOL TO PERFORM A CUSTOMER MARKETING AUDIT**

The customer marketing audit tool consists of five parts. In the first section relevant product attributes are established.

The second part of the audit tool contains questions regarding the buying habits of cheese (quantity purchased, frequency of purchase and favorite places of purchase).

The third part is designed in order to evaluate the company marketing orientation and the attributes related to the elements of an effective marketing orientation – the key to obtain marketing performance (AVLONITIS & GOUNARIS, 1999).

The fourth part of the instrument is built as a grid to evaluate the customer loyalty to an agro food brand. Last part of the audit tool contains questions designed to find out socio-demographic information on business customers to better understand them.

Pretesting phase of the customer marketing audit tool was made in November 2011 in the Department of Agricultural Economics and Engineering Faculty of Life Sciences of Ghent (Belgium) on a sample of 25 respondents.

### 4.3. SAMPLING

For determining the sample size for agro food companies, was chosen the simple survey method, unrepeatable, unalternative feature, for a relative limit error of 8% and a probability of 95% results guarantee.

Absolute error limit was calculated according to the formula (MERCE et al., 2010):

$$\Delta_{\tilde{x}} = \frac{R_{\tilde{x}} \cdot X_{\max}}{100} = \frac{8 \cdot 22}{100} = 1,76 \quad (1)$$

Where  $\Delta_{\tilde{x}}$  is the absolute limit error,  $R_{\tilde{x}}$  is the relative limit error, and  $X_{\max}$  maximum value of the feature „age of the company”.

Sample volume (n) was determined based on the company average age on the agro food market which is 13, 6 years:

$$\sigma_x^2 = \frac{\sum_{j=1}^k (x_j - \bar{x})^2 N_j}{\sum_{j=1}^k N_j} = 40,32 \quad (2)$$

Where  $\sigma_x^2$  represents the dispersion, X represents the average age of the investigated population. The sample volume is calculated according the following formula (MERCE et al., 2010):

$$n = \frac{k^2 \cdot \sigma_x^2}{\Delta_x^2 + \frac{k^2 \cdot \sigma_x^2}{N}} = \frac{(1,96)^2 \cdot 40,32}{(1,76)^2 + \frac{(1,96)^2 \cdot 40,32}{571}} = 45,98 \text{ firms} \cong 46 \text{ firms}$$

Sampling in the case of S.C. Napolact S.A. clients is developed starting from the initial population composed by the households from Cluj-Napoca. According to NIS (2011) their number is 119.378. The sample was determined using the following formula:

$$n = \frac{N}{1 + N(e)^2} \quad (3)$$

Where: n= sample size

N= population size

e= maximum admitted error, considering a confidence level of 95%.

Therefore: 
$$n = \frac{119378}{1 + 119378 * 0,07^2} = 204$$

#### 4.4. MULTIVARIATE DATA ANALYSIS

Factor Analysis is used to reduce the number of variables to reduce the time needed for data processing and identifying patterns hidden in the relations between them. Principal Components Analysis (PCA), also known as the Hotelling transformation or Karhunen-Loeve transformation, is a technique of Factor Analysis in which the main purpose is to reduce the original number of variables, considering a few representative variables. ACP is particularly useful in large data where patterns would be difficult to identify. But ACP method is using fewer sizes, patterns become easier to identify without losing a significant amount of information (CĂRBUREANU, 2010).

Analysis of K - Means Cluster is a technique for grouping individuals or objects into groups that are not known in advance. This analysis was used in this study to group agro food companies depending on variables indicating the marketing orientation a product orientation or a sale orientation. Also, the analysis was used to group consumers according Cheese attributes considered important in the purchasing phase.

Discriminant analysis is used to identify the size of each group and its characteristics identified. The objective of Discriminant Analysis is to find the linear combination of independent variables that can maximize the discrimination between the two groups and at the same time minimize the probability of erroneous classification of individuals or objects into groups.

#### 4.5. IMPORTANCE PERFORMANCE ANALYSIS

Analysis of Importance - Performance consists of a four-quadrant grid where the vertical axis indicates the importance of the attributes for the customer and the horizontal axis the company's performance for the same attribute perceived by the customers (Figure 3). This technique involves finding a set of attributes for the product audited.

Occurrence of an attribute in the quadrant A indicates the company underperformance for that attribute and the need to react quickly in terms of improvement because of high importance for the customer. The company reaction is required due to the dissatisfaction which the attribute caused to the customer. Occurrence of an attribute in quadrant D indicates over performance (ABALO et al., 2007) the company being perceived as having high performance for attributes less important for the customers. It is recommended to maintain an over performance only if it does not involve high costs.

Quadrant B shows a correct approach of the company for attributes that are important to customers; therefore, it is necessary to continue in the same way. Quadrant C shows poor performance for attributes irrelevant to customers. Improving performance in this case will be done unless it involves high costs (MATZLER et al., 2004).

The main reason behind using the Importance – Performance grid in an audit consists in the possibility to have a clearer view of the business situation and the links between: a good performance and important attributes, important attributes and unsatisfactory performance, good performance and less important attributes, unsatisfactory performance and important attributes (BROWNLIE, 1996).

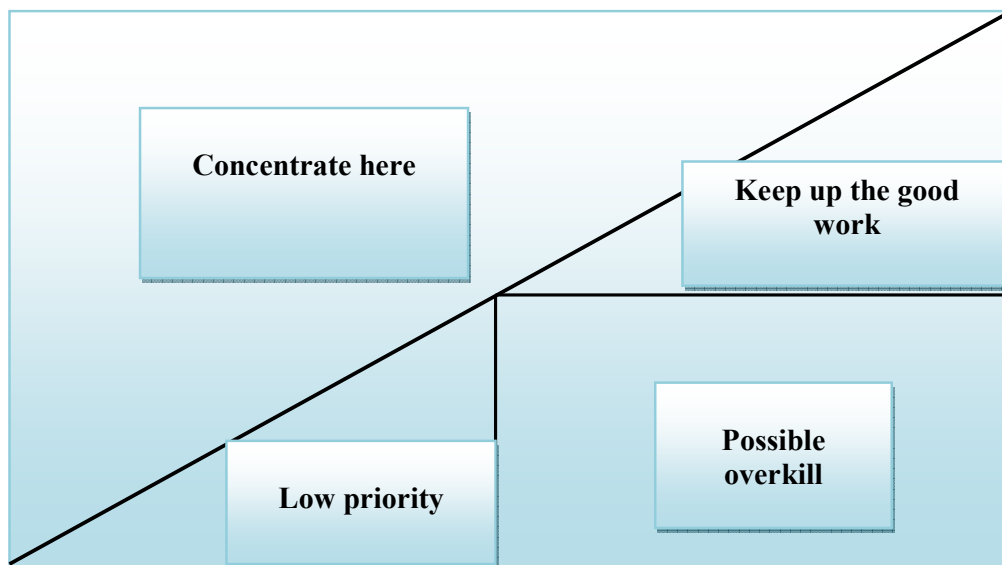


Fig.3. Importance – Performance grid

The main advantages of this technique are: the possibility of obtaining an evaluation of the importance of each attribute to the customer and getting feedback from customers on how the firm performs for each attribute.

## **PART III. RESULTS AND DISSCUSIONS**

### **CHAPTER 5. EVALUATION THE MARKETING AUDIT STAGE OF DEVELOPMENT AMONG AGROFOOD COMPANIES FROM CLUJ**

#### **5.1. RESPONDENTS CHARACTERISTICS**

Respondents of the present research are represented by firms, namely manufacturing companies operating in the agro food sector in Cluj County. Most respondents (31, 37%) activate in the food category that includes breads, pastries, pasta and sweets. Most of the companies (35, 29%) have a number of employees between 10 and 49. Variable „turnover in 2011” has revealed the existence of a relatively high share of 21, 57% of companies that have a turnover of less than 2.000.000 Euro. 84, 31% of the respondents have placed their headquarter in the urban area.

#### **5.2. CHARACTERISTICS OF MARKETING DEPARTMENT FROM THE AGROFOOD COMPANIES**

A percentage of 17, 6% of the companies do not have a separate marketing department. Dimensional distribution parameters analysis indicated that companies have on average 1-2 members in the marketing department.

