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## **1. ABSTRACT**

This paper gives a short review on the applying possibilities of colors and points out the specific features of it. The toolkit of marketing must be changed and can be renewed. The competitive situation is intensifying among firms, and the identifying process is quite a complex process. The consumers identifying brands by design and they recognizing firms by logos. This study examined the role of colors with and without the helping image of design. We analyzed the efficiency of colors on responders and created ten clusters regarding their attitudes and the specific characteristics of their identifying process. The hypotheses were analyzed by cross-tabs and were verified by  $\chi^2$  statistic. The statements are relating to the communication strategy of firms and summarizing the results of colors efficiency.

**Key words:** colors, consumer behavior, corporate identity, identifying process, cross tabs

## **2. CONCEPTUAL FRAMEWORK**

The theme of the article is the applying possibilities of colors like undeveloped marketing tools. Until this time, the roles of colors had been examined in lots of area. From the psychological aspects, we can get useful information about the color's energy, what have depended on the depth, saturation and pureness of colors and how we can use this in different situations. In this case, the studies can give useful results in the place of sales. The sociological aspect had examined the estimation of colors, and had looked for relationship between the evolution of personality and the preferred colors of examined person.

The author has made the goals more exact in the beginning. She had defined that she would exam the side of colors free from psychology and sociology. Although we had used the colors' effects mentioned above, but the pure marketing approach had been missing. The colors until this were used like fundamental things or same just like a suddenly raised inspiration. The goal of the research had been how to make the colors more conscious. First of all the importance of the article is that, how can we enlarge the marketing tools with the conscious application of colors? The research about the colors efficiency had verified the theme's significance. Using the results and fitting it to the special company's environment every firm can apply the verified and personal thesis of this research.

### **2.1. The goal and actuality of this research**

The goal of this study is to verify the possibility of conscious application of colors. For this thesis, it is necessary to prove the consumers' susceptibility for the colors; and in the other hand, we need to exam the possible conscious application by companies. According to this one side of the literature background had been the consumer behavior and the identifying of the influencing factors of decision making; the other side of it had been the corporate image, its developing history, and the necessity of grouping the main variables.

Analyzing the literature of consumer behavior and the parts of the corporate image the missed role of color had become known. Although we could find it in some model of corporate identity or it has been defined like one of the influencing factor of consumer.

The actuality of this research is that in present days the tendency of markets leads to enforce the competitive situation for the consumers. There are changing features of the national and international communication strategy emphasizing the young consumer groups' features. The advertising is not about the better or competitive image, but it's about being in league with the

consumers. We can emphasize the feelings of interdependence to make us in better light. One of these tools, which lead to this result, can be the unique or shrill color.

In the different level of competition, we can use different tools; the goal of it is the distinction or the similarity. In the author's primer research that fact was verified which represented the products with similar characteristics using conscious applied and similar colors and with it, we can mix the consumers' identifying ability. However, applying a unique color either in the level of corporate image or product image the efficiency of identifying process can be higher.

## **2.2. Objectives**

The object of this study is to survey the role of colors in marketing. First of all the general appreciation of colors, their appearance in everyday-life, and the mapping of their relations with people are important for us. Within this topic we examine the meaning of colors, their moral reference, and their relationship with feelings, cities, countries and jobs. We analyze the connection between products and colors, particularly concentrating on the degree of consciousness of the presence and type of colors in a given purchase situation, and how much are people able to identify a product according to its color. The next step of our research is the determining of opportunities of identifying companies according to colors, together with the criticism of promotion policy and strategy building in consideration of the results. Among our objectives there is the determination of color or color-combination for the different target groups with the appropriate group-building criteria.

## **3. LITERATURE BACKGROUND**

If we suppose that the consumer can reach a higher level of satisfaction as a result of rational decision-making (O'Shaughnessy and O'Shaughnessy, 2005)<sup>1</sup>, and the different risk factors have a great effect on their decision, a question will arise: Can the risks be decreased with the application of colors by brand-reputation and identification? In Frank's (1988)<sup>2</sup> commitment model appear not only the rational, but the emotional factors, and the emphasis is still on the

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<sup>1</sup> O'Shaughnessy, J. - O'Shaughnessy, N. J. [2005]: „Considerations of equity in Marketing and Nozick's Decision value Model" Academy of Marketing Science Review 2005 (10)

<sup>2</sup> Frank, Robert [1988]: Passions within Reason. The Strategic Role of the Emotions, New York. WW. Norton & Company Inc.

examination of costs and benefits. However in Nozick's (1993)<sup>3</sup> decision-value model more factors are included that can influence the consumer in the shopping decision, and the most important are the symbolic benefits, that may cause the decision. Among these values representing a symbolic advantage appears the colors, too.

