

# CENTER FOR QUALITY



UNIVERSITY OF MONTENEGRO  
FACULTY OF MECHANICAL  
ENGINEERING PODGORICA



CENTER FOR QUALITY  
University of Kragujevac  
Faculty of Engineering

Association for Quality  
and Standardization  
Serbia



**10<sup>th</sup> International Conference**

# ICQME<sup>20</sup><sub>16</sub>

(Quality, Management, Environment, Education, Engineering)

## PROCEEDINGS



TEMPUS JP 543662

**Editor: Prof. Zdravko Krivokapić, PhD**

**Petrovac, Montenegro  
28<sup>th</sup> – 30<sup>th</sup> September 2016**



TEMPUS JP 543662

Krivokapić, Z. (editor): *Proceedings of the 10<sup>th</sup> International Conference "Quality, Management, Environment, Education, Engineering" (ICQME 2016)*; Petrovac, Montenegro; 28<sup>th</sup>–30<sup>th</sup> September 2016. Podgorica (Montenegro): Center for Quality, Faculty of Mechanical Engineering, University of Montenegro 2016. - 349 pp. ISBN 978-9940-527-49-5.

**Publisher:** Center for Quality, Faculty of Mechanical Engineering,  
University of Montenegro,  
81000 Podgorica, Montenegro

**For publisher:** Prof. Zdravko Krivokapić, PhD, Director of the Center for Quality

**Reviewers:** Prof. Slavko Arsovski, PhD, Faculty of Engineering, University of Kragujevac, Kragujevac (Serbia)  
Prof. Sergey Kovalevskyy, PhD, Donbass State Engineering Academy (DSEA), Kramatorsk (Ukraine)  
Prof. Sanja Peković, PhD, University of Montenegro, Faculty of Tourism and Hotel Management, Kotor (Montenegro)

**Approved by:**  
Decision no. 1/9/2016 from 01-09-2016 from Center for Quality, Podgorica (Montenegro)

#### **Disclaimer Note**

The content of this publication, data, discussions and conclusions presented by the authors are for information only and are not intended for use without independent substantiating investigations on the part of potential users. Opinions expressed by the Authors are not necessarily in accordance with Center for Quality as the Publisher, and the organizer and editor are not responsible for any statement in this publication.

#### **Copyright © 2016 Center for Quality**

All rights are reserved for this publication, which is copyright according to the International Copyright Convention. Excepting only any fair dealing for the purpose of private study, research, review, comment and criticism, no part of this publication can be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, electrical, electronic, optical, photocopying, recording or otherwise, without the prior expressly permission of the copyright owners. Unlicensed copying of the contents of this publication is illegal.

**Circulation:** 150 exemplars

**Printed by:** Artgrafika  
Nikšić, Montenegro

## ORGANIZERS

# CENTER FOR QUALITY



UNIVERSITY OF MONTENEGRO  
FACULTY OF MECHANICAL  
ENGINEERING PODGORICA



CENTER FOR QUALITY  
University of Kragujevac  
Faculty of Engineering



Association for Quality  
and Standardization  
Serbia



**PROCEEDINGS PUBLISHING IS SUPPORTED BY**



## ORGANIZING COMMITTEE

1. Prof. Zdravko Krivokapić, PhD (Chairman)
2. Prof. Milan Perović, PhD
3. Radoica Luburić, PhD
4. Evica Milić
5. Danilo Radoman, MSc
6. Dragan Vukčević
7. Prof. Aleksandar Vujović, PhD
8. Prof. Jelena Jovanović, PhD
9. Prof. Milan Vukčević, PhD
10. Srđan Martić, MSc
11. Rade Grujičić, MSc

## SCIENTIFIC COMMITTEE

<b>Adolfo Senatore</b>	<i>University of Salerno, Italy</i>
<b>Aleksandar Vujović</b>	<i>University of Montenegro, Montenegro</i>
<b>Alireza Lari</b>	<i>Fayetteville State University, USA</i>
<b>Ayşegül Akdoğan Eker</b>	<i>Yildiz Technical, Beşiktaş/Istanbul, Turkey</i>
<b>Baki Karamis</b>	<i>Erciyes University, Turkey</i>
<b>Bülent Eker</b>	<i>Namik Kemal University, Tekirdağ, Turkey</i>
<b>Cristiano Fragassa</b>	<i>University of Bologna, Italy</i>
<b>Cornelia Ioan</b>	<i>U.S.A.M.V.B., Timisoara, Romania</i>
<b>Darko Petković</b>	<i>University in Zenica, B&amp;H</i>
<b>Goran Putnik</b>	<i>University of Minho, Braga, Portugal</i>
<b>Jaroslava Hyrlova</b>	<i>University of Pardubice, Czech Republic</i>
<b>Jelena Jovanović</b>	<i>University of Montenegro, Montenegro</i>
<b>Jovan Filipović</b>	<i>University in Belgrade, Serbia</i>
<b>Marc-Arthur Diaye</b>	<i>Paris-Sorbonne University, France</i>
<b>Marty Casadesus</b>	<i>AQU Catalunya, Barcelona, Spain</i>
<b>Milan Vukčević</b>	<i>University of Montenegro, Montenegro</i>
<b>Milan Perović</b>	<i>University of Montenegro, Montenegro</i>
<b>Mirjana Pejić Bach</b>	<i>University of Zagreb, Croatia</i>
<b>Mirko Soković</b>	<i>University of Ljubljana, Slovenia</i>
<b>Miroslav Bobrek</b>	<i>University in Banja Luka, B&amp;H</i>
<b>Pavel Castka</b>	<i>University of Canterbury, New Zealand</i>
<b>Petroman Ioan</b>	<i>U.S.A.M.V.B., Timișoara, România</i>
<b>Slaviša Moljević</b>	<i>University in East Sarajevo, B&amp;H</i>
<b>Slavko Arsovski</b>	<i>University in Kragujevac, Serbia</i>
<b>Stanislav Karapetrović</b>	<i>University of Alberta, Canada</i>
<b>Svetlana Cicmil</b>	<i>University of the West of England, UK</i>
<b>Tadeusz Sikora</b>	<i>Cracow University of Economics, Kraków, Poland</i>
<b>Valentin Nedeff</b>	<i>Universitatea din Bacau, Romania</i>
<b>Veijo Kauppinen</b>	<i>Helsinki University of Technology, Finland</i>
<b>Vesna Cancer</b>	<i>University of Slovenia, Slovenia</i>
<b>Vidoje Vujić</b>	<i>University of Rijeka, Croatia</i>
<b>Vladimir Modrak</b>	<i>Tehnickal University of Kosice, Slovakia</i>
<b>Zdravko Krivokapić</b>	<i>University of Montenegro, Montenegro</i>
<b>Zora Arsovski</b>	<i>University in Kragujevac, Serbia</i>

## P R E F A C E

*It is our pleasure to invite you, on behalf of the Organizational Committee, to the 10<sup>th</sup> International ICQME Conference that will be held in Petrovac between 28<sup>th</sup> and 30<sup>th</sup> September, 2016.*

*The idea of Conference has first come to life when a need was felt to have the eleventh traditional National Conference on Quality Management System (SQM) with the international participation evolve into an international conference, with an extension of thematic areas to be covered.*

*National Conference on Quality Management System (SQM) with the international participation has been gathering prominent experts from the field of quality over the last twelve years. In addition to the local, Montenegrin experts, the participation lists included a number of well-known scientists and experts from France, Spain, Canada, Portugal, Italy, Greek, Poland, Denmark, Slovakia, Slovenia, Serbia, Bosnia and Herzegovina, Croatia, so some of the vital issues of quality, management, engineering, education, and environmental protection will be discussed at 10<sup>th</sup> International ICQME Conference, and the participants from both the university and the commercial fields will take part, contributing to a more productive exchange of ideas and experiences.*

*The conference intends to shed further light on the complex and potentially conflicting choices that firms take, in order to acquire, exchange, and create knowledge in order to improve its performance. This theme relates to quite a wide variety of aspects relating to the increasing complexity (e.g. economic, management, engineering, sociology) of systems for knowledge creation and innovation. This complexity implies a more intensive and more frequent need to embrace as well as to connect both internal and external source of knowledge in the search for new technological achievements. ICQME became a part of Quality Festival, a manifestation that takes place in Montenegro, Bosnia and Herzegovina and Serbia.*