An important aspect is finding the marketing decision-maker which in 45% of the companies interviewed is the administrator followed by the manager in 27, 5 % of the cases and by the marketing responsible in only 17, 5% of the cases. The fact that the marketing function is held in most of the cases by the administrator indicates that the company is unlikely to conduct effective marketing activities (Figure 4).

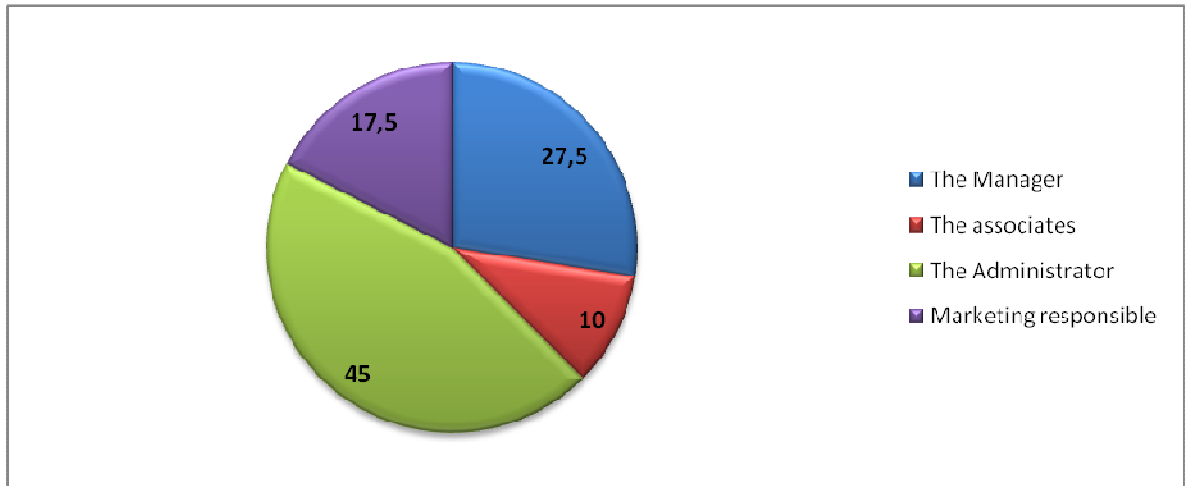


Fig.4. Marketing decisions-maker inside the agro food companies (%)

38, 24% of marketing decision makers do not have economical education but learned from the practice (Figure 5).

From all the respondents, only 33, 33% establish a separate budget for marketing.

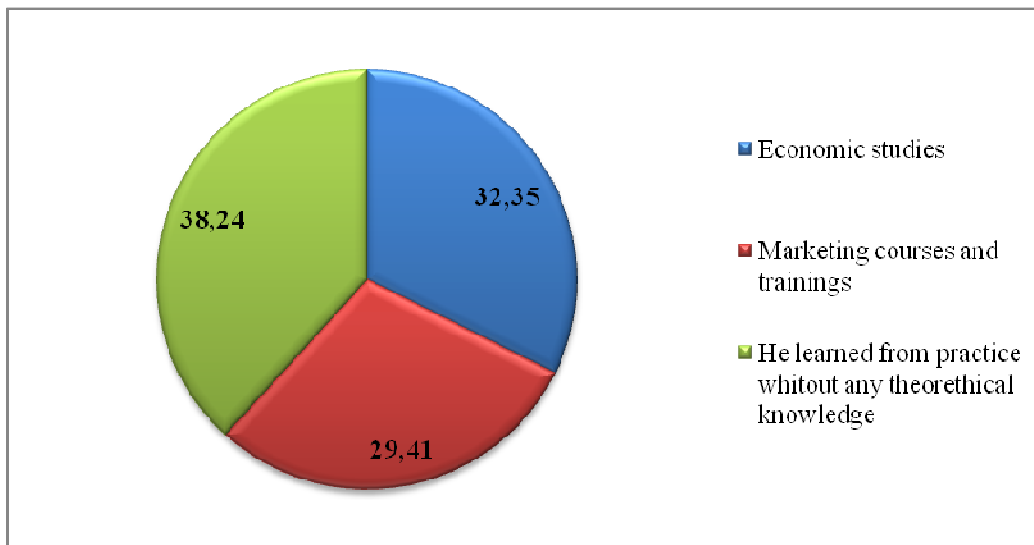


Fig.5. Statements related to the marketing responsible (%)

### 5.3. MARKETING ORIENTATION OF COMPANIES IN THE AGROFOOD INDUSTRY

Starting from the premise that marketing-oriented firms are more likely to conduct a marketing audit, seven statements were established towards which the company representatives have expressed their importance. Of those statements, 64, 71% of the respondents considered that that "customer satisfaction about the products offered" are the most important.

Using factor analysis the 7 statements were reduced to two important factors: marketing orientation and sales orientation. Analysis K - Means Cluster revealed two groups and the Discriminant Analysis established that the first group consists of 32 companies with a sales orientation, while the second group of 19 companies has a marketing orientation.

### 5.4. EVALUATION THE REPUTATION OF A MARKETING AUDIT PROCESS

Financial audit is the audit mostly performed with a 22, 12% of the respondents followed by audit management (14, 42%), human resources (12, 50%) and technical (11, 54%) There is also the percentage relatively high (20, 19%) which did not apply to any audit (Figure 6).

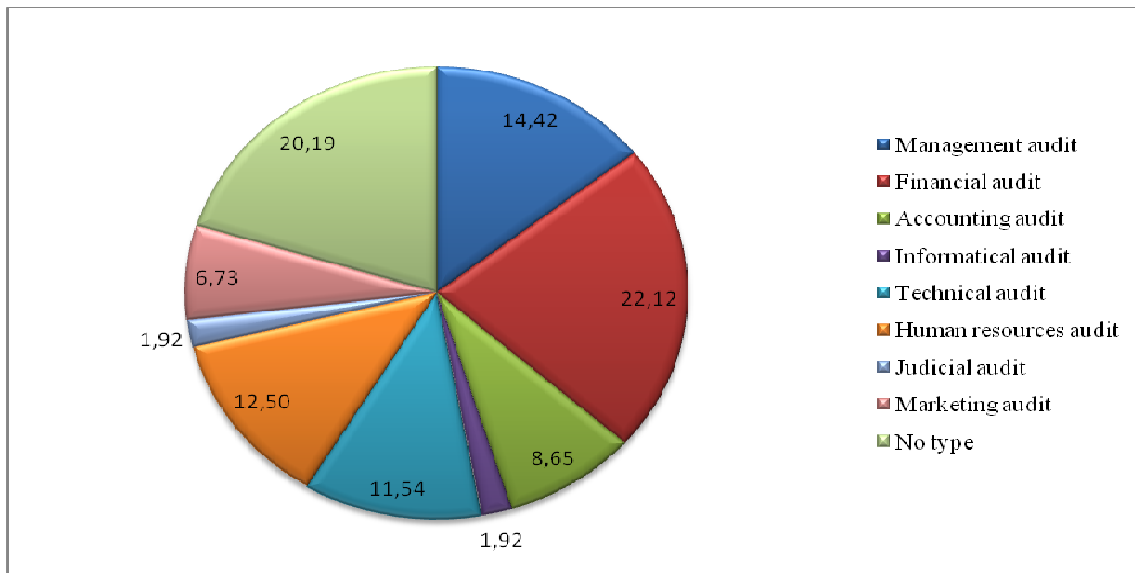


Fig.6. Types of audit performed by the agro food companies (%)

Regarding the awareness of marketing audit is found very high proportion of respondents who have heard of it (76,47%). 3,92% do not know its use, while 60,78% had



heard of it, know the advantages but did not conduct one. A significant percentage of 13,73% have never heard of this type of audit but did not have the desire to learn more while 9,80% although they did not hear about it they would like to be informed about it. The indifference showed by some firms indicates an undeveloped entrepreneurial culture and fear for novelties, aspect that could subminate in time the firm activity.

Regarding sources of information on marketing audit, most of them (29,69%) nominated the Internet as a main mean of information followed by a similar percentage of 28,13% which heard from the business partners of companies that proved to be an important source of information. To this question, only the respondents which heard about the marketing audit could answer. Specialized books are an important source for three quarter of the respondents while the advertisements of management and marketing consulting firms where a useful source for 17,19% (Table 1).

