

Consumer behaviour towards new products

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Abstract. *The main purpose of this paper is to find a structure of consumer behaviour, especially regarding the preference for the newly-released products from the market. We intend to study the impact of the new, innovative products compared to the traditional ones. Empirical research is based on the selling mix of a company in Romania and Austria. The analysis of this case will be done with the support of an econometric model of simple regression. This research confirms the validation of the structure and the attitude of the consumers towards the new products, launched by that company. By applying this linear model, it is possible to identify the percentage of the increase or decrease in consumption of new products. The need of carrying out this study regarding the impact of the consumption of new products is to create a profile and to find the causes that influence their acquisition. The originality of this paper lays in studying some aspects of influence over the consumption of new products from McDonald's in Romania and Austria. Where does McDonald's stand regarding the digitalization? It is not enough to sell new products; it is also necessary to bring innovation in the organization. Nowadays consumers are more present in the online environment and retailers are adapting at a fast pace to their needs of direct communication and transparency. How does a company that faces Slow Food and Bio era, deal with consumers who are more preoccupied with the nutritive values of the nourishment act? Platforms for real-time communication with clients such as "Our food. Your question" redefined the term of transparency and helped McDonald's stop bad rumors. The results of the research will show us if there really is transformation in behaviour towards traditional products and in what degree consumers are influenced by innovation.*

Keywords: consumer behavior, consumer structure, communication campaigns, innovation, digitalization, statistics.

Introduction

If we start from the global capitalism, based on the expansion of multinational companies, we notice that this environment adds value to the entrepreneurial environment. This value addition is based on consumer trends and preferences, but also on gaining a maximum profit. In general, the business environment has to rely on the turnover volume for the constant reinventing of products and services, of quality and prices. Hoyer et al. (2008) developed a conceptual model for finding the clues and the decisional way of buying goods and services that already exist on the market at a certain moment. This model integrates

four areas regarding consumer behavior, namely: (1) the psychological part; (2) the decisional process; (3) consumer culture and (4) problems and results. This model follows the understanding regarding the way we research the consumption and consumer behavior, helping marketing structure develop efficient tactics, strategies in order to satisfy the needs of potential clients. The main goal of this work is to enter the mind of the consumer by using real data in order to make an actual and behavioral analysis of the consumer towards new products. Starting from the initial hypothesis that the wish of the consumers is to have access to innovative products as often as possible, as a proof of competitiveness of the favorite brand, we want to look at actual data in order to analyze with precision the effects of launching new products in Food & Beverages segment in Romania, especially inside McDonald's chain of restaurants. We'll also try to empirically analyze the effects of modern marketing campaigns in this market segment, namely, the strategies of approaching consumers by various communication channels and the way the company influences the process of decision making in favor of new products.

Literature review

With an important relevance for the present paper comes the definition elaborated by Cătoi and Teodorescu (1997, p. 53), as follows: *"Consumer behavior can be defined as a multidimensional concept, as a specific result of a system of dynamic relations between perception processes, information, attitude, motivation and effective manifestation which define the integration of the individual or of the group in the space opened by the ensemble of consumption goods and services existing in the society at a certain moment, by individual or group decisional acts that regard these."*

Generally, economists consider two main growth sources: (1) the supplementation with more input factors (capital and labor) and (2) innovation, technological change or, in economic terms, total factor productivity. These two strategies could be simply named: growth through brute force and smart growth. MIT professor Robert Solow won the Nobel prize for economics by showing that in the end of the 50s, in USA and few other industrialized countries, innovation and smart growth were more important than brute force in generating extra results on long term (Solow, 1956-1957). Consequently, according to Solow, innovation is similar to godsend: something that cannot be controlled by policymakers. Even if these people may discretely influence innovation through sponsored research or incentives for study and development, the rhythm of innovation is essential as given. Theoretical models of economic growth created by Solow and other scientists make fast ways of expressing in mathematical terms the relationships between certain input variables – labor, technological advance, capital – and productivity growth in goods and services. Although abstract, these models can generate ideas.

