Present challenges and future opportunities for Dacia cars on the Romanian automobile market

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PRESENT CHALLENGES AND FUTURE OPPORTUNITIES FOR DACIA CARS ON THE ROMANIAN AUTOMOBILE MARKET

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Abstract: Dacia car models are becoming well known and appreciated not only on the Romanian market but also on European markets. The present paper presents a current survey of Dacia cars sales on the domestic market, both in terms of territorial and structural elements, in order to identify the company strong points. A territorial level analysis was conducted in order to identify market areas suitable for further development along with a Dacia models analysis, the final objective being to highlight the main features of the company products most valued by the customers.

1.Introduction

The customer is always viewed as a recipient of the products companies manufacture and therefore it is important to know what determines him to purchase a product or another. Starting from the main factors affecting purchasing behavior (cultural, social, personal or psychological [5]) marketers can determine how to influence buying behavior in their favor. The company can only influence certain factors and therefore identifying those factors is extremely important for the firm marketing strategy [1,2]. Based on the knowledge and understanding of consumer behavior, an aggregation of consumer demand based on similarity that leads to market segmentation can be made [4]. Automobile markets are very dynamic with substantial structural changes. These changes are manifested both in territorial levels of number of units sold but also in terms of preference for one model or another.

Dacia Company currently manufactures six models [7] offered to customers both on domestic and foreign markets. Even though the domestic market has a low absorption capacity and felt a sharp decline with the current financial crisis, it still remains very important to the company. Foreign car manufacturers also view this market as having a growth potential and this results in a strong competition at the sales level. For Dacia Company is useful to know the size of the submarkets in the developing regions of Romania and to what extent the cars manufactured at the Pitesti plant are preferred by buyers when compared with other brands. This information's also offer valuable insights regarding the life cycle of a particular Dacia model and the particular phase it's passes on the Romanian car market. All this information can help Dacia to adopt a more efficient marketing policy, but also it may contribute to a better understanding of consumer behavior which finally can be influenced in favor of the company.

2. Dacia's car sales territorial structure

To identify the preferences of Dacia buyers at a territorial level, data obtained from the website of the Directorate for Driving Licenses and Vehicle Registration from the Ministry of Administration and Interior were used [8]. Preferences for Dacia brand naturally vary from one county to another and from one development region to another. These preferences have also changed in time so that they can be growing for some developing regions and stagnate or fall

for others. Of the total car registrations for 2010, Dacia had the largest market share in the South-East region, as is shown in Table 1.

Table 1. Preferences for Dacia cars by development regions during 2007-2010

Development Region	2007	2008	2009	2010
Bucureşti-Ilfov	23,0%	22,8%	20,9%	20,5%
Centru	35,8%	29,4%	36,8%	41,9%
Nord- Est	37,8%	32,7%	42,4%	43,3%
Nord-Vest	37,5%	31,4%	42,8%	44,2%
Sud-Est	34,7%	28,1%	36,1%	46,7%
Sud-Muntenia	44,4%	39,7%	45,7%	34,0%
Sud-Vest Otenia	35,8%	31,4%	43,5%	40,9%
Vest	42,0%	32,7%	45,2%	43,0%
Media naţională	30,0%	27,1%	31,2%	32,5%

Source: http://www.drpciv.ro/

The largest car submarket in Romania, Bucharest-Ilfov region has experienced decreases in preferences, but nationally Dacia cars have the best percents on car buyers' preferences in 2010. South-Muntenia Development Region has experienced a decline in buyers' preferences: if in 2007 more than 44% of car buyers have chose Dacia, in 2010 only 34% have the same option. Favorable mutations occurred in other developing regions. The largest increase in "appetite" for Dacia cars was recorded in the South-East Region which in 2007 was in last place (except the region Bucharest-Ilfov) and in 2010, four years later, become the first with 46.7% of customer opting for Dacia.

