

## THE INFLUENCE OF MARKETING INTELLIGENCE ON PERFORMANCES OF ROMANIAN RETAILERS

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### ABSTRACT

*The paper was dedicated to the assessment of the Romanian retailers' capabilities regarding the intelligent approach of the market, by means of three hypotheses, based on relevant variables. The independent variables are as follows: the sources of collecting Marketing Intelligence information, the reasons for implementation of a Marketing Intelligence project, and the use of Marketing Intelligence specific instruments which are the Customer Satisfaction Index (CSI), Customer Perceptions Audits (CPA), and Early Warning Alerts (EWA). The dependent variables are as follows: the level of marketing decision support which may be strategic, tactical, operational, the possibility to improve the positioning strategy based on relevant targeting criteria, and the results of a Marketing Intelligence project focused on the promotion of products. The research, which involved a methodology based on the optimal use of statistical tools such as Pearson Chi-Square, Spearman, regression analyses and one-way and two-way ANOVA, provides managerial implications in the area of Marketing Intelligence activities that can be promoted at the level of the retailers.*

**KEYWORDS:** *performance, marketing intelligence, retailers*

**JEL CLASSIFICATION:** *M00*

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### 1. INTRODUCTION

Retail companies need to update their marketing strategies in order to stay competitive. The diversification of sales channels offers retailers many opportunities for business development, but it also presents them different challenges, which could be efficiently managed by means of Marketing Intelligence tools (Ailawadi, Kusum L., J. P. Beauchamp, Naveen Donthu, Dinesh K. Gauriand Venkatesh Shankar, 2009).

The digital technologies integrated in a Marketing Intelligence system collect and process targeting data stored within retailers' data warehouses. These data may be aggregated in order to inform retail marketing activities or may be processed at a micro-level for supporting highly targeted campaigns such as behavioural advertising, customized purchase incentives and to encourage the consumer engagement in brand-based promotional activities. In this case, targeted marketing activities consider the consumer segmentation, since not all consumers desire the same relationship type or intensity or interaction with the retail company.

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Retailers can use Marketing Intelligence software to reach consumers in a more effective manner, reduce operational time and costs and assign their resources more efficiently through their value chain (Tellis, Gerard J. and Joseph Johnson, 2007)..

The role played by marketing variables that influence the performances in the retailing sector is relevant for understanding the opportunities related to the increase of this domain. In this chapter, the main goal is to provide relevant answers to the following research suppositions:

- i. How do influence the relevant sources of Marketing Intelligence information collection the level of marketing decision support?
- ii. What explains the better positioning strategies of Romanian retailing companies based on relevant targeting criteria?
- iii. What are the use implications of the most appropriate Marketing Intelligence tools on the business development of Romanian retailers?

## **2. ASSESSMENT OF ROMANIAN RETAILERS' CAPABILITIES REGARDING THE INTELLIGENT APPROACH OF THE MARKET**

The research conceptual framework regarding the evaluation of Marketing Intelligence capabilities related to the Romanian retailers involves three independent variables and three dependent variables, based on a previous research, based on the identification of Marketing Intelligence techniques implemented in order to achieve a superior positioning on the eco-label food products niche market.

The independent variables are as follows: the sources of collecting Marketing Intelligence information, the reasons for implementation of a Marketing Intelligence project, and the use of Marketing Intelligence specific instruments which are the Customer Satisfaction Index (CSI), Customer Perceptions Audits (CPA), and Early Warning Alerts (EWA) (Lei, Jing, Niraj Dawar and Jos Lemmink, 2008). The dependent variables are as follows: the level of marketing decision support which may be strategic, tactical, operational, the possibility to improve the positioning strategy based on relevant targeting criteria, and the results of a Marketing Intelligence project focused on the promotion of products.