A former research (Laufer – Silver – Meyer; 2005)<sup>4</sup> has already proved that we can determine segments, consumer groups by taking into consideration the level of dissonant feelings following from the insecurity of a product, and defining these we can form groups. The authors of the above mentioned research surveyed the difference between young and old people, who helped them to realize that colors can be used in processes in order to lessen dissonance.

Considering the option of consumers, (Gabel, 2005)<sup>5</sup> and the elongated buying decision process caused by this, it is natural that the adequate knowing of brands simplifies the whole buying decision process. If the potential customers are aware of the brand due to the use of the appropriate color, we can cut down extra-time.

According to Echambadi's (2000)<sup>6</sup> three-type-commitment (planning, normative, and emotional), and the improved adaptation of the model (Pimentel – Reynolds, 2004)<sup>7</sup>, that analyzes the connection with brands, we can draw a parallel between colors and brand reputation.

Examining the differences between cultures, one of the authors laid down (Dernóczy, 2004)<sup>8</sup> that the appreciation of colors change, when they get into a different culture. Srnka (2004)<sup>9</sup> studied the ethical background and the conditions of adaptability in this view. A question is aroused, in what way is acceptable the more dominant presence of color because of its subconscious character. According to another research (Ogden – Ogden – Schau, 2004)<sup>10</sup> in case of products representing a high value is the presence of symbolic attributes high, too, and the symbolic meaning of colors can be subordinated to this theory.

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<sup>3</sup> Nozick, Robert [1993]: The Nature of Rationality, Princetin, NJ: Prinveton University Press

<sup>4</sup> Laufer, D -Silver, D., H and Meyer, T. [2005]: "Exploring Differences Between Older and Younger Consumers in Attributions of Blame for Product Harm Crises." *Academy of Marketing Science Review* 2005 (7)

<sup>5</sup> Gable, Terrance G. 2005. "Toward an Expanded Theory of Surrogate Consumption: Consideration of Consumer Choice and Choicelessness." *Academy of Marketing Science Review* 2005 (6)

<sup>6</sup> Echambadi, Raj. 2000. "Customer Retention: An Integrative Model and Empirical Test." working paper.

<sup>7</sup> Pimentel, Robert W. and Kristy E. Reynolds . 2004. "A Model for Consumer Devotion: Affective Commitment with Proactive Sustaining Behaviors." *Academy of Marketing Science Review* 2004 (5)

<sup>8</sup> Dernóczy, Adrienn [2003]: Globalizing colors – globalizing senses In: Európaiság és magyarság I. kötet, Komárom VEAB, ISBN 963 7385 67 3

<sup>9</sup> Srnka, Katharina J.. 2004. "Culture's Role in Marketers' Ethical Decision Making: An Integrated Theoretical Framework." *Academy of Marketing Science Review* 2004 (1)

<sup>10</sup> Ogden, Denise T., James R. Ogden, and Hope Jensen Schau. 2004. "Exploring the Impact of Culture and Acculturation on Consumer Purchase Decisions: Toward a Microcultural Perspective." *Academy of Marketing Science Review* 2004

According to the other related are the corporate identity is a complex concept. According to Christie et al<sup>11</sup> the corporate identity can be originated from the positive and negative influences of interaction between the own, planned and perceived image. The strong and positive image can be a comparative advantage<sup>12</sup>. We have to analyze the stakeholders of corporate image to get the right strategy toward them. According to Melewar and Akel<sup>13</sup> the target groups can be divided into twelve subparts. The four main parts are: the direct and closest target groups, like consumers or employees, etc.; the companies connected to the administration level of the firms, like government; the direct influencing elements toward the market behavior, like competitors or opinion leaders, and the indirect influencing factors, like potential employees or environmentalists. We should define those groups properly to get their motivations and features to have an efficient strategy.

In the other parts, according to Albert and Whetton<sup>14</sup> the salience of identity can be divided into three parts. The central identity factors must be related to the company itself, the distinctive factors can be an advantage related to the competitors, and the permanent factors will lead to a long time period and a long market role. Balmer<sup>15</sup> has developed this model. In his opinion the permanent factors must be emphasized like developing factors. The triad of the identity, values and tradition and their connection can be the motivate power. In his opinion the environment and leadership must be mentioned among those factors. In the corporate identity mix we can find the strategy, the structure, the communication and the culture. In the area of communication we can analyze the role of colors.

