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INFLUENCE OF QUALITY MANAGEMENT SYSTEM ON CUSTOMER SATISFACTION AND LOYALTY IN HIGHER EDUCATION

UTJECAJ SUSTAVA UPRAVLJANJA KVALITETOM NA ZADOVOLJSTVO I LOJALNOST KORISNIKA USLUGA U VISOKOM OBRAZOVANJU

ABSTRACT

Large and rapid changes on the global market are emphasizing the importance of quality management as a core component of competitiveness. Key to differentiation of service sector, including educational institutions, as opposed to other sectors lies in two basic characteristics of services such as intangibility and inseparability of production and consumption. It is these characteristics that emphasize the importance of service quality as a key competitive determinant. People, their knowledge, competencies, effective and well developed organization are becoming bearers of differentiation of businesses and a key component for earning profits in the current market environment. By development of effective QMS (QMS – Quality Management System) there was a need to merge more management systems in to one system – integrated management system. In the case of higher education, organizations need to implement the ESG guidelines. Also, most common standard for improving the quality in organizations is well known ISO 9001 QMS. Also, every organization have their own specific characteristics and requirements and need to develop the self adjusted high effective QMS. Perceived quality of service in higher education has a positive impact on student progress and development. Thus the aim of paper is to show that relationship between students and faculty have a significant impact on dimensions of quality, which implies satisfaction of students, and thereby their loyalty. Special emphasis is placed on examination of relationship between perceived quality of service of higher education institutions and student results. Based on the data from the conducted research, policymakers in higher education can shape the strategy of higher education focused on the progress and development of students.

Keywords: competitiveness, career management, quality, ISO 9001, loyalty, customer satisfaction

SAŽETAK

Velike i brze promjene na svjetskom tržištu naglašavaju važnost upravljanja kvalitete kao osnovnu komponentu konkurentnosti. Ključ diferencijacije uslužnog sektora, uključujući edukacijske institucije, kao suprotnost drugim sektorima nalazi se u dvije osnovne karakteristike usluga kao što su nedodirljivost i neodvojivost od proizvodnje i potrošnje. Ove karakteristike naglašavaju važnost kvalitete usluge kao ključne konkurentne odrednice. Ljudi, njihovo znanje, sposobnosti, učinkovitost i dobro razvijena organizacija postaju nositelji diferencijacije poslovanja i ključni komponenti za ostvarivanje profita na trenutnom tržišnom okruženju. Razvojem učinkovitog sustava upravljanja kvalitetom pojavila se potreba za spajanjem više sustava upravljanja u jedan sustav – integrirani sustav upravljanja. U slučaju višeg obrazovanja, organizacije moraju provoditi ESG smjernice. Također, najčešća norma za poboljšanje kvalitete u organizacijama je dobro poznati ISO 9001 sustav upravljanja kvalitetom. Također, svaka organizacija ima svoje specifične karakteristike i zahtjeve te mora razviti vrlo učinkovit samo podešavajući sustav upravljanja kvalitetom. Percipirana kvaliteta usluge u višoj edukaciji ima pozitivan utjecaj na napredak i razvoj studenta. Cilj rada je pokazati da veza između studenata i fakulteta ima značajan utjecaj na dimenzije kvalitete, što uključuje zadovoljstvo studenata, a time i njihovu lojalnost. Posebno je naglašeno ispitivanje veze između percipirane kvalitete usluge institucija višeg obrazovanja i rezultata studenata. Temeljno na podacima iz provedenog istraživanja, kreatori politika s visokim obrazovanjem mogu oblikovati strategije višeg obrazovanja usmjerenog na napredak i razvoj studenata.

Ključne riječi: konkurentnost, upravljanje karijerom, kvaliteta, ISO 9001, lojalnost, zadovoljstvo potrošača