Starting from the fact that the individual has to satisfy his biogenic and psychogenic needs at all times, day and night, it is imperatively necessary to see in this work the reason that determines him to act towards this way of satisfaction. Among the most known human motivational theories, we have the theory of Sigmund Freud who started from emphasizing the unconscious motivations, proving that beyond the utility function, the consumer has also a symbolical one, of the real psychological forces which belong in great measure to the subconscious mind. A person accepts the rules of the game from the social environment by repressing some impulses, but these will not be eliminated or completely solved. They will appear in the form of uncontrolled actions or in the form of dreams. Apart from this theory

we also have other incentives studied by Adler, according to whom the man fights for superiority in order to eliminate the inferior feelings got in the childhood. Framm and Sullivan on the aversion for loneliness and Horney insisting on anxiety and security needs. Any person who undertakes an action from a justified or unjustified impulse in order to satisfy the human needs will have a state of angst or tension.

In order to better understand consumer behavior in business economy, we believe that we should have other relevant views for the managerial study environment. If we consider the theory of the experts in emotional marketing, the consumer goes through three stages in what he calls “consumer’s journey”: the stage of awareness, the stage of consideration, the stage of decision. Thus, we observe the behavior of modern consumer, self-educated, free in exploring the most suitable products for him. In the first stage, the consumer is in the phase of finding some symptoms or needs which require his attention and initiate the search for the information. Then, the process reaches the second stage, when the consumer already has a name for his problem, is aware of the need and can look towards an appropriate solution. Only in the third stage of his journey, the consumer is prepared to make a decision regarding the most suitable product for his needs.

The journey of the consumer is one of the essential concepts of contemporary marketing regarding the buying decision for a service or good, which can be seen as a cost-benefit analysis in the presence of multiple alternatives (Engle et al, 1968). Nowadays, the internet and social networks change a lot the social, informational and political game. The marketing in Facebook and Instagram Era involves a lot more participation, is more direct and quicker than traditional means of advertising. These networks started to rather look like “Socrates’ gathering”, where everything is decided among all consumers. In Romania, the society became more complex than some decades ago and so, we can notice two types of consumers: the traditional consumer stayed with the traditional means of information such as TV and written media, while the modern one prospered by easily using the modern means of information such as blogs, official web sites and social pages. Essentially, traditional advertising system didn’t lose its role in marketing, but among them a new trend also appeared which will change very fast the rule of the game.

Brands that are present on the social networks in Romania are considering user preferences when they choose the communication channels with clients. According to manafu.ro, YouTube is a communication channel appreciated at the national level, the same sources confirming the presence of over 9 million individual users since 2015 and over 1 million channels. If we choose to evaluate consumer preferences according to the internet access rankings by Romanian users, the situation looks like this, according to alexa.com(n/a): Google, YouTube, Facebook, in this order from 1 to 3. These ‘national trends’ lead us precisely to the location where we can look for information about consumers, and so we’ll also research the way of communication of McDonald’s in Romania, with the help of social media, in order to observe the strategy approached in case of launching new products on Romanian market.

Research methodology

Considering the importance, the challenges and the complexity of consumer behavior in a wide sense, but especially in the case of restaurant food and services segment, this work intends to carefully analyze the created impact by the new products, launched along with the traditional ones, for McDonald’s consumers in Romania.

The purpose of the current work, namely the evaluation of Romanian consumer behavior towards the new products, will be fulfilled with the help of a mix of analyzes, both quantitative and qualitative, regarding McDonald's client consumption.