In the other case the corporate dimension must be more emphasized. Hatch and Schultz<sup>16</sup>, Moingeon and Soenen<sup>17</sup> have stated the five elements of corporate identity. The elements are the expressed and planned identity (the closest elements toward the corporate identity), the experienced and manifested identity (related to the culture and tradition), and the endowed or authorized identity.

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<sup>11</sup> Christie, D. – Barker, M. – Fraser, C.[2002]: Corporate Image under the microscope: stakeholder analysis of a university campus using the HIPSYS program, IFSAM Conference, Gold Coast, Queensland, Australia

<sup>12</sup> Fatt, J.P.T. – Wei, M – Yuen, S. – Suan, W. [2000]: Enhancing corporate image in organisations. Management Research News, Vol. 23. (5/6), 28-54

<sup>13</sup> Melewar, T.C. – Akel, S. [2005]: The role of corporate identity in the higher education sector. A case study. Corporate Communications An International Journal, Vol.10 (1) 41-57

<sup>14</sup> Albert – Whetton [1985]: Questions about Identity Process. Journal of Marketing and Management, Vol. 2. 74-85.

<sup>15</sup> Balmer, J. M. T [2001]: Corporate Identity, corporate branding and corporate marketing. European Journal of Marketing 35 (3/4) 248-291

<sup>16</sup> Hatch, M.J. – Schultz, M. [1997]: Relations between organizational culture, identity and leadership. European Journal of Marketing, 31 (5-6), 356-365

<sup>17</sup> Moingeon, B. – Soenen, G [2002]: The five facets of collective identities: integrating corporate and organizational identity. In: Moingeon, B. – Soenen, G [2002]: Corporate and organizational identities? integrating strategy, marketing, communication and organizational perspectives. London, Routledge

According to Melewar and Jenkins<sup>18</sup> the corporate identity can be divided into five parts which led to the efficient identifying. The right communication level and quality toward the stakeholders, the corporate behavior in the market which lead to the attitudes; the acceptable corporate culture; and the conditions of market which lead to the market situation and competitive situation's quality.

In the model of Birkigt and Stadler<sup>19</sup> the elements of corporate identity are the behavior, the communication and the symbolism. The colors like the proper tools for symbolism can be mentioned. In the other hand according to Abrat<sup>20</sup> the motivate power can be more defined. The corporate, the aims of communication, the functional aims of communications, the structures and the system development influence the corporate identity. In Schmitt's<sup>21</sup> opinion the culture, the market conditions, the strategy, the products and services, and the execution are the most emphasized and influencing factors in the corporate identity. Olins<sup>22</sup> has recognized that dispensing with the factors mentioned above the physical environment has an emphasized influence to the identity.

According to these literatures we can state that the strategy what secure the corporate identity can contain psychological and graphical tools, marketing strategy and corporate behavior. It is important to secure the synergy of aims, and the right emphasis and values of applied tools.

#### **4. RESEARCH METHOD**

In the phase of exploratory research secondary data has been used. There are two related area of the literature background – because of missing results of color's application – first is the consumer behavior and the second is the corporate identity. Analyzing the main process and models it has been raised that the pure color application in marketing without of psychology and sociology is missing. This led to that thesis that the role of color must be identified and analyzed.

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<sup>18</sup> Melewar, T.C. – Jenkins, E. [2002]: Defining the corporate identity consrtuct. *Corporate Reputation* 5 (1), 76-91

<sup>19</sup> Birkigt, K.– Stadler, M. M. [1986]: *Corporate Identity: Grundlagen, Funktionen, Fallbeispiele*. 3rd Edition, Landsberg am Lech, Verlag Moderne Industrie

<sup>20</sup> Abrat, R. [1989]: A new approach to the corporate image management process. *Journal of Marketing and Management* No. 1. 63-76

<sup>21</sup> Shmitt, B.[1995]: *Experimental Marketing*, *Journal of Marketing and Management*, Vol.15. 53-67

<sup>22</sup> Olins, W [1995]: *The new guide to identify: how to create and sustaine change through managing identity*. Aldershot, UK Gower Publishing

The features of the study and the colors are limited the scaling and measurements methods. The data lead mostly to nominal scaling. The  $\chi^2$  statistics can be used to verify the theses.

The primary research is based on a questionnaire, which is completed with a focus-group survey and profound interview techniques.

The sample size related to the quantitative method is included 342 responders. After the data cleaning and processing the applying questionnaires' volume is 323.