1. Introduction

Turbulent market environment intensifies the need for a more detailed behavior analysis of users, with the purpose on gaining his trust. User needs in current time are getting harder to satisfy with basic characteristics of products and services. So today market experts are getting more focused on the relationship between buyers and manufacturers that is service providers. From that relationship we can clearly discern the buyer preferences and to see the meaning of product and service quality on the buyers loyalty. The issue of this paper is focused on the influence of service quality on customer loyalty. In hypercompetitive market environment it is difficult to focus the customer attention on only one brand, therefore make him loyal. So the crucial role on the market is in the service quality which implies satisfaction, and thereby loyalty. People, their knowledge, abilities, skills and competence are the key components of every organization. Thereby people are becoming the holders of business differentiation. All assets except humans, is inert and requires human use in order to create additional value. Therefore the conclusion imposes, and from the previous we can see that the basic task of every modern organization is to attract and keep the top people and to work on a wide span of activities and assignments of human resources management. QMS focus the attention of organizations on human resources management, with the goal to increase efficiency and competitiveness of the organization on the global market, and to increase service quality in order to satisfy the customer. Basic market problem is how to keep current loyal customers, and how to attract new ones, knowing that satisfied customers eventually become loyal, which enables more secure selling results, as better business and sell planning, which contributes on making more quality permanent business results. In line with the stated issue the goal of this

paper is to explore the influence of career management teachers on quality of the class in perception of a customer, watched through their satisfaction and loyalty. Research for the needs of the paper was carried out on Virovitica college.

2. The importance of human capital development in relations to increased competitiveness

Management of human resources and career is one of the requirements and mandatory procedures which support the process of human potential management in the organization, and thereby one of the documents of QMS that can crucially influence on making human capital out of human potential. The fact is that career management can be definitely established and documented only in organizations that have implemented QMS in line with requirements of international ISO 9001 standard. Legislative regulation which regulates quality management on all levels in Croatian education is continuously improved and coordinated with European aquis. The question of quality management in the educational system is present for a long time. Even though on higher system levels (ministry, agencies, etc.) the system is already organized, very common problem is in application on school levels (from primary schools to universities). Measurements for improving quality are usually brought only on declarative level, without real application and understanding the purpose. One of the most common causes is in lack of education of those who should be involved in that system, and not understanding the basic settings of quality management. For the full application of the management system it is often necessary to change the way of thinking of everyone that influence on quality of provided service (from the principle/dean, through teachers/professor to technical staff).

2.1. Client satisfaction

In current time companies compete in providing products and services which customers seek, mostly they are small differences in design, color, taste or service they provide. "There is no doubt that service quality and satisfaction of users are closely related, interconnected greatness" (Došen, 2002:65). "Satisfaction implies clients positive feeling about used product or service, which gives him confirmation that he did a good transaction, that he made the right decision when choosing between different possibilities. Significance of satisfied and unsatisfied client is shown on picture (Table 1). And if the product surpasses the clients expectations then he is really satisfied.

Table 1 Satisfied opposite to unsatisfied client

Unsatisfied client	Satisfied client
Only 4% of unsatisfied clients complain directly to the firm	Keeping an existing client costs 4-5 times less than to win a new one
Over 90% of unsatisfied clients doesn't want to do business or to come in contact with the firm any more	Satisfied clients are prepared to pay more for a product/service
Every unsatisfied client will approximately tell nine other people about his unsatisfactory	Every satisfied client will tell five others about his good product/service

Source: made by author according to Vranešević, T. (2000): Management of customers satisfaction. Golden marketing: Zagreb, page 183. According to Knauer, V. Increasing customer satisfaction, Pueblo, CO: United States Office of Consumers Affairs, 1992.

The goal of the company doesn't have to be only to satisfy the customers it can also be to delight them. Top companies want to fulfill and surpass the consumer expectations and to put

a smile on their faces, and if they succeed it becomes a standard (Kotler, 2004). “We can bring satisfaction into a direct connection with product quality, with relation of the company to the consumer, with the price, that is the fact that the product shouldn’t be overrated, nor underrated, and with other factors depending on the nature of companies business.” (Kos and sur., 2011:2).

2.2. Buyer loyalty

“Customer loyalty is rated in repeated purchase, forgetting eventual mistakes, recruiting new customers with the propaganda “Word of mouth”, showing what do they like, and what they don’t like” (Meler, Dukić, 2007:116). When customers are turning into loyal customers, they are going through a process that takes some time, and every step has a specific need (Grbac, Meler, 2007). According to Grbac, Meler (2007) the goal of every enterprise is to achieve the highest loyalty with the critical mass of costumers, and in that purpose it is recommended to develop a loyalty program. A loyal customer will buy a product to which he is loyal even though a competitive manufacturer has a lower price on that product. Enterprises have to be aware that building a relationship with customers, regarding to the effort and time they put in doesn’t guarantee that the customer will become loyal or that the satisfied customer will be kept. On the other hand “Loyal customer will buy a brand of a product to which he is loyal, even though competitors have chipper products because he’ll achieve a better relation on the principle value-for-money. He will also be inclined to buy other products of the same manufacturer on the “Halo-effect” principle” (Meler, Dukić, 2007:123).