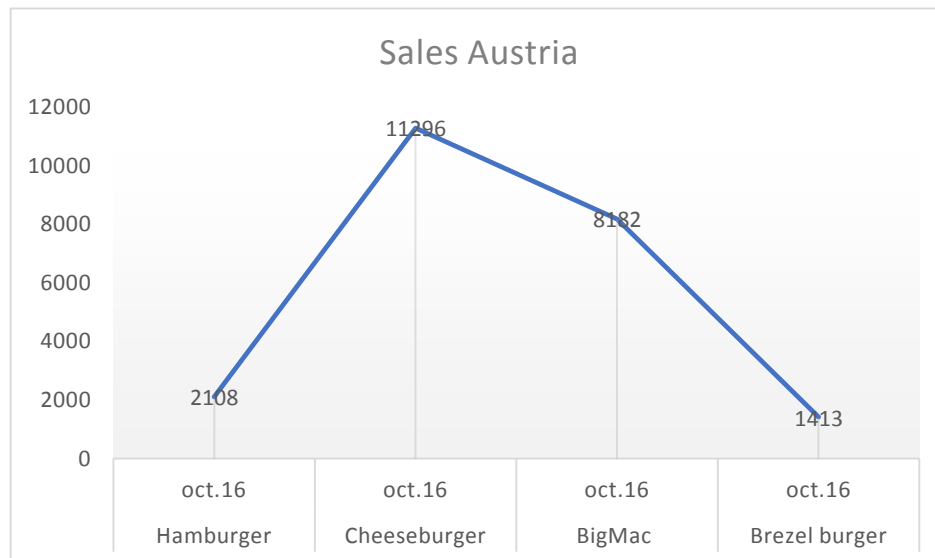
In order to reach our goal, we used the following methodological tools:

- The analysis and interpretation of data regarding the turnover and the sales quantum on new and traditional product categories, both in Romania and in Austria by the linear regression method, with the aim of observing the success and failure of new-launched products compared to the traditional ones in the restaurant chain and comparing the results between Romanian and Austrian consumers;
- The analysis of the content from official social pages from Romania, such as Facebook, but also YouTube video communication channel, with the goal of identifying the main segment to which the restaurant chain addresses on Romanian market, and also of the way of approach and treat for McDonald's existing clients;
- The analysis of the specific marketing and image instruments, such as the official website and the mobile applications, with the purpose of identifying the main means for attracting and converting the new clients but also for the organizational responsibility that McDonald's practices in Romania, in order to consolidate the trust in the old and new products of the company.

Results and discussion

Based on the research, we made a model in which we include real values of the turnover of McDonalds Romania and Austria, in two restaurants, and also the sales for top products: hamburger, cheeseburger, bigmac and the new products launched in October, pork with radish (Romania) and brezel burger (Austria).

With the help of Eviews software, we estimated the model by using the method of the smallest squares and tested the validity of the model, its reliability degree, the regression unifactorial model hypothesis and also the statistical significance of the parameters included in the model.