One of the used sampling techniques is the convenience sampling because of its advantages.

The aim in this phase of the research is to gather more responders rather than its representative feature to cover the problem itself. The other technique is the snowball sampling, when the responders forwarded the questionnaire by e-mail to the others. In this case the limits of the geographical borders are disappeared.

The demographic features of the sample are:

- rates of gender: 50,2 % male, 49,8% female
- rates of age: 33,7 % under 25, 32,4 %-a between 25-35, 26,3 % between 36-51, 7,6 % up to 51.
- rates of job: 32,4 % non active, 57,9 % white collars, 9,7 % blue collars.
- rates of place of residence: 8% from the capital city, 36,3% from county towns, 38,5% from towns, 17,2% from villages.

The questionnaire can be divided into more parts. The first part of it includes the general appreciation, the meaning and the importance of colors in a usual buying situation. It looks for relations between colors and jobs, cities, countries. (E.g. What kind of color can be connected to naivety? What kind of color can be connected to the politicians? In your opinion what is the ideal color for washing machine? Etc.)

The second part implies the attitude-statements used for group-founding, and that is the base for the cluster-analysis. It has been measured by Likert scale. (E.g: I prefer national brands rather international ones. Etc.)

It is followed by series of questions examining the linking of colors and products, in order to get information how much are customers able to identify a product by its colors (with the help of design and form). (E.g.: Can you recognize these products? If so please fill their names. Etc.) In this case among the products we can find both heterogeneous and homogeneous products.

### **Figure 1: Products to recognizing without brand name**



The fourth block analyzes the relations between companies and colors, where only the color-combination help to determine the firms. (E.g.: Can you recognize these firms? If so please fill the names. Etc.)

**Figure 2: Mobile companies to recognizing**



The focus group technique is used in this research to gather consumer perceptions and opinions on product characteristics, companies' image and advertising. The limitations of the focus group interviews can be caused by the absence of representative and the significant deviations in the field of qualification and general literacy of participants. The main aim is to generate impressions of products and companies. It is hard to define the different subgroups, because there can be several distinct population segments in the color's scope.

The use of focus-group interviews helps to answer those questions that came from the irregular results of the previous quantitative research and must be certified.

In the profound interview phase the CEO-s and decision makers of companies, where form the view of the survey major changes in the image of the company or in the color of a product produced by a firm has recently taken place, are asked

## 5. HYPOTHESES

1. A.) The consumer categories based on demographic features had had different efficiency in the right color linking with companies' names.
1. B.) The consumer categories based on lifestyle had had different efficiency in the right color linking with companies' names.
2. A.) The consumer categories based on demographic features had had different efficiency in the right product recognising.
2. B.) The consumer categories based on lifestyle had had different efficiency in the right product recognising.

3. A.) The consumer categories based on demographic features had had different efficiency in the right companies recognising.
3. B.) The consumer categories based on lifestyle had had different efficiency in the right companies recognising.
4. A.) The consumer categories based on demographic features or lifestyle had had different efficiency for the reciprocity.
4. B.) The reciprocity has been related to the company and could be verified by the corporate communication strategy.

## 6. SUMMARIZING THE NEW RESULTS AND MAIN STATEMENTS OF THE STUDY AND PRESENTING THE RESULTS

*1<sup>st</sup> hypotheses: The consumer groups based on demographic features and lifestyle had different efficiency in right color linking to the companies' names.*

The first group of the hypothesis had been related to the right color linking. The hypothesis was examined by sex, age, job, place of residence and cluster membership. In her assumption there had been differences between groups, so the respondents had had different rate in the right color linking with companies. The examined firms had had from different branches. There had been some cases where the color defining had been difficult. It could be caused by the communication system or by the unrequired defining. In the other hand there had been some cases where the colors had been melted with the firm (like IBM and blue), or where the communication level had been so intensive that we could recall its colors and logos easily.

Among the examined companies the deviation had arisen from the gender had been in the 25 % of cases, so the gender related part of the theoretical hypothesis had been rejected. The gender of the respondent had not influenced the color linking with the companies' names; they were independent.

**Table 1. Statistics for the hypothesis related gender**

company	$\chi^2$	prob. of sig.
Renault	3,96	0,047
OTP Bank	5,264	0,022
Raiffeisen	0,077	0,781
T-Mobile	1,766	0,184
Shell	0,368	0,544
Mol	1,445	0,229
Opel	0,249	0,618

Henkel	3,381	0,066
Allianz	0,469	0,493
Szamos Marcipán	2,925	0,087
IKEA	2,846	0,092
IBM	23,725	0,000

Among the examined companies the deviation had arisen from the age had been in 58 % of cases, so the age related part of the theoretical hypothesis had been partly accepted. The youths could identify better like the older ones.