**In Podgorica,  
September 2016**

### ON BEHALF OF THE ORGANIZING COMMITTEE

**Prof. Zdravko Krivokapić, PhD**



**Prof. Milan Perović, PhD**



TEMPUS JP 543662



# CONTENTS

1.	<b>Andros S.V., Gerasymchuk V.H. (Kiev - Ukraine)</b> <i>From quality of administrative decisions to quality of life</i>	1
2.	<b>Arsovski S. (Kragujevac - Serbia), Krivokapić Z. (Podgorica - Montenegro)</b> <i>A regional quality enhancement through synergy among West Balkan countries supported by EU</i>	9
3.	<b>Jovović T. (Podgorica - Montenegro)</b> <i>QMS model for improvement of health care service in emergency center</i>	23
4.	<b>Kokić Arsić A., Mišić M., Arsovski S., Radojković M., Prlinčević B. (Zvečan - Serbia)</b> <i>Integration of sustainable development and quality on organisation and regional level</i>	31
5.	<b>Krivokapić Z. (Podgorica - Montenegro)</b> <i>Training for quality (motive ISO 9001:2015) – New or...</i>	38
6.	<b>Mitreva E., Lazarevski I., Filiposki O., Taskov N. (Štip - Macedonia)</b> <i>Situation analysis of textile industry in Macedonia by criteria for obtaining the European Award for Quality</i>	46
7.	<b>Mitreva E., Risteski S., Srebrenkoska V., Lazarevski I. (Štip - Macedonia)</b> <i>Analysis of the situation in the textile industry in Macedonia through four quality pillars</i>	64
8.	<b>Vaxevanidis N.M. (Athens - Greece), Psyllaki P. (Piraeus - Greece), Asteris P.G., Chatzarakis G.E. (Athens - Greece), Prokopiou H. (Galatsi - Greece), Krivokapić Z. (Podgorica - Montenegro)</b> <i>Research on quality management in southeastern europe: A bibliometric study</i>	77
9.	<b>Rivera D.E., Fa M.C., Villar A.S., Viadiu F.M. (Barcelona - Spain)</b> <i>Standardization of management of the delight: A proposal and critical analysis</i>	89
10.	<b>Aleksić A., Arsovski S., Nestic S., Stefanovic M., Tadic D. (Kragujevac - Serbia)</b> <i>Achieving business continuity through organizational resilience: Socio-ecological perspective</i>	99
11.	<b>Nikolić D., Radulović J., Skerlić J. (Kragujevac - Serbia)</b> <i>Serbian ZNEB and PNEB - Optimization of energy consumption</i>	106
12.	<b>Marjanović Z., Raos M., Malenović Nikolić J. ()</b> <i>Reducing emissions of motor vehicles by using liquified petroleum gas as propulsion fuel</i>	114
13.	<b>Pravdić P. (Kragujevac - Serbia), Kučinar R. (Trebinje - Bosnia and Herzegovina)</b> <i>Integration of environmental aspects into BSC</i>	122
14.	<b>Pravdić P. (Kragujevac - Serbia), Kučinar R. (Trebinje - Bosnia and Herzegovina)</b> <i>Introduction of EMS in TQM concept</i>	131
15.	<b>Radulović J., Nikolić D., Skerlić J., Ranković V., Vasković M. (Kragujevac - Serbia)</b> <i>A review of photovoltaic technology for electricity generation</i>	138
16.	<b>Skerlić J., Nikolić D., Lukić N., Radulović J. (Kragujevac - Serbia)</b> <i>Optimization solar domestic hot water systems</i>	146
17.	<b>Đelović D., Medenica Mitrović D. (Bar - Montenegro)</b> <i>An overview on the decision making in the cargo handling process</i>	154

18.	<b>Jašarević S. (Zenica - Bosnia and Herzegovina), Miličević Dž. (Zavidovići - Bosnia and Herzegovina), Brdarević S., Lemeš S. (Zenica - Bosnia and Herzegovina)</b>	<b>162</b>
	<i>Measurement of organizational culture in public administration: Case study of 5 municipalities in Bosnia and Herzegovina</i>	
19.	<b>Jelić M., Stanković M. (Niš - Serbia)</b>	<b>182</b>
	<i>The contribution of perception in business excellence attainment</i>	
20.	<b>Peković S. (Kotor - Montenegro), Perović Đ., Stanovčić T. (Podgorica - Montenegro)</b>	<b>189</b>
	<i>Evaluating innovation in tourism business</i>	
21.	<b>Petrović J., Popović P. (Kotor - Montenegro)</b>	<b>193</b>
	<i>Implementation of business analytical methods and applications for certification bodies performance management</i>	
22.	<b>Roy S., Samaddar S. (Salt Lake City, Kolkata - India)</b>	<b>207</b>
	<i>CMMI and six sigma - Complementary framework for software process improvement</i>	
23.	<b>Vijayabanu C., Therasa C. (Thanjavur, Tamil Nadu - India)</b>	<b>214</b>
	<i>The upshot of small group activity: The quality improvement technique in Indian private sector unit</i>	
24.	<b>Vujović A., Vujović D., Bogdanović M. (Podgorica - Montenegro)</b>	<b>222</b>
	<i>Telemedicine application in function of the health care performance improvement</i>	
25.	<b>Cvetić T., Djorđević A., Arsovski S., Macuzić I. (Kragujevac - Serbia)</b>	<b>231</b>
	<i>Work related stress and management standards</i>	
26.	<b>Kovalevskyy S. (Kramatorsk - Ukraine)</b>	<b>235</b>
	<i>International university continuing education as support of innovative development</i>	
27.	<b>Kovalevskyy S., Kosheva L. (Kramatorsk - Ukraine)</b>	<b>238</b>
	<i>Pyramid needs and problems of physical education in open education</i>	
28.	<b>Lazić Z. (Kragujevac - Serbia)</b>	<b>244</b>
	<i>Integrated management systems in higher education</i>	
29.	<b>Milivojević J., Cvetić T. (Kragujevac - Serbia), Kokić Arsić A. (Zvečan - Serbia)</b>	<b>250</b>
	<i>Quality of life in cities - Research aspect</i>	
30.	<b>Misailović V. (Užice - Serbia)</b>	<b>259</b>
	<i>Integration of quality management system and system of intellectual property right</i>	
31.	<b>Nowicki P., Dziadkowiec J. (Krakow - Poland)</b>	<b>270</b>
	<i>Implementation of food safety management system – where it brings the real value: A case study from polish enterprises</i>	
32.	<b>Todorović G. (Kragujevac - Serbia)</b>	<b>276</b>
	<i>Multiple-regression model for determining the strength of influence of the life quality factor in the urban areas</i>	
33.	<b>Campiglia S. (Oxford - United Kingdom), Fragassa C., Pavlovic A. (Bologna - Italy)</b>	<b>282</b>
	<i>Electric city buses powered by framed modular biocomposite platform: An advanced solution in ecodesign for a sustainable urban mobility</i>	
34.	<b>Djurić A., Gojković R., Marković B., Moljević S. (East Sarajevo - Bosnia and Herzegovina)</b>	<b>290</b>
	<i>QFD methods for lightweight construction</i>	
35.	<b>Gligorijević J. (Gornji Milanovac - Serbia), Macuzić I., Đapan M., Radenković M. (Kragujevac - Serbia)</b>	<b>296</b>
	<i>Production process losses elimination generated during production orders changeover by usage of CIM systems and TPM tools</i>	
36.	<b>Grammis K. (Patras - Greece), Vaxevanidis N.M. (Athens - Greece)</b>	<b>305</b>
	<i>Institutional accreditation according to NATO Bi-SC education and individual training directive 075-007 (2015)</i>	



37.	<b>Kafel P., Balon U. (Krakow - Poland)</b> <i>Certification of products, processes and management systems - common features and differences</i>	313
38.	<b>Peković S. (Kotor - Montenegro), Jovanović J., Bacović M. (Podgorica - Montenegro), Stanovčić T. (Kotor - Montenegro)</b> <i>The relationship between quality management and firm performance: The case of in developing countries</i>	318
39.	<b>Roy S., Samaddar S. (Salt Lake City, Kolkata - India)</b> <i>Risk management: Case study in indian scenario</i>	329
40.	<b>Simović O., Raičević M., Kovačević M. (Podgorica - Montenegro)</b> <i>Public involvement as a basis for good decision making</i>	336

Elizabeta Mitreva<sup>1</sup>  
Ilija Lazarevski<sup>2</sup>  
Oliver Filiposki<sup>3</sup>  
Nako Taskov<sup>4</sup>

## SITUATION ANALYSIS OF TEXTILE INDUSTRY IN MACEDONIA BY CRITERIA FOR OBTAINING THE EUROPEAN AWARD FOR QUALITY

**Abstract:** This study is to show the analysis of the situation of the Macedonian textile companies as per the criteria's for getting the European Quality Award: leadership, policy and strategy, staff management, resources, processes, customer satisfaction, employee satisfaction, impact to the company, business results etc. These criteria are used to evaluate what will be their position when they will compete for the European prize for quality. The results showed weak development in terms of the criteria, for that reason this study is proposing guidelines and recommendations for increasing the competitiveness of textile companies and their restructuring to catch up with the latest global trends.

**Keywords:** textile industry, leadership, policy, management of resources, processes, customer satisfaction, employees, business results.

### 1. INTRODUCTION

In recent years, when talking about management in practice, which is based on ISO quality standards, dominates the model of business excellence designed by the European Foundation for Quality Management (EFQM) and applied in practice through competition for the European Prize Quality (EQA) and through many other alternative programs for the same application. European model of excellence has become an example and benchmark based on which later they created national models of excellence, according to their needs and the actual level of the national economy in terms of general European market [1]. Europe has its peculiarities that the states in the Union, besides applying the European model of excellence; each for itself has created its own national model or national quality award. Through the national model of excellence should better check the performance of the national companies, and through the activities of national companies to promote and stimulate national values and characteristics. The European model shows that fulfilling customer satisfaction, employee satisfaction and impact on society are achieved through leadership that manages policy and strategy, management of staff, resources and processes, leading to excellence in achieving business results [2,3].