3. The distribution of Dacia car sales by models

Dacia factory produces six models, the latest, Duster being launched in the first half of 2010. If preference rankings by models in 2009 were: Logan, Sandero, MCV, Van and Pick-up, in 2010 (with the marketing of the new model Duster), Logan kept its leading position but Duster moved to the second place, followed by MCV and Sandero, the last two places remaining unchanged. The current study was conducted on a sample of 405 people owning Dacia cars and was aimed at identifying customer's preferences for specific models. After the data collected was processed, at the forefront of buyers' preferences are Logan models, followed by Logan MCV, Sandero and Duster. At the end of the rankings is Logan Van and Logan Pick-up, one possible cause for these positions being the fact that the two models address specific needs, mainly those of contractors and commercial firms. The scores obtained for each version are presented in Table 2., calculated as an average on a scale from 1 - Best to 6 - Worst.

Table nr. 2 Customers preferences for Dacia models

		Arrange the models according to your preferences:					
		Duster	Logan Sedan	Logan MCV	Sandero	Logan Van	Logan Pick-up
		1	2	3	4	5	6
N	Valid	405	405	405	405	405	405
	Missing	0	0	0	0	0	0
Mean		2,72	2,75	2,94	3,01	4,57	5,01

Median	2,00	3,00	3,00	3,00	5,00	6,00
Std. Deviation	1,574	1,566	1,339	1,445	1,327	1,340

The youngest model of Dacia brand, Duster came in the first place with an average score of 2.72, followed closely by Logan Sedan with 2.75. It can be observed that although Logan Sedan is the bestseller of all Dacia models, customer preferences lean towards Duster. This attitude shows the appeal of this new model and anticipate in some ways, it's market success. Regarding the gender preferences for Dacia models, the results are presented in Figure 1.
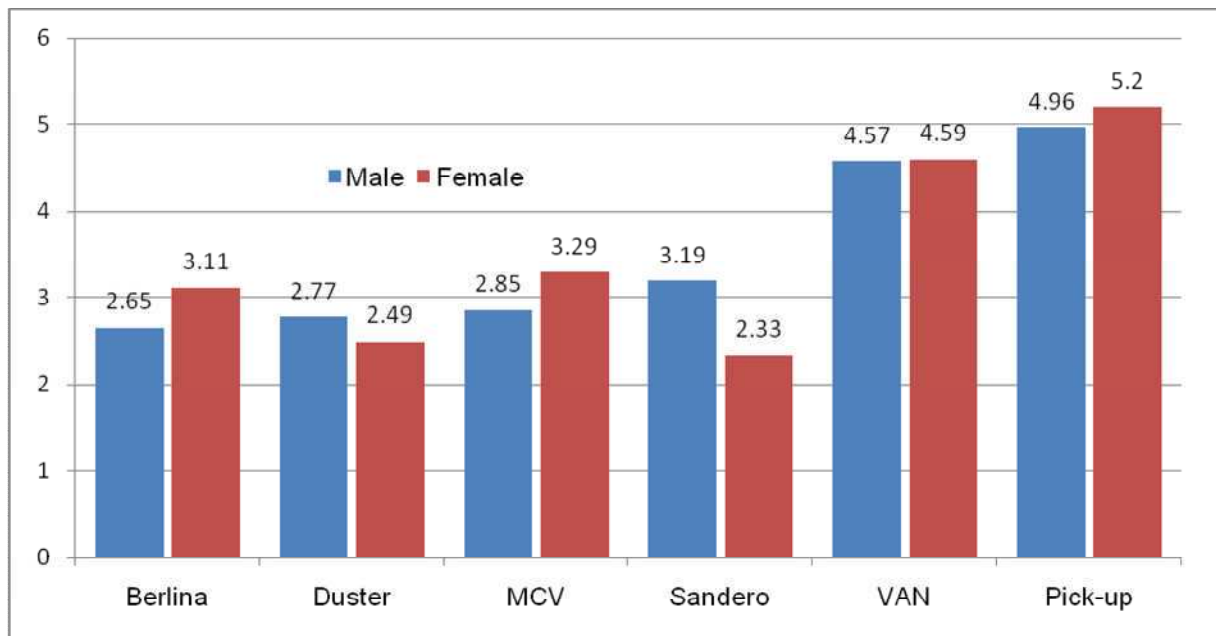

Figure 1. Average customers preferences for Dacia models, by gender

The two groups (male and female) show differences in preferences for one Dacia model or another. Considering the fact that the lowest values signify higher preferences ranking, it can be noted that Sandero model is the first in women's preferences, while Logan Sedan is main choice for male customers. Another interesting finding is that women find the Duster model to be more appealing then men, despite this model's more masculine character.