Table 1

#### Sources of information regarding marketing audit

Sources of information regarding marketing audit	N	Percent
From specialized books	16	25,00
From business partners	18	28,13
From the Internet	19	29,69
Advertising made by marketing and management consultancy companies	11	17,19
Total	64	100

The most important source of information in the case of the companies that conducted a marketing audit is also the Internet (35, 71%) but followed with a high percent of 28% by specialized books and business partners with a 21, 42%. What is interesting to notice is that for companies that did not have conducted a marketing audit, the most important source of information have been the business partners followed by the Internet and specialized books. In both cases the advertising of the management and marketing consulting firms have the lowest percentage.

Respondents' opinion on the most appropriate entity to conduct a marketing audit indicates that most of the respondents (37,7%) thought that it would be the prerogative of management and marketing consulting firms while the potential marketing audit offices hold 35,8% of the assessment. Equally (13, 20%) of respondents consider that this process would be designated to a person within the firm or to a person later verified by an external auditor.

## 5.5. BEHAVIOURAL INTENTIONS REGARDING THE PRACTICE OF MARKETING AUDIT

Regarding the trust granted to an auditor to provide confidential information, the percentage of those who agree or strongly agree with the statement is much higher (37, 77%) compared to those who do not trust a person outside the organization to provide confidential data.

If the marketing audit would help increase profitability, 31, 11% of total firms would be willing to spend money to conduct it annual, would agree 40, 26%, while 15, 55% would not agree.

Relatively high proportion of firms reluctant to spend some money towards obtaining important advantages indicates low risk willingness and also the unwillingness to innovate and improve their financial situation.

33,33% of respondents consider that they perform an intense marketing activity and are willing to be audited from the outside, 31,11% are neutral while the cumulative percentage of 35,56% disagreed with the statement according which they conduct an intense marketing activity and they need an audit.

Lack of comparable marketing audit standards is reflected in very high percentage of 64, 44% of respondents which would perform a customer marketing audit if a standardized tool exist. Percentage of respondents who declare themselves neutral (24, 44%) are most likely confused on such a tool and reluctant to express a precise opinion reason for why this segment is very important. In view of the occurrence of such a tool, this segment is more likely to be receptive once he understands the mechanism of operation. 11, 11% are against a customer audit even in the eventuality of a standardized tool.

## 5.6. IDENTIFICATION THE MARKETING AUDIT IMPACT BENEFITS FOR THE AGROFOOD COMPANIES

In order to identify the most important benefits of marketing audit for the agro food companies Factor Analysis was used to identify those with major impact that could determine a future need for a marketing audit. The first phase consisted in proceeding to a Kaiser-Meyer-Olkin test (KMO) to measure the adequacy of the sample. Its value is 0,672 > 0, 5 and Bartlett's Test of Sphericity is significant ( $p < 0,000$ ), which means that the data are correlated.

Rotated component matrix indicates four important factors for agro food companies from Cluj, potential reasons for conducting a marketing audit.

After performing the Analysis K - Means Cluster 2 groups of agro food firms were obtained: the first group consists of 32 companies and the second group of 12 companies. To characterize the two groups and the interest shown by those for the marketing audit benefits t was performed a Discriminant Analysis using as segmentation variables the four factors derived from Factor Analysis. The first group is negatively related to the second group and vice versa. In the first group of companies there is a marketing orientation combined with an interest in productivity and profitability. The analysis indicate that these companies understand the importance of knowing the business environment but profitability growth is seen closely related to productivity growth. The second group is interested strictly in market, its evolution, the changes taking place at the potential opportunities arising, considering that a good product could increase the market advantage.

#### 5.7. DECISION-MAKER FUTURE BEHAVIOURAL INTENTIONS REGARDING MARKETING ACTIVITY

In view of organizing marketing audit as an independent profession in specialized branches exclusively in this area, following the financial audit model, only 17, 78% of respondents strongly agree that they would prefer it more than the consulting firms, 51, and 11%, agree, and 4, 44% disagree with this hypothesis. Relatively high percent of 26, 67% of respondents which declared themselves neutral, may be an indication that this type of activity is not very easy to fit and the possibility of creating specialized branches could lead to potentially high prices.

From Figure 7 it can be observed the very high percentage (46, 67%) of respondents for which the possibility of conducting an external marketing audit in the future is high.

Totally agree with this possibility are 2, 22% of respondents, percentage equal to those who declare themselves totally disagree with this possibility. 17, 78% disagree with this possibility and a large proportion of 31, 11% are neutral. Although the statements to which the respondents expressed a degree of agreement/disagreement are hypothetical, indicate an open attitude of the decision makers towards a new element, more precisely the marketing audit.

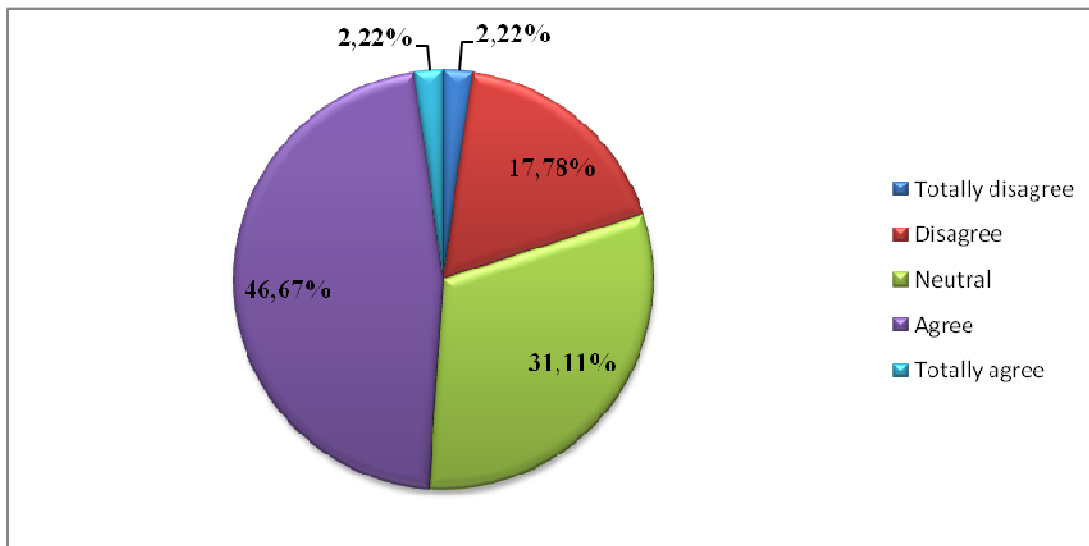


Fig.7. The possibility to apply for an external marketing audit in the future is high

#### 5.8. MARKETING AUDIT PERFORMED AMONG THE AGROFOOD COMPANIES FROM CLUJ COUNTY

From the total of the respondents (51 agro food companies), a percentage of 11, 76% (6 companies) have developed a marketing audit. The external audit prevailed, conducted by a consulting firm. This confirms the hypothesis that the predominant form of audit is external, unlike the study conducted in Australian companies by TAGHIAN & SHAW (2008) where 74% have done internal audits. An explanation of the dominant position of the external audit in Cluj County may be the lack of specialized staff to perform audit function given the size of the agro food companies.

All companies have demanded recommendations to improve product strategy. This is of particular significance given the fact that the respondents perform in the agro food industry providing daily food, which is closely to the consumer.

The need to improve product strategy shows a strong awareness of the need among companies for a good products market positioning, with an appropriate strategy. Companies are interested to optimize the process and to ensure that their products arrive fresh and in good condition to the customer, given the nature of the products: dairy and bakery.

Regarding the unpleasant aspects related to the marketing audit, all respondents consider that "providing confidential", "long time to perform the audit" and "lack of comparable auditing standards" are the most unpleasant. The responses of those interviewed

confirmed the hypothesis that marketing audit increases the financial performance of the company (Figure 8).