Each of the nine elements is criteria that can be used to assess the progress of the companies in achieving excellence. The results show what the organization has achieved and opportunities show how these results are achieved. The model of the European Foundation for Quality Management (EFQM) with a slight modification is applied in most European and other countries [3]. Republic of Macedonia does not have its own model of excellence [1].

The current research we have made in the textile industry in Macedonia show the great importance of companies' orientation to quality as a central axis of the management concept. In our country many

---

<sup>1</sup> Elizabeta Mitreva, University "Goce Delcev" - Stip, Macedonia, Krste Misirkov, No.10-A P.O. Box 201, Stip 2000, e-mail: elizabeta.mitreva@ugd.edu.mk

<sup>2</sup> Ilija Lazarevski, University "Goce Delcev" - Stip, Macedonia, Krste Misirkov, No.10-A P.O. Box 201, Stip 2000, e-mail: ilija.lazarevski@ugd.edu.mk

<sup>3</sup> Oliver Filiposki, University "Goce Delcev" - Stip, Macedonia, Krste Misirkov, No.10-A P.O. Box 201, Stip 2000, e-mail: oliver.filiposki@ugd.edu.mk

<sup>4</sup> Nako Taskov, University "Goce Delcev" - Stip, Macedonia, Krste Misirkov, No.10-A P.O. Box 201, Stip 2000, e-mail: nako.taskov@ugd.edu.mk

companies are dealing with the topic of quality management or pursue certification under ISO standards, but with total quality management is characteristic for a small number of companies [1].

Macedonia is a country in transition, where the economy "swims" in time and space. European officials occasionally put forward suggestion that our destiny is in our hands, it's up to ourselves whether we will enter Europe. Membership of the National Foundation in the scheme of EFQM partner organizations is necessary but it is possible only with a clear strategic support from the state and readiness of national firms to use the European model of excellence for the advancement of their own performance. The support of the state is particularly important during the contest for national award because it has strategic importance [1].

The self-evaluation in textile companies as a basic approach in applying the model of excellence is of crucial importance for the correct application of the model. Without sincere commitment of the top management to apply the model, every other partial attempt is doomed to failure [1][4][5].

## **2. ANALYSIS OF THE CURRENT SITUATION OF THE TEXTILE COMPANIES IN MACEDONIA IN TERMS OF THEIR APPROACH TO QUALITY**

With the collapse of the ideological values and the transition to capitalist values and standards of operations in Macedonia, various textile companies have achieved varying degrees of success. The extent of their success depended primarily on the intensity of conflicts, company culture and the country's readiness and companies to accept the values of developed countries and European standards [6]. Major transformations that have occurred in the textile industry of the Republic of Macedonia in the transition period with the collapse of several large textile complexes led to major structural changes in the range and scope of the supply of textile products. The new owners of the transformed companies generally did not buy them, but their markets and resources, so they had no interest in investing in their economic development. That led to technological stagnation and economic collapse which many of them fail. The once relatively quite diversified production program consisted of basic raw materials, synthetic fibers, and yarns of cotton, wool, synthetic and mixed type, and a wide range of fabrics, textile products for a variety of purposes [7][8]. Today, it is reduced to a minimum production of yarns and fabrics and clothing production whose scale and range is dimensioned almost exclusively from foreign clients by loan arrangements. In Macedonia many companies implemented the quality system ISO 9001, and many of them failed to survive the period. Greater social benefit is creating a rich and successful company. For such a range of textile companies, in addition to individual entrepreneurship owners need is a vision, mission and culture, oriented toward meeting the needs of all stakeholders: customers, employees, business partners and company, because all of them are users of the achieved results.

## **3. FINDINGS AND ANALYSIS OF THE RESEARCH**

This study shows the analysis of the efforts made by managers in textile companies in Macedonia in terms of improving business processes and fast adaptation to external changes as a result of changes within the company. But to meet international and European requirements the approach should be to major changes in the resolution of problems with their detailed analysis [7]. Macedonian textile companies were analyzed through a questionnaire and a detailed analysis of the situation by the criteria for obtaining a European quality award: leadership, policy and strategy, staff management, resources, processes, customer satisfaction, employee satisfaction, the impact to the company, business results. These criteria are evaluated where they stand if they have competed for the European award for quality. Due to the sheer volume of research in this study are presented only the results of research on several criteria for the European Prize for quality. The general survey was attended by 71

Macedonian textile companies present in the east of the country out of 500 registered in the territory of Macedonia.

#### 4. CRITERIA FOR ACHIEVING EUROPEAN QUALITY AWARD (EQA) - LEADERSHIP WITHIN THE MACEDONIAN TEXTILE COMPANIES

In terms of assessing the success of a company one of the parameters which is also a criteria for the results is the leadership. Behavioral measures taken by the top management and other managers should be in the direction to inspire, support and promote the culture of TQM (Total Quality Management) [7,9]. To see the behavior of the leadership in the Macedonian textile companies were asked a couple of questions. The question “How the top management creates a working atmosphere in your company?” received the following results, Figure 1:

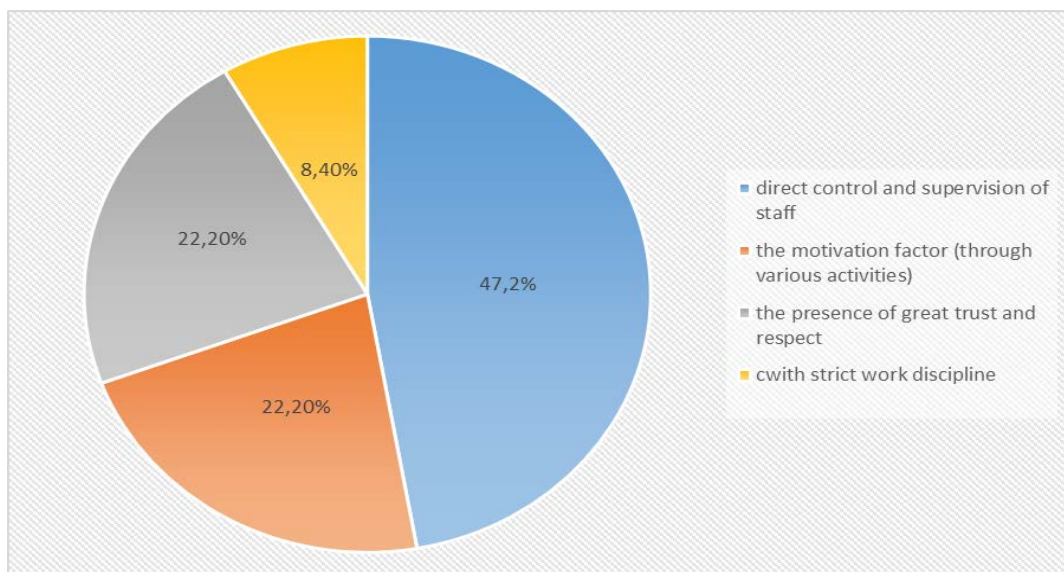


Figure 1. How the top management creates a working atmosphere in the company?

- 47,2% of respondents said that a working atmosphere is built through *direct control and supervision of staff*;
- 22,2% of them are *using the motivation factor (through various activities)* while building good working atmosphere;
- 22,2%, stated that *the presence of great trust and respect*, and the absence of fear in expressing their own opinion allows quality relationships;
- 8,4%, said they work environment built *with strict work discipline*.

The balance between the interests of the company and human rights and freedoms of employees subtly weighs on the side of the company. But despite the fact that the company protects its interests by establishing order and discipline in the operation, it will lack business results if not applied various motivational activities.

Ensuring quality in companies requires the involvement of top management, proper selection of teams for solving problems and improving business processes. For that reason, the research in the Macedonian textile companies was towards obtaining knowledge of the existence of management teams, the way of solving problems, building trust in the team, as well as how the management teams influence to the improvement of business processes.

The question how the management teams function or what is the teamwork on the management level obtained the following results:

The distribution of the results indicates poor functioning of the teams in surveyed companies, since almost 91 % of cases shows that problems in companies are not recognized and are not resolved in accordance with the possibilities.

The problem in our companies when it comes to employee involvement and teamwork is two-fold:

- a problem with our mentality is emphasized on the individualism;
- have a problem of demarcation between old habits and participation in solving problems, improvement and innovation.

For many authors the key to successful teamwork in readiness for cooperation within the team. When team members share the same vision and are motivated to achieve, they in most cases are very cooperative and all that leads to success [8,9].

