QUALITY SYSTEM MANAGEMENT IN THE HOTEL INDUSTRY IN THE REPUBLIC OF NORTH MACEDONIA

Elizabeta Mitreva[1]*, Dzevat Kicara[2],

[1]Faculty of Tourism and Business Logistics, University "Goce Delcev" - Shtip
*Mail: elizabeta.mitreva@ugd.edu.mk
[2]Standardization Institute of the Republic of North Macedonia

Abstract

The introduction of the TQM (Total Quality Management) system in the hotel industry requires a complete understanding of the needs and demands of tourists, respect for the established standards and the creation of products with superior values that will meet or exceed their expectations with their quality. Total quality management applies to the entire organization, in all hotel activities and functions (reception, accommodation, procurement, sales, marketing, kitchen block, service, technical maintenance, hygienic maintenance, etc.). In this way, the established system will enable the hotel company to continuously improve its performance, whereas the needs of all interested parties participating in the process of creating and delivering the hotel product must not be neglected. Analyzing the findings of the research, this paper provides guidelines for the direction in which the hotels in the Republic of North Macedonia should move by applying the principles of the process orientation, based on the process approach and management of the entire value chain.

Key words: business processes, hotel service, TQM (Total Quality Management) system.

JEL Classification: Z32 Tourism and Development; Z39 Tourism: Other

INTRODUCTION

Respecting the basic principles on which the TQM (Total Quality Management) system is based, and starting from the variety of heterogeneous resource and market opportunities, the adequate application of this system in the hotel industry implies the use of different principles and activities that should enable the hotel management to make a decision about their introduction. The basic principles on which the introduction of the TQM system in the hotel industry is based are: commitment to the users of hotel services; management responsibility in the process of establishing a quality system; readiness of the employees to accept the quality system; continuous improvement of the quality of hotel services; orientation towards the dwelling and working environment; process orientation; systemic approach to quality; orientation towards planning approach; measuring the satisfaction of the user of the services; a control system for its products and services. By focusing and relying on the manner of the actual work performance and by applying a logical sequence of activities in the processes, a more reliable picture of the business is obtained, and the managerial work becomes more rational and clearer (Mitreva, et al., 2008). The quality in tourism and hospitality involves consistently delivering products and services to guests in accordance with expected standards. Providing quality service is one of the principal challenges that restaurants will face in the coming years, as it is a basic condition for success in the growing, fiercely competitive, global hospitality markets, hence, different management systems are applied in the hotel management (Campanella, 1999). There are various tools that measure and improve the quality service, as well as the mechanisms for recognizing quality in tourism and hospitality (Foster, 2001). Managers need to determine, record and measure the impact of costs and profits and be able to prioritize the process of improving the quality of their assets. Tourism stakeholders consider the quality service in the hotel as value for money, comfortable room, friendly staff and delicious food . (Dervitsiotis, 2000).

Quality service is a management tool that allows the hoteliers to monitor the service from the customer's perspective in an appropriate way. Quality assurance refers to any planned and systematic activity aimed at providing consumers with goods and services of adequate quality, along with confidence that they meet consumer requirements and

expectations. Quality assurance depends on the excellence in two important focal points in business: the design of goods and services and quality control during the performance of service delivery, often aided by some form of measurement and inspection activities (Hammer, 1990).

The service quality management system is a results-oriented approach. It deals with the features of the service that are of greatest importance to the end users; it addresses service providers who have tangible results that they can present to the end users (consumers); it guarantees the customers a high quality of service that they can receive during their stay in the accommodation facility and provides the staff with a methodology to demonstrate their commitment to quality service (Heleta, 2010).

Considering that the concept of quality is widely discussed in hospitality management, quality in hospitality is defined as the consistent delivery of products and services to guests according to the expected standards. It is known that guests are willing to pay more when they visit hotels/restaurants that offer a service that meets or exceeds their expectations, therefore, the level of quality service is an important factor in the experience that guests receive during their visit to hotel industry organizations. By creating value for the guest, an accommodation facility, for example, can successfully retain its guests, but in doing so, the managers will have to recognize the importance of customer retention, as attracting a new customer is considered more expensive and takes a lot of time and resources (Sasaoka, 1995).

LITERATURE REVIEW

One of the most significant benefits that a country's economy can have from tourism is that it is a highly labor-intensive activity and affects the creation of a large number of jobs, thereby contributing to solving unemployment problems. The tourism development in a certain area provides a significant opportunity for direct employment in the tourism industry (accommodation, food, transport), but also in activities that are indirectly related to tourism and achieve significant benefits from tourism (trade, construction, industry, agriculture). Unlike other economic branches, tourism maintains a high level of labor demand, which is based primarily on the need for labor in hotels, catering, retail and public transport. Tourism enables the employment of people from different educational profiles, from those who directly provide services and those who work in various technical-technological processes, to those creative staff who create modern tourism products and deal with development policy (Dervitsiotis, 2000).