4. Customer perceptions about the main features of Dacia models

Based on a sample consisting of 405 subjects, customers owning Dacia cars were questioned about seven different characteristics of their vehicles. Respondents were interviewed about these characteristics using a semantic scale with seven levels, one being the most unfavorable opinion, four being a neutral one and seven the highest appreciation from the customer's part for a specific characteristic. A main components analysis was implemented, which consisted in linear combinations of model's variables in order to obtain a small number of features (components) that explain the most part of the customer's attitudes towards the researched subject. [3]. The results of this analysis are shown in Table 3.

Table 3. Mean scores for Dacia cars characteristics

	N	Minimum	Maximum	Mean	Std. Deviation
Pollution	405	1	7	4,81	1,238
Roominess	405	2	7	5,77	,925
Fuel Consumption	405	1	7	4,67	1,071
Design	405	1	7	4,22	,937
Public Appeal	405	1	7	5,27	1,112
Comfort	405	3	7	5,75	1,019
Reliability	405	1	7	4,76	1,226
Valid N (listwise)	405				

The most solid opinions refer to Roominess and Design, at the opposite being those regarding the Reliability and Pollution. The best viewed characteristics are the Roominess and Comfort of the cars, while the Fuel Consumption, Reliability and Design are not so well rated. Although these characteristic have lower scores, these are still over 4 (considered a neutral value) which imply a positive to neutral attitude toward these features.

In order to analyze the customer's perceptions regarding the seven main features a multivariate analysis was used.

Table 4 .Correlation matrix for Dacia cars characteristics

		Pollution	Roominess	Fuel Consumption	Design	Public Appeal	Comfort	Reliability
Corelatio	Pollution	1,000	0,253	0,665	0,113	0,068	0,231	0,889
	Roominess	0,253	1,000	0,383	0,215	0,310	0,733	0,298
	Fuel Consumption	0,665	0,383	1,000	0,180	0,147	0,318	0,740
	Design	0,113	0,215	0,180	1,000	0,397	0,170	0,133
	Public Appeal	0,068	0,310	0,147	0,397	1,000	0,210	0,110
	Comfort	0,231	0,733	0,318	0,170	0,210	1,000	0,267
	Reliability	0,889	0,298	0,740	0,133	0,110	0,267	1,000

Looking at the results reveals a strong correlation between reliability and degree of pollution as well as between reliability and fuel consumption. Also there is a strong correlation between comfort and interior space. The weakest correlation is between the degree of pollution and public appeal which means that the two attributes are not linked in the eyes of the public.

Table 5. Component Matrix(a)

	Component	
	1	2
Pollution	0,797	-0,483
Roominess	0,670	0,488
Fuel Consumption	0,821	-0,276
Design	0,352	0,477
Public Appeal	0,355	0,590
Comfort	0,617	0,458
Reliability	0,842	-0,447

It appears that the findings relating to pollution, interior space, fuel consumption, comfort and reliability are strongly correlated with the first component while the design and the public appeal are strongly correlated with the second one.

Table 6. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,098	44,255	44,255	3,098	44,255	44,255	2,606	37,232	37,232
2	1,533	21,896	66,151	1,533	21,896	66,151	2,024	28,919	66,151
3	1,066	15,233	81,383						
4	,597	8,527	89,911						
5	,352	5,027	94,937						
6	,252	3,601	98,539						
7	,102	1,461	100,000						

Extraction Method: Principal Component Analysis.