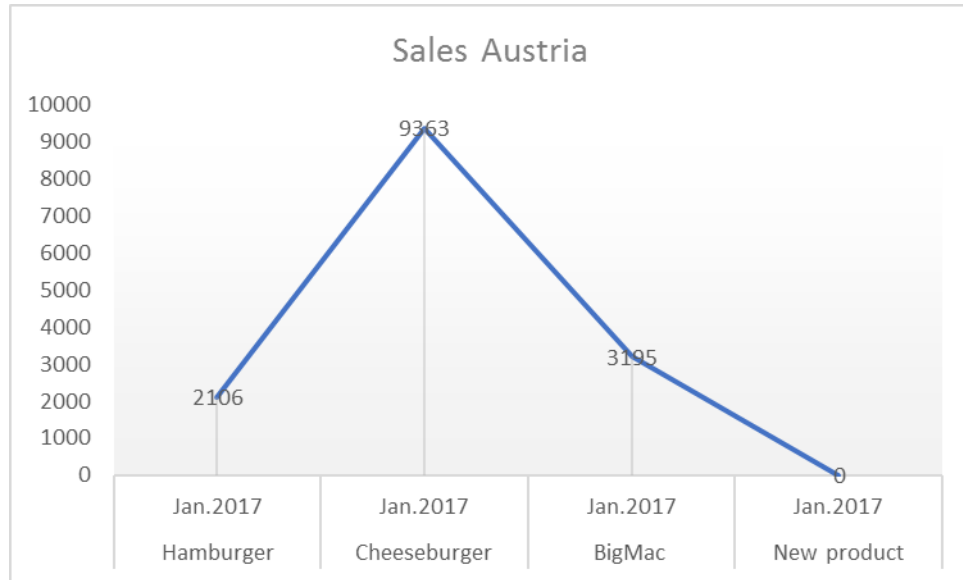
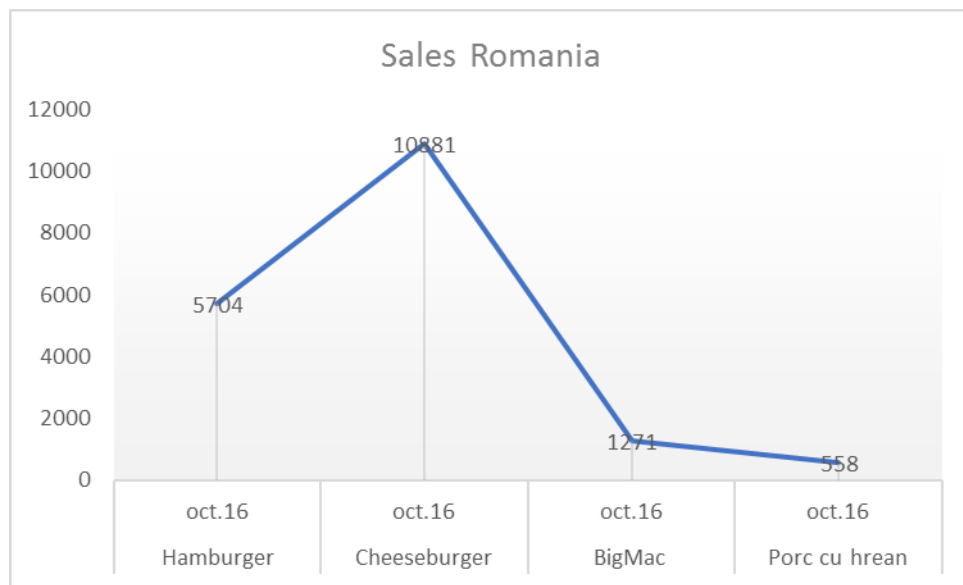


Figure 1. Evolution of sales in October 2016 compared with January 2017, in Austria
Source: Authors' own research.



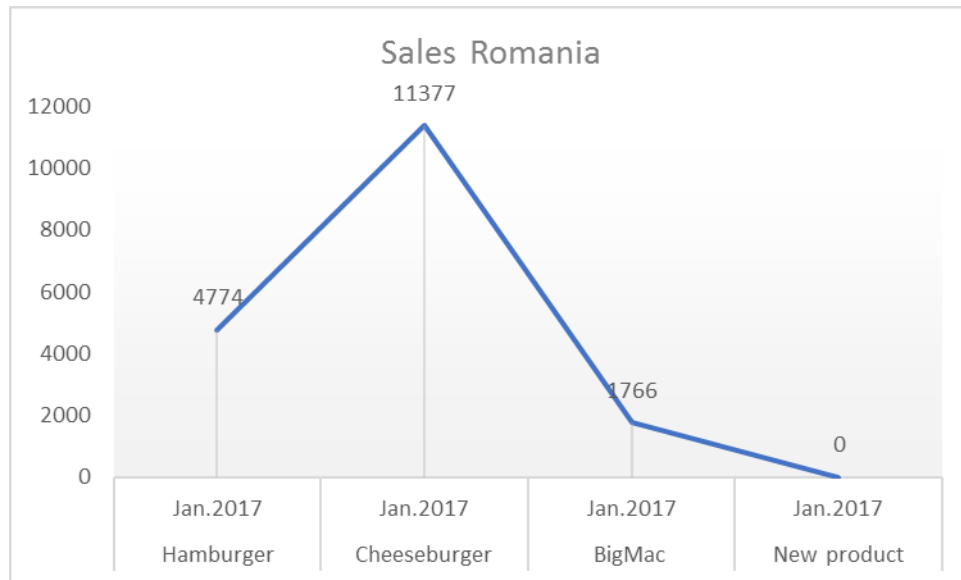


Figure 2. Evolution of sales in October 2016 compared with January 2017, in Romania

Source: Authors' own research.