3. Service quality in higher Education

Starting points for development of competence profile and existing legislation which cover the area of quality management in education is defined with a series of primary and subordinate legislation. Criteria for service quality in higher education are defined by rules, guidance and extra criteria of the Agency for Science and Higher Education (ASHE) and European Association for Quality Assurance in Higher Education (ENQA). Analyzing the current legislation we can see the highlight on defining quality standards that are expected from universities and colleges. The key role in defining quality standard in higher education in Croatia is tied with National Council for Higher Education, National Council for Science, Rectors’ Conference, Student Conference and Council of universities and colleges and ASHE. From reviewing legislations and rating application in practice, what is early said is evident, legislative framework exists, many activities are set in motion, but according to authors rating there is a lack of practical use and understanding the point of this activities. Implementation of ISO 9001 standard requirements frequently has a positive effect and eases the practical use of those requirements (Kolenc-Miličević, Britvić, Miličević, 2012:69).

3.1. Perceived quality of products and services

“Costumers usually judge the quality of products and services based on different information indicators that are connected with the product. Some of those indicators are inner (intrinsic) to the product or service, while others are external (extrinsic). Together or individual, indicators provide a foundation for perceive quality of products and services” (Schiffman, Kanuk, 2000:146). According to Korda, Milfelenr (2009) perceived value of consumers can be widely defined as a total evaluation of costumers about usefulness of products or services that is based on perceptions of what is accepted and what is given. Significance of quality is different to every user and quality of the service is a subjective category. “Perception of quality of service doesn’t occur suddenly, it is shaped after a series of services and service enterprises...” (Bratko, Previšić 2001:443). “Many consumers use the image of the country of

origin as a stereotype while evaluating the quality of the product (for example “German technique is great.” Or “Japanese cars are reliable.”)”(Schiffman, Kanuk, 2000:146).

4. Influence of product and service quality on customers satisfaction

Success in keeping customers and increasing their satisfaction and gaining new customers depends on how well you know the needs of customers and understanding why do customers use certain products or services. Satisfaction of the client is based on the price while the quality isn't, that is, the satisfaction of the client is based on the delivered value which main components, but not the only ones, are quality and price. Companies that achieve high rates of satisfaction try to aware their market about that, and they understand that their satisfied clients provide some extra advantages for the company. Satisfied clients are not paying much attention on the price and they stay their customers for a longer period. With time they start to buy products that the company has introduced as a related product or improvement. Also by talking to others they speak in the benefit of the company and their products (Kotler and sur., 2006). Companies know that they are chosen by thy clients because they have the right to choose.

5. Case analysis – Virovitica college

Virovitica college is founded by Croatian Government Decree on September 7 in 2007. Development of the college from foundation to the end of 2013 has been continuously carried in three basic directions:

1. Development of human resources necessary for continuous promotion of quality of educational process, professional and applied scientific work,
2. Development of material resources necessary for assurance of optimal conditions for conducting class and improving student standard,
3. Activity in the community by creating assumptions for participation in development of local area through transfer of knowledge by realization of cooperation and partnership with economy, private, public and civil sector.

During 2009 Expert council have accepted the Strategy of College development in the period from 2009 to 2013 where one of the goals that was highlighted was the development of the Quality Assurance system and development of human, material and financial resources. By the end of 2009 setting up Quality assurance system has started. During 2011 integrated quality control system was established (which is made of ISO 9001:2008 with IWA 2:2007 guidance for educational institutes, safety management system OHSAS 18001:2007 and the Financial management and control system FMC) which is certified and once a year supervised from the certification company QS Group Zurich Switzerland. 2012 Quality control center was established. During 2014 re-accreditation by ASHE was successfully conducted and recertification by the certification company according to ISO 9001:2008. As one of the basic components in encouraging employees and managing their career is the measure to encourage them to extra education. This measure directly influences on quality of the employee which automatically projects on the quality of his work, class. Concern with the stated measure college encourages and finances their employees on further education through Postgraduate specialist and doctoral studies, as well as active writing of papers and participation on conferences, and exchange of knowledge and experience with colleagues from other higher educational institutions. In order to enable a direct analysis of quality of work of teachers in winter semester in 2009 the first student questionnaire was conducted by electronic way which has a purpose to grade the quality of teachers work and class, and that practice is kept with the present day.