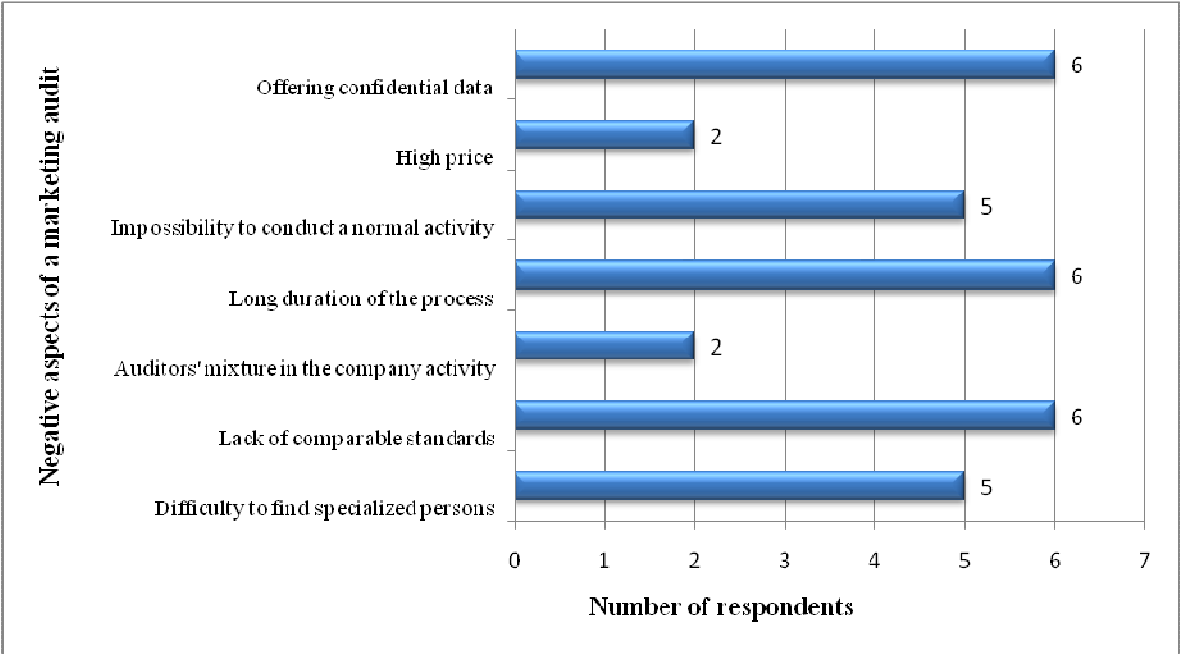


Fig. 8. Inconvenient regarding the conduct of a marketing audit

The responses of those interviewed confirm the hypothesis that marketing audit increases the financial performance of the company, 3 respondents agreeing with the statement and 3 are in total agreement. The hypothesis according which the marketing audit leads to increased sales is also confirmed three of the respondents stating that they agree with this statement and the other 3 are in total agreement.

Referring to statement "I am very pleased that I conducted a marketing audit" most respondents expressed their agreement (2 respondents) and total agreement (3 respondents) while one respondent declared himself neutral.

The opportunity of creating marketing audit specialized branches is regarded as "good enough" by 5 respondents "very good" by a respondent.

## **CHAPTER 6. HIGHLIGHTING THE PRACTICAL UTILITY OF THE CUSTOMER MARKETING AUDIT TOOL. CASE STUDY S.C. NAPOLACT S.A. COMPANY**

### **6.1. INFORMATION ABOUT CURRENT CUSTOMERS**

Customer marketing audit should include questions that give to the agro food company information on their profile to know whom to address their products. The customer marketing audit of SC Napolact S.A. was conducted on a sample of 216 people. Respondents' age is between 18 and 76 years and the average age of the sample is 39, 21 years. In the total percentage of respondents 64, 81% are females which can be explained by the large number of women responsible for household food supply, the purchase decision is often their responsibility.

Regarding the level of education among respondents it can be noticed the high percentage (more than half of the total sample) of people with higher education, college graduates (41,67%) and masters graduates (20,37%).

The number of family members ranged from 1 to 6. Most respondents, however, live in families of 3 (more than 33, 8% of respondents) or 2 people (more than 30, 6% of respondents). Approximately 7% of respondents are living in households with 5 members while 8, 3% are single. Largest share of the household net income is situated between 2001-3000 lei followed by income group between 1501-2000 lei. Share of extreme income (below 500 lei and 500 lei) is equal (5, 56%).

### **6.2. CHEESE BRANDS MOSTLY CONSUMMED**

Moeciu cheese is mostly consumed by respondents, followed by Bobalna (made by Napolact) and Hochland, Dalia cheese being situated on third place.

Beside the cheeses mentioned in the questionnaire, other products still under Napolact brand are frequently consumed (Bobalna, Nasal, Olanda), the company share of Napolact being very high. The Cluj market structure of „cheese” can be represented after processing the free answers from the questionnaire (Figure 9). Respondents' preferences are attached to S.C. Napolact S.A.

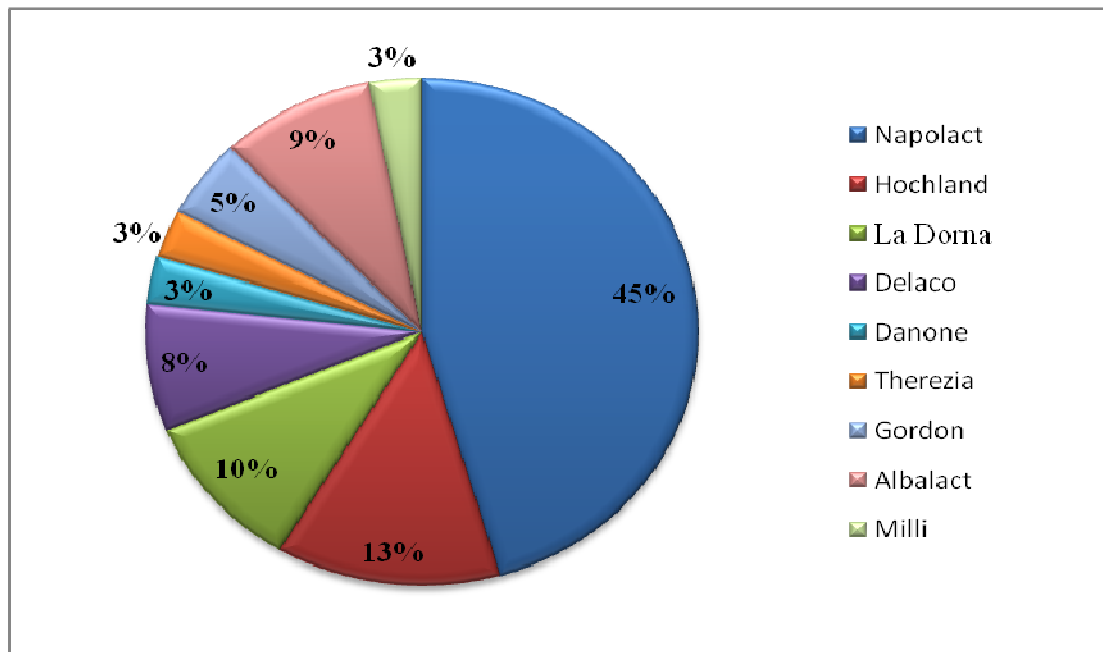


Fig. 9. The most frequently consumed cheese brands on Cluj market (%)

### 6.3. HIERARCHY ATTRIBUTES IMPORTANCE OF CHEESE IN BUYING DECISION PROCESS

In cheese purchasing decision among the intrinsic attributes, consumers attach greatest importance to „taste” (attribute with an average score of 9, 35) then of being „made from natural ingredients” (average score: 8, 67) and „lack of artificial ingredients” (8, 47).

The most important extrinsic attributes in the decision to purchase cheese are „quality logo” and „information on the label”, attributes that have obtained equal scores. „Attractive shape” of cheese is the second most important criterion in acquisition, followed by „brand reputation” and „accessible in any store”. The least important attribute for customers is „recyclable packaging” (average score 4, 25) fact that proves a low interest of the customers for aspects related to environment.

#### 6.4. CUSTOMER PERCEIVED PERFORMANCE OF MOECIU CHEESE INTRINSIC ATTRIBUTES AND THAT OF COMPETITORS HOCHLAND AND LADORNA

After building the Importance – Performance grids (Figure 10) it can be observed that S.C. Napolact S.A. has significantly higher scores for eight attributes, the only exception being the attributes related to „texture” and „aspect” where Hochland is even better positioned, even if for texture both companies are located in the area that indicates „keep up the good work”.