In Table 6. are presented the initial Eingenvalues for each component and also the percentage of the total variance explained by these components. The first two components explained 66.151% of the total variance, the last components explaining less and less of the variance. It is also important to note that the variances explained by each of the first two components do not change substantially after the rotation of axes is applied. The significant differences between the Eigenvalues of the first two components and those of the following ones are highlighted on the graphical representation in Figure 2.
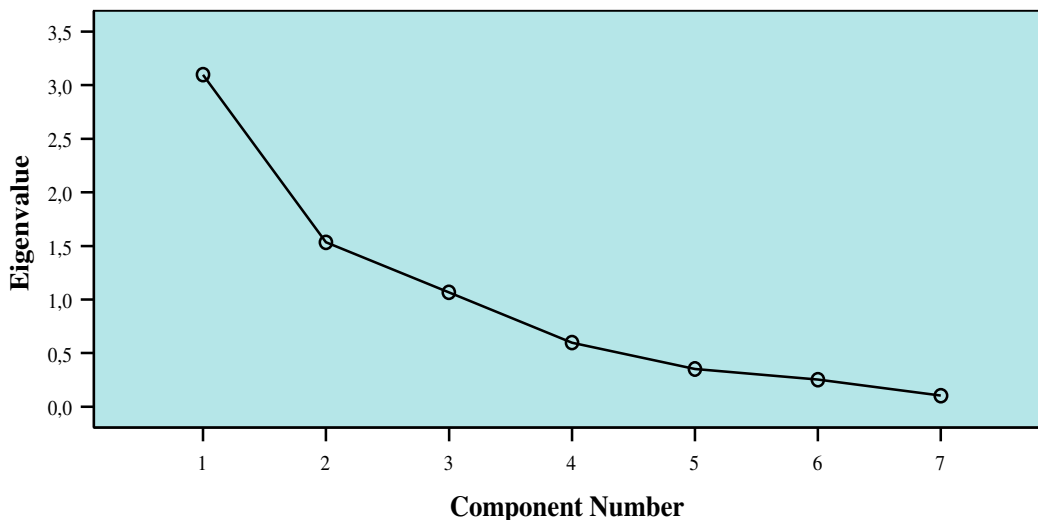
Scree Plot

Figure 2. Scree plot of factors

Next a maximization of variables coefficients was implemented trough the application of a "Varimax" Rotation with Kaiser Normalization; the results are presented in Table 7.

Table 7. Rotated Component Matrix(a)

	Component	
	1	2
Pollution	0,931	0,046
Roominess	0,281	0,780
Fuel Consumption	0,835	0,232
Design	0,025	0,592
Public Appeal	-0,036	0,688
Comfort	0,255	0,726
Reliability	0,948	0,102

a Rotation converged in 3 iterations.

The results regarding the correlation coefficients of the variables analyzed and the two principal components derived from the axis rotation using a "Varimax" method, which seeks to maximize the factors strongly correlated with the variables coefficients, are presented in Table 7. It can be noted that after the axis rotation, substantial changes in the values of correlation coefficients relating to the starting values presented in the Table 5 were not achieved.