For cooperation within mature business team of great importance is the interaction between the members of the team. The question “How managers gain the trust of the employees?” obtained the following findings, Figure 2:

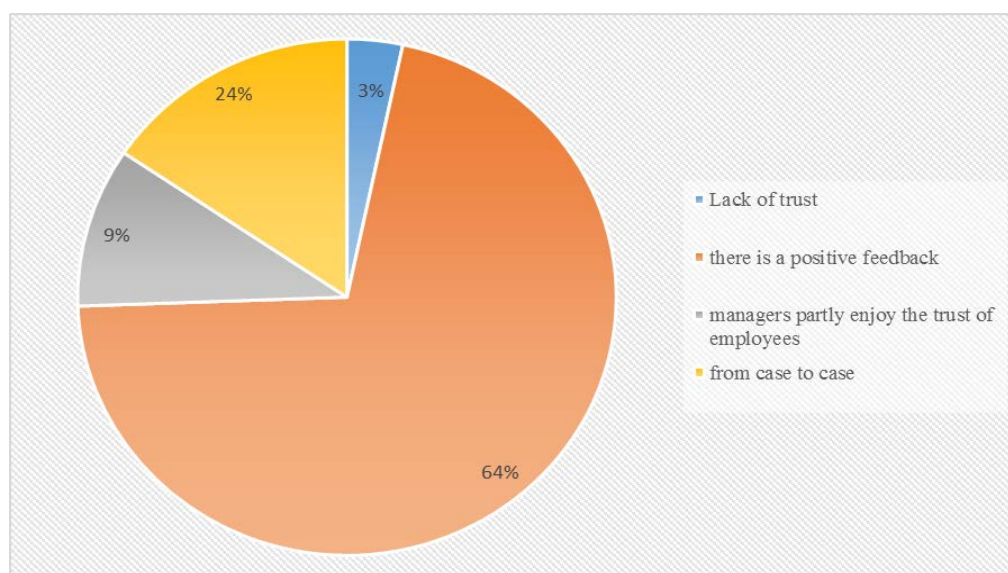


Figure 2. How managers gain the trust of the employees

Lack of trust in 3,0 % of the companies means distance between the management teams and the employees which leads to constant conflicts and malfunctions of management.

Between managers and employees in 64,0 % of the companies there is a positive feedback because the success of management teams depends on trust and engagement of employees and managers so it is necessary for the managers to make further efforts to build a good business relationship with the employees.

9% of respondents said that managers partly enjoy the trust of employees and 24 % of them - from case to case due to their vague, inconsistent and dishonest relationship with the employees. *Private companies, driven by the desire to get rid of the socialist syndrome, has introduced an authoritarian management style of the owner - manager where any teamwork is considered a waste of time and*

involvement of employees in decision-making is considered self-management and breakage to the integrity of the owner.

#### 4.1. Analysis on how leaders recognize and reward the efforts and results of employees

The norms for execution of tasks are among the most important issues dealt with by the management of the companies. The scope of the work performed at a particular time does not mean only quantity but quality and productivity. When determining the norms must take into account the achievement of defined quality. *The question “How managers have regulated the employee work obligations?” gave the following data figure. 3: 100% of respondents said they have a standard of quality, but the practice (28%) shows that it is the norm for quantity, Figure 3.*

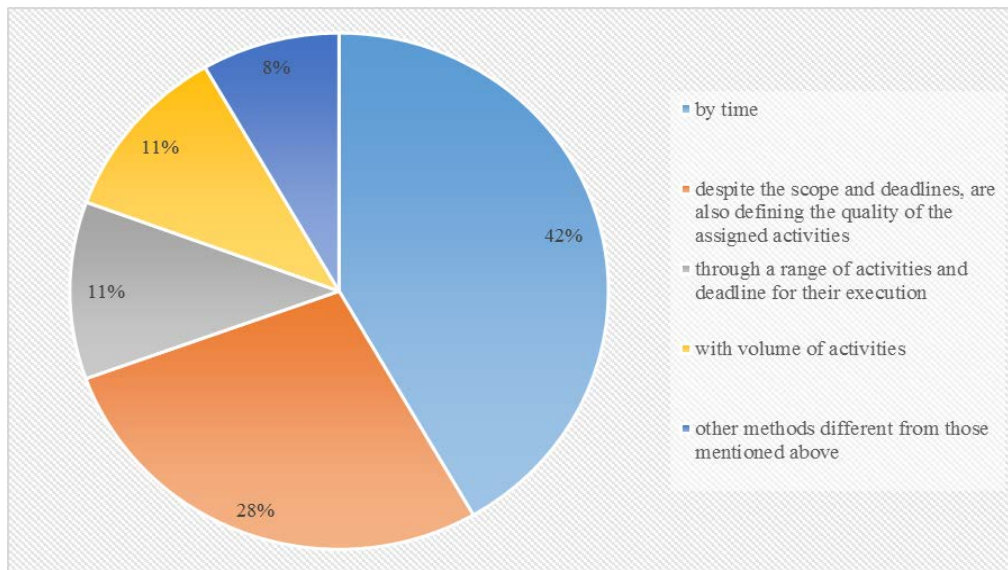


Figure 3. How managers have regulated the employee work obligations

- for 42% of the respondents, standardization work responsibilities are defined *by time*;
- 28% of them despite the scope and deadlines, are also defining *the quality of the assigned activities*;
- 11% of respondents are regulating the labor obligations through *a range of activities and deadline for their execution*;
- for 11% of them standardization is defined only *with volume of activities*, and;
- 8 %, mentioned *other methods* different from those mentioned above.

**And in other methods** states that standard work responsibilities are with quality of operations.

Labor norms and standards for the products/services are acceptable only where quality is required as assurance or for realization of certain operations. These regulations must be reduced only when they stand in the way of continuous quality improvement. In organizations that aspire to TQM (Total Quality Management), and have awareness of the need to improve business processes, management of certain actions encourages generating new ideas, taking action of codification or transfer of ideas from the minds of employees in any explicit form and implementation [9,10].

The achievement of TQM results is through the implementation of improvements and innovation of business processes, creating innovatory climate which encourages each individual creative thinking and original solutions [11].

*The question whether the Macedonian textile company rewards innovation and how much of their total revenue is invested in innovation, research and development obtained the following results:*

- 38,9% of respondents represent *more than 1.0 % of total revenues*;
- 25% of them distinguished *between 0.5-1.0 % of the total income*;
- 22,2% of the companies *do not invest in innovation research and development*;
- 13,9% of them allocated *less than 0.5 % of total revenues*.

And in companies *that invest in innovation, research and development, only 7 % of them are rewarding for innovation*, indicating that senior management acts de-motivating towards the employees in their desires and intentions to make additional efforts on innovative activities. Investments in innovation, research and development are small, both in terms of number of organizations and in terms of the amount.

In highly developed countries, innovation management has become one of the most important areas of quality management in the company and more. Many Macedonian companies are based on the traditional approach and therefore a need for the necessity of reorganization/re-engineering of the operations. One of the biggest changes that require a new strategy of TQM when comes to our companies is a change of mentality and release of the old habits and transitional syndrome. This means that there is a need to develop the positive features of our mentality and adopt modern mental model. However, the most important aspect in the developing of the new theory is founded on the third approach that is learning organization.

#### **4.2. Analysis of building policy and strategies within the Macedonian textile companies**

*The analysis is done in the direction to perceive how the company formulates, develops and reassessing its policy and turns it into plans and actions. The question “Which is the key to the company's competitiveness in the market?”, obtained the following results:*

Macedonian textile companies are aware of the necessity of ensuring quality of products /services as one of the conditions to be competitive in the market. When analyzing the data, to the question what is competition for them, the answers are that 83,3% of respondents as a key factor for the competitiveness of their products /services in the market led to the quality of products/services. The rest stated:

- 2,8% of them, *trust is achieved between the end customers*;
- 5,6% of them *long-standing tradition*;
- 5,6% of them *achieved image*;
- 2,8% of them *due to low prices of products / services and*
- none of them *pleaded innovation of the company*.

Other respondents listed: adaptation to market needs, entrepreneur spirit, rapidly solving problems, cordiality and courtesy of staff; modern technology, marketing and knowledge to promote their products and services; specialized expertise or specialized products, knowledge of foreign markets [7,11,12].

**None of them mentioned the innovation of the company**, which is what all companies' worldwide aim for. This is a logical consequence of the inadequate attitude of senior management towards innovation. As per all worldwide researches the innovation is located on the second or third place as a key factor of competitiveness.

The question “What is the pricing policy of the Macedonian textile companies?” obtained the following results, Figure 4:

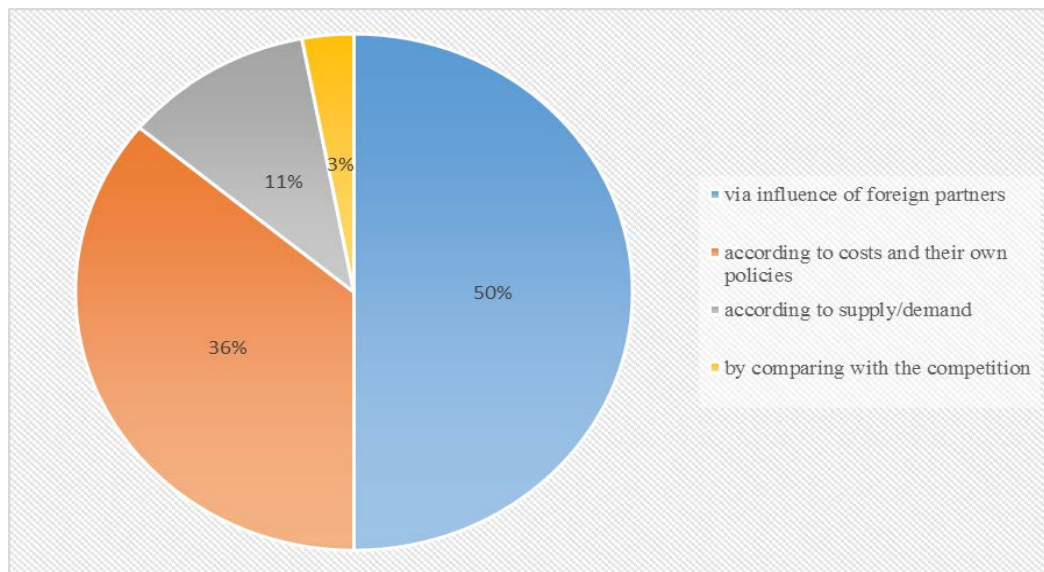


Figure 4. How managers are pricing their products /services

- 50% of respondents are *determining prices of products /services via influence of foreign partners*;
- for 36% of respondents *prices are determined according to costs and their own policies*;
- 11% of them *according to supply/demand*;
- 3% of them, *prices are down by comparing with the competition*.

