

ALBANIAN MOBILE COMPANIES 4G SERVICE STRATEGIES APPLICATION

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ABSTRACT: *Albanian mobile market is made of three big players. In this paper the strategies and application for the 4G services of all the operators is discussed and compared. Main point which is tested and discussed in this paper is the quality of service offered by all operators according to their respective clients relative to the application of the strategies pertaining to mobile internet services, and in particular 4G and 4G+ services. The data is organized and gathered according to the SERVQUAL model and his paper is only one piece of a bigger study made in Albanian Telecommunications' Market. Primary data is analyzed using SPSS. The findings are true and representative of the Albanian market, according to the validity test and the findings.*

KEYWORDS: Albania, Telecommunication, Marketing Strategy, 4G Services, Service Quality, Servqual

INTRODUCTION

This study is an attempt to identify and analyze the applications of different marketing strategies of telecom service providers in product differentiation, pricing, distribution and sales promotion, or what is traditionally known as marketing mix in traditional marketing. The focus of this paper is mostly on the 4G services that the companies try to offer the best they can as compared to the competition. Strategies for the third and fourth generation mobile phone market or 4G are included in the study. The study assesses the distribution of service benefits, personalization, customer service, quality of service, brand value in the eyes of customers, promotional offers, competition in prices with other operators and unethical practices of telecom service providers in Albania. Also, part of the study deals with the comparison between customer perception of different cellular companies and the quality they communicate to customers. To this end a comparison of the strategies that operators use to differ and target their clients regarding their services quality. Services are divided in qualities or attributes; one of them is studied in particular and showed in this paper, tangibility. The tangible and physical part of the services, sales persons, point of sales and every other thing that companies use to make their services more tangible to their customers.

4G services

The hypothesis that is tested and assumed regarding 4G services is: there are important differences between strategies for mobile operators in terms of 4G services

4G services have become one of the key elements of consumer satisfaction seeing tremendous growth and interoperable broadband internet services. 4G services are important for everyone, ranging from mobile brands to companies which need to make significant investments to deliver the service, and to the network geographical coverage, customers use their 4G service wherever they are in Albania. 4G services entered the market relatively late in the Albanian market and Vodafone is the company which offered for the first time in September 2015. 4G or LTE as it is called in Korean and US market is an advanced technology that can process data quicker and increase the speed of the mobile operations, data calls or both. Everything that is related to the rapid actions by the companies for the customers they tend to prefer and appreciate. Companies operating in Albania are trying to have an inner race of which can offer their services quickly with the higher quality. There are rumors about 4G + etc. Customers are more inclined towards one company if it is able to offer some 4G service in all the places where they live and work. Plus Communications failed to apply 4G technology for its customers because the technology is capital intensive intervention, and they went out of market too early.

4G services and fast internet are measured in this study starting with the normal data connection that customers can have with their phones, another 4G measure is to see if companies manage to cover as much of the Albanian territory with 4G signal, and the easiness or the possibility for every user of the configuration of this kind of service. It shows that companies in Albania have relatively good ratings in terms of 4G internet. The company that has ranked higher on the study about the configuration ease and 4G signal is Eagle Altelecom, measured by the average estimate of its customers who valued their company higher than those of the competition. In checking these three questions homogeneity of variances, there is noticed a violation of the principle of homogeneity of variances regarding the second question, and a possible explanation for this violation could be because the company Plus Communications has failed to enter in the 4G network and therefore cannot have a proper coverage. Despite the result to the second question, which is a violation of the homogeneity of variances principle related to the signal coverage in all Albanian territory, the null hypothesis in the other questions cannot be rejected and the assumption that there are no statistically significant differences in the variances of the variables' groups for 4G stands. So, it can be concluded that there is homogeneity of variances in remaining questions or variables. Regarding the difference between the mean of groups and the statistical significance of this difference they will be evaluated by Anova table. Questions related to the easiness of connection to this service and simple Internet configuration, the coefficient of significance is almost at the limit of acceptance or rejection of the null hypothesis. If this result is further

tested with the robust tests of averages equality, namely with the Welch and Brown-Forsythe test the result that will be observed is that in the third question which relates to the configuration of the internet connection, it shows a coefficient statistical significance which can be interpreted that there is a statistically significant difference between operators in relation to this variable. In the easiness of internet configuration question, the results show that the companies which have scored higher are: Plus, with 4:17 and after comes Eagle Albtelcom with a score of 4:16, with Vodafone and Telecom respectively scoring 3.73 to 3.65 at the end.