Comparing the two countries, we witness a cheeseburger tendency for purchase, the product that is more traditional, but according to charts for Austria the new product has a greater impact than in Romania, so in January shows a decreased cheeseburger acquis.

Dependent Variable: VP				
Method: Least Squares				
Date: 02/05/17 Time: 14:22				
Sample: 1 4				
Included observations: 4				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CA	0.137816	0.053772	2.562941	0.1244
P	-139.7258	231.5896	-0.603334	0.6076
R-squared	0.492661	Mean dependent var		5749.750
Adjusted R-squared	0.238992	S.D. dependent var		4787.013
S.E. of regression	4175.989	Akaike info criterion		19.81894
Sum squared resid	34877763	Schwarz criterion		19.51209
Log likelihood	-37.63789	Hannan-Quinn criter.		19.14558
Durbin-Watson stat	2.397663			

Figure 3. Graphic methodology

Source: Authors' own research.

The model equation is the following:

$$VP = \beta_0 + \beta_1 * x ; VP = -139.7258 + 0.137816 * x$$

The regression quotient β_1 is positive, which shows that between the two variables there is a direct relation. We can also notice that the increase with one percent of the sales will lead to an increase with 0.137816 of the turnover. The high value of the free term β_0 reflects the influence of the unspecified factors in the evolution of the resulted variable (VP), this is a significant one, which shows the correctness of the result. Thus, there is a direct

relation between the sales and the turnover. The determination quotient R-squared = 0.492661 shows that 49.26% of CA variation is explained by sales, while the rest of the variation being explained by factors that are not included in the model.

Reviewing the result of the hypothesis regarding the simple linear regression model

We take into consideration the Jarque-Bera test, having the following hypothesis:

H_0 = randomized errors has normal distribution

H_1 = randomized errors do not have normal distribution

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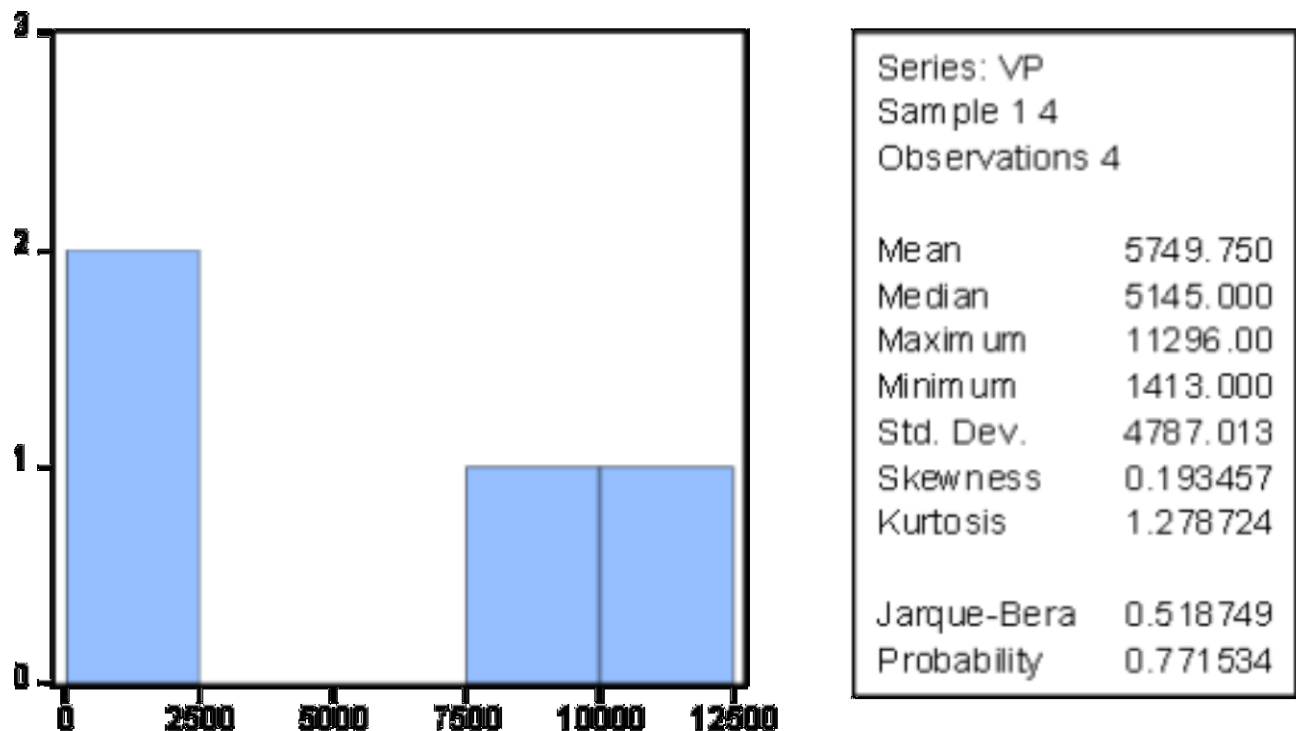


