

**QUALITY MANAGMENT OF ASSEMBLED SERVICE ON
TELECOMMUNICATION MARKET OF BOSNIA AND
HERZEGOVINA**

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ABSTRACT

Quality management of key dimensions and characteristics of assembled service has to secure quality that is expected by service customers. Principle dimensions of assembled service are speech service, data-transfer service and telecommunication equipment. Factor analysis of research results should point out to the determinants of customer's content, as well to main characteristics that influence customers' decision to buy and use assembled services. Also, internal processes in one of the telecom operators in the market of Bosnia and Herzegovina will be analysed by FMEA methodology, and suggestions for quality improvement will be given. The results of this analysis and selection of assembled service characteristics and dimensions which are important for customers, along with the analysis of internal processes will enable the creation of a model ensuring a steady improvement of assembled service quality. The model is based on general references of ISO 9001:2008 standard for quality management, and it means grouping all processes and activities in one unique process on the service level.

Keywords: Quality management, assembled service, telecommunication market of Bosnia and Herzegovina, customer satisfaction.

1. INTRODUCTION

The model of the quality management of assembled service, integrated into the organizational structure of the telecom operators in the telecommunications market of Bosnia and Herzegovina on the principles of matrix organization, is shown in the example of BH Telecom company. Quality Management suite of services directed toward the identification of necessary activities and their management in the entire process, all geared to creating satisfaction at the customer service package. In order to maximize customer satisfaction, there should be a constant increase in the level of perceived quality of the service package. To achieve this goal, the activities are directed towards: governance dimensions that have the greatest significance for the user, taking concrete actions to improve the quality of the actual package of services, targeted promotional and advertising campaign, in order to establish the real effect on the level of expectations among users, and thus indirectly influenced the increase in levels of satisfaction and perceived quality.

To achieve these objectives adequately and comprehensively, implementation through the various stages of internal and external research data collected is necessary; and their detailed analysis and

processing of the conclusions drawn are used as the basis in creating the model for quality management package.

The study analyzed the following package dimensions: voice services, data transmission services and terminal equipment. For the analysis of customer satisfaction dimensions and characteristics, the package is divided into 10 determinants of satisfaction: quality of voice service, voice service prices, sales and after-sales support voice services, quality of service for data transmission cost of service for data transmission, sales and after-sales support services for data transmission, quality of terminal equipment, the cost of terminal equipment, sales and after-sales support sold to terminal equipment, and kindness, expertise and professionalism of employees in sales and support services package.

2. RESEARCH RESULT

In order to create the model, a statistical evaluation of the gathered information was performed using an ANOVA Test, factor analyses and the FMEA method. The first tested the significance of the differences of attitudes Customer Services presented determinants. It also tested the significance of differences in the perception of the sales staff and management on the attitudes and customer satisfaction. The analysis is aimed to point out the discrepancies in the attitudes of users regarding their satisfaction and perceptions of the attitudes of the sales staff and of management companies. Results show that in terms of individual perceptions of customer satisfaction package dimensions observed between the three groups there are significant differences. These differences are particularly pronounced in the perception of support for voice services, support services for data transfer, cost of terminal equipment, terminal equipment sold to support and kindness, expertise and professionalism of employees in sales and support. It was found that employees in sales have a better perception of the attitudes of users per dimension of satisfaction expressed by the above variables in relation to the management company.

With the aim of identifying and establishing key dimensions of satisfaction of users, the level of customer satisfaction and quality of different sized characteristics is considered using factor analysis. The main task of this analysis is based on a number of original variables, which correlate with each other, set aside with a small number of mutually independent latent variables that can explain the correlation between the original variables. According to the separation factor it was found that the first two factors have a critical value greater than 1, and that these two factors explained 58.799 of variance. The results of orthogonal rotation of factors indicate that the first factor - which we call the quality factor, among others, satisfied the following: support services for the transmission of data, quality of service for data transmission, quality voice service. The cost factor is the pleasure prices of mobile handsets and pricing services for data transmission.