In other variables the groups' means of independent variable appear to be with homogeneous variance. Variables in connection with the variety of plans and services offered by 4G, charging fees transparency and absence of hidden costs as well as the comparability of the company to which the user belongs, to the price of other companies differ in Anova for low values of coefficient importance. As it is observed from the homogeneity of variances of these variables and coefficients it is higher than the level of acceptance. So, regarding the homogeneity of variances of these variables it can be concluded that the null hypothesis stands, that is there is no statistically significant difference between groups for all three variables. As it is displayed in Table 1 further tests with robust averages equality confirmed results obtained by Anova. These tests completely confirm and resonate Anova's results for both the test levels, Welch and Brown-Forsythe.

Table 1-Robust Tests of Equality of Averages 4G

Tests robust average of Equality

	Statistikaa	DF1	df2	Sig.
Është shumë e lehtë për tu lidhur me shërbimet 4G	2,271	3	62.663	,089
	Brown-Forsythe	3	87.199	,090
Rrjeti ofron mbulim të mirë gjeografik për 4G, ka kudo ku shkoj në Shqipëri	,709	3	62.839	,550
	Brown-Forsythe	3	103.592	,523
Konfigurimi i internetit është shumë i thjeshtë.	2,759	3	66.689	,049
	Brown-Forsythe	3	150.020	,043
Shpejtësia e shkarkimit është shumë e lartë.	,333	3	62.230	,802
	Brown-Forsythe	3	83.357	,758
Roaming për shërbimet 4G është e shkëlqyer.	,706	3	58.752	,552
	Brown-Forsythe	3	69.352	,425
Ofruesi im i shërbimit për suport shumë të mirë për shërbimet 4G.	1,374	3	56.983	,260
	Brown-Forsythe	3	85.187	208
	Welch	3	62.724	,002

Ka varietet në planet tari fore që ofrojnë 4G.	Brown-Forsythe	5.452	3	96.652	,002
Tarifimi është transparent dhe nuk ka kosto të fsh ehura ose jo të qarta.	Welch	3.183	3	64.008	.030
Vlera e shërbimeve 4G ë shtë e duhur për koston që ka.	Brown-Forsythe	2,930	3	110.835	,037
Çmimet e shërbimeve 4 G të kompanisë janë më të mira në krahasim oper atorët e tjerë.	Welch	2,104	3	62.532	109
	Brown-Forsythe	2.167	3	106.946	,096
	Welch	5.737	3	60.508	,002
	Brown-Forsythe	5.433	3	98.086	,002

a. F asymptotically distributed.

Source: Author simulations.

Based on these results it can be clearly observed that the null hypothesis, which assumes that there are no statistically significant differences between groups regarding the variables, in particular these three variables which were cited by the results of the analysis of variance, may be rejected and can be concluded that no statistically significant differences between operators in relation to these three variables exists. In the first variable relating to varieties that exist in 4G tariff plans shows that there are significant differences between Eagle and Plus, Eagle with Telekom and Eagle with Vodafone. The second variable from multiple comparability tests which relates to transparency and hidden costs may refuse to accept null hypothesis that no significant statistical difference exists between the cellular companies. Going further it can be seen that significant differences occur between Eagle and Vodafone. The same thing happens with the third variable, which expresses the difference between operators regarding prices for 4G and customer perception that this company is the cheapest in terms of 4G internet offerings. The difference between the averages of groups pertaining to the variable price is cheaper than the competition, is statistically significant. If observed carefully further as to which companies or groups differ from each other, Eagle and Telecom, Vodafone and Eagle have different coefficients with significant statistical coefficients. So, the null hypothesis is that the factor groups have no statistically significant difference in their averages, the data rejects this hypothesis while the alternative hypothesis stands true.

