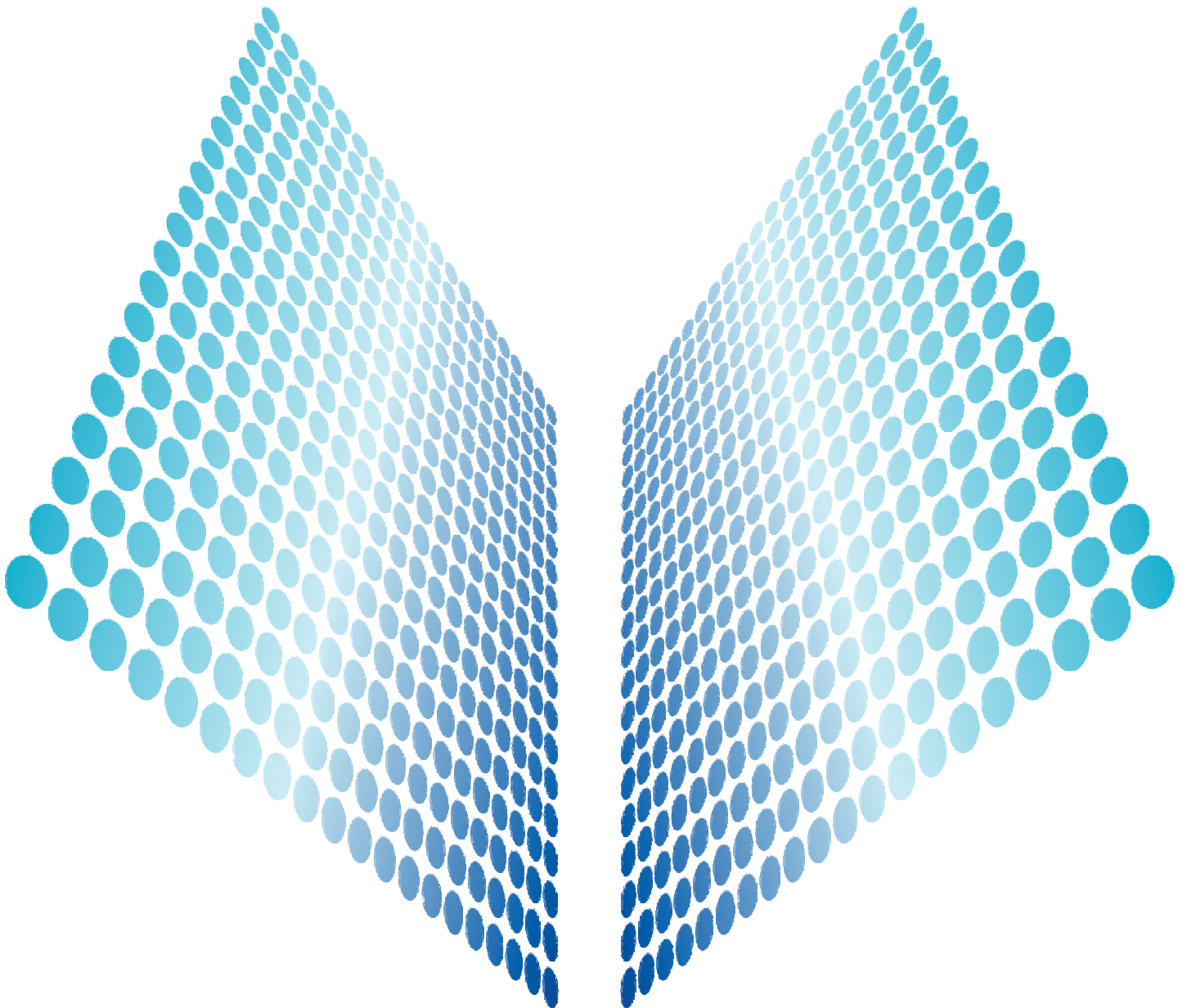


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IMPLEMENTING QFD METHODOLOGY FOR EVALUATING THE EDUCATION AND CREATING A SHORT TERM STRATEGY