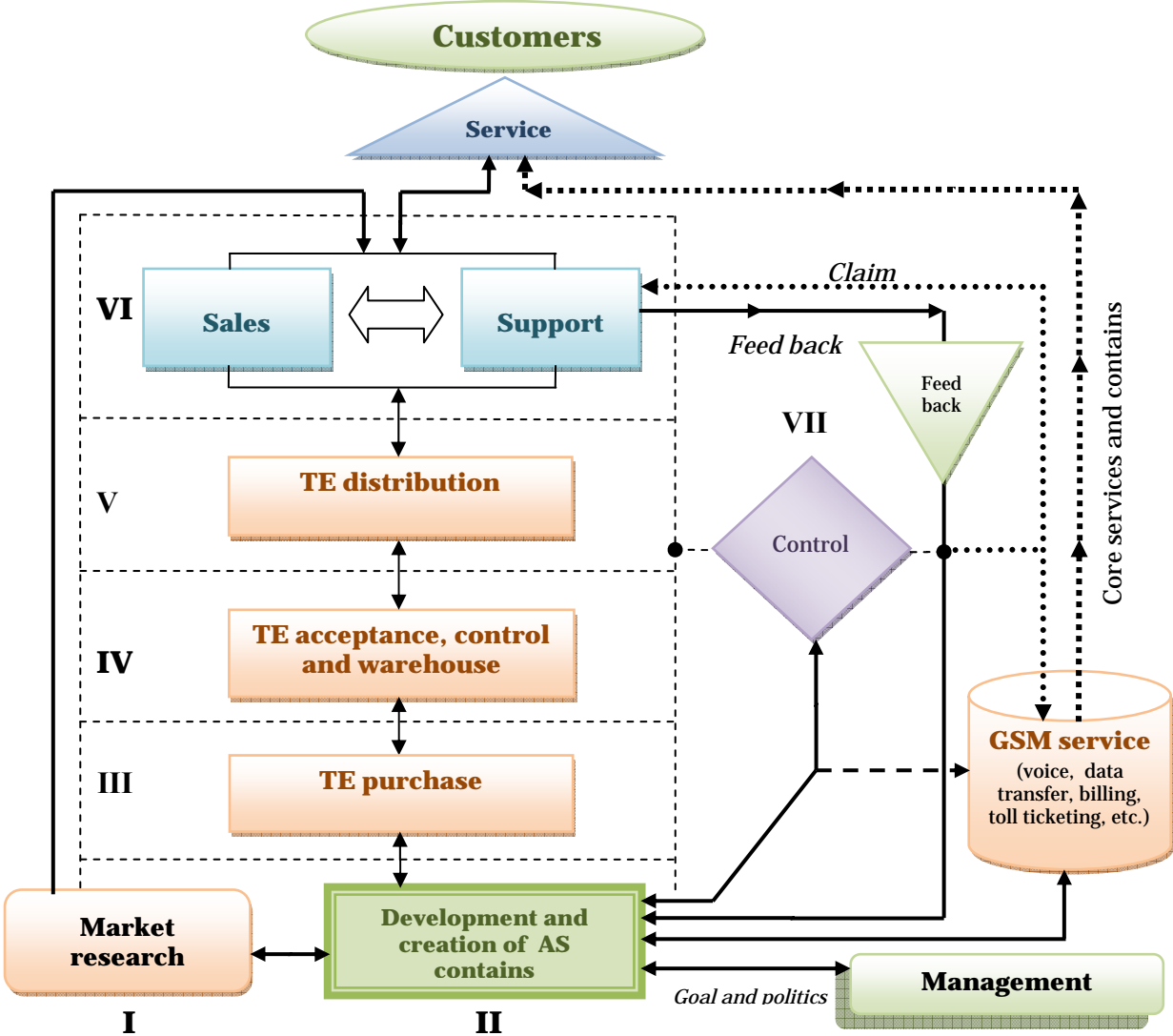
Factor analysis examined the effect and importance of certain dimensions and characteristics when customer making decisions about purchasing and using the package. According to the analysis, the first two factors have a critical value greater than 1, and these two factors explained 59.903% variance. The results of orthogonal rotation of factors indicate that the quality factor, among other things, it seems important that the user has: the quality of voice service, sales and after-sales support voice services, and quality of service for data transmission. Factor prices and support, it seems important that the user has: cost of terminal equipment, sales and after-sales support related to terminal equipment.

3. QUALITY IMPROVEMENT MODEL

FMEA methodology for quality management has enabled the analysis of all processes to create and package delivery services, and shows weak points and opportunities for improvement of these processes. Guided by the results of the research, is the presented and described model for creating and delivering a higher quality package.

The model fulfills the basic requirements of ISO 9001:2008 reference in terms of identification of the main and auxiliary processes. The package of services under the proposed model is considered as the main process, composed of several individual processes and activities, both existing and new. The model is based on the concept of a spiral in which the quality of basic information related to market requirements providing market research, followed by specification requirements and development of a package of services in accordance with those requirements, completion of all required components, their functionality control, training of all participants, as well as distribution and sales package of

services. The model is based on seven key activities combined and coordinating with each other, according to clearly defined and described rules should allow the package to provide higher quality services and thereby increase the level of customer satisfaction. Through the specific contributions of each of the seven activities described in the way of functioning models of quality improvement. For each activity is defined as the specific dimensions of quality of the service pack installed in that activity.



Legend: AS – Assembled service (Package of services); TE – Terminal equipment

Figure 1. Assembled service quality management model

In order for these activities to be adequately realized, management companies, among others, must constantly develop the culture of quality, implement and enforce an adequate personnel policy and organization and systematization of jobs and tasks. In connection with this proposal and given the type of organization to implement the model. It is a matrix organization. Observed through a system of creating and managing quality of service package, provides a matrix organization effectively defining points of contact between the process, supervision and process control, and efficient management of all resources involved in the main process. This paper presents an approach to quality management package services at the level of full service, independent of the division of tasks and responsibilities of the functional units. Defining the holder and owner of the entire process will enable smaller and tougher individual processes into one that is integrated, which is much easier to manage.

The model in its coverage of most of the existing employees does not require a significant commitment from new employees, except to the extent of implementation of activities under number I, II and VII. However, implementation of models for the delivery of a package of improved quality of services requires significant changes in the existing processes.

The creation of cross connections for the implementation of specific activities aimed to increase their efficiency, and accelerate the realization of the process. In creating and defining the horizontal and vertical cross-ties should involve all organizational units that are in any way involved in the creation and implementation of a package. Only in this way can it be expected for cross-link assignments to be adequately defined and accepted, and therefore that each connection functions successfully.

4. CONCLUSION

The successful realization and implementation of the proposed models will largely depend on the willingness of top management to recognize the need to implement specific changes within the business processes and activities, and their full and unconditional support for these activities. Different dimensions and characteristics of the package have a different significance and impact on customer satisfaction.

Results of the analysis of the key dimensions and characteristics of a package of services, that affect customer satisfaction, shows that the dominant aspect of service quality in relation to the aspect of price.

The decision to purchase and use the packet services, and satisfaction resulting from its use are supplied under the influence of the quality of all its dimensions. Enlarging process and a clear definition of the owner of the process should enable more effective monitoring, control and implementation of all activities and tasks of the entire process of a packet. Analysis of existing processes and activities involved in the implementation of a package with all its dimensions and characteristics indicates a possible improvement in all the observed processes / activities.

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