Our observations show that to the pricing of the Macedonian textile products /services a great impact has detailed analysis of the competition and the needs and potential of the market. All of it leads to uninventive access, suppression of personal creativity and breaking their own labor standards and more.

Successful companies use benchmarking as an opportunity for creation, not imitation.

The question “Which companies are used to compare to when creating business policy?” obtained the following results, Figure 5:

- 61% of respondents said *they perform constantly comparing of their capabilities relative to competitors in the same industry and take measures to improve quality*;
- 17%, *do not make comparisons with anyone*;
- 17% of them *performed comparison with the best companies in the world*;
- 5% of them *carry out comparison with competitors in the same industry, without taking measures for improvement*.



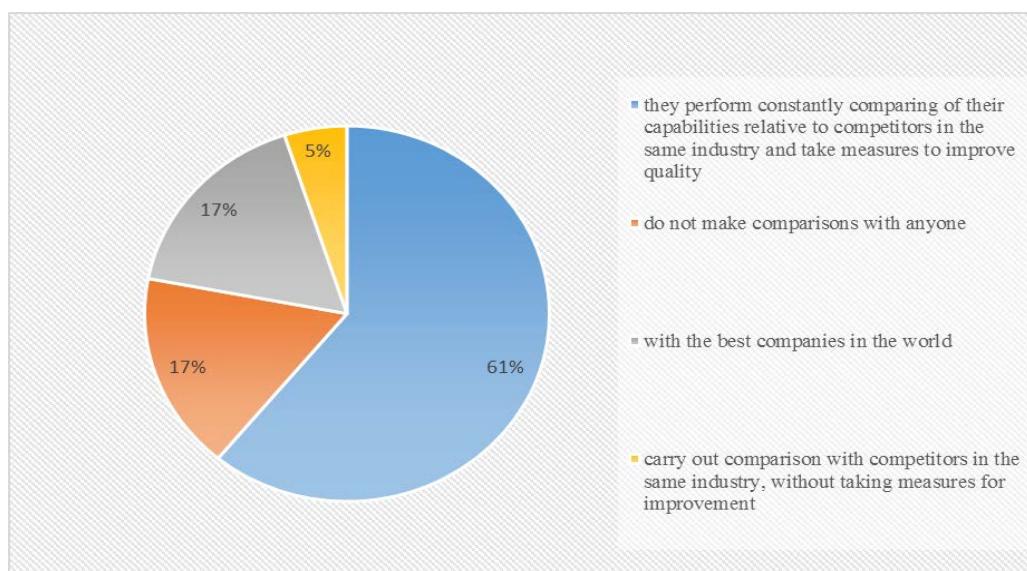


Figure 5. Which companies are used to compare to when creating business policy

To improve the competitiveness of textile products/services all innovators should be encouraged to apply innovation and new technologies to develop research centers and to follow the world achievements (by purchasing licenses and other rights and establishing cooperation with foreign partners). The competitiveness can be improved by practicing regular training and acquiring additional knowledge among employees to raise their qualification potential. In order to achieve the modernization of business processes a cooperation with scientific research organizations, universities and consulting organizations must be conducted [13].

#### 4.3. Analysis of planning and staff development as a business resource within the Macedonian textile companies

The quality of products/services can be achieved only if the company holds educational and qualified human resources capable of caring about the quality, and capable management at all levels willing to improve permanently. *Employee management is a major segment in the implementation of TQM strategy [9-11].*

To see what profile of employees the companies have, as they are included in business processes, are they authorized to perform organizational functions and how their results are recognized were the asked questions.

In terms of educational structure of employees according to the size of companies you can say that in all but small companies dominate the presence of employees with secondary education. *But research in terms of what profile of staff shortages in the Macedonian textile companies obtained the following results:*

- 86,1% of respondents said *they have sufficient staff with secondary education;*
- 11,1% of them *a college education;*
- 2,8% *with university higher education.*

PhDs and Masters Degree holders are not needed.

In Macedonia, the textile companies feel the shortage of technicians, tailors, dressmakers, due to reduced interest in education in textile trade. The reasons for lack of interest in education in these occupations are low salaries and unfavorable working conditions in the factories, as well as frequent

violations of workers' rights. All this implies a serious reduction in the attractiveness of these jobs and the interest of young people to this profession. The quality of human resources is one of the important preconditions for development of textile industry, especially the efforts of the owners for a gradual transition from inward to a full package of production that could be realized only through a narrow specialization, quality production and fast delivery. And this can only be achieved with well-educated, skilled and motivated workers.

The presence of employees in the management of companies in our country can't be assessed for good. This means that, continuing education is necessary not just to increase the qualification level of direct workers, but to strengthen and top and middle management, especially training related to compliance with EU requirements and courses in the field of TQM philosophy. To strengthen the employee resources with employees in marketing, distribution, management quality, design, and financial planning means engaging highly skilled personnel with sound knowledge of technology and foreign languages as well as knowledge of the domestic and overseas market. *The formation of marketing team in each company is a necessity for survival in the market because it will enable the flow of marketing information into measurable indicators and standards.* In this way, the development of these indicators and standards will enable measuring and monitoring the quality, achievement of an acceptable level of quality in all sectors, removal of defects and waste. This will result in reducing the need for separate control of each job and the expenses for this purpose.

*One of the criteria for obtaining EQA is how the company carries out planning and development of staff as a business resource.*

*The question was asked whether the educational structure meets the needs of the company and whether there is a shortage of labor and from which profile, obtained the following results:*

Surveyed companies are satisfied in terms of manpower employed because 95% of them said that the educational structure of employees correlates to the needs of them. The quality of contracted work potential in the Macedonian textile companies is a result of the educational system that has tradition and quality and the acquired work experience in companies.

#### **4.4. Analysis how Macedonian textile companies operate effectively and efficiently resources**

One of the criteria for obtaining EQA is in what way the company is managed effectively and efficiently with information technology resources. The need of the use of information technology will enable fast transfer of data, modeling of product, electronic data transfer to the wishes of customers, fast and efficient production [7][14].

*The answer to the question how prevalent computer programs are operating in the Macedonian textile companies obtained the following results:*

- 50% of respondents said that among them *there is no integrated information system - only individual computers who are not connected to a network;*
- In 16,7 % of respondents have started a *complete system - integration of information technology but it works partially;*
- In 16,7 % of the respondents completed a *full system - integration of information technology and perform continuous improvement;*
- In 16,6 % of them reported that *they are in the process of planning activities for the design and implementation of information system.*

The prevalence of computers in building complete computer information system in the Macedonian textile companies is relatively weak. The use of computers in production is mainly in the field of design (and that a small number of companies), modeling and progression patterns in their preparation, while in the administration the computers are mostly used in accounts department. This condition is due to the high prevalence towards the operations where the design of the product/service is received by the foreign partner.

The analysis indicates very little relevance and use of services provided by the university and consulting organizations, and various international programs. It is mostly a consequence of insufficient update to the managers of the benefits offered by these organizations and programs. It should also be taken into consideration the lack of time for the managers (mostly in these companies one or several persons carry out all business activities), and their disappointment with participating in some kind of cooperation, taking into account the expectations of getting fast results.

*One of the criteria for obtaining EQA is in some way the company is managed effectively and efficiently the cooperation with suppliers and raw materials.*

Procurement of input materials is one of the most important activities for quality assurance, because the costs for input materials make up 50-70% of the product, and the quality of incoming material in large part determines the quality of the finished product. Ensuring quality of incoming material is accomplished by properly defining of the characteristics and regulated documents. Quality management of suppliers is an important aspect of TQM philosophy.

Our research indicated poor cooperation with suppliers, lack of nurturing those relationships, lack of mutual trust and other. *The answer to the question whether the Macedonian textile company requires specification of the quality of input materials obtained the following results:*

The results have shown that only 47.2% of the surveyed companies always require specification of the quality of input materials; not only if there is a doubt about the quality.