Figure 4. Jarque-Bera Test

Source: Authors' own research.

The probability of this test is 0.771534, which tends to 1. Consequently, H_0 hypothesis will be accepted.

Homoscedasticity of randomized errors with White test

The hypothesis are: H_0 = there is homoscedasticity

H_1 = there is no homoscedasticity

Heteroskedasticity Test: White				
F-statistic	0.254702	Prob. F(2,1)		0.8139
Obs*R-squared	1.349947	Prob. Chi-Square(2)		0.5092
Scaled explained SS	0.199507	Prob. Chi-Square(2)		0.9051
Test Equation:				
Dependent Variable: RESID^2				
Method: Least Squares				
Date: 02/06/17 Time: 12:50				
Sample: 1 4				
Included observations: 4				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11637041	13076960	0.889889	0.5370
CA^2	0.000465	0.002390	0.194411	0.8778
P^2	-26481.71	40792.75	-0.649177	0.6334
R-squared	0.337487	Mean dependent var		8719441.
Adjusted R-squared	-0.987540	S.D. dependent var		10947723
S.E. of regression	15434115	Akaike info criterion		36.05576
Sum squared resid	2.38E+14	Schwarz criterion		35.59549
Log likelihood	-69.11153	Hannan-Quinn criter.		35.04572
F-statistic	0.254702	Durbin-Watson stat		2.946075
Prob(F-statistic)	0.813949			

Figure 5. White test

Source: Authors' own research.

We find that $\text{Prob}(F\text{-statistic}) = 0.813949$, and notice it is higher with 5%, which leads us to the fact that there is homoscedasticity.

Consequently, the determination ratio shows that the sales represent an influence factor which is relevant for the increase of the turnover with the traditional products assigned for the studied model, but also with the new products launched in a limited amount of time.

The empirical estimation shows the direct relation between turnover and sales. There is a direct, determinist relation and we can say that an increase in the sales percentage leads to an increase in turnover.

Statistically comparing the two countries, we find that the Austrian consumer has a higher curiosity of trying new products compared with Romania.

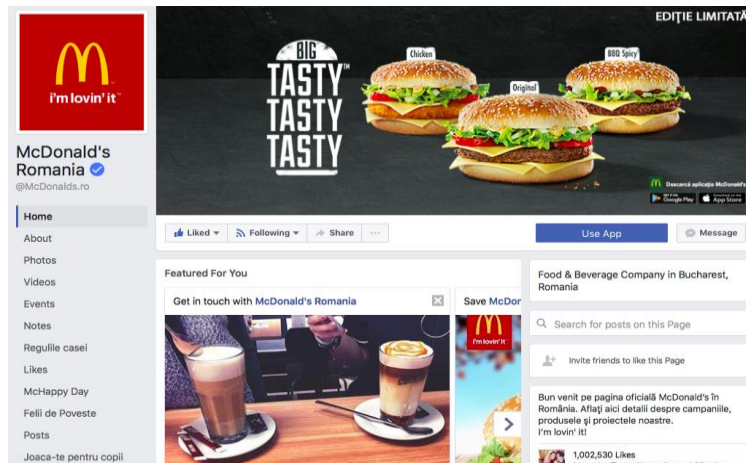


Figure 6. The official page of McDonald's Romania

Source: <https://www.facebook.com/McDonalds.ro/>.