The statistical methods that we used in order to test the hypotheses are Pearson chi-square, Pearson's R and Spearman coefficients of correlation. Chi-square test is applied in view to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. The use of chi-square test involves the design of two hypotheses: the null hypothesis states that there is no significant difference between the expected and observed frequencies, while the alternative hypothesis states they are different. The level of significance (the point at which we can say with 95% confidence that the difference is not due to chance alone) is set at 0,05. The correlation coefficient Pearson's R is a useful descriptor of the degree of linear association between two variables, having two key properties of magnitude and direction. When it is near zero, there is no correlation, but as it approaches -1 or +1 there is a strong negative, respectively positive relationship between the variables. The sign of the Spearman correlation indicates the direction of association between the independent variable and the dependent variable. If the dependent variable tends to increase when the independent variable increases, the Spearman correlation coefficient is positive; otherwise, the Spearman correlation coefficient is negative. A Spearman correlation near zero indicates that there is no tendency for the dependent variable to either increase or decrease when the independent variable increases.

First of all, we will reveal the mathematical calculations in the case of Pearson chi-square; then, we will emphasize the advantages of SPSS software use, mainly focused on the capacity to build contingency tables by gathering data from the research database, resulted after the answers' processing.

The target companies for this research have been represented by retailers with high awareness, which are selling their products in Romania, while the convenience sample of 90 retailers was selected depending to their managers' availability to answer to our questionnaire. The survey was undertaken in a real commercial context, taking into account the most representative retailers from all the development regions of Romania.

### 3. FINDINGS AND DISCUSSIONS REGARDING THE CORRELATIONS BETWEEN THE RESEARCH VARIABLES FOCUSED ON RETAILERS' MARKETING INTELLIGENCE CAPABILITIES

This paper section emphasizes the statistical meanings of the cross tabulation processes related to the correlations between the variables previously defined. The application of chi-square test in the case of  $H_1$  hypothesis involves designing a contingency table with double entry, which allows the classification of the observed frequencies as can be noticed in Table no.1.

**Table no. 1:** Cross tabulation between the sources of Marketing Intelligence data and the level of marketing decision

<b>Level of marketing decision</b> <b>Source of MK Intelligence data</b>	<b>Strategic</b>	<b>Tactical</b>	<b>Operational</b>	<b>TOTAL</b>
Marketing research reports from retailing sector	13	9	17	<b>39</b>
Fair and promotion events focused on innovative retailing methods	8	12	15	<b>35</b>
Competitors' e-tailing communications on Internet	3	7	6	<b>16</b>
<b>TOTAL</b>	<b>24</b>	<b>28</b>	<b>38</b>	<b>90</b>

The null hypothesis associated to the first research hypothesis –  $H_{0(1)}$  is: The sources of collecting Marketing Intelligence information do not significantly influence the level of marketing decision support (strategic, tactical, operational).

We will apply the following formulae:

$$\chi^2 = \sum \sum [ (O_{ij} - A_{ij})^2 / A_{ij} ] \quad (1)$$

where: "r" and "k" – number of rows, respectively, columns of the contingency table

$O_{ij}$  – the frequency of row "i" and column "j" which result from observation .

$A_{ij}$  – the frequency of row "i" and column "j" which result according to null hypothesis.

The data from Table 1 are used in order to calculate the values which are resulting according the null hypothesis (Table no.2).

**Table no. 2:** Values which are resulting according the null hypothesis based on the report observed between **H<sub>1</sub>** hypothesis' variables