However, the impact of tourism on employment is often subject to criticism and it is related to the fact that most jobs in tourism are seasonal and it is more difficult to find suitable skill profiles for employment, so those with lower qualifications are included in the labor process (which impairs the quality of the offer), as well as students and pensioners who cannot be considered as part of the working population (Dighe & Bezold, 1996).

Today, it is impossible to imagine a modern hotel industry without a computer equipment and technology. The modern work organization and qualified employees, as well as the new equipment, are factors that influence the successful operation of the hotel facility.

The service quality management in hospitality and tourism has become an independent field of research and application, as tourists and guests expect more than what they can get. Therefore, it is necessary to fill in the gap between their expectations and the resulting service and product quality (Jayaram, et al., 1997).

The hospitality and tourism service sector adopted the philosophy of TQM (Total Quality Management) from the manufacturing sector and adapted it to the characteristics of the tourism and hotel industry. Based on the example of the manufacturing sectors and the achieved good results, the service sector has adopted the business rule that productivity, quality and profit represent one whole. Quality becomes a decisive factor for efficiency and competitiveness in the turbulent tourist market (Mitreva, et al., 2018).

Tourists/guests, or in general - consumers, no longer tolerate errors, downtime, complaints and poor quality. They demand quality for their money. This has led the travel agencies, hotels and other participants in the tourism offer to introduce quality control, standards and a TQM system. The American international hotel chains were the first to implement the TQM system where good results were achieved and this philosophy was also adopted by Europe (Campanella, 1999).

There is a great variety of equipment and inventory in the Macedonian facilities. The facilities do not have a complete service. They often deviate from hotel interior design standards, hotel room and kitchen design standards, as well as ISO 9000 management and quality assurance standards and ISO 14000 environmental management standards, as well as HACCP food safety management system (Mitreva, et al., They often deviate from hotel interior design standards, hotel room and kitchen design standards, as well as ISO 9000 management and quality assurance standards and ISO 14000 environmental management standards, as well as HACCP food safety management system (Mitreva, et al., 2019).

For the performance of catering activities, the minimum technical conditions prescribed by the Law on Tourism Activity must be fulfilled. In addition, they must meet the following conditions: the facility can be used, the conditions for protection at work, sanitary and health conditions, protection and improvement of the environment, fire protection and the conditions for protection against noise prescribed by law (Vusić, 2007). The purpose of the new rules is to raise standards in the hotel industry. It is quite logical to conclude that if the management of an organization is not interested or is not able to continuously improve the quality, it is difficult to expect this from the employees. The management, before making the final decision to introduce the TQM system, should check its own readiness and possible problems that may arise in the process of establishing any management system and its implementation. For many companies, the implementation of ISO 9001 is the first step towards TQM (Total Quality Management). Upgrading ISO 9001:2015 with the TQM strategy means improving quality by rethinking organizational processes not only in the direction of definition, improvement and design, but also improving productivity and optimizing costs (Westcott, 2014). Competitive advantages are often decisive for the development and use of the quality assurance system and other management systems (Šaković Jovanović, et al., 2020).

MATERIAL AND METHODS

Through the research within this paper, a general idea of the business process management models in the hotel industry in the Republic of North Macedonia should be obtained. The problem investigated in this paper refers to the state and improvement of the business processes in the organizations of the hotel industry in the Republic of North Macedonia and the level of maturity in relation to the strategy of TQM (Total Quality Management), which represents a new approach in management, in direction of continuous improvement of the quality of all activities of the organizations. Therefore, the purpose of the paper is to analyze the existing situation in the hotel industry, to analyze the possibilities for the improvement of business processes in the hotel industry, and finally, to propose a model for improving of these processes.

During the research in this paper, qualitative and quantitative methods were used. The qualitative approach includes a literature review of many publications that generally deal with the issue of improving business processes in hotel services and their application in practice.

The sample was made according to the list received from the Department of Tourism and Hospitality within the Ministry of Economy (Tab. 1). Moreover, more than half of the hotels identified for the survey have four stars (50.00%), almost a third have three stars (31.25%), whereas only 18.75% are five-star hotels.