**Table 2. Statistics for the hypothesis related age**

company	$\chi^2$	prob. of sig.	contingency	best group
OTP Bank	25,055	0,000	0,271	under 24
Raiffeisen	17,726	0,001	0,231	under 24
T-Mobile	11,679	0,009	0,189	between 36 to 50
Mol	11,176	0,011	0,185	under 24
Szamos Marcipán	8,965	0,030	0,168	between 24 to 35
IKEA	30,730	0,000	0,299	under 24
IBM	17,950	0,000	0,233	between 24 to 35

Among the examined companies, the statistically significant deviation arisen from the job had been in 42 % of cases (five companies). Nevertheless, it could be caused by the age bias, so the author had accepted these under reserve. The job related part of the theoretical hypothesis had been rejected.

Among the examined companies the statistically significant deviation arisen by place of resident in one case. The place of resident related part of the theoretical hypothesis had been rejected.

In the case of sub-samples based on cluster membership half of the examined companies had had significant deviation, so it could be stated that there had been relationships between the variables for clusters and linking color. The cluster membership related part of the theoretical hypothesis had been partly accepted.

**Table 3. Deviances**

companies	$\chi^2$	Prob. of Sig.	Contingency	best group
Raiffeisen	20,180	0,017	0,246	cautious daredevil
T-Mobile	17,798	0,038	0,233	global stubborn

Shell	25,791	0,002	0,276	global stubborn
Henkel	23,838	0,005	0,268	global stubborn
Allianz	19,136	0,024	0,240	designing daredevil
IKEA	19,222	0,023	0,242	global stubborn

**Table 4. Companies and the best groups**

companies	gender	age	profession	place of residence	cluster
Renault	male			capital	
OTP Bank	male	under 24	passive		
Raiffeisen		under 24	passive		cautious daredevil
T-Mobile		between 36 and 50			global stubborn
Shell			passive		global stubborn
Mol		under 24	blue collar		
Opel					
Henkel			passive		global stubborn
Allianz					designing daredevil
Szamos Marcipán		between 24 and 35			
IKEA		under 24			global stubborn
IBM	male	between 24 and 35			

*2<sup>nd</sup> hypotheses: The consumer groups based on demographic features and lifestyle had different efficiency in recognising products.*

The author supposed that the differences between sub-samples would be significant. She had stated these on the different product usage by different groups. She had assumed that among the recognising of examined product would be statistically significant differences made by the diverse groups based on different independent variables. The author had made an effort when had chosen the products. There were products with similar characteristics and products with dissimilar features.

Among the examined products the deviation arisen from the gender had been in the 51 % of cases, so the gender related part of the theoretical hypothesis had been partly accepted. The products related to the gender had higher deviance, and to summarize the women had been better in recognising like men.

Among the examined products the deviation arisen from the age had been in 65 % of cases, so the age related part of the theoretical hypothesis had been partly accepted. In this case the most efficient group had been the youths, most part of the cases they had better results.

Based on jobs the research had resulted the same like before. Among the examined products the statistically significant deviation arisen from the job had been in 70 % of cases. The job related part of the theoretical hypothesis had been accepted. The author had accepted these under reserve and the cause must be examined in a further research.

Among the examined products the statistically significant deviation arisen by place of resident had been minimal, so the place of resident related part of the theoretical hypothesis had been rejected. The right answers were determined by the respondents' place of resident in 14 % of cases.

In the case of sub-samples based on cluster membership 60 % of the examined products had had significant deviation. The cluster membership related part of the theoretical hypothesis had been partly accepted. The result of the hypotheses could be more exact by examining the basic variables.