Jovanka Kuzmanova, Ivo Kuzmanov, Roberto Pasic

Abstract: *The basic aim of the paper is to present only a segment from an extensive research which was done with an aim to create a short-term strategy for continuous improvements into the process of education. While doing the research a comparative approach was used, and we have created a complete QFD matrix which an aim to compare three key elements while creating the short term strategy. The key aspects were: the advantages that the subject under review has at the moment, analyzing the good sides of the competition as well as the analyses of the momentary market trends – at this case the demands from the customers. Into the process of creating the correlation matrix and also creating the priorities, all of the negative sides of the subject and the competition were also taken under consideration. Using such methodology a short term results are expected into the everyday work of the subject, but also with an everyday practicing of the created priorities we are expecting to get a better picture for the subject into the eyes of the customers – in this case the students who are involved into the process of education. The paper presents only a small segment from an extensive research, that will be published into some other occasion.*

Key words: *QFD, education, higher education, R. Macedonia*

1. INTRODUCTION

The continuous improvements into the process of education are a must for every educational institution, no matter the sector – private or state university. Actually only a quality education process is basic segment which brings the society improvements in any field. One of the key segments which should be mentioned are the following: non depending if the institution has an defined short or long term strategy, a continuous implementation of multiple methodologies is a daily routine with a purpose to create quality into the processes of education, and to create students that has the one inside them - situation where the employees are demanding such key possibilities. Seeing real experiences we could find various methodologies which have an applicative usage into educational institutions, but the one that has the “heart” inside her to create real improvements into educational processes is the QFD methodology (Quality Function Development). The things which make this methodology one of the best are the combinations of multiple criteria’s such as: the real experiences from users of the processes (in this case the students), real experience from the best practice at the moment (in this case the comparative ones – University from Skopje and a Private one also from Skopje), combination of organizational possibilities (from infrastructural ones to financial ones) and the potentials for improvements (from human aspects as well as from the aspects of future possibilities for improvements of the educational processes). Having in mind that the same methodology QFD worldwide is used as one of the methodologies for strategic planning, actually into the processes of pre-planning, the same one if applicative implemented can bring the organization and the process of education from a cycle to a cycle to a much better situation (improved).

Actually the basic aim of the paper is to present only a small segment from an extensive research in which three higher education institutions were considered, as well as more than 300 real users of the processes into the institutions which with their experience, benefits, needs, demands but also negative experiences were used to create an QFD matrix shown into the paper. The same one could be used to create future steps for the institution from Bitola, for future improvements of the processes

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into the same one. While creating the matrix all of the momentailary possibilities at the state universities were also taken under consideration, especially into the part of creating strategic future steps.

2. PRESENTING THE RESEARCH PROCESS

The main idea for such a research came from the spotted need to create much more better educational processes into a Faculty from Bitola (or to be more specific into a selected study program). The idea was to use a methodology with which the institution from a cycle to a cycle will have better results based on direct needs of the students, the environment but also regarding the business entities needs and demands. But before we could present the process of research, into the following few rows, the actual situation regarding the higher education process into R. Macedonia is presented. In this stage we have several state universities, from which the faculty that was under research is from the second largest one, and we have various private universities (more than 15) at the moment. All of them had a different infrastructural, human and other kind of opportunities. All of the educational processes are according to a previous accreditation study programs, approved by the state educational ministry. The research had in mind three faculties, or to be more precise three study programs with similarities, from which one is from Bitola, and the other two are from Skopje (one state and one private). Into the processes of research more than 300 momentaliraly students and graduated ones were interview with a purpose to get a precise picture for all of the three institutions (SWOT). The actual number of interview students gave an excellent information and picture about the institutions, their straight sides, their possibilities but also give information about the negative sides into the institutions.