<b>Level of marketing decision</b> <b>Source of MK Intelligence data</b>	<b>Strategic</b>	<b>Tactical</b>	<b>Operational</b>	<b>TOTAL</b>
Marketing research reports from retailing sector	(24x39)/90 <b>=10,4</b>	(28x39)/90 <b>=12,13</b>	(38x39)/90 <b>=16,46</b>	<b>39</b>
Fair and promotion events focused on innovative retailing methods	(24x35)/90 <b>=9,33</b>	(28x35)/90 <b>=10,88</b>	(38x35)/90 <b>=14,77</b>	<b>35</b>
Competitors' e-tailing communications on Internet	(24x16)/90 <b>=4,26</b>	(28x16)/90 <b>=4,97</b>	(38x16)/90 <b>=6,75</b>	<b>16</b>
<b>TOTAL</b>	<b>24</b>	<b>28</b>	<b>38</b>	<b>90</b>

$$\chi^2 = \sum \sum [(O_{ij} - A_{ij})^2 / A_{ij}]$$

$$\chi^2 \text{ calculated} = [(13 - 10,4)^2 / 10,4] + [(9 - 12,13)^2 / 12,13] + [(17 - 16,46)^2 / 16,46] + [(8 - 9,33)^2 / 9,33] + [(12 - 10,88)^2 / 10,88] + [(15 - 14,77)^2 / 14,77] + [(3 - 4,26)^2 / 4,26] + [(7 - 4,97)^2 / 4,97] + [(6 - 6,75)^2 / 6,75]$$

$$\chi^2 \text{ calculated} = \mathbf{3,066}$$

Number of degrees of freedom:  $n = (3 - 1) \times (3 - 1) = 4$  degrees of freedom

Probability:  $\alpha = 0,05$

$\chi^2$  table = **9,49** (according to Chi-square-table)

$\chi^2$  calculated <  $\chi^2$  table  $\Rightarrow$  null hypothesis is confirmed  $\Rightarrow H_1$  is not validated.

The results corresponding to the test of  $H_1$  hypothesis, after the configuration of cross-tabulation process using the respondents' answers stored in SPSS database, are shown in Table no.3 and Table no.4.

**Table no. 3:** The correlation results between the sources of collecting Marketing Intelligence information and the marketing decision support

<b>Chi-Square Test Indicators</b>	<b>Value</b>	<b>Degrees of freedom</b>	<b>Asymptotic significance</b>
Pearson Chi-Square	3,066	4	0,547
Likelihood Ratio	3,058	4	0,548
Linear-by-Linear Association	0,201	1	0,654
Number of valid cases	90	-	-

In this case, the value associated to the Asymptotic significance (0,547) is superior to the level of significance (0,05) and the Pearson Chi-Square value (3,066) is inferior to the Chi-Square value corresponding to the Statistics table (9,49), within the context of four freedom degrees; the hypothesis is rejected, so the sources of collecting Marketing Intelligence information don't have a positive influence on the level of marketing decision support (strategic, tactical, operational).

**Table no. 4:** First hypothesis testing by means of Pearson's R and Spearman correlation

Statistical Indicators	Value	Asymptotic Std. Error	Approx. T	Asymptotic significance
Pearson's R	0,048	0,103	0,447	0,656
Spearman Correlation	0,039	0,105	0,367	0,714
Number of valid cases	90	-	-	-

The results of the first hypothesis testing process are also validated by Pearson's R and Spearman correlation coefficients, because their values (0,048, respectively 0,039) are positive, but situated near zero, emphasizing the lack of correlation between the independent variable (source of Marketing Intelligence data) and dependent variable (level of marketing decision).

The marketing research reports and sustainability reports represent primary data sources for retail companies, validated by experts in the field; their acquisition involves significant budgets, which could be assigned only at the level of leading retail companies; the participation in fairs and promotion events focused on innovative retailing methods could be constrained by financial reasons, while the analysis of the competitors' e-tailing activities on Internet, especially on social media networks, depends on the existence of specialized staff highly-skilled in IT tools.

The application of chi-square test in the case of **H<sub>2</sub>** hypothesis involves the design of the contingency table with double entry, outlined in Table no.5, respectively Table no.6 – using data resulted according to the null hypothesis.