The transfer process of mentalities between the two countries is a slow one, at the time when we hardly catch up with some ways of thinking and seeing the world, in Austria there have already been quite large marketing mutations. McDonald's Romania approaches its customers by online communication channels, with the support of the Facebook page, having an emotional marketing strategy. The main segment to whom it turns to is made of young teenagers who are active and present in online social environment.

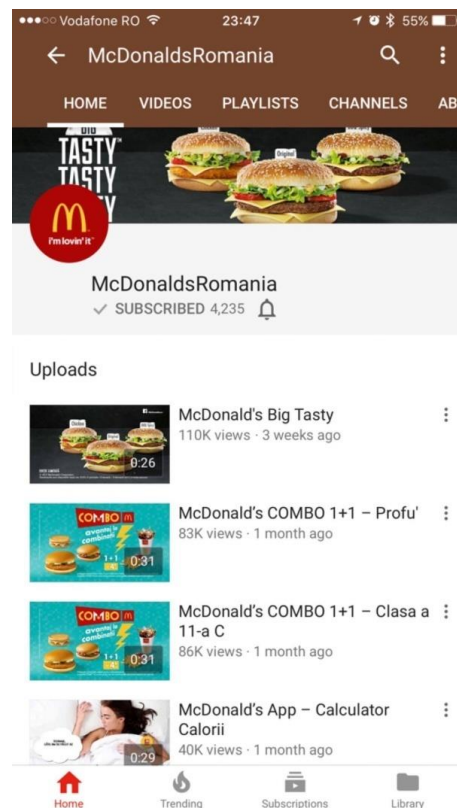


Figure 7. The YouTube channel of McDonald's Romania

Source: <https://www.youtube.com/user/McDonaldsRomania>.

The official Facebook page has 1 million likes and covers information, reports and news about McDonald's products, campaigns and projects. It is also a transparent environment with an immediate feedback, where the consumer community of the restaurant chain can communicate, express in a freeway their opinions and experiences related to products and services and can get information from the company's employees in the shortest time. This is one of the most important channels for communicating with clients in Web 2.0 era and a powerful tool for consolidating the public image of an organization. The campaigns and projects of the restaurant chain take place in strong relation with the Facebook page, these having buttons for predefined applications where users can have immediate access. Some of these are: The Ronald McDonald program, Slices of Story, Play for the children, Come in the lunch break!.

The YouTube Official Channel has 4200 subscribers and facilitates the access to 49 videos about restaurant's products, awareness and image campaigns and also about the services provided to the clients by mobile applications. This communication channel can be a useful source of education and awareness for the consumers by the means of the provided information and of the educational content.

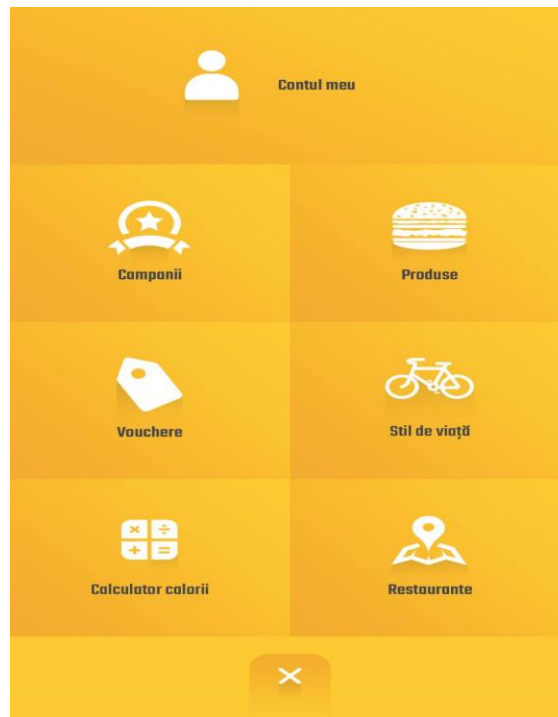


Figure 8. McDonald's Romania Mobile Application

Source: <http://mcdonalds.ro/mobile-app>.