5.1. Hypothesis

The goal of this paper is to analyze student questionnaire that is carried out on college and determine if there are indicators which point that implementation of ISO 9001:2008 with IWA 2:2007 guidelines for educational institutions is a improved quality of communication with students and the availability of class materials, organization of class seminars and exercises, and organization of colloquiums and exams. Also it is necessary to connect improvement in the performance of human potential with the satisfaction of customers, and to analyze what influence has the performance of human potential on loyalty of the customers. According to stated three hypothesis of this paper can be specified:

H 1. Grade of students from the area of quality communication with students and availability of class materials, organization of seminars and exercises, organization of colloquiums and exams has been improved consider the time before implementing ISO 9001:2008 with IWA 2:2007 guidelines for educational institutions;

H 2. Development of student grades according to the linear trend established from the available data is growing;

H 3. Establish interconnection between quality of work, satisfaction and student loyalty.

5.2. Methods of analysis

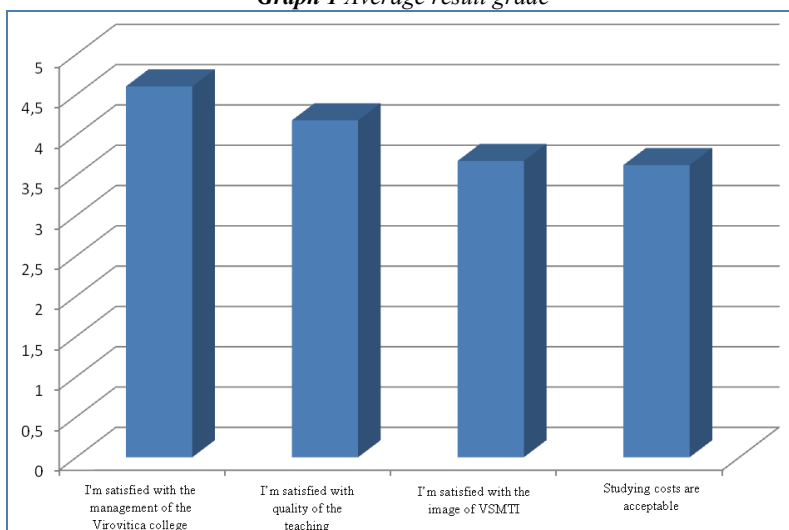
Student questionnaire in college is carried out since the academic year 2009/2010 when only 38 students participated, 7% of the total number of students. In academic year 2010/2011 156 students participated, in 2011/2012 there were 289 students participating, 2012/2013 251 students participated and in 2013/2014 there were 274 students participating. Student questionnaire in college is conducted two times a year, after listened first and after the second semester in an academic year. Each student has a right to participate in the questionnaire which is completely anonymous. All data given by the questionnaire are saved in the database on the domain server. Because the questionnaire is conducted twice in a academic year, in this paper average grades were monitor by academic year not including 2014/2015 because the second questionnaire wasn't conducted. For the collected data relative changes were observed in the current period in compared with the previous, chain indexes, average rate of change and trend. The data was processed with MS Excel. The goal of quality in education is to satisfy the need of students through teachers and Professional Service of the Faculty. "Educational service is not touchable, expendable and in the same time it is produced by service provider (teacher) and consummated by the user (student)" (Vojinić, Stojičić, 2012:21). In order to determine influence of quality in education on the satisfaction of students an extra research was conducted which had a goal to determine the level of satisfaction of students on Virovitica college and their loyalty to the college. Research was conducted on a sample of 310 students of Virovitica college. All students that were in class on January 22 in 2015 were included in the research. The tool was a questionnaire bract made by 8 statements. Students were rating the statements with grades from 1 to 5, 1 would be meant as negative, 3 undecided and 5 positive.

5.3. Results of research

The total rating of students from all of the areas in the academic year 2010/2011 is lower for 6,78% compared to the academic year 2009/2010. One year after implementation of ISO 9001:2008 with IWA 2:2007 guidelines for educational institutions in academic year 2011/2012 the rating has increased for 3,69 % compared to academic year 2010/2011, in the next academic year rating was increased for 6,59 % compared to 2012/2013. The grade in the period between 2009/2010 to 2013/2014 has increased by 1,00 % so with the assumption that

the development of student grades from area of organization of colloquiums and exams keep up in accordance with linear trend determined based on observed period, 2014/2015 the grade 4,26 can be expected. From previously stated indicators we can clearly see how encouragement of employees to additional education and promotion of their competence has directly influenced on the change of attitudes of users and a better picture of the college in the perception of the students. What clearly imposes that management of quality and career of the teacher has a significant influence on managing their competences what was clearly recognized by the students. Results of the questionnaire conducted on the sample of 310 students are shown graphically below. Average ratings of results collected are shown on the graphs. Grades were given according to Likerts scale from 1 to 5, 5 being the most positive. According to collected data, high satisfaction of students in all three offered levels is clearly visible.