**Table 5. Products and the best groups**

		gender	age	profession	place of residence	cluster
soft drinks	Sió	female	51-			
	Happy Day	female		passive		
	Hey Ho		under 24	passive		opened but avoid risk
	Hey Ho Premium		24-35	passive	village	designing daredevil
coffee	Tesco			blue collars		
	Edusho		under 24	passive		designing daredevil
	Tchibo	female	36-50	passive		global opened
	Merido		under 24			
beers	Amstel			blue collars	town	opened but avoid risk
	Szalon	male	under 24	blue collars		designing daredevil
	Stella		under 24	passive		
	Borsodi			passive		
other	Balfi	female	under 24	passive	county city	cautious daredevil
	Fonyódi		under 24	passive		
	Zewa Softis		under 24	passive		
	Friskies			passive		
foodstuffs	Maggi		under 24			
	Rama	female	24-35	passive		forever optimistic
	Parmalat	female	under 24			global stubborn
	MiZo	female			capital	designing

						daredevil
dairy products	Danone	female				designing daredevil
	Danette					
	Danone Éden		under 24			
	Bakony túrókrém	female	under 24	passive		
chocolates	Sport szelet		under 24	passive		global stubborn
	Milka		under 24		village	forever optimistic
	3Bit		under 24	passive		global stubborn
	Boci csoki		under 24			designing daredevil
tooth-paste	Colgate		under 24	passive		designing daredevil
	Aquafresh	female	under 24	passive		
	Amodent	female	under 24	passive		apathetic-stay-at-home
crèmes	Dove	female	under 24	blue collars		designing daredevil
	Garnier	female		passive		designing daredevil
	Baba	female	under 24	passive		designing daredevil
	Nívea		under 24	blue collars		designing daredevil
washing powder	Ariel	female	36-50	blue collars		designing daredevil
	Tomi Kristály	female				global stubborn
	Persil	female	under 24	passive		
	Vanish	female	under 24			
cleaning agents	Pur		under 24	passive	town	forever optimistic
	Cif	female	under 24	passive		global stubborn
	Cillit	female	36-50	passive		
	Domestos	female	under 24			designing daredevil

*3<sup>rd</sup> hypotheses: The consumer groups based on demographic features and lifestyle had different efficiency in recognising companies.*

The third part of the research had analyzed the identification of firms by colors. The respondent had given the right answer just using the companies' colors. Knowing the answers the next statements have arisen:

- identifying companies had been difficult just using colors;

- there had been groups who had been more efficient in this case like the case before;
- the identifying process could be more effective by using the other design tools for the less visual consumers;
- the most emphasized firms with intensive communication had recognized in higher rate;
- those firms who had had only one emphasized color in their corporate design had been better recognized like the others.

The identifying role of colors could be determined by the comparative analyzes of the 2<sup>nd</sup> and 3<sup>rd</sup> hypotheses. Until the 2<sup>nd</sup> thesis had been based on the design and colors, this one had been based on just colors. There had been more statistically significant deviation in the case of color examining like in the case of design and color. So that could be stated that there were groups where the colors could be used like efficient tools.

Based on the results there had been more statement. One of them had been that the identification could be more difficult in powerful competitive situation. It could be harder when their used colors or design had been similar.

In those cases, where the companies had had target groups, these groups had been more effective related to the identifying like the others. At those firms, who had used the mass marketing, the differences between the results had been caused by other factors. The examined firms were selected by the intensity of their communication strategy. The referred areas were filling stations, malls, mobile phones companies, TV channels and banks.

Among the examined companies the deviation arisen from the gender had been in the 20 % of cases, so the gender related part of the theoretical hypothesis had been rejected. The respondents' gender had had a minimal influence for the identification.

**Table 6. Recognizing companies by gender**

	$\chi^2$ statistics	probability	contingency coefficient	best group
OMV	0,378	0,539		
Shell	0,309	0,578		
Agip	0,122	0,727		
MOL	3,934	0,047	0,111	male

Auchan	1,987	0,159		
Plus	8,672	0,003	0,164	female
IKEA	1,974	0,160		
Tesco	1,955	0,162		
Pannon GSM	0,965	0,326		
T-Mobile	0,900	0,343		
Vodafone	0,031	0,860		
Matáv	2,634	0,105		
RTL Klub	0,261	0,609		
TV2	0,194	0,017		
Romantika	7,533	0,006	0,311	female
Viva+	2,627	0,105		
OTP Bank	1,955	0,162		
ING	0,025	0,873		
Ella	0,000	0,991		
Raiffeisen	13,161	0,000	0,202	female

Among the examined companies the deviation arisen from the age had been in 90 % of cases, so the age related part of the theoretical hypothesis had been accepted. In this case the most efficient group had been the youths, it could be caused by their susceptibility and the communication affects for them.