The mobile application developed by the company provides free access to information regarding the nutritional qualities of the products, latest products, advertising campaigns and also reward program for the consumers by using table vouchers that consumers can use in any McDonald's restaurant in the country. McDonald's mission: sharing beautiful moments, keeping the values consolidated in the 21 years of presence in Romania – good food, served fast in a pleasant environment where you like to come back. All the locations in the restaurant chain are arranged in an attractive, modern, relaxing and useful way, in order to create a pleasant environment for the consumers. The fast food concept is replaced by organizing a slow food-type ambient, where you spend your time with pleasure and where

you can be delighted with a complete meal. The meal is diversified, organized depending on the time of the day and, thus, you can opt for breakfast or for the other meals of the day. In McCafe area, clients can choose between a variety of coffee, tea, refreshing drinks, but also cookies and croissants.

All these details to which they thought in great detail represent a complex and full brand and marketing strategy in order to get into consumer's mind and soul.

Observing the advertising campaigns of company's products, we can identify the idea of happiness and fulfillment inspired by the commercialized products; in close relation, fulfillment comes from the confidence that this is the place where we always find good and fresh food, that we are always welcomed with the well-known products which have the same familiar taste. This is actually the idea of a restaurant chain: the guarantee of the unitary quality and of the fact that the product you are looking for is available wherever you are. The idea of product must be placed in a unique and significant way in the mind of the consumers segment. But this thing is not so easy to be done. Due to the financial crisis from 2007-2009, the companies operate on the background of distrust from the consumers, this fact being visible also in Romania. This aspect, together with the strong traditionalist character of Romanians, determine the national consumers to be individuals who are mainly resistant to innovation.

We can thus say that, from the information gathered from this brand, the organization makes efforts in order to overcome the current level of consumption for new products, by integrating in a regular way in the menu new products, with local features from the traditional cuisine. For example: the McMici sandwich, launched on the occasion of Labor's Day, on May 1, the sandwich with pork and radish, the soups with vegetables and mushrooms available along with the conventional meals. All the foods are emotionally related to Romanians' consumption customs and are promoted as limited edition products, in order to facilitate the impulsive choosing.

The new marketing concepts appear or are adapting depending on the evolution and the preferences of the consumers. Restaurants segment makes no exception from the trend of the market. In Romanian internal marketing the consumer segment is more conservative and non-homogenous, while in Austria it is compassionate, but also competitive.

From the point of view of the Romanian consumer personality we can say that there is a high distrust in our country towards the private environment, but also the public institutions, fact which exerts a pressure in all the areas of commerce and services.

Conclusions and recommendations

The case study shown in this article has highlighted the consumer behavior towards the new products, on a controversial market segment. The analyze has underlined the following conclusions, from which several recommendations can also be done:

The food&beverage segment still faces a resistance to innovation on Romanian market, compared with the Austrian market.

Although there is reluctance towards the new products, this market segment produces consistent turnovers, considering the consumption customs of Romanians.

The emphasis of the social media communication and marketing methods helps building a strong consumer community, promoting trust at the level of horizontal relations, area where all the organizations must invest in contemporary strategies; the trust at the level of vertical relations, hence at the level of the companies, decreased.

The most statistically important and significant point of view would be that McDonald's bases itself on non-price, which leads to an increase in sales performance.

Objective measurable behaviors depend on the context of the surroundings, on the motivation and impulse of the consumers, but also on the location of the restaurants; it is possible that a location which is accessible by a segment of young customers, such as nearby schools, high-schools, universities, to benefit of a greater, even surprising opening towards the new meal products.

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