

## **INFLUENCE OF DEMOGRAPHIC FEATURES ON THE CUSTOMER SATISFACTION WITH COMPLEX TELECOMMUNICATION SERVICES ON THE MARKET OF BOSNIA AND HERZEGOVINA**

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### **ABSTRACT**

*On telecommunication market of Bosnia and Herzegovina is currently providing a number of complex telecommunications services, a trend in telecommunications markets around the world, and all this to keep users with many different connection services for telecom operators, both for themselves and realizing certain benefits.*

*For telecom operators, a simple solution is to offer in which the fewest number of different services. However, because of the growing need to create different profiles package for different categories of users, there is a constant need to differentiate offerings, and create and offer several different packages depending on the targeted user groups (gender, age, residence, etc.). In this context it is important to know what are the necessary differentiation that each of the target categories of users and expected claims.*

*Research conducted in the telecommunications market of Bosnia and Herzegovina indicates that in certain segments of preference and usage of telecommunications services between different categories of users there are significant differences that affect their satisfaction. The result of the analysis and extraction of key features of telecommunications services, is to create the best possible offers, promotions and placements of different service packages for different categories of users*

**Keywords:** demographic features, customer satisfaction, telecommunication services.

### **1. INTRODUCTION**

Meeting the needs and expectations of customers includes the provision of what is needed and when it is necessary (the right combination of services at the right time). It is important to note that in any case should not assume the users' needs. Serious companies invest huge efforts and resources that you may know and explore the needs of the user.

In terms of global competition and telecommunications services can be observed in such conditions, telecom operators cannot achieve a competitive advantage on the basis of cheaper services. To create a competitive advantage, telecom operators have certain (required) to provide services before and the better compared to the competition in order to maintain its market position, which should be seen as a passing and variable category.

In an effort to achieve the maximum degree of profitability of its services, the telecommunications company for the needs of their potential customers and creating services for its contents match the widest possible beneficiary population. However, it is clear that for different categories of users, there are different preferences toward variables that determine the content of complex telecommunications services. For the purposes of this study the influence of demographic features, proceeding to the satisfaction of complex telecommunications services, extracted the following variables: V1-quality voice service, V2-cost voice services, V3-sales and after-sales support voice services, V4-quality

services for the transmission of data, V5-cost of service for data transmission, V6-sales and after-sales support services for the transmission of data, V7-quality terminal equipment, V8-cost terminal equipment, V9-sales and after-sales support for the sold terminal equipment, the V10-kindness, expertise and professionalism of employees in sales and support of complex telecommunication service.

In accordance with these variables were examined preferences and attitudes of user satisfaction with different demographic features, proceeding. The study used the following demographic features, proceeding: gender, age and place of residence (urban and rural).

A sample of the research conducted included 200 users. Of this number, 159 customers have submitted properly completed the questionnaire, 32 users can not get submitted questionnaires and 9 are filed incorrectly completed questionnaires. Overall response to the survey was 79.5%, which was rated as very acceptable level.

## 2. RESEARCH RESULT

Analyzing the demographic characteristics of users and their impact on the perception of quality and satisfaction, we tried to establish the existence of significant differences in the perception of quality and satisfaction of service. The observed sample representation of male users was 81% and the rest (19%) of users are female.

The age structure of the user in the observed sample shows that only 5% of users under the age of 25 years, 31% of users aged over 45, while the largest number of users aged between 25 and 45 years (64% of them).

Also tested was a statistically significant difference in user satisfaction with a package by gender, using the following assumptions:

H<sub>0</sub>-Gender does not affect the user satisfaction in the use of a package,

H<sub>1</sub>-Gender of users affects satisfaction in the use of a package.

The elements of H <sub>i</sub> square test:			
Significance level:	0,05	Table value:	9,487
Degree of freedom:	(2-1) x (5-1) = 4	Calculated value:	0,875

The test results indicate that there is no statistically significant difference in the satisfaction of a package of services between users of different genders, that is to accept the null hypothesis (H<sub>0</sub>).