**Table no. 5:** Cross tabulation between the reasons for implementing a Marketing Intelligence project and the pillars of positioning strategies

Pillars of positioning strategies Reasons of MK Intelligence implementation	Focus on high awareness brands	Focus on lower prices	Focus on their own brands	TOTAL
Following the trends in consumers' behaviour	2	6	11	<b>19</b>
Launching new products in the selling network	16	5	8	<b>29</b>
Support for Marketing and Sales activities	19	17	6	<b>42</b>
<b>TOTAL</b>	<b>37</b>	<b>28</b>	<b>25</b>	<b>90</b>

**Table no. 6:** Values which are resulting according the null hypothesis based on the report observed between  $H_2$  hypothesis' variables

<b>Pillars of positioning strategies</b>	<b>Focus on high awareness brands</b>	<b>Focus on lower prices</b>	<b>Focus on their own brands</b>	<b>TOTAL</b>
<b>Reasons of MK Intelligence implementation</b>				
Following the trends in consumers' behaviour	$(37 \times 19) / 90 = 7,81$	$(28 \times 19) / 90 = 5,91$	$(25 \times 19) / 90 = 5,27$	<b>19</b>
Launching new products in the selling network	$(37 \times 29) / 90 = 11,92$	$(28 \times 29) / 90 = 9,02$	$(25 \times 29) / 90 = 8,05$	<b>29</b>
Support for Marketing and Sales activities	$(37 \times 42) / 90 = 17,26$	$(28 \times 42) / 90 = 13,06$	$(25 \times 42) / 90 = 11,66$	<b>42</b>
<b>TOTAL</b>	<b>37</b>	<b>28</b>	<b>25</b>	<b>90</b>

$$\chi^2 = \sum \sum [(O_{ij} - A_{ij})^2 / A_{ij}]$$

$$\chi^2 \text{ calculated} = [(2 - 7,81)^2 / 7,81] + [(6 - 5,91)^2 / 5,91] + [(11 - 5,27)^2 / 5,27] + [(16 - 11,92)^2 / 11,92] + [(5 - 9,02)^2 / 9,02] + [(8 - 8,05)^2 / 8,05] + [(19 - 17,26)^2 / 17,26] + [(17 - 13,06)^2 / 13,06] + [(6 - 11,66)^2 / 11,66]$$

$$\chi^2 \text{ calculated} = 17,827$$

Number of degrees of freedom:  $n = (3 - 1) \times (3 - 1) = 4$  degrees of freedom

Probability:  $\alpha = 0,05$

$\chi^2$  table = **9,49** (according to Chi-square-table)

$\chi^2$  calculated >  $\chi^2$  table  $\Rightarrow$  null hypothesis is not confirmed  $\Rightarrow H_2$  is validated.

The results corresponding to the test of  $H_2$  hypothesis, after the configuration of cross-tabulation process using the respondents' answers stored in SPSS database are revealed in Table no.7.

**Table no. 7:** The correlation results between the reasons of implementing the Marketing Intelligence project and the positioning strategies

<b>Chi-Square Test Indicators</b>	<b>Value</b>	<b>Degrees of freedom</b>	<b>Asymptotic significance</b>
Pearson Chi-Square	17,827	4	0,001
Likelihood Ratio	18,846	4	0,001
Linear-by-Linear Association	1,164	1	0,002
Number of valid cases	90	-	-

In this case, the value associated to the Asymptotic significance (0,001) is inferior to the level of significance (0,05) and the Pearson Chi-Square value (17,827) is superior to the Chi-Square value corresponding to the Statistics table (9,49), within the context of four freedom degrees; the hypothesis is accepted, so the reasons for implementing the Marketing Intelligence project significantly influences the positioning strategies, based on the business focus on high awareness brands, lower prices and retailers' own brands.

The main reason of a marketing Intelligence project implementation is represented by the support for Marketing and Sales activities, according to the answers received from the participants in the survey. By taking into account the fact that Romanian consumers gradually orients towards retailers and the rate of green purchase is very sensitive to the use in store communication and information, the retailers must be able to foresee the changes in consumer behaviour and to launch new products in their selling network, in line with the results of market research surveys.