Napolact has four attributes that require concentration while Hochland has 6 attributes of this type (taste, natural color, appearance, no additives, no artificial ingredients, high nutritional value, made from natural ingredients) and La Dorna 8 (taste, special flavor, natural color, appearance, no additives, made from natural ingredients, high nutritional value, no artificial ingredients).

Napolact taste is mostly appreciated from all the three competitors even if improvements are required. The „special flavour” is also appreciated but also other attributes except the „texture” and the „aspect”.

It can be observed that the product Moeciu from Napolact brand is well positioned in the market compared to competitors offering similar products although it requires improvement to achieve maximum performance.



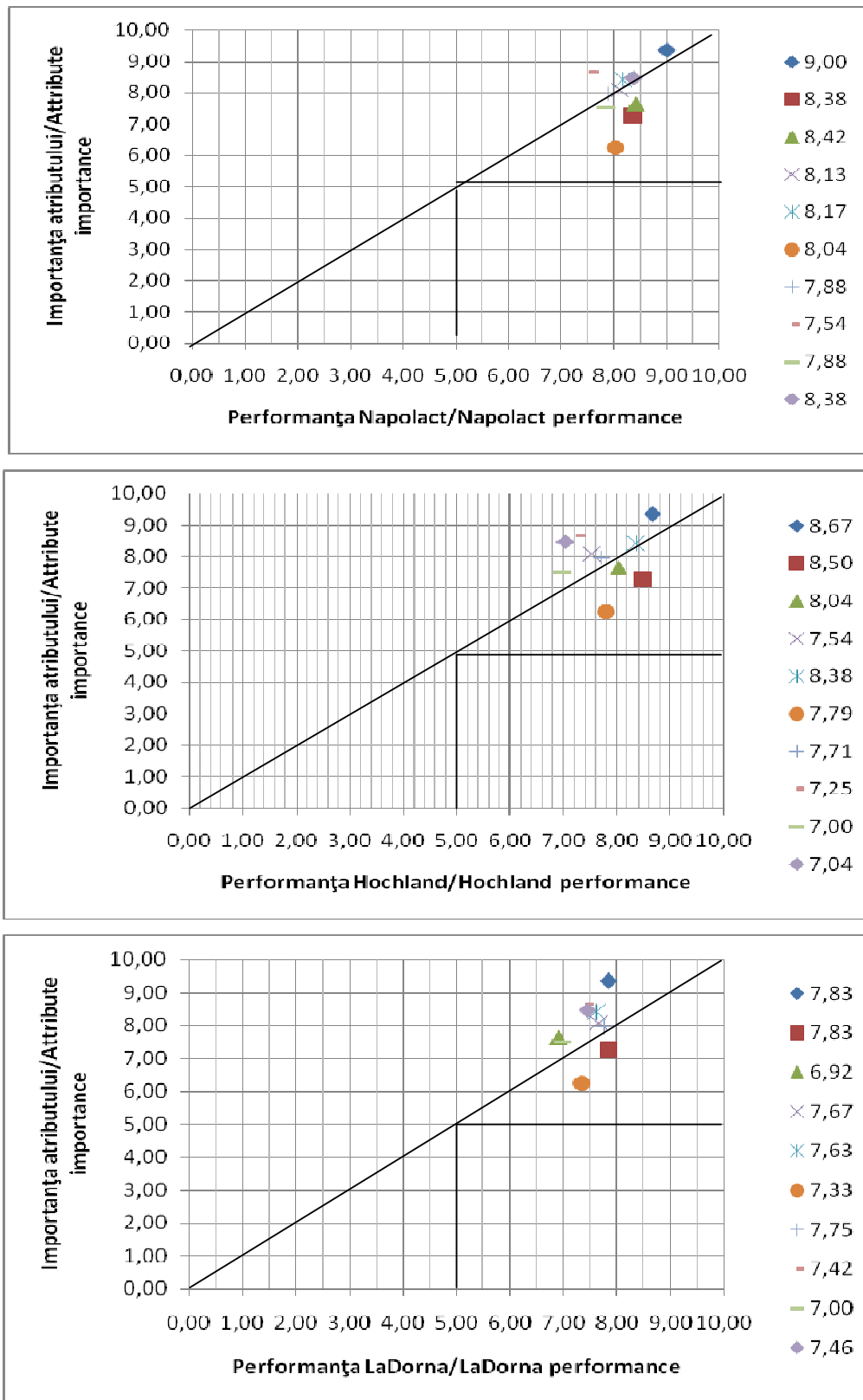


Fig. 10. Importance-Performance grids of intrinsic attributes for the three competitors

#### 6.5. CUSTOMER PERCEIVED PERFORMANCE OF MOECIU CHEESE EXTRINSIC ATTRIBUTES AND THAT OF COMPETITORS (HOCHLAND AND LADORNA)

Grids interpretation of Figure 11 offers to S.C. Napolact S.A. a stable position from the point of view of perceived performance by the consumers, no attribute being located in an area that requires concentration, but there is an attribute for which the company allocates efforts oversized compared to the importance given by consumers, „recyclable packaging”. Moeciu cheese is considered to be less traditional than LaDorna. Hochland is also considered too have a more attractive package than Moeciu cheese. In order to achieve superior performance, the company will need to consider the elements of attractiveness of the competitors’ packaging and improve their own packaging.

Concerning brand reputation, Napolact holds the highest score being followed by LaDorna. This fact can be explained by the attachment of the population towards local brands. This attribute is very important in the audit process because it gives clues regarding consumer perception over the brand reputation.

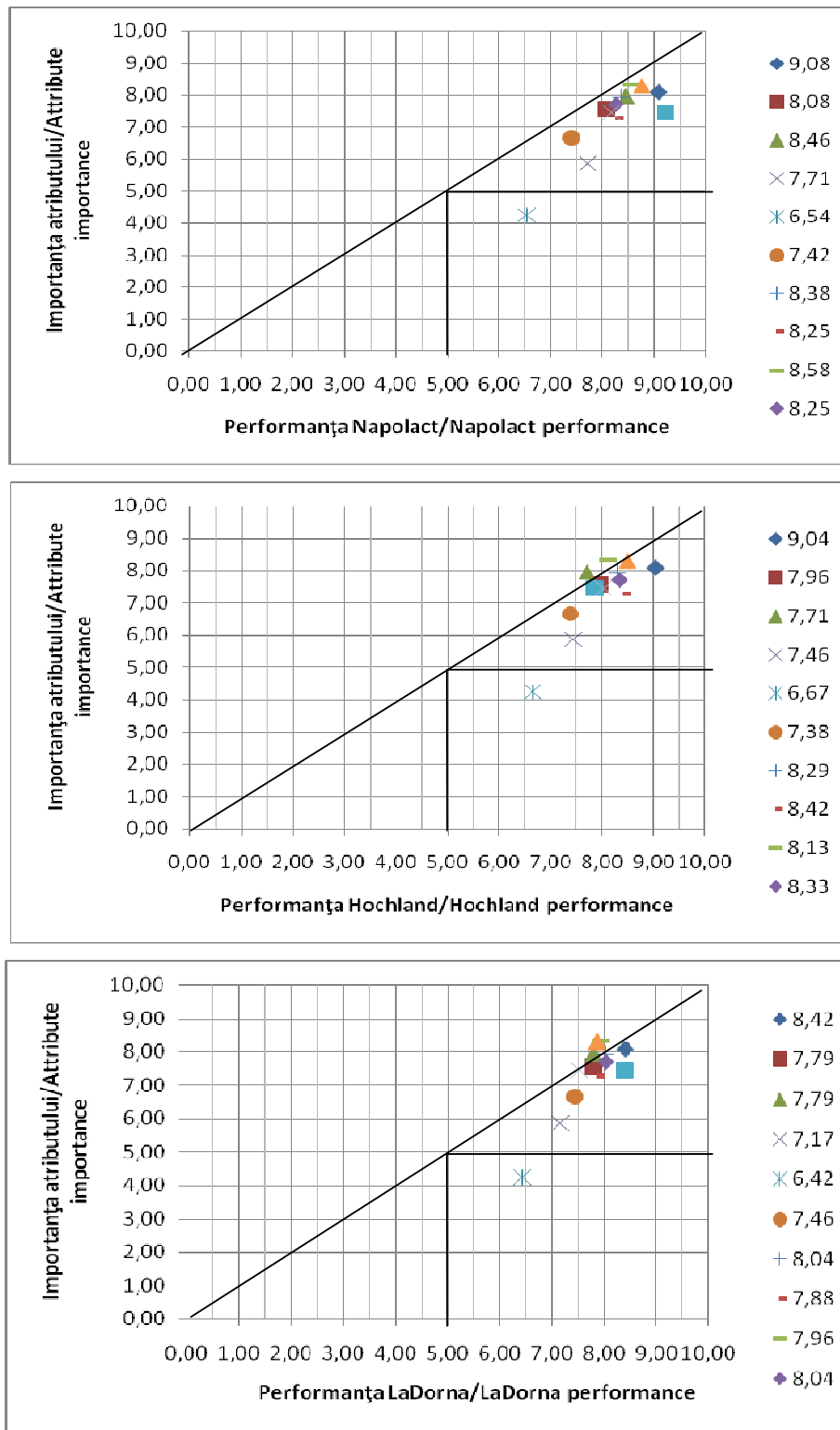


Fig. 11. Importance-Performance grids of extrinsic attributes for the three competitors