One of the goals of this research was to determine the influence of age on user satisfaction using complex telecommunications services. Therefore, applying the chi-square test showed a statistically significant difference in customer satisfaction according to their age. The starting point for this test was:

H<sub>0</sub>-Age does not affect user satisfaction in the use of a package,

H<sub>1</sub>-Age affects the user satisfaction in the service package.

The elements of H <sub>i</sub> square test:			
Significance level:	0,05	Table value:	15,507
Degree of freedom:	(3-1) x (5-1) = 8	Calculated value:	19,939

Relationship spreadsheet and calculated values shows that the risk of 5% accept H<sub>1</sub>, that there is a statistically significant difference in customer satisfaction, depending on their age. Analysis of the average satisfaction score for the observed dimensions of a package indicates that users are under the age of 25 years significantly more satisfied compared to the other two age categories (average satisfaction score across all dimensions is 4:12). Mentioned users are satisfied with courtesy, professionalism and expertise of employees in the sales and support (average score 4.83), and least satisfied with the prices of services for the transmission of data (average score 3). Additionally, this may be an indication that this category of users use services for transferring data more than the other two categories.

When considering the geographical representation of the customers, i.e. the primary place of use, more than half of the users are inhabited and services used in urban areas and 43% in rural areas. Influence of residence of the beneficiary and of the use of the observed service to rewarding, revealing the

existence of the need to create a different profile of services for users in urban and rural areas. These effects has been tested with the following assumptions:

- H<sub>0</sub>-Place of residence does not affect the satisfaction of the service package,
- H<sub>1</sub>-Place of residence affects the user satisfaction in the service package.

The elements of Hi square test:

Significance level:	0,05	Table value:	9,487
Degree of freedom:	(2-1) x (5-1) = 4	Calculated value:	11,025

At the risk of 5% is accepted H<sub>1</sub>, i.e. that there is a statistically significant difference in customer satisfaction depending on the place of residence and the use of services. Comparison of average rating of these categories of users shows that users in rural (rural) areas are more satisfied (average score 3.83), compared to people in urban (city) areas (average score 3.69). Despite the significant differences in the average scores for each dimension of pleasure, is characteristic of both categories that are most satisfied with the staff in the sales and support service package and least satisfied with prices of services for data transfer.

It is interesting to see the preferences that the importance that the individual observed variables attach to different groups of users. Figures 1, 2 and 3 shows the average score of significance that the importance of that particular content attach to users with different demographic features, proceeding.

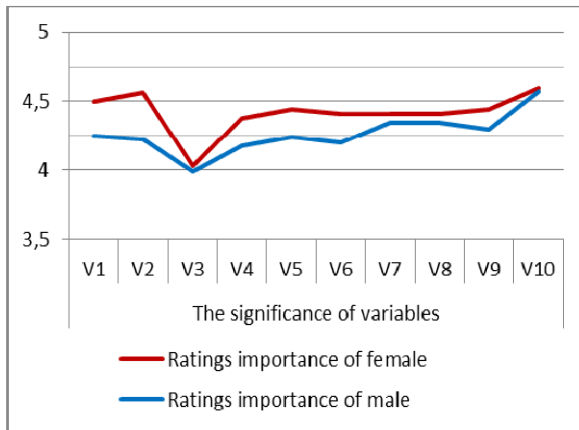


Figure 1. Ratings the importance of certain content toward gender

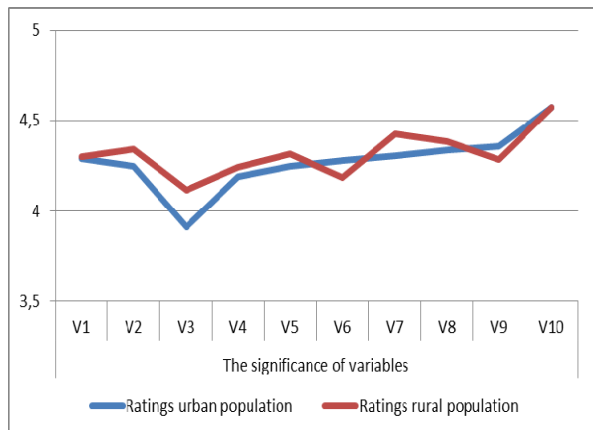


Figure 2. Ratings the importance of certain content toward the place of residence