In Table no.8, we will emphasize the results of H<sub>2</sub> hypothesis test using Pearson's R and Spearman correlation.

**Table no. 8:** Second hypothesis testing by means of Pearson's R and Spearman correlation

Statistical Indicators	Value	Asymptotic Std. Error	Approx. T	Asymptotic significance
Pearson's R	-0,328	0,092	-3,259	0,002
Spearman Correlation	-0,294	0,097	-2,889	0,005
Number of valid cases	90	-	-	-

The results of the second hypothesis testing process are also validated by Pearson's R and Spearman correlation coefficients, because their values (- 0,328, respectively - 0,294) are negative, emphasizing the negative relationship between the independent variable (reasons of Marketing Intelligence implementation) and dependent variable (pillars of positioning strategies).

The application of chi-square test in the case of H<sub>3</sub> hypothesis involves the design of a new contingency table with double entry outlined in Table no.9, respectively Table no.10 – using data resulted according to the null hypothesis.

**Table no. 9:** Cross tabulation between the Marketing Intelligence tools and the results of the Marketing Intelligence projects

Results of MKI projects MK Intelligence Tools	Comparisons between products	Support for differentiation strategies	Sales cheat sheets	TOTAL
Customer Satisfaction Index	21	14	7	<b>42</b>
Customer Perceptions Audits	4	7	2	<b>13</b>
Early Warning Alerts	8	22	5	<b>35</b>
<b>TOTAL</b>	<b>33</b>	<b>43</b>	<b>14</b>	<b>90</b>

The null hypothesis associated to the third research hypothesis – H<sub>0(3)</sub> is the following: The use of Marketing Intelligence instruments (Customer Satisfaction Index, Customer Perceptions Audits and Early Warning Alerts) do not significantly influence the results (outcomes) of the Marketing Intelligence project.

**Table no. 10:** Values which are resulting according the null hypothesis based on the report observed between  $H_3$  hypothesis' variables

<b>Results of MKI projects MK Intelligence tools</b>	<b>Comparisons between products</b>	<b>Support for differentiation strategies</b>	<b>Sales cheat sheets</b>	<b>TOTAL</b>
Customer Satisfaction Index	(33x42)/90 = <b>15,4</b>	(43x42)/90 = <b>20,06</b>	(14x42)/90 = <b>6,53</b>	<b>42</b>
Customer Perceptions Audits	(33x13)/90 = <b>4,76</b>	(43x13)/90 = <b>6,21</b>	(14x13)/90 = <b>2,02</b>	<b>13</b>
Early Warning Alerts	(33x35)/90 = <b>12,83</b>	(43x35)/90 = <b>16,72</b>	(14x35)/90 = <b>5,44</b>	<b>35</b>
<b>TOTAL</b>	<b>33</b>	<b>43</b>	<b>14</b>	<b>90</b>

$$\chi^2 = \sum \sum [(O_{ij} - A_{ij})^2 / A_{ij}]$$

$$\chi^2 \text{ calculated} = [(21 - 15,4)^2 / 15,4] + [(14 - 20,06)^2 / 20,06] + [(7 - 6,53)^2 / 6,53] + [(4 - 4,76)^2 / 4,76] + [(7 - 6,21)^2 / 6,21] + [(2 - 2,02)^2 / 2,02] + [(8 - 12,83)^2 / 12,83] + [(22 - 16,72)^2 / 16,72] + [(5 - 5,44)^2 / 5,44]$$

$$\chi^2 \text{ calculated} = 7,650$$

Number of degrees of freedom:  $n = (3 - 1) \times (3 - 1) = 4$  degrees of freedom

Probability:  $\alpha = 0,05$

$\chi^2$  table = **9,49** (according to Chi-square-table)

$\chi^2$  calculated <  $\chi^2$  table  $\Rightarrow$  null hypothesis is confirmed  $\Rightarrow H_3$  is not validated.