## 6.6. ANALYSIS THE MARKS FOR THE INTRINSIC ATTRIBUTES IN ORDER TO BUILD MARKETING STRATEGIES

Medians of most attributes are 8 or 9, with no lower values. In this case, „taste”, „made from natural ingredients” and „no artificial ingredients” are attributes that have been the most common graded with 10 while the attribute „low fat” was frequently noted with 7.

## 6.7. CUSTOMER SEGMENTATION BY CHEESE IMPORTANT ATTRIBUTES IN THE BUYING DECISION PHASE

For a Napolact customer segmentation based on the attributes of Moeciu cheese that have a significant influence in the purchasing phase, a Factor Analysis was performed using both its intrinsic and its extrinsic attributes.

The analysis of the matrix components after rotation led to the establishment of seven key factors, as defined later depending on the content of constituents': „concern for healthy eating”, „aesthetic and reputation”, „food safety and ergonomics”, „advantage and availability”, „sensory attractiveness”, „nature and tradition” and „taste”.

Further analysis was done using K - Means Cluster Analysis and two groups (clusters) were obtained: first group consisting of 172 respondents one of 42 respondents.

Table 2

Clusters characterization considering factor belonging

Factor	Cluster Number	
	1	2
F1 Preoccupation for healthy food	1,354	-5,543
F2 Esthetics and reputation	-0,079	0,323
F3 Food safety and ergonomicity	1,050	-4,298
F4 Advantage and disponibility	-0,068	0,278
F5 Sensory atractivity	0,473	-1,935
F6 Nature and tradition	0,465	-1,903
F7 Taste	0,043	-0,176

The first group (consisting of 172 respondents) attaches high importance of healthy eating so that the product purchased has a low fat content, is made from natural ingredients without additives. Important in choosing cheese for this group is the factor „food safety and

ergonomics” which includes attributes such as „information on the label”, the quality of being a „Romanian product”, „security of the package” and „resealable package”. „Sensory attractiveness” is important for this segment but to a lower extent compared with other attributes. So, „texture”, „color”, „appearance” are appreciated and considered to a lower extent. This group is concerned with recycling packaging and appreciate the traditional quality cheese without added nuts, seeds etc. It should be noted that the „taste” is located last in the purchase decision, overriding the attributes and factors referred to above. For this segment of customers, company reputation is not important in the decision to purchase and the price and availability does not matter (Table 2).

The second segment of customers is negatively related to the elements of which the first group is related positively and vice versa. Thus the group consisting of 42 respondents is only interested in cheese external attributes such as „packaging”, „quality logo”, „and brand reputation”. The factor "advantage and availability" has no significance to them.

#### 6.8. EVALUATION THE MARKETING ORIENTATION OF S.C. NAPOLACT S.A.

According to the key factors that indicate an efficient marketing orientation, SC Napolact S.A. has a number of aspects to be improved. Of the 15 variables defining marketing orientation, Napolact Company is perceived as performing well for only 6 variables that are not included among the most important variables for clients (Figure 12).

- Market orientation: SC Napolact S.A. is perceived by its customers as unperformant for any variable of this factor. So for its clients the most important attribute for a dairy company is to be focused on quality, followed by customer inspired confidence and ability to respond promptly to complaints. Analyzing the differences between the scores given to the importance of attributes and the company performance is found the largest differences between importance and performance for "prompt response to complaints", "prompt response to suggestions" and "focus on quality". Napolact should therefore improve the image on the market through greater openness to consumers. "Product quality" is a variable for which that SC Napolact SA, according to consumer opinions, should adopt strategies of improvement.

Network communication: The company has made a positive assessment for the attributes of this factor, the perceived performance variables „array of sale” and

„importance attached to publicity” importance” is greater than the importance given but the difference is not very high, the company must „keep up the good work”.

- Uniqueness products: SC Napolact S.A. is perceived as having a touch of uniqueness of the products due to high scores given by the customers to attributes like: „wide range of products”, „unique characteristics of products”, „focus on design”. It is recommended to „keep up the good work”, all the three attributes being placed in that quadrant.
- Price advantage: the company is not perceived as having the price advantage on the market because both variables of this factor („value for the money”, „competitive prices”) are placed in the quadrant where the company should focus on improving the situation. The lowest valued variable is related to the value given for money.
- The sales force is skilled: the variable „own presentation stores” is of less importance than the perceived performance which shows that the company will have to continue the good work. Sale staff courtesy is important for customers but S.C. Napolact S.A. is not perceived as having high performance for this attribute so it has to improve this variable.

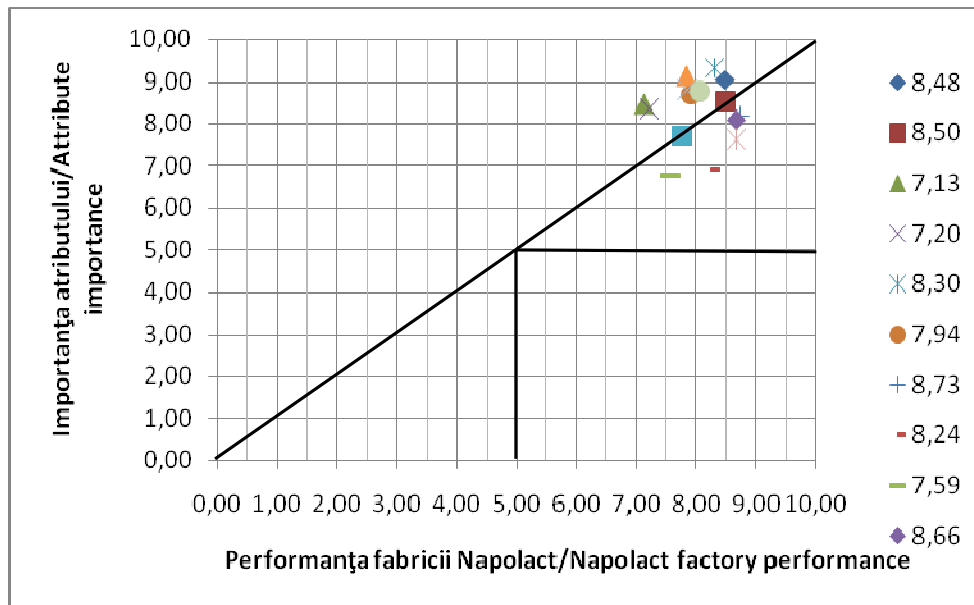


Fig. 12. Importance Performance Analysis of S.C. Napolact S.A.

## 6. 9. PERCIEVED PERFORMANCE ANALYSIS OF SC NAPOLACT COMPANY BY HEAVY AND LOW USERS

Perceived performance analysis by Napolact low and heavy-users highlight significant differences regarding the intrinsic attributes. Low-users attach greater importance to „taste” than the heavy-users. This category of customers attach greater importance of attributes such as „no artificial ingredients”, and „made from natural ingredients”. Attributes that require attention from the company are the same in both cases: taste, artificial ingredients, made of natural ingredients and no additives. So both loyal customers and those who are not brand loyal, have a similar perception of Moeciu cheese, which is considered a product containing artificial elements. In order to attract a higher number of loyal customers, the company should improve these attributes that would pass in the area where the company is perceived as powerful.