Partnering with suppliers requires trust and adequate integration in terms of generating improvements and development of new values. *The question how the companies select the suppliers of input materials obtained the following data, Figure 6:*

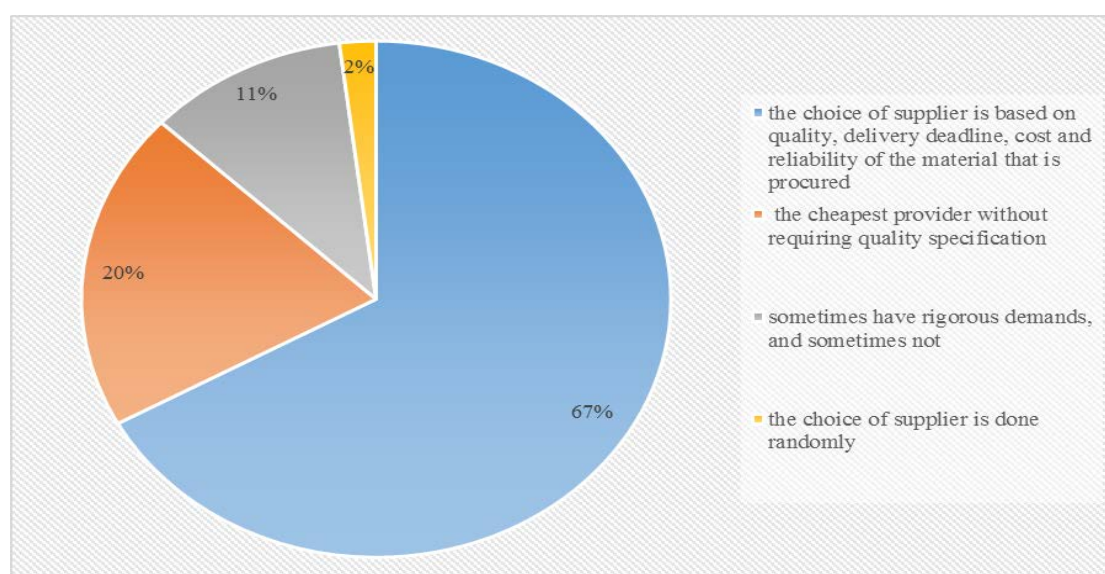


Figure 6. How do they select the supplier of input materials?

- for 67% of the surveyed textile companies *the choice of supplier is based on quality, delivery deadline, cost and reliability of the material that is procured*, contradicting the previous answers, where only 47.2% of them reported that they always require specification of the material that is procured. If not defined the quality of input materials cannot be said that there are good business relationships with suppliers;
- 20% them choosing a supplier based on the criteria - *the cheapest provider without requiring quality specification*;
- 11% of them said they *sometimes have rigorous demands, and sometimes not*;
- 3% of the respondents said that *the choice of supplier is done randomly*.

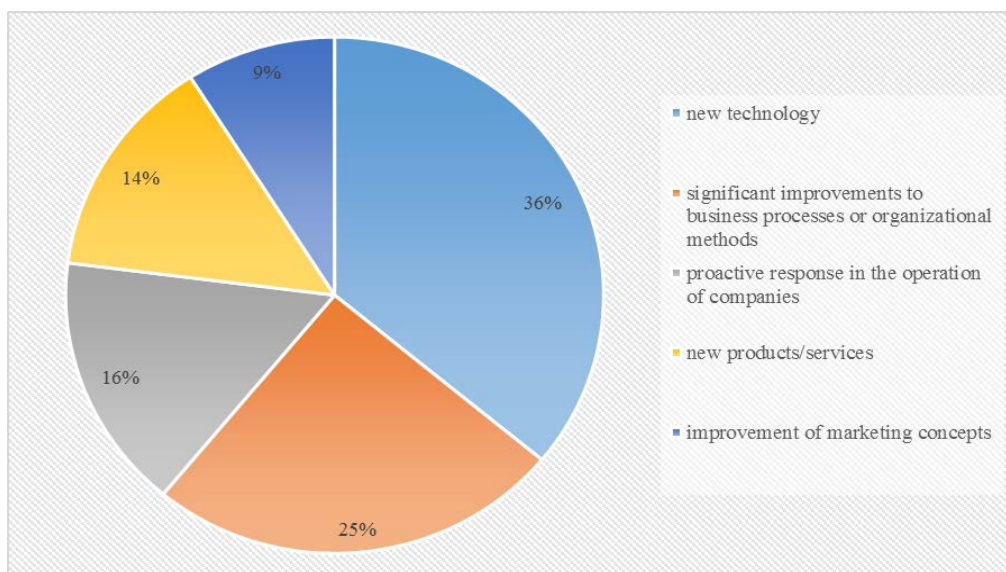
*In terms of building long-term cooperation with suppliers we obtained the following results:*

- 88,8% of respondents reported to *have long-term cooperation with suppliers and foster partnerships with them*;
- 5,6% of them *treat suppliers as a reserve variant*, with lack of trust and discontinuity in the quality of business cooperation;
- 5,6% of them are *in constant search for new suppliers* not taking care to build good relationships with existing ones to foster cooperation and to include them in all activities towards improving the business results of the company.

The supplier should be treated as an introduction to the manufacturing process and many authors are with a common opinion on the necessity of building partnerships with suppliers as well as their motivation for the need to fulfill the expectations of buyers [15]. Quality oriented companies are no longer directed towards establishing criteria for selecting suppliers, but proactively aimed at developing long-term relationships with them, with their technical support for conducting training to improve processes, product quality and productivity.

#### **4.5. Analysis of improvement of business processes within the Macedonian textile companies**

*The companies were asked if in recent years have introduced some improvements to business processes or changes that significantly affect the business results in their businesses and the following results were obtained, Figure 7:*



*Figure 7. In recent years have you introduced some improvements to business processes or changes that significantly affect the business results in your companies*

- 36% of the surveyed companies have introduced *new technology*;
- 25% of them have made *significant improvements to business processes or organizational methods*;
- 16,7% of them said they step which significantly influenced their business performance was their *proactive response in the operation of companies*;
- 13,9% of the surveyed companies introduced *new products/services*;
- 8,3% of them have achieved *improvement of marketing concepts* and strategies.

The use of technical-technological equipment in Macedonian textile companies is close to a satisfactory level and to some extent meets the current requirements of customers/consumers. The problems mainly stem from poor marketing approach (only 8.3% of them achieved promotion to marketing concepts and strategies), poorly organized business processes (only 25% have made significant improvements to business processes or organizational methods) and inability to meet the required standards quality. Here, the same technology is delivering lower business results. The reasons are not only lacking in modern technology but also weaker abilities of managers, qualifications and employees' motivation, the quality of running business processes etc.

The requirements for high quality products/services are entailing not only the purchase of new equipment, but also investment in education and training of employees, reengineering of business processes and permanently improving the quality system [7][16].

*Current market conditions pose despite fulfilling the wishes and needs of customers/users and analysis of the position of competitors and their strategy. Marketing activities in the Macedonian textile companies should aim at diversifying the range and quality of products/services, determining the existing markets and conquer new and richer cooperation with foreign partners.*

#### **4.6. Analysis of measuring customer/consumer satisfaction in Macedonian textile companies**

Listening to the wishes and needs of customers/users and the attempt by companies to meet their needs will increase customer satisfaction and provide competitive advantage [6].

Data collection for customer satisfaction for the quality of products/services should show what measures should be taken by companies to improve their satisfaction. *Sources of measurement can be objections, complaints, inquiries, debates and more.*

*Answers to the question how the Macedonian textile companies learn what their customers/users require obtained the following results, Figure 8:*

- 75,2% of respondents learn about the desires and needs of consumers for products they sell *through direct contact* with them and finding common optimal and affordable solutions;
- 13,1% of them *do not deal with that issue*;
- 8,9% of respondents learn about the desires and needs of consumers for products they sell *by analyzing the consumption/supply*;
- 2,8% of them *by analyzing the questionnaire*.

*Asked if they had requests from customers/users that cannot be met, following results were obtained:*

- 47,2% of respondents *can fully meet the needs of customers/users*;
- 52,8% of them *are not able*.

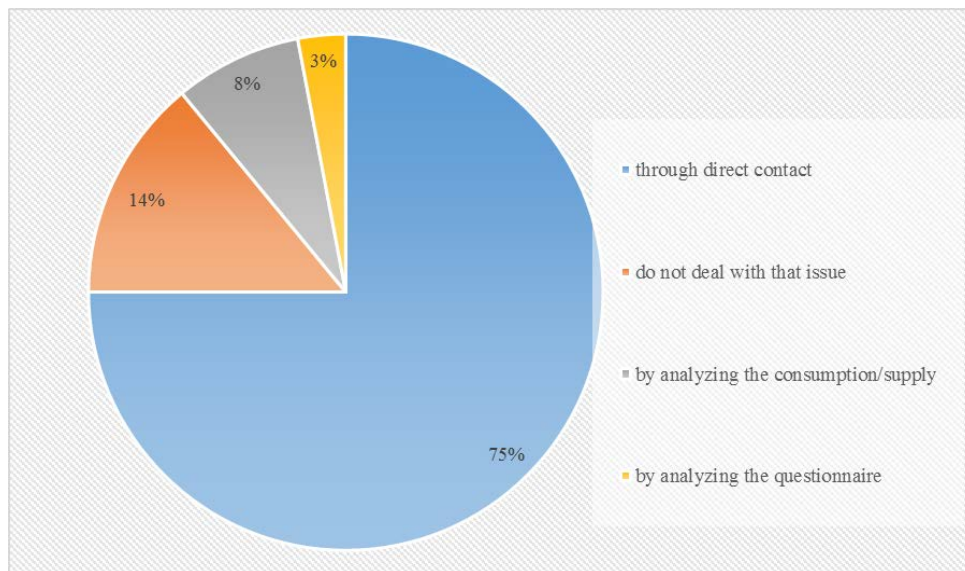


Figure 8. How the Macedonian textile companies learn what their customers/users demand?