The results corresponding to the test of  $H_3$  hypothesis, after the configuration of cross-tabulation process using the respondents answers stored in SPSS database are highlighted in Table no. 11.

**Table no. 11:** The correlation results between the use of Marketing Intelligence tools and the results of Marketing Intelligence project

<b>Chi-Square Test Indicators</b>	<b>Value</b>	<b>Freedom degrees</b>	<b>Asymptotic significance</b>
Pearson Chi-Square	7,650	4	0,105
Likelihood Ratio	7,795	4	0,099
Linear-by-Linear Association	2,455	1	0,117
Number of valid cases	90	-	-

In this case, the value associated to the Asymptotic significance (0.105) is superior to the level of significance (0.05) and the Pearson Chi-Square value (7,650) is inferior to the Chi-Square value corresponding to the Statistics table (9.49), within the context of four freedom degrees; the hypothesis is rejected, so the use of Marketing Intelligence tools (Customer Satisfaction Index,

Customer Perceptions Audits and Early Warning Alerts) don't have a positive influence on the results of the Marketing Intelligence project.

In Table no.12, we will emphasize the results of H<sub>3</sub> hypothesis test using Pearson's R and Spearman correlation.

**Table no. 12:** Third hypothesis testing by means of Pearson's R and Spearman correlation

Statistical Indicators	Value	Asymptotic Std. Error	Approx. T	Asymptotic significance
Pearson's R	0,166	0,103	1,580	0,118
Spearman Correlation	0,189	0,105	1,801	0,075
Number of valid cases	90	-	-	-

The results of the third hypothesis testing process are also validated by Pearson's R and Spearman correlation coefficients, because their values (0,166, respectively 0,189) are positive, but situated near zero, emphasizing the lack of correlation between the independent variable (Marketing Intelligence tools) and dependent variable (outcomes of Marketing Intelligence projects).

According to the respondents' opinions, the Customer Perceptions Audit is the Marketing Intelligence tool providing valuable assessments of their differentiation strategies, if they are properly performed throughout the entire pre-purchase to post-purchase experience; moreover, this tool facilitates the design process of the sales cheat sheets, which have a high impact on customers' perceptions. Implementing and developing a Marketing Intelligence tool such as the Customer Satisfaction Index provides the retailers an opportunity to design specific scorecards, through which will be possible to make relevant comparisons between different products. The early warning alerts help retailers' managers to plan their future marketing activities by identifying the market risks and developing the mitigation methods.

The reports delivered by the Marketing Intelligence led to increased sales among the retailers. As the consumers "get in touch" with the products at the point of sale, the role of retailers is essential in their promotion. The results from the analysis of the Romanian retailers' Marketing Intelligence capabilities can be summarised as follows. The retailers marketing strategies are mainly based on market research and available sustainability reports, their most relevant Marketing Intelligence instruments are the Customer Perceptions Audits, which play a very important role in supporting the differentiation strategies, while the positioning strategies are primarily focused on the brands' awareness.

The research attempts to provide some managerial implications in the area of Marketing Intelligence activities that can be promoted at the level of the retailers. The conceptual pattern and the results of the hypotheses testing could support marketing decision-making process in the case of companies that are taking or planning to take greening actions at strategic, tactical and operational levels.

The design of a Marketing Intelligence plan enables the retailers to collect and analyze competitors and consumers data by means of Competitive Intelligence techniques for the right decisions. Thus, it is concretely suggested that the retailers should implement training programs for the sales representatives in order to provide a customized approach to their clients and to promote premium price brands for the purpose of increasing the satisfaction and, implicitly, the loyalty rate.

In the next section of this chapter, we will illustrate the impact of Marketing Intelligence practices on the satisfaction level and retention rate of the retailers' customers using ANOVA and regression analyses.