**Table 7. Recognizing companies by age**

	$\chi^2$ statistics	probability	contingency coefficient	best group
OMV	28,480	0,000	0,301	under 24
Shell	12,646	0,005	0,200	under 24
Agip	22,793	0,000	0,269	under 24
MOL	20,266	0,000	0,254	between 24 and 35
Auchan	11,840	0,008	0,194	under 24
Plus	24,040	0,000	0,276	under 24
IKEA	8,672	0,034	0,166	under 24
Tesco	8,370	0,039	0,163	under 24
Pannon GSM	54,746	0,000	0,417	under 24
T-Mobile	3,782	0,286		
Vodafone	11,113	0,011	0,188	under 24
Matáv	10,279	0,016	0,161	under 24
RTL Klub	13,201	0,004	0,205	under 24
TV2	14,507	0,002	0,215	under 24
Romantika	2,662	0,264		
Viva+	19, 659	0,000	0,250	under 24
OTP Bank	11,549	0,009	0,191	under 24
ING	13,839	0,003	0,210	under 24
Ella	9,961	0,019	0,178	under 24

Raiffeisen	44,005	0,000	0,374	under 24
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Among the examined products the statistically significant deviation arisen from the job had been in high number of cases. The job related part of the theoretical hypothesis had been accepted. The author had accepted these under reserve and the cause must be examined in a further research.

**Table 8. Recognizing companies by profession**

	$\chi^2$ statistics	probability	contingency coefficient	best group
OMV	5,522	0,063		
Shell	8,160	0,017	0,163	passive
Agip	22,948	0,000	0,273	passive
MOL	2,517	0,284		
Auchan	18,700	0,000	0,246	passive
Plus	26,925	0,000	0,295	passive
IKEA	8,252	0,016	0,163	passive
Tesco	17,898	0,000	0,241	passive
Pannon GSM	59,428	0,000	0,439	passive
T-Mobile	17,680	0,000	0,239	white collar
Vodafon	36,232	0,000	0,342	passive
Matáv	12,506	0,002	0,201	passive
RTL Klub	5,503	0,064		
TV2	7,770	0,021	0,159	passive
Romantika	5,333	0,069		
Viva+	26,995	0,000	0,296	passive
OTP Bank	16,294	0,000	0,230	passive
ING	9,260	0,010	0,173	blue collar
Ella	9,278	0,010	0,173	blue collar
Raiffeisen	54,018	0,000	0,418	passive

Among the examined products the statistically significant deviation arisen by place of resident had been minimal, so the place of resident related part of the theoretical hypothesis had been rejected. There had not been interaction between the right answers and the respondent's place of resident.

In the case of sub-samples based on cluster membership 80 % of the examined products had had significant deviation. The cluster membership related part of the theoretical hypothesis had been accepted.

**Table 9. Recognizing companies by cluster membership**

	$\chi^2$ statistics	probability	contingency coefficient	best group
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OMV	29,301	0,001	0,306	forever optimistic
Shell	28,507	0,001	0,302	designing daredevil
Agip	20,703	0,014	0,258	patriot
MOL	23,486	0,005	0,274	forever optimistic
Auchan	17,861	0,037	0,239	designing daredevil
Plus	32,628	0,000	0,323	apathetic-stay-at-home
IKEA	18,237	0,033	0,242	apathetic-stay-at-home
Tesco	26,171	0,002	0,290	designing daredevil
Pannon GSM	28,152	0,001	0,300	designing daredevil
T-Mobile	22,042	0,009	0,266	global stubborn
Vodafone	31,235	0,000	0,316	opened-but-avoid-risk
Matáv	10,765	0,292		
RTL Klub	20,196	0,017	0,254	opened-but-avoid-risk
TV2	13,811	0,129		
Romantika	27,216	0,001	0,598	local schizophrenic
Viva+	13,134	0,157		
OTP Bank	36,762	0,000	0,343	global opened
ING	31,399	0,000	0,317	global opened
Ella	15,785	0,072		
Raiffeisen	34,380	0,000	0,332	designing daredevil

*4<sup>th</sup> hypotheses: The consumer groups based on demographic features and lifestyle had different efficiency in color reciprocity.*

The forth part of the research had examined the relationship between the model for analyzing the efficiency of communication policy and the 3<sup>rd</sup> hypothesis. In this theses the better dimension in the impression – willingness matrix had led to the better recognizing rate.

**Table 10. Frequency analysis to the 4th hypotheses (%)**

companies	rate of the right answers	
	connecting colors	recognizing colors
OTP Bank	88,8	76,9
Raiffeisen	72,8	76,8
T-Mobile	68,6	78,9
Shell	83,2	86,7
Mol	79,0	80,8
IKEA	66,2	88,2

Generally the reciprocity couldn't be proved. When the whole sample had been analyzed there had not been interaction between the two variables. Therefore, the right color linking had not determined the right recognizing by colors. On the strength of this the theoretical hypotheses part A had been rejected.