While researching and interviewing the users of the educational processes, two parts of the research were used. The first one was conducted with a questioner which has questions about: the real experience of the users, their needs and demands, the potentials and the quality of the staff members included into the educational processes, their experiences and also the future steps for improvements. After creating view about the things previously mentioned, the second part of the research was done whit a usage of an open discussion sessies. While the session all of the subjective views of individuals were discussed and after more sessions an objective ones were created about all of the spotted information's. At this stage it's more than relevant to say that the ones from the prive university were included with a purpose see the side of the educational processes into institutions from that side of the educational processes into R. Macedonia. While creating the focus groups the individuals were from different stages of the process of education (graduated ones, the ones that are in the 1st, 2nd, 3rd and final stage of studies), but also while discussing the information's into the second part three focus groups were created each from representatives from one of the institutions. Also one of the criteria's which were considered was the situation of the object (infrastructural) where the processes of education were enrolled. The one from Bitola was 55 year old, the one from Skopje was more than 60 years old and the private one was exactly 10 years old. Important information which was considered was the staff member numbers (professors employed in the institutions). So considering this point of view, the Bitola one has more than 55 employees, the state one from Skopje more than 60 and the private one only 6 professors. The main focus at this stage of the research was to create a real picture about the processes of education, the curriculums, the knowledge which the staff has, possibilities for real practice into real industrial entities as well as to discuss the possibilities for future improvements.

3. PRESENTING THE QFD MATRIX

Having in mind all of the information's previously mentioned (the desires of the students, their subjective thoughts about the educational processes, the opinions of the target groups, the possibilities and the potentials of the institutions under review, the real information's about the institutions) the QFD matrix was created. The same one is a correlation of multiple relevant factors with a final aim to generate priorities which will improve the situation into the institution from Bitola. At

this stage, we have presented the first QFD matrix that was created, from which several others were created. The picture presets the created matrix and after the same one a tabular view of the priorities is given also. One of the things which is worth full mentioning is to say that the information's gathered gave us real information's about momentailary situation considering better sides, opportunities, threats and negative sides of the institution, but also relevant information about the future steps which are needed to be made.

The gathered information could also be used with an aim to create a larger research on national level where all of the institutions in the field could be taken under consideration and a national agenda for improving the state university processes of education could be made.

In addition of the paper the matrix as a picture and the priorities as a tabular view are presented. Discussing about the levels of priorities we could say that at this stage we could discuss about the possibilities and the time for future improvements placed as needs into the tabular view. The same ones are real and all of them could be achieved in such short notice.



Priority	BASIC AIM
LEVEL 1	More Math's subjects in the Curricula's
	Less choosable subjects
LEVEL 2	Equipment activation in the educational processes – the subject has an excellent laboratories
	Cooperation with Business Entities
LEVEL 3	Administration staff to be put in a situation where the student are on first place
	Nonfunctional E-Systems

4. CONCLUSION

The paper presents only a segment from an extensive research done with a final aim to develop a short-term strategy for continuous improvements into the process of education, or to be more precise to create a short term strategy in a real educational institution from Bitola. While doing the research a comparative approach was used, and we have created a complete QFD matrix so we can compare three key elements while creating the short term strategy. The key aspects were: the advantages that the subject under review has at the moment, analyzing the good sides of the competition as well as the analyses of the momentary market trends – at this case the demands from the customers, the needs of business entities and the momentary trends in the environment. Into the process of creation an correlation matrix and also creating the priorities previously setted into the tabular view, all of the negative sides of the subject and the competition were also taken under consideration. So, in a situation to create an exact matrix with a real information, over 300 graduated and students which are in the process of education at the moment from the institutions undred review were interviewed. The informations were devided into two categories of evaluation, the first one with a quaetionary and the second one with an focus groups. So with the information and real aplication of the methodology, the given matrix was created and the tabular view of priorities also. Using such methodology a short term results are expected into the everyday work of the subject, but also with an everyday practicing of the created priorities we are expecting to get a better picture for the subject into the eyes of the customers – in this case the students who are involved into the process of education on one hand and on the other the business entities as an institutions that could employee some of the graduated ones. The paper presents only a small segment from an extensive research, that will be published into some other occasion. At the end we could also conclude that this paper and the created matrix could be used for future creations of such matrixes from which the entity could be improved from a stage to a stage.

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