Quality of Service

Tangibility

The first is the quality of service tangibility, in this study, this quality is measured by four questions or variables. Tangibility has to do with the visible part of the services which the consumer sees or manages to touch with the physical media or facilities where the service is

consumed or delivered. To this tangibility the study of services supported by the literature measures it using four variables, and these variables are: the company has modern and convenient stores for customers, the company's stores are attractive visually, the appearance of staff is professional and competent and pamphlets, brochures and materials promotional are visually attractive.

Table2-Tests of Normality, Tangibility, Quality of Service

Tests of normality

	NumriCelular	Kolmogorov-Smirnova		Shapiro-Wilk		Sig.	
		Statistics	df	Statistics	df		
Dyqanet_e_kompani_së_time_celulare_jan_ë_tërheqëse nga ana vizuale.	Eagle	274	45	,000	,808	45	,000
	Albtelecom						
	Plus	,270	18	,001	,752	18	,000
	Telekom	,243	83	,000	,819	83	,000
Punonjësit_e_ofruesi_t_të_shërbimit_tim_kanë_zotësi_dhe_pamje_profesionale.	Vodafone	256	163	,000	,786	163	,000
	Eagle	,246	45	,000	,831	45	,000
	Albtelecom						
	Plus	,260	18	,002	,872	18	,019
Pamphlets,_broshura,_materiale_që_lidhen_me_shërbimet_janë_tërheqëse nga ana vizuale.	Telekom	,231	83	,000	,871	83	,000
	Vodafone	222	163	,000	,867	163	,000
	Eagle	,294	45	,000	,756	45	,000
	Albtelecom						
Ofruesi_im_i_shërbitimit_i_përmbushpremtimet_e_tij.	Plus	222	18	,019	,817	18	,003
	Telekom	,209	83	,000	,859	83	,000
	Vodafone	215	163	,000	,835	163	,000
	Eagle	248	45	,000	,803	45	,000
	Albtelecom						
	Plus	187	18	,097	,871	18	,019
	Telekom	,231	83	,000	,884	83	,000
	Vodafone	,224	163	,000	,875	163	,000

a. Lilliefors Correcting Importance

Source: Author simulations.

If all variables are taken into account by groups, the analysis shows that the distribution does not change much, but it cannot be said that a normal distribution exists for the majority or three variables in all groups. Distribution of the question related to whether the shops are visually attractive measured by test Kolmogorov-Smirnov and Shapiro-Wilk observes that there is a statistical significance coefficient p of less than 0.001 for all operators and 0.001 for

Plus Communication regarding the test Kolmogorov-Smirnov. This indicates that for the variable related to the company's stores and their being attractive visually the null hypothesis assumes that variables do not have a statistically significant difference from a normal distribution. Being that the importance of the test with p less than 0.05 is observed in this case, it can be concluded that the null hypothesis cannot be rejected and that the alternative hypothesis that would be the variables have a statistically significant difference from a normal distribution stand.

The second question is related to the appearance of professional service and sales staff, as well as their professional ability. In connection with the distribution of this variable across groups surveyed that are the mobile operators it is observed that the null hypothesis which is the assumption that there is a statistically significant difference between variable and normal distribution. As seen from Table 3 that the observed results have a smaller statistical significance than 0.001 and the only difference is that of the group that belongs to Plus Communications with a statistical value of 0.002 and 0.019 for the KS tests (Kolmogorov-Smirnov) and Shapiro Wilk respectively. This shows that although this is a slightly higher value, again it is enough to reject the null hypothesis.

The third question is about the quality of modern shops and convenience of point of sales for the companies operating in the market. Clearly as expected in the case of Plus Communication it has a statistical significance value of 0.002 and 0.001 for KS and Shapiro Wilk tests respectively. Regarding the other three operators, statistical values are smaller than 0.001. Based on this coefficient it can be concluded that the null hypothesis that assumes that there does not exist a statistically significant difference between variables' and normal distribution is not true, and the alternative hypothesis stands. So, there is a statistically significant difference between variables 'distribution and normal distribution. The same applies also to the fourth question, which is related to the information about with pamphlets, brochures and materials the companies use for promotion and if they are attractive visually.