The reasons are related to the lack of technological capabilities, unrealistic demands of customers/users as well as requirements for delivery terms shorter than optimal. Macedonian textile companies very little used questionnaires to measure satisfaction or dissatisfaction with the buyers of their products because the question in what way they find out that their products /services do not meet the expectations of users obtained the following answers, Figure 9:

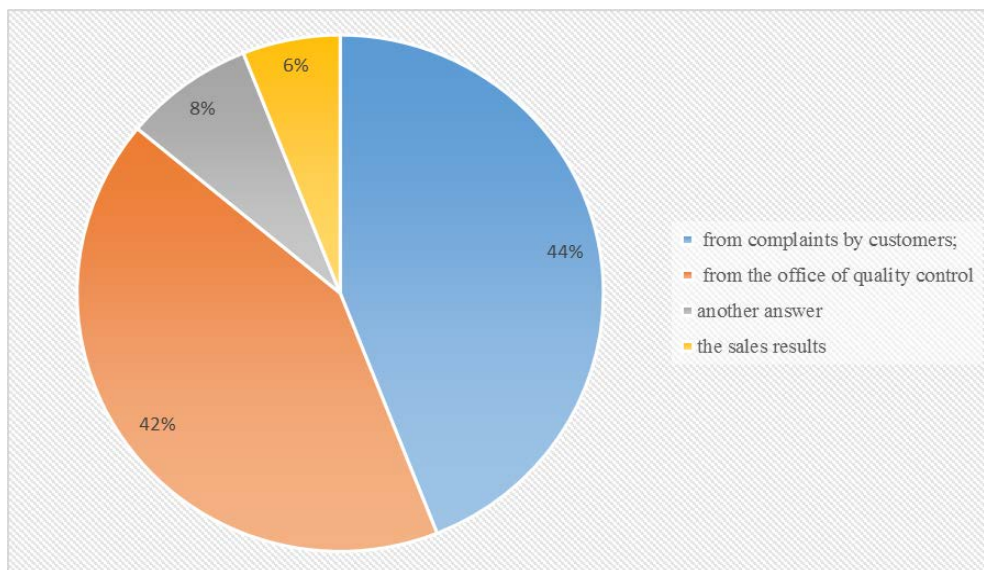


Figure 9. In what way companies learn that their products/services do not meet the expectations of users

- 44% of respondents reported that about the poor quality of their products/services they learn from complaints by customers;
- 42% of them from the reports from the office of quality control;
- 8% of them were in favor of another answer (direct contacts with users is helping in detecting if their products/services meet their expectations);
- 6% of them of the sales results (whether increased or decreased);
- none of them stated that an analysis of a questionnaire for users.

For a company to promote products/services, it is important not to be interpreted wrongly intentioned objections or claims of customers and practiced continuously monitoring their satisfaction which will give an unrated source information for business analysis as well as their management [6].

For a company to successfully understand the company's position and the position of their products in the market it is necessary to collect and adequately evaluate the data and parameters of the users in terms of product, their experiences and expectations in terms of product and their satisfaction of using the product.

#### 4.7. Analysis of measuring employee satisfaction in the Macedonian textile companies

*One of the criteria for obtaining EQA is in what way the company measures employee satisfaction.*

Employee satisfaction is as important as customer satisfaction as employees are responsible to create and implement activities [9][11]. Standardization work and the introduction of quality system is not by itself the only guarantee of the success of organizations. Satisfied associates strive for improvement and put effort to raise the quality of products/services to a higher level. A key factor in this is the material and tooling equipment in the workplace, especially informational and communication linkages that are a factor of effectiveness and efficiency of business processes. Companies are aware of the role and importance of motivation and employee satisfaction on the efficiency of operations. *In the era of knowledge, more and more time is given to measuring employee satisfaction and detecting the level of motivation, Figure 10:*

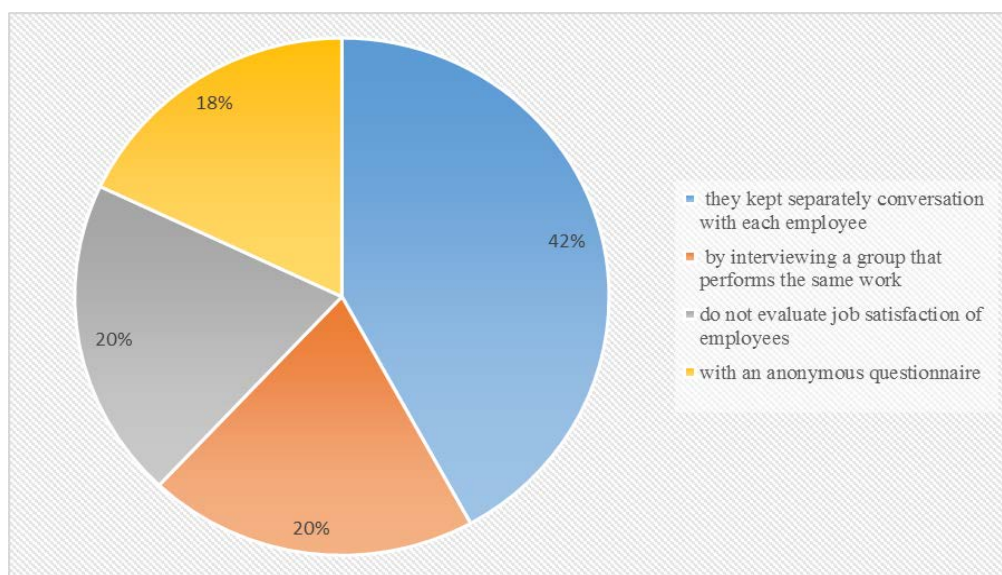


Figure 10. In what way managers evaluate job satisfaction of employees

- 41,7% of respondents said *they kept separately conversation with each employee* and thus measure the job satisfaction of employees;
- 19,4% of them answered that the job satisfaction of employees measured *by interviewing a group that performs the same work*;
- 19,4%, *do not evaluate job satisfaction of employees*;
- 19,5%, assess employee satisfaction *with an anonymous questionnaire* which is the most realistic method.

*Most objective way to measure employee satisfaction is through an anonymous questionnaire because it perceives reality, while running a single conversation with staff or conversation led a group of*

employees who perform similar activities creates fear and insecurity among the employees to express their (dis) satisfaction of operation. Workers are afraid of direct talks with superiors for fear of losing the job.

Taking into account the current situation in our country, top management should act in the direction of greater respect and motivate direct employees and their placement in suitable jobs that match their expertise and their continuous advancement of knowledge in order to increase satisfaction of employees.

*The answer to the question whether in the company there is loyalty by employees towards the company obtained the following results:*

- 64,8% of respondents said that *there is a partial loyalty by employees towards the company*, due to the lack of effort by managers to build a clear, consistent and honest relationship with employees and have a professional attitude towards work, which is basis for establishing trust in business relationships. This indicates that these companies questioned management and survival of the organization;
- interesting is the fact that 2.8% of companies said *they have no loyalty by employees towards the company*;
- 32,4% of them said that *there is loyalty by employees towards the company*.

#### **4.8. Analysis of how the management is taking care of their employees within Macedonian textile companies**

In companies where there is a quality system there are procedures and guidelines for the implementation of business processes. Job descriptions and tasks are documents that top management communicates with the employees [8,9]. Organizational culture as a system of values and beliefs through the downward communication is transmitted to employees and communicating up with the top management wants to hear the voice of the people, or to obtain genuine, processed and synthesized performance data. While horizontal communication facilitates the exchange of information between employees of the same level in the hierarchy it is also a necessity for coordinating business processes [10-12,17].

*The question in what way the Macedonian textile company exercise effective dialogue with employees, i.e., the manner in which communications take place in the company, obtained the following results:*

- 50% of them were *in favor of developed communications in all directions including diagonal*;
- 25% of companies have reported *for vertical and horizontal communication* in their companies which helps managers to assess the effectiveness of their downward communications and allows them to learn about their organizational problems;
- 22,2% reported for formal communication and *only the top towards the bottom* which shows the "hard" attitude of top management, without the necessity of effective upward communication, without the need to hear the proposals, suggestions and wishes of employees to promote business processes;
- 2,8% of them reported *having poor horizontal communication*.

The results show the differences between the various companies in the way they cooperate with the employees and the way they collaborate within. All this leads to partial loyalty by employees towards the company, due to the lack of effort by managers to build a clear, consistent and honest relationship



with employees and have a professional attitude towards work which is the basis for establishing trust in business relationships.

## CONCLUSION

### *Developmental stages of TQM system within the Macedonian textile companies*

Based on the detailed analysis of the current situation, determine the "age" or the development of the Macedonian textile companies in the pillars of the house of quality (of young and underdeveloped system to mature and developed system and in reverse order), according to the criteria for obtaining European quality award, Table 1. The situation in the Macedonian textile companies is different than those companies in the world based on the principles of TQM. Macedonian textile companies are encouraged by the fact that (as evidenced by the survey) we are starting to change the attitude towards quality. In recent years, since the beginning of the introduction of market reforms particularly emphasized the desire of our country to get involved in European associations are thereby changing the position of top managers who are willing to achieve top quality.