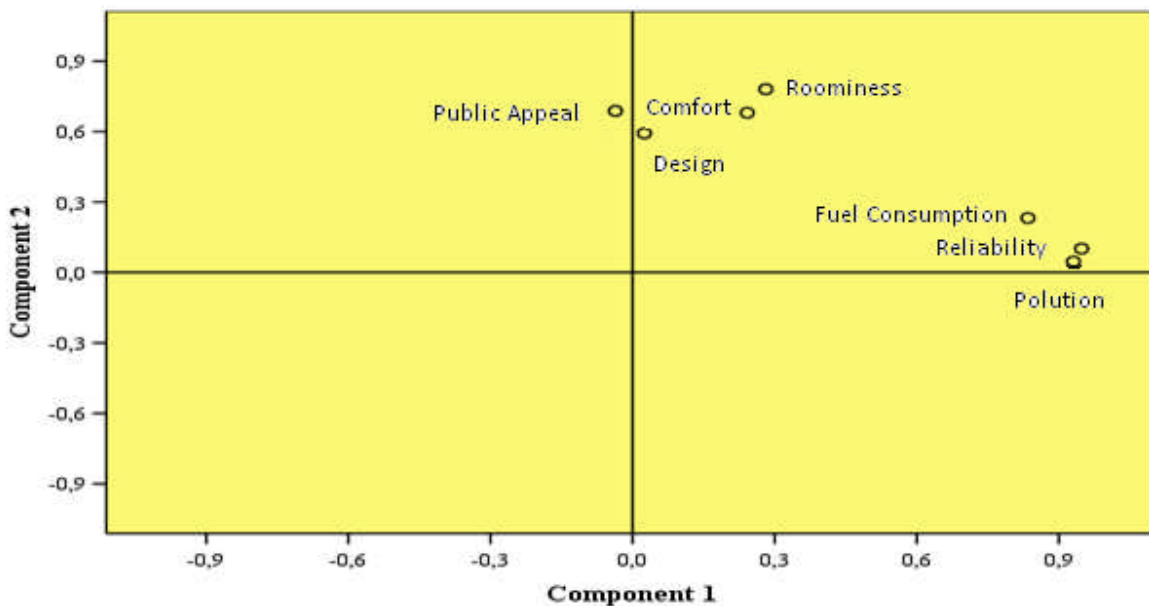**Component Plot in Rotated Space**

Figure 3. Component plot in rotated space

In Figure 3. a graphic representation of association between variables and principal components (factors) is presented. It can be noted that the first component is determined in particular by variables relating to sensory (subjective) perceptions, expressed by "public appeal", "Roominess", "Design", "Comfort", while the second component is represented by more technical-related aspects such us "Fuel Consumption", "Reliability" and "Pollution".

Table 8. Dacia cars characteristics after Factor Analysis

Dacia cars characteristics	Components obtained after Factor Analysis
Pollution	Technical Performance Orientation
Roominess	
Fuel Consumption	
Design	Sensory (subjective) Orientation
Public Appeal	
Comfort	
Reliability	

In conclusion, regarding the customer's perceptions about the importance of various product characteristics that define Dacia cars, two components were separated after analysis. One of them defines the technical performance, while the second is determined by sensory characteristics. Both of them are important for Dacia cars success on the market and therefore they require constant monitoring and sustained improvement efforts from behalf of the company marketing department, with special attention to those attributes that have received lower perceptions scores.

5.Conclusions

Dacia cars are well regarded by the Romanian market, a good proof of this assumption being the fact that the company market share grew constantly.

At a development regions level buying intentions for Dacia cars are decreasing in two main regions. On the biggest sub-market, Bucharest-Ilfov which accounts for more that 20% of the total cars sold in the country, Dacia see a drop in customer preferences for his models and some corrective actions are required. The fact that Dacia cars are being perceived as roomy, comfortable and close to the public is a good starting point for designing a successful marketing strategy. Adding new elements and improving some of these features could gain a competitive advantage for Dacia models.

The Duster model was sold mainly in full-option equipment which shows that the price argument is starting to come second for some Dacia clients. Based on this finding Dacia can offer higher equipment options for her other models, both in terms of technical and comfort, attracting new customers for whom price is not the decisive choosing factor and who are currently oriented versus import models.

Another important aspect is the customer's perceptions about different Dacia models in relation to their gender. Sandero was found to be more appealing to female customers, but also to men. The same can be said about the Duster model that has been specially designed for men, but as the results have shown, it is well regarded by the feminine clientele. Even though apparently the two categories of buyers were largely similar in terms of preferences, Dacia should try to customize some of their models to accommodate more diverse and sophisticated customers (Ex.: a limited Spring Edition of the Sandero models aimed at the feminine public, a special Duster version dedicated to the European Football Championship or a Christmas Edition for Logan MCV which is viewed as being a family car).

For Dacia, increasing product quality, improving technical performance and encouraging a high degree of innovation are all factors that can help boost sales by influencing consumers purchasing behavior. Customers are currently largely attached to Dacia. This brand loyalty advantage added to those listed above, is placing the company products closer to the levels at which import automobiles brands are viewed on the Romanian

car market (especially those of German origin). But for this goal to be achieved, a successful combination of marketing, financial, and production elements must be implemented. Dacia Company proved that it is capable of surpassing great challenges and the current economic and financial conditions that impose more rational decisions from the customer's part, could translate in a real opportunity for future expansion on global markets for Dacia's products.

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