#### 4. IMPLICATIONS OF MARKETING INTELLIGENCE PRACTICES ON THE BUSINESS PERFORMANCES

Another survey was focused on the identification of the specific dimensions of Marketing Intelligence (operational vs. strategic) that mainly contribute to the business performances. The data that we analyzed were collected from a survey that we undertook on the sample of 90 retailers mentioned in the previous part of this chapter.

The purpose of this research is to examine Marketing Intelligence practices with regard to its different conceptualisations and dimensions, and to suggest predictors for business performances. The study represents an adaptation of another survey methodology, used in an article, focused on the identification of the degree in which the dimensions related to logistic service quality (operational and relational) influence the customers' level of satisfaction and their retention rate within an online retailer, specialized in sales of IT and electronic devices published.

The conceptual model of the research was structured on 2 dimensions and subsequent 10 items, which can be assessed by using a five points Likert scale:

❖ **OPERATIONAL DIMENSIONS**

- **MKINTELL<sub>1</sub>**: Design of the Marketing Intelligence database.
- **MKINTELL<sub>2</sub>**: Marketing Intelligence data gathering.
- **MKINTELL<sub>3</sub>**: Marketing Intelligence data analysis.
- **MKINTELL<sub>4</sub>**: Marketing Intelligence data assessment.
- **MKINTELL<sub>5</sub>**: Marketing Intelligence data dissemination at the level of decision makers.

❖ **STRATEGIC DIMENSION**

- **MKINTELL<sub>6</sub>**: Market size calculation.
- **MKINTELL<sub>7</sub>**: Competitor profiling and analysis.
- **MKINTELL<sub>8</sub>**: Market entry research.
- **MKINTELL<sub>9</sub>**: Market penetration strategy
- **MKINTELL<sub>10</sub>**: Branding research.

According to the one-way analysis of variance ANOVA (Table no.13), the customers who bought products from the retailers included in the sample perceived a high level of satisfaction regarding Marketing Intelligence practices' impact on business performances.

**Table no. 13:** Perception of customers on Marketing Intelligence practices, according to one-way ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Operational MKIntelligence	Between groups	18,415	1	18,415	21,148	0,000
	Within groups	141,585	9	0,826		
	<b>Total</b>	160,000	10			
Strategic MKIntelligence	Between groups	12,460	1	11,180	11,786	0,001
	Within groups	147,5400	9	0,936		
	<b>Total</b>	160,000	10			

The results provided by two-way analysis of variance ANOVA emphasize the fact that the score related to the four items overpass the value of 4. The highest score was assigned to the retailers representatives' perception on the item **MKINTELL<sub>3</sub>** (Marketing Intelligence data analysis) - 4,32, followed by the score assigned to the item **MKINTELL<sub>6</sub>** (Market size calculation) – 4,12 and the score assigned to the item **MKINTELL<sub>5</sub>** (Marketing Intelligence data dissemination at the level of decision makers) – 4,09. The lowest scores were assigned to the customers' perception on the item **MKINTELL<sub>1</sub>** (Design of the Marketing Intelligence database) – 2,64, respectively to the item **MKINTELL<sub>8</sub>** (Market entry research) – 2,87 (Table no.14).

Moreover, the mean of the items corresponding to operational dimension of Marketing Intelligence (3,74) is superior to the mean of the items corresponding to strategic dimension of Marketing Intelligence (3,06).