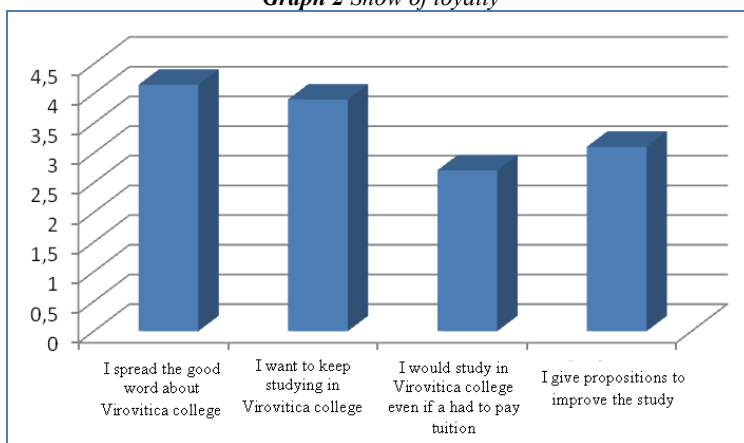
Graph 1 Average result grade



Source: made by the authors

Focus of this research is pointed to the quality of the class which is interdependent with the quality of the teaching stuff, and what is positively graded on the previous graph with the average of 4.18. Next question is does the so expressed satisfaction influence on the loyalty of students. According to the next graph we can see that loyalty is shown with the need to spread the good word about the Virovitica college and with the desire to continue education.

Graph 2 Show of loyalty



Source: made by the authors

It is interesting to see that the change of tuition expenses would significantly influence the loyalty of students, only the component “I would study even if a had to pay tuition” is rated with a average negative grade (2,7) what indicates that the expense has a significant influence on consumers behavior, in this case students. From the conducted research it is possible to conclude how management of human potential and directing their development under the influence of quality guidelines has a significant influence on the perception of quality from the student point of view, which causes satisfaction and loyalty.

7. Conclusion

According to modern theory of marketing the goal of every organization is to satisfy the need and desires of customers and the users of products and services and to make them better than the competition. So it is important for the organization to study the behavior of customers in every moment so they could get an answer on what way to individuals buy, use and dispose products or services so they could satisfy their own needs and desires. Based on starting theoretical settings, this paper has shown through research of satisfaction on Virovitica college that quality of the study and study spaces influence on loyalty of users, in our case students. Students express their loyalty to the college by promoting and spreading the good word what results with the improvement of the colleges image what has a synergistic effect. Synergistic effect is made through improved image, and spreading the good word caused by quality encourages a larger number of students to sign in. Because of the influence the product and service quality on the loyalty of the customers, organizations manage to keep existing customers and improve their satisfaction and also to attract new ones. Quality, that is the perception of quality makes customers loyal. Quality has become a competitive need in the 21st century. Only companies that provide the best possible quality will stay successful. Satisfied and loyal customer is not a coincidence, it is a building concept, therefore the behavior of customers may and must be measured so that the results from that measurement could be used in the strategy development of satisfied customers. Career management is strictly connected to strategic decisions of the organization so the development of employees is a continuous process that needs to be motioned be the employer and implementation of ISO 9001:2008 QMS is an ideal opportunity for that. QMS defines written procedures which support the process of management of human potentials in organization, and also one of the

quality documents which can crucially influence in making human capital from human potential. It is undoubted that career management can definitely determine and document only in those organization which have implemented the QMS, so the QMS is a good foundation to build a human resources management system. From the previous, conclusion imposes that ISO 9001 standard can help in the work of educational institutions on all levels of education. The biggest advantage of ISO 9001 standard is in its simplicity. Implementation of ISO 9001 standard it is easier to fulfill requirements which legislator places in front of educational institutions, parallel with that the development of human potentials and their competences is encouraged which directly influences on competitiveness of organizations and perception of users about the organization.

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