If the consumer had been aimed by the companies with intensive impacts in sort time the reciprocity could be realized. The stress was on the right fixation and on sort time. Related to this the reciprocity was not permanent.

The presence of reciprocity had caused by the consumer visually level, so the rate of this factor must be analyzed by further research.

One part of the consumers had been able to identify by colors, the other part of them had been able to link the right color independently of each other. To raise the causes could be an aim to the further research.

According to the results the B part (reciprocity focused on firms) of the theoretical hypotheses had been accepted. During the primary research the reciprocity was proved. The reciprocity had been depended on the companies' features. Divided the sample into subgroups the ability of them for reciprocity had been proved. Using the cross-tabs to verify the theoretical hypotheses the following results can be represented:

**Table 11. Groups had been able to the color reciprocity in the examined firms**

	groups	$\chi^2$	prob. level of sig.	$\Phi$ coefficient
Firm 1. OTP	age between 25 thru 35	3,961	0,047	0,224
	non active worker	10,459	0,001	0,346
Firm 2. Raiffeisen	female	13,990	0,000	0,350
	metropolitan	14,000	0,000	0,707
	from county town	6,093	0,014	0,287
	age between 25 thru 35	4,014	0,045	0,252
	age between 36 thru 50	9,264	0,002	0,438
	“opened but avoid risk”	18,906	0,000	0,567
	“global opened”	8,726	0,003	0,475
	“patriot”	5,698	0,017	0,480
Firm 3. T-Mobile	“designing daredevil”	5,318	0,021	0,640
	female	4,063	0,044	0,191
Firm 4. IKEA	age between 36 thru 50	5,441	0,020	0,319
	white collar	10,269	0,001	0,285
	“cautious daredevil”	8,571	0,003	0,471
Firm 5. Shell	from country town	4,861	0,027	0,234

Summing up the results the identifying function of colors had been determined and had been bordered by the basic demographic factors and the cluster membership.

## **7. PRACTICAL UTILITY OF THE STUDY'S RESULTS**

The practical utility of the research had been the possible usage of colors like marketing tools. Until this, the colors had not been used consciously but now it can be a good tool in the strategic marketing. The colors can be used like a target group oriented, conscious actor in the communication policy. Judging the results they could be used for the business. The creating of communication strategy can be changed by taking the target groups and their attributes into consideration.

According to the result the right color linking can be reached without efforts in the case of targeting the youth. The corporate image can be permanent. In that case if the company were able to segmenting its target group by lifestyle, the factors would determine the intensity of communication. In the case of gender related products the waste coverage can be reduced by reminder advertising, the probability of recognizing with colors is higher.

Targeting the older groups it is necessary to use more forceful reminder ads and BTL tools. This statement is based on the examined products and the communication strategy level behind them. If the aim is the increase of the identification on clusters, the “susceptibility to the novelty” factor has determining the practice. If the variable’s level is lower, the communication intensity can be lower, too. The identifying can be easier by using unique colors in vigorous competitive situation, and it will simplify the communication. The unified image with one or few colors can be more remarkable and easier recognised. The designers of the firms can be more persuadable of using these colors by this result. The more intensive connection towards the consumers had influence the effectiveness of recognising companies. If the firms’ goal is the identifying by colors in both sides, they have to make their communication more intensive. The reciprocity had not influence the consumers’ opinion about the company, so it’s just a plus advantage of them.

The limits of the studies are derived from the specialized area. First of all the nominal scale lead to limited statistical method and measurement models. The second limit can be mentioned about the research method. It is hard to examine the colors’ affect to the consumer behavior. We must have used both qualitative and quantitative methods. It is hard to gather a

representative sample and it is hard to find the related features. Will the job or the place of residence affect differences in the recognizing method? It is hard to define the proper variables.

The result of this study can be used to have a better corporate image and more efficient communication strategy. With the right strategy and color application the potential consumer can be reached and remembered much more easily. Analyzing the targeting consumers with both demographics and psychographics we can know that if it is possible or enough to use just colors like tools or not. Do I have to pay attention to the colors or don't?

In the future the study must be expanded. One way of the spreading can be the analyzing of the cultural differences in international size. Other way can be a specialized focusing in some consumer or product area, e.g. colors and car brands. In the other side we can enlarge the study into different companies or industrial areas.

Summing up the colors can be useful strategic tools in product design or in the corporate identity.

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