Table 1. Developmental stages of TQM system within the Macedonian textile companies as per the criteria to receive the European Quality Award

		Developmental stages of TQM system in Macedonian textile companies			
		Initial	Middle	High average	Advanced
Criteria for receiving the European Quality Award	Leadership	■			
	Policy and Strategy		■		
	Staff Management		■		
	Resources Management	■			
	Process Management		■		
	Customer Satisfaction		■		
	Employee Satisfaction	■			
	Impact to the community	■			
	Business Results		■		
	Innovation	■			

Research in this study showed several forms which manifest the potentials of Macedonian textile companies as well as their threats. Based on these studies SWOT Analysis are defined as shown in Table 2. SWOT analysis helped in identifying the capabilities and weaknesses of the Macedonian textile companies which helped in creating a universal, integrated methodology for the design and implementation of TQM system applicable in the Macedonian textile companies. To live up to these aspirations, it is necessary that managers and employees gain additional theoretical and practical knowledge that will assist them in managing their companies.

Prospects for development of the Macedonian textile companies are essentially determined by their current status, which is reflected in their strengths and opportunities as well as weaknesses and threats to development. These conditions result in the general level of development of the economy in our country. The future of the textile industry should be directed to the production of:

- products of high technological processes;
- breakthrough in other sectors (construction, medicine, etc.);
- gradual reduction of the current practice of mass production and the transition to small and high-quality series of products.

Table 2. SWOT analysis in textile companies in Macedonia

	<b>Internal</b>	<b>External</b>
+	<p><b>Strength</b></p> <ul style="list-style-type: none"> <li>▪ availability of cheap labor, its eligibility and competitiveness which it is based on;</li> <li>▪ flexibility, ie a large number of textile companies are small and entirely privately owned, which allows a high degree of adaptation to the needs of partners for fast delivery of products/services of appropriate quality;</li> <li>▪ redesign/reengineering of business processes to the needs of the market;</li> <li>▪ improving the quality of business processes and quality of products/services;</li> <li>▪ optimization of business processes;</li> <li>▪ increased reputation;</li> <li>▪ close location to European markets, good transport links, and functional infrastructure;</li> <li>▪ established long-term business relations with foreign partners (before the transition period);</li> <li>▪ knowledge and experience gained in cooperation with foreign partners;</li> <li>▪ stable macro-economic and financial environment;</li> <li>▪ status of candidate for membership of the EU and possible membership in NATO.</li> </ul>	<p><b>Opportunity</b></p> <ul style="list-style-type: none"> <li>▪ abandonment of traditional forms of work and the transition to providing a flexible and proactive work;</li> <li>▪ greater competitiveness on the market;</li> <li>▪ satisfaction of all stakeholders;</li> <li>▪ inflow of external knowledge and resources to develop the textile industry;</li> <li>▪ relocation of businesses from the EU to MK;</li> <li>▪ strong business associations;</li> <li>▪ joint appearance;</li> <li>▪ greater regional cooperation;</li> <li>▪ creation of local and regional brands;</li> <li>▪ good business climate;</li> <li>▪ low taxes;</li> <li>▪ State aid.</li> </ul>
-	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>▪ no strategic planning and effective management (usually a person performs several functions);</li> <li>▪ loan contracts and delivery of goods with relatively low added value at low prices;</li> <li>▪ dependence of small and medium companies from a small number of large companies;</li> <li>▪ relatively outdated equipment and low productivity at work;</li> <li>▪ traditional, outdated business processes;</li> <li>▪ lack of job training and continuous improvement of knowledge;</li> <li>▪ lack of strength to change the organizational culture;</li> <li>▪ lack of order and discipline in the operation and bad system of reward and punishment;</li> <li>▪ low investment in innovation and modernization;</li> <li>▪ poor application of information technology in production;</li> <li>▪ poor application of information technology in production;</li> <li>▪ poor application of quality standards and quality care;</li> <li>▪ small number of companies that develop their own brand;</li> <li>▪ insufficient development of associations to support the textile industry, poor cooperation between the companies, individual performance and great mistrust.</li> </ul>	<p><b>Threat</b></p> <ul style="list-style-type: none"> <li>▪ political instability in the country and the region;</li> <li>▪ strong competition from abroad, primarily from some Asian countries;</li> <li>▪ inconsistency and incomplete implementation of regulations;</li> <li>▪ weaknesses of the administration;</li> <li>▪ poor climate for investment, both domestic and foreign investors;</li> <li>▪ changes in the conditions of foreign markets can largely destabilize our companies;</li> <li>▪ large presence of imported products of inadequate quality,</li> <li>▪ high volume of informal economy;</li> <li>▪ weak economy;</li> <li>▪ depending on the brand owners;</li> <li>▪ our customers/users usually prefer Western brands;</li> <li>▪ young people have no desire to be educated and employed in the field of textile industries.</li> </ul>

This means that the emphasis should be put on modernization, human resource development, innovation and knowledge transfer, marketing, consulting support and internal organization of the textile sector for joint performance. For that reason, there is a need to develop internet connections for quick orders, production and delivery of small batches in the short term and higher added value and profits. *Future production of clothing is creating own recognizable trademark.* It requires gradual change of the production transition to making high quality clothing. The future is in the restructuring of the inward work in a way that successful and large Macedonian companies provide work for smaller.

## REFERENCES

- [1] Mitreva, E., Taskov, N., Kitanov, V., Filiposki, O., Dzaleva, T. (2013). Models of TQM Strategy in the World and the Need for Macedonian Model of Excellence, *International Journal of Pure and Applied Sciences and Technology*, Vol. 16, No. 1, pp. 69.

- [2] Young Kim, D., Kumar, V., Murphy, S.A. (2010). European foundation for quality management business excellence model: an integrative review and research agenda, *International Journal of Quality & Reliability Management*, Vol. 27, No. 6, pp. 684-701.
- [3] Heras Saizarbitoria, I., Arana Landín, G., Casadesús Fa, M. (2006). The impact of quality management in European companies' performance: The case of the Spanish companies, *European Business Review*, Vol. 18, No. 2, pp. 114-131.
- [4] Saizarbitoria Iñaki, H., Arana Landín, G., Casadesús Fa, M. (2006). A Delphi study on motivation for ISO 9000 and EFQM, *International Journal of Quality & Reliability Management*, Vol. 23, No. 7, pp. 807-827.
- [5] José Tarí, J. (2005). Components of successful total quality management, *The TQM magazine*, Vol. 17, No. 2, pp. 182-194.
- [6] Mitreva, E. (2013). The superior customer's value of the new economy implemented within Macedonian companies, *International Journal for Quality Research*, Vol. 7, No. 2, pp. 215-220
- [7] Mitreva, E., et al. (2012). Analysis of the existing management system in Macedonian companies and the necessity of accepting the TQM philosophy, *International Journal of Pure and Applied Sciences and Technology*, Vol. 8, No. 2, pp. 54-63.
- [8] Mitreva, E. (2013). Business TQM culture in the world compared with the situation in the Macedonian companies, *ILIRIA International Review*, Vol. 3, No. 1, pp. 63-70.
- [9] Taskov, N., Mitreva, E. (2015). The motivation and the efficient communication both are the essential pillar within the building of the TQM (total quality management) system within the Macedonian Higher Education Institutions, *Procedia-Social and Behavioral Sciences*, Vol. 180, pp. 227-234.
- [10] Taskov, N., Mitreva, E. (2015). Total dedication of the top management within the Macedonian higher education institutions, *Procedia-Social and Behavioral Sciences*, Vol. 180, pp. 219-226.
- [11] Mitreva, E., Prodanovska, V. (2011). Employees' contentment: A key factor in designing and projecting total quality management systems in Macedonian educational institutions, *Academic Days of Timișoara: Social Sciences Today*, Vol. 22.
- [12] Mitreva, E. (2011). Model-integral methodology for successful designing and implementing of TQM system in Macedonian companies, *International Journal for Quality Research*, Vol. 5, No. 4, pp. 255-260.
- [13] Mitreva, E. (2012). The need for planning and implementing educational activities in Macedonian companies, *International Journal for Quality Research*, Vol. 6, No. 2, pp. 143-149
- [14] Mitreva, E., Taskov, N., Kitanov, V., Filiposki, O., Dzaleva, T. (2013). The Need for Information System Design in Building a House of Quality, *International Journal of Pure and Applied Sciences and Technology*, Vol. 16, No. 1, pp. 26.
- [15] Mitreva, E., Taskov, N., Atanasoski, D., Gjorshevski, H., Sazdova, J., Georgieva, I. (2016). Integrating supplier satisfaction with customer satisfaction in the projection and implementation of the TQM system in Macedonian companies, *International Journal of Information, Business and Management*, Vol. 8, No. 1, pp. 25.
- [16] Mitreva, E., Taskov, N. (2014). Evaluating the success of the company designing the TQM System. *Journal of Process Management-New Technologies, International*, Vol. 2, No. 5, pp. 44-51.
- [17] Mitreva, E., Filiposki, O. (2012). Proposed methodology for implementing quality methods and techniques in Macedonian companies, *Journal of Engineering & Processing Management*, Vol. 4, No. 1, pp. 33-46.