**Table no. 14:** Results of the two-way ANOVA application

Items	Respondents (n=90)	F	Sig.
<b>MKINTELL<sub>1</sub></b>	<b>2,64</b>	<b>14,28</b>	<b>0,002</b>
<b>MKINTELL<sub>2</sub></b>	<b>4,03</b>	<b>19,23</b>	<b>0,003</b>
<b>MKINTELL<sub>3</sub></b>	<b>4,32</b>	<b>25,49</b>	<b>0,003</b>
<b>MKINTELL<sub>4</sub></b>	<b>3,63</b>	<b>18,32</b>	<b>0,001</b>
<b>MKINTELL<sub>5</sub></b>	<b>4,09</b>	<b>22,68</b>	<b>0,002</b>
<b>MKINTELL<sub>6</sub></b>	<b>4,12</b>	<b>23,73</b>	<b>0,002</b>
<b>MKINTELL<sub>7</sub></b>	<b>2,96</b>	<b>16,92</b>	<b>0,002</b>
<b>MKINTELL<sub>8</sub></b>	<b>2,87</b>	<b>15,82</b>	<b>0,001</b>
<b>MKINTELL<sub>9</sub></b>	<b>3,72</b>	<b>18,84</b>	<b>0,002</b>
<b>MKINTELL<sub>10</sub></b>	<b>3,12</b>	<b>17,75</b>	<b>0,002</b>

In order to identify the Marketing Intelligence dimension which mostly contributes to the business performances, we conducted a linear regression analyses, in which the independent variables were represented by the two dimensions of Marketing Intelligence practices (strategic and operational), while the dependent variable was business performance improvement.

Within the linear regression analysis (Table no.15), the adjusted value related to R-square indicator was 0,72, revealing that the two Marketing Intelligence dimensions generated a variance of 72 percentages in the case of the variable – business performance improvement; the effects of these dimensions on the dependent analyzed variable are, in order of importance, the following:

- operational dimension ( $\beta=0,623$ );
- strategic dimension ( $\beta=0,514$ ).

**Table no. 15:** Results provided by the linear regression analysis, in which the dependent variable was the retailers' perception of business performance

	Unstandardized Coefficients	Standard error	Standardized coefficients	t	Sig
LSQ operational dimension	0,711	0,058	0,623	12,325	0,001
LSQ relational dimension	0,618	0,043	0,514	13,281	0,001

Note: The adjusted value of the indicator R-square = 0.720; F = 132.753; Sig.= 0.001

## 5. CONCLUSIONS

The identification of the retailers' perceptions in what concern the Marketing Intelligence practices contribution to the business performances improvement is relevant for the decision makers from this field.

This study of the relationships between retailers' perceptions of Marketing Intelligence practices and business performance, by combining different statistical methods, is a new and valuable approach in this context. The findings have also important practical implications for marketing professionals from retailing sector.

The main advantage of Marketing Intelligence consists of the fact that they are very suitable for optimizing the functions of continuous variables, of discrete variables or of both types of variables. Another advantage is the fact that their application is performed regardless of the continuity, derivability or mono-modality of the objective functions. Other advantages could be added, such as the improved performances of the research and the simplification of calculations.

If one wishes to maximize the market share, the retail company must decrease the actual price a little; but it is interesting that the program hasn't selected the minimum price indicated within the program. In return, the promotional expenses and especially the ones for quality improvement, the ones for services related to the sale included, must be significantly higher than the ones indicated when the target is to maximize the profit. As a result, it is recommended to spend more for quality improvement, including for the sale related services than for promotional shares. In order to gain more than one percent in the market share, these expenses need to be much higher than the ones registered so far. Any company interested in optimizing the mix of a product can use the program proposed.

It can be easily changed depending on the number of marketing variables that are subject to study, depending on the partial models of reaction of the demand and on the estimated function for the global market demand; all these variables are given for each and every product.

As a future area of research, it is expected to implement the functionality of Marketing Intelligence in the particular own application and to connect the application to the data base of the retail company in order to have direct in real time access to the company's data to be analyzed and to the market it activates on. Once implemented such an application might help the marketer to establish the type of politics that needs to be applied for reaching the strategic objectives that had been set.

We consider that the integration of the Marketing Intelligence dimensions (operational and strategic) within the marketing strategy of a retailer could determine a better position on the market and consequently, an increased business turnover.

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