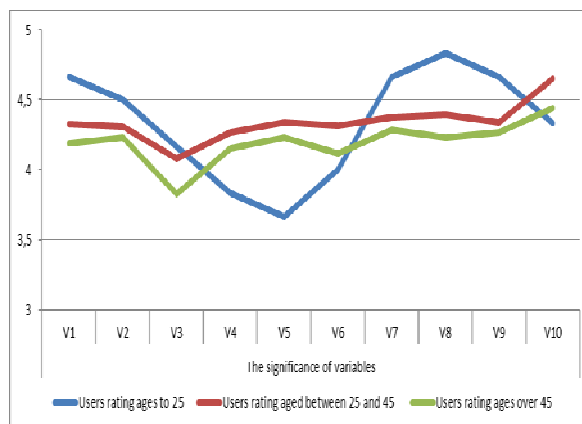


Figure 3. Ratings the importance of certain content in relation the age of users

### 3. CONCLUSION

Perceptions of quality and satisfaction among users of different demographic characteristics require a different approach to communication, which is adapted to each of these categories. With regard to age and place of residence have a statistically significant impact on customer satisfaction service package. For these reasons, it is necessary to communicate with users aged between 25 and 45, and customers with over 45 years in retail outlets as well as through the channels for after-sales support to pay particular attention to the need for more specific approach to communicating with the following categories of users, in order to secure a sufficient amount of information on all the dimensions and characteristics of the complex telecommunications services. This is necessary primarily because of incentive creating realistic expectations, and thereby increase the level of their satisfaction.

Research shows that the prices of voice services most satisfied customers in the category up to 25 years, and the least satisfied customers aged over 45 years. Also, users of the male sex are more satisfied with prices than are women, and greater satisfaction show users in rural areas compared to those in urban areas. Accordingly, it is appropriate to create a profile that will be treated differently priced voice services in relation to other dimensions of the package of services.

The results show that users are extremely well-judged this sales and after-sales support this dimension of a package, and it takes place, such a high level of support in the future.

Assessment of quality of service for data transfer, as one dimension of a package, shows that nearly three quarters of customers are satisfied and very satisfied with the quality of this dimension of package services, 10% of users are dissatisfied and very dissatisfied, while 16% of users do not have a clear position on the issue quality. The results show that the highest perceived quality users under the age of 25 years, although in this category of user quality is of minor importance. Unlike the previous categories, users 25-45 years and over 45 years of attach much more importance to this dimension of the package, while they are less satisfied with the quality of service for data transmission.

Attitude towards the price of the service user to transfer data shows that this feature with which users are least satisfied, and that got the lowest score of all categories of users (age, urban-rural, male-female). This suggests that, in addition to quality services for the transmission of data, pricing policy is not adapted to the expectations and demands of the users and the same need to be revised with the degree of the utmost urgency, and prices adapted to the requirements and expectations.

When it comes to the promotional aspect of the marketing of services, the research shows that users in urbanism areas (cities), most of the information about the services obtained through the web portal, then the TV and friends and newspapers. Users in rural (rural) areas most information obtained through the TV, followed by internet and recommendations from friends. When we look at age of subjects and its effect on the perception of the media through which they convey information clearly shows that users under 25 most of the information obtained through the web portal, users between the ages of 25 and 45, most of the information obtained via the TV and the same as users age over 45 years.

Is interesting that users who use the service in rural areas show a much higher degree of loyalty and willingness to positive word of mouth recommendation in relation to beneficiaries in areas of urbanism.

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