Regarding the extrinsic attributes (Figure 13) it is found that Napolact heavy-users attach the highest importance to the extrinsic attribute „Romanian product” (8,30) and „accessibility in any store”(8,12) followed by „package security”(8,10). Perceived performance of the company SC Napolact S.A. by Napolact heavy-users is favorable, thus excluding „price” that is perceived as an attribute for improvement and „resealable packaging” all extrinsic attributes are placed in the company favorably area and indicates to „keep up the good work” in the same way in the future.

Least important attributes for Napolact heavy-users are: „resealable package” (6, 63), „high quantity per piece” (6, 05) and „recyclable package” (4, 85).

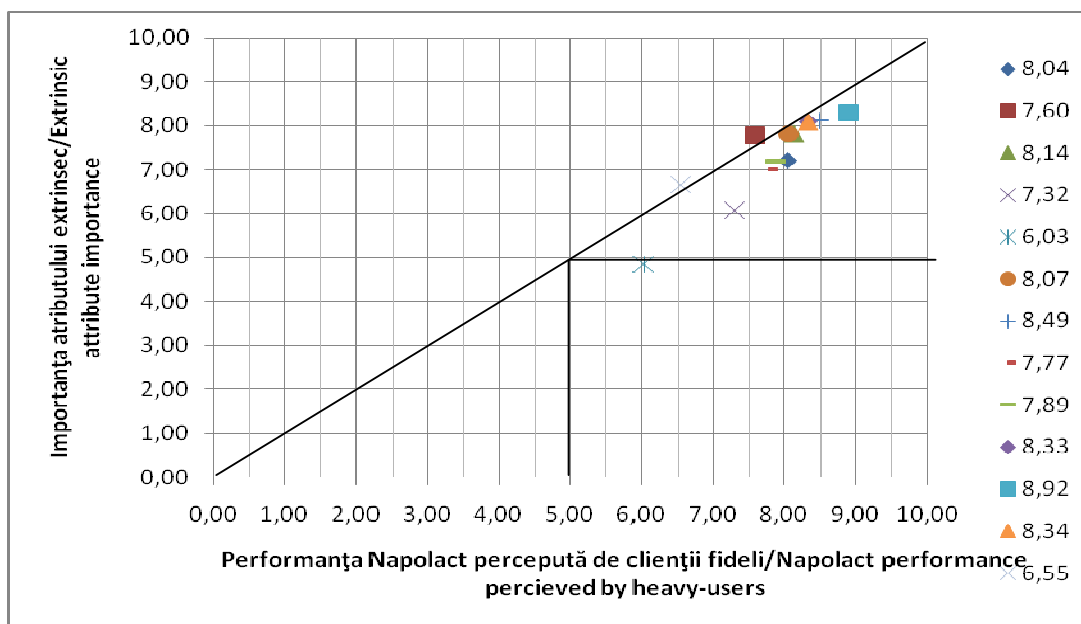


Fig. 13. Matricea privind performanța percepută a atributelor extrinseci de către clienții fideli Napolact

Napolact low-users customers attach the highest importance to the attribute „accessible in any store” (8, 38) and „low price” (8, 31) followed by „information on the label” (7,94) (Figure 14). They believe that each of these three attributes important in the buying decision should be improved by S.C. Napolact S.A., being located in an area that requires attention.

Other attributes of less importance to them but that requires attention from the company are related to packaging that is perceived as unattractive, without being able to reseal product and made from nonrecyclable materials. The customers are also dissatisfied with the information provided by the label. Although they are low-users of the Napolact brand, they appreciate it for having a good reputation with quality logo and according to their findings; the product is a Romanian cheese. For this category of customers product is considered to be traditionally produced without innovations and additions of nuts, seeds, etc. This is not appreciated by customers.



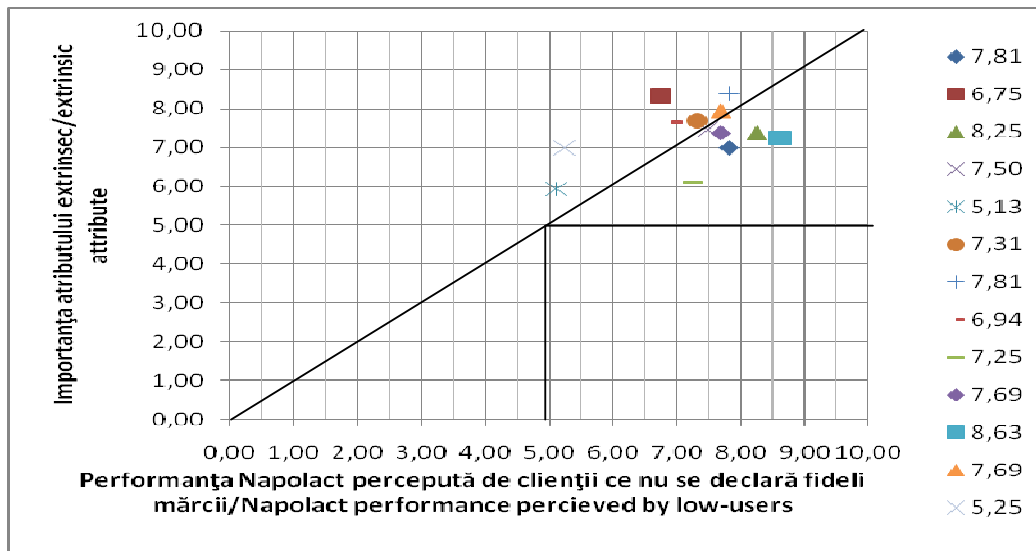


Fig. 14. Importance- Performance Analysis regarding the perceived performance of extrinsic attributes by Napolact low users

#### 6.10. CONSUMER BEHAVIOUR ANALYSIS FOR MOECIU CHEESE AND COMPETING PRODUCTS

Regarding the frequency of consumption of Moeciu cheese, 25% of respondents consume it more than once a week compared with Hochland that is consumed by only 6,02%. Most respondents consume Moeciu cheese once a month (22, 2%). Very high is the percentage of 16, 7% of those who consume this cheese less than once a month. Only a percentage of 2, 3% do not consume Moeciu cheese compared to Hochland (where 25% of respondents do not consume it) and LaDorna (where 29% of respondents do not consume it). The competitors of Napolact record low cheese consumption, 32, 87% consume Hochland less frequently than once a month while the Dalia cheese is consumed less frequently than once a month by 31% of respondents.

The supermarket is the favorite place of purchase for 124 of respondents representing 57% of the sample size. 46% prefer the hypermarkets and 37, 7% prefer the company presentation store. Grocery stores in food markets are preferred by only 5, 6% of the sample being placed the last in the consumer preferences.

## 6.11. NAPOLACT BRAND EVALUATION

Napolact brand evaluation and customer perceptions related to it, was performed using fifteen statements to which respondents expressed their level of agreement.

Analysis is useful because it reveals the product categories to which customers are loyal and to which they manifest their rejection. A ranking of products from Napolact heavy-users customers declare milk as the product with the largest number of loyal customers, followed by cream, yogurt and finally by cheese. This is explainable by the intense competition in the cheese market, both national and international.

In terms of brand awareness, it can be said that the symbol Napolact is well embedded in the consciousness of consumers; they expressed their total agreement regarding the statement "I know how it looks Napolact symbol". They also recognize the Napolact symbol among other dairy brands, with a percentage of 46, 8%, without reservation, 35, 2% expressed a simple agreement with this statement and 7, 9% partially agreed. The percentage of respondents which do not recognize the Napolact symbol among other brands is 4, 1%.

In the overall brand equity, the audit results are favorable to SC Napolact S.A. So 30, 6% of respondents believe that it is normal to buy Napolact brand even if other similar brands are in the store. 43, 1% show a preference for the Napolact brand even if there are brands having similar characteristics in the store. For 44% of the respondents it makes sense to buy Napolact brand even if similar products could be found in the store. 21, 3% of respondents do not buy similar to not buy other brands of cheese if Napolact is present in the store.