Table 3- Homogeneity of variances tangibility

The test of homogeneity of variance

		Statistics Levene	DF1	df2	Sig.
Dyqanet_e_kompanisë_tij me_celulare_janë_tërheqë se nga ana vizuale.	Based on average	2.817	3	307	,039
	Based on Mediane	3.065	3	307	,028
	Based on Mediane adjusted the degree of freedom	3.065	3	298.090	,028
	Based on the average of Cut	2,910	3	307	.035
Punonjësit_e_ofruesit_të_ shërbimit_tim_kanë_zotësi i_dhe_pamje_profesionale.	Based on average	3.944	3	307	,009
	Based on Mediane	2,135	3	307	,096
	Based on Mediane adjusted the degree of freedom	2,135	3	278.104	,096
	Based on the average of Cut	3.794	3	307	,011
Pamphlets, _broshura, _materiale_që_lidhen_me _shërbimet_janë_tërheqës e nga ana vizuale.	Based on average	,696	3	307	,555
	Based on Mediane	,483	3	307	,694
	Based on Mediane adjusted the degree of freedom	,483	3	228.225	,694
	Based on the average of Cut	,694	3	307	,556
Kompania_celulare_ka_d yqane_moderne_dhe_kom ode_për_konsumatorët.	Based on average	1,801	3	307	147
	Based on Mediane	1,287	3	307	279
	Based on Mediane adjusted the degree of freedom	1,287	3	295.276	279
	Based on the average of Cut	1,957	3	307	120

Source: Author simulations.

As it can be clearly observed from in Table 3, which shows that the homogeneity of variances of two variables related to the visual appearance of the company's shops and professional competence of the service employees have the appearance of little statistical significance smaller than 0.05. This means that the null hypothesis which assumes that the variables have equal variance across groups can be rejected, then it can be concluded that the variables of shops and employees and their visual appeal have a variance statistically significant different from one group to another. In the case of the other two questions dealing with the practicality and comfort of shops as well as pamphlets, brochures and publicity material it shows that

there is a higher value than the coefficient of importance 0,05. This means that the hypothesis that assumes that variances are homogeneous along variable control groups cannot be dismissed. So, it can be concluded that there is no statistically significant difference between the operators in terms of comfort of operators' point of sales and promotional materials and their appearance. In the case of statistically significant differences a post hoc test must be run in order to better understand which groups currently have different variances about these questions the quality of services.

As observed from the table of descriptives of Anova in terms of visual perception of the shops and their comfort inside the Point of Sales, Vodafone has a relatively higher average than other companies, the lowest score in these two variables turns out to be Plus, indicator which can be explained as a lack of high investment driven by their market share that the company has and their late entry in the market, which was the 4th operator. Regarding the professional appearance and appeal of employees, in this question and the promotional material involved in POS-s, Eagle Albtelcom has scored the higher value in the first place and Vodafone gets back down in second place, with Telekom that comes next and Plus at the end. It should be noted that the difference in the average user response is very small in absolute terms, and all averages are very close to number 4, which in the likert scale that is used in the questionnaire, is actually very good score and close to excellent.

CONCLUSION

In this paper the service quality and 4G services are studied and compared between operators in Albanian mobile market. In the first part a hypothesis about the homogeneity of 4G services offered by all operators in the market is tested. The hypothesis states that in the strategies and application of 4G internet services there exist significant differences between the operators. Years studies are 2016 and 2017. The study and most of the questionnaires were delivered and answered by clients in those years there were 4 operators in the market, and only at the end of 2017 the forth operator ceased its services and transferred the numbers to other companies. So, in this paper all 4 operators are taken into account.

In the second part of this paper, the services quality is studied and tested according to the respective clients' perception. In testing the services, a SERVQUAL model was used. Services are divided in 5 attributes. One of those is studied in this paper and shown as results. The first attribute of services is tangibility, and this is the one attribute that this paper studies and shows. The other attributes of the services are studied and showed in a bigger and more complete study that is used in other publications.

As the observations of the data shows, there are some statistically significant differences between the independent variable groups' averages and in the homogeneity of variances as well between the control factor variable groups tested against the dependent variables.

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