## CONCLUSIONS AND RECOMMENDATIONS

The study conducted among the companies from agro food industry from Cluj regarding the evaluation of the stage of development for the marketing audit process allowed the following conclusions:

1. The hypothesis according that most of the agro food companies do not prepare a separate budget for marketing activity was confirmed in the study.
2. Most companies, regardless of their size, allow the marketing decision making to the managerial factor, and there is no actual separation between the two functions of the company. Hypothesis H2 is therefore confirmed in the study, most of the companies interviewed have as marketing decision maker the administrator of the company (45%) or its manager (35, 20%).
3. Hypothesis H3 was confirmed, the firms having in most of the cases (35, 20%) one member in the marketing department.
4. Observing the market as a whole and behavior analysis of economic factors led to the hypothesis that firms will be mainly oriented towards sales, the hypothesis being confirmed in the study: 32 companies are sales-oriented while 19 companies have a marketing orientation.
5. The assumption that most of the companies will appreciate the customer satisfaction as the most important was confirmed in the study, 67,71% of respondents consider it the most important aspect.
6. Assumption that the Internet is the most important source of information on marketing audit was confirmed, 29% of respondents believing as such.
7. Hypothesis that firms that have conducted a marketing audit would prefer marketing audit specialized offices instead of consulting firms has been confirmed, 35, 80% of respondents consider the marketing audit offices as appropriate.
8. Hypothesis of TAGHIAN & SHAW (2008) according to which the conduct of marketing audit leads to increased profitability was confirmed by all six companies that have conducted an audit.
9. Assumption that marketing audit leads to increased sales was confirmed by all six companies that have conducted a marketing audit.
10. Assumption that marketing audit practice leads to improved marketing activity has been confirmed.

11. One of the main disadvantages of a marketing audit is the lack of standards in the field.
12. Most companies that have conducted a marketing audit consider appropriate to create specialized branches in the marketing audit.

Regarding the customer marketing audit tool developed, which has been tested using as study case the Napolact Company, it can be said that the main objectives pre-established have been achieved. Its utility is proved by the fact that agro food companies can get some useful information in developing marketing strategies and namely:

1. Using the customer marketing audit tool the managers can obtain the brands most commonly consumed by customers; SC Napolact S.A. holding two products - Moeciu and Bobalna - on the first and second place by consumers.
2. It is possible to highlight the perceived performance by clients on intrinsic product attributes as well as the company competitors. SC Napolact S.A. is well positioned in this regard, having only 5 attributes that needs improvement compared with Hochland having seven attributes and LaDorna eight attributes. Company should pay more importance and improve attributes such as „taste”, „made from natural ingredients”, „no artificial ingredients”, „no additives” and „aspect”. So the customers associate Moeciu cheese with an artificial product.
3. With IPA method it is possible to obtain a visual representation of the company perceived performance by customers in terms attributes indicating marketing orientation. SC Napolact S.A. proved to have a poor marketing orientation, having eight attributes in the area that needs attention and improvement.
4. Information obtained allows profiling customers, so there are two distinct groups of customers with different interests. The first group of 172 respondents is concerned about healthy eating, food safety and ergonomics, nature and tradition, taste and sensory appeal. The second group of 42 respondents is concerned about aesthetic and cheese reputation, about advantage and availability to purchase it.

After performing the research and the conclusions obtained, some recommendations could be draw, having practical use for economic actors in the agro food industry:

1. Regarding the study about marketing audit among food companies, the main recommendations are intended to increase the role of marketing in their decision-making structure by assigning decisions related to marketing to specialized people in the field.

2. It is also recommended that companies gain a marketing orientation to replace the sales orientation, this solution being more profitable in the long run. It is also recommended that decisions related to marketing, to be awarded to people with a higher qualification.
3. Marketing audit should be recommended to become an independent profession, liberal following the example of the financial audit, because of its effects on food companies proves beneficial activity. Setting up specialized branches exclusively in marketing audit would be appropriate and people specialized in this field to constitute an independent professional association.
4. It is recommended a high promotion of marketing audit, through which its benefits are clearly explained, stages and inconvenience that may arise during its conducting. The most effective communication channel is, according to the research, the Internet.
5. It also recommended focusing the attention towards internal audit that has its advantages reason for introducing the profession of internal auditing in the COR. Its tasks should be clearly defined in accordance with the stages and phases of the external audit which would complement it, for added objectivity.
6. It is recommended to develop clear and specific standards and procedures for the new profession, taking into account the area of activity of the firm.
7. Developing a customer marketing audit tool represented a first step in creating specific tools of the agro food industry. It is recommended to test this tool in other agro food domains.

## OWN CONTRIBUTIONS

This research brings a new element within agronomic management and marketing, primarily through the issue addressed and specifically the marketing audit. Other elements of originality and novelty arise naturally from the topic. The author's own original research contributions are:

1. Analysis of food industry development and opportunities through marketing audit.
2. Developing of a questionnaire to evaluate the state of development of the marketing audit in the agro food industry from Cluj, having two distinct sections one for companies that did not conduct a marketing audit and one for those companies that

did conduct one. Such a study, from the author's knowledge, has not been realized in Romania.

3. Building a marketing customer marketing audit tool that agro food companies can use to periodically audit their clients is a very useful in terms of information obtained for building marketing strategies. The analysis proposed method is „Importance - Performance Analysis” because it offers the possibility to a graphical representation of the company position, both individual and also against competitors. The audit tool was tested using as a case study SC Napolact S.A. Cluj-Napoca. The audit tool users will have the possibility of conducting a comprehensive audit (applying full questionnaire) or partial depending on the needs of the company at a time (applying certain questions). After data collection company managers will be able to obtain a large number of information and to make a lot of statistical analysis with the view of obtaining an image of the firm seen by its customers.

## SELECTIVE BIBLIOGRAPHY

1. ABALO, J., J. VARELA, V. MANZANO, 2007, Importance values for Importance-Performance Analysis: A formula for spreading out values derived from preference rankings, *Journal of Business Research*, 60, 115-121.
2. AVLONITIS, G.J., & S.P. GOUNARIES, 1999, Marketing orientation and its determinants: An empirical analysis, *European Journal of Marketing*, 33(11,12), 1003-1037
3. BROWNLIE, D., 1996a, Marketing audits and auditing: Diagnosis through intervention, *Industrial marketing management*, XXV,1,11-12
4. CĂRBUREANU MĂDĂLINA, 2010, O metodă de analiză factorială aplicată în domeniul dezvoltării, *Analele Universității "Constantin Brâncuși", Târgu-Jiu, seria Economie*, 1, 187- 194
5. CHIRLA GABRIELA, SABINA FUNAR, ADRIANA MAN, 2010, The Concept of Marketing Audit and Its Utility for the Romanian Enterprises, În: „*Bulletin of University of agricultural sciences and veterinary medicine*” al Facultății de Horticultură, Cluj-Napoca ed. AcademicPres, Cluj-Napoca, LVXVIII, 2, 275
6. CRAWFORD, I.M., 2006, Agricultural and food marketing management, FAO Agriculture dept.
7. KOTLER, P., GREGOR, W.T., ROGERS III, W., 2005, Marketing audit comes of age, *Sloan Management Review. Classic reprint*, 1-30.
8. MATZLER, K., F. BAILOM, H. H.HINTERHUBER, B. RENZL, J. PICHLER, 2004, The asymmetric relationship between attribute-level performance and overall customer satisfaction: a reconsideration of the importance–performance analysis, *Industrial Marketing Management*, 33, 271– 277.
9. MERCE, E., C.C. MERCE, DIANA DUMITRAȘ, 2010, Prelucrarea statistică a datelor, Ed. AcademicPres, Cluj-Napoca
10. TAGHIAN, M. and R.N. SHAW, 2008, The marketing audit and organizational performance: an empirical profiling, *Journal of Marketing Theory and Practice*, XVI,4,341
11. ZECHERU, V., 2003, Considerații generale privind auditul managementului în: *Economia*, II, p. 116
12. \*\*\*BORG DESIGN, 2008, Listă firme

13. \*\*\*INS, 2011, Comunicat de presă privind rezultatele provizorii ale Recensământului Populației și Locuințelor
14. \*\*\*Raportul Comisiei Europene, IP/10/1016, 2010, Forum la nivel înalt pentru abordarea provocărilor din sectorul alimentar, Bruxelles