Table 1. A research sample

Type of hotel	Number	%

5* hotel	12	18.75
4* hotel	32	50.00
3* hotel	20	31.25
In total	64	100

Source: Government of the Republic of Macedonia, Ministry of Economy, Department of Tourism and Hospitality.
Note: Data as of December 2022

Although the research was conducted on a convenient sample of 64 respondents, 32 respondents (N=32) participated in it who have senior positions and decision-making power in 32 hotels on the territory of the Republic of North Macedonia, as shown in Table 2. The low response rate obtained (N=32) is satisfactory, taking into account the conditions of the Covid-19 pandemic and in this type of scientific research, it ranges between the limits of 16% to 25%, which in our case is considered as relevant (Bohdanowicz, et al., 2005; Medina-Muñoz & García-Falcón, 2000).

Table 2. Distribution of responses by type of hotel in percentages

Type of hotel	Number	%
5* hotel	6	18.8%
4* hotel	11	34.4%
3* hotel	15	46.9%
Total:	**32**	**100%**

The survey questionnaire was structured in three parts:
In the first part, answers were sought about the demographic characteristics of the respondents (11 questions).
In the second part, the questions referred to the management systems implemented by the hotel, as well as questions related to describing the business environment in the hotel where the respondents work - for each of the listed factors of managing the management systems (9 questions).
In the third part, issues related to the organizational structure and management of business processes were addressed. In this part of the questionnaire were analyzed 13 aspects that refer to: the strategy, the leadership, the process management, the employee management, the information technology, the communication, the focus on buyers, the relations with external suppliers, the employee skills, the reward system, continuous improvement, methods and techniques, defect free operation, as well as performance measures. The results are processed with statistical methods.
As statistical indicators for determining maturity in business process management and hotel competitiveness factors, the following were used: information technology, process management (including methods and techniques for flawless operation), employee management, strategic approach, organizational or business culture) and competitiveness (market share) of the hotel.
The collected data were analyzed using the statistical software tool IBM SPSS Statistical Package for the Social Sciences - 22, and in the analysis are used descriptive statistics and Spearman's correlation coefficient, as well as the χ2 test and the cross-tabulation method. During the statistical processing, descriptive statistics were applied, i.e., frequencies, percentages, rank, arithmetic mean and standard deviation. A five-point Likert scale (from 1 to 5) is used, with an impact factor of very low (1 – 1.80), low (1.81 – 2.60), medium (2.61 – 3.40), high (3.41 – 4.20) and very high (4.21 – 5.00).

RESULTS AND DISCUSSION

Due to the extensiveness of the research, this paper presents the results regarding the application of internal standardization and quality assurance. The questions from the second part of the questionnaire aimed to determine the existing degree of three application of different management systems. The House of Quality is held by four subsystems: internal standardization, quality methods and techniques, education and motivation and quality cost analysis.

Table 3 presents the general characteristics and management systems used in the researched hotels that made up the research sample. From Table 3 it can be summarized that 59.4% of the hotels operate according to a functional approach and 40.4% are process-oriented organizations. The sample did not include organizations with semi-adaptive ways of functioning, that is, those that practice a divisional/sector approach and a matrix/project system.

Table 3. General characteristics and used management systems of the organizations that comprise the research sample

Management systems	Answer	Frequency (n)	Percentage (%)
What is the organizational structure of the organization?	Functional	19	59.4
	Divisional/Sectoral	-	-
	Matrix/project	-	-
	Process oriented	13	40.6
Does the hotel you work in possess a quality management system certificate ISO 9001:2015?	Yes	13	40.6
	No	19	69.4
Does the hotel you work in possess an environmental management system certificate ISO 14001:2015?**	Yes	8	29.6
	No	19	70.4
Does the hotel you work in possess an occupational health and safety management systems certificate ISO 45001:2018?***	Yes	14	46.7
	No	16	53.3
Does the hotel you work in possess an ISO 22000:2018 food safety management system certificate?	Yes	19	59.4
	No	13	40.6
Does the hotel you work in possess an implemented system for hazard analysis and critical control points (HACCP)?	Yes	28	87.5
	No	4	12.5
Does the hotel you work in apply the ISO 26000:2010 Social Responsibility guideline?	Yes	13	40.6
	No	19	59.4
Does the hotel you work in apply multiple management	Yes	7	21.9
	No	25	78.1

systems combined as an integrated system?			

** 5 respondents did not answer this question.
*** 2 respondents did not answer this question.

As can be seen from the presented information (Tab. 3), the majority of the hotels, i.e., 87.5% have implemented HACCP, the system for hazard analysis and critical control points. 59.4% of the respondents declared that the organizations in which they work possess a certificate for food safety management systems ISO 22000:2018.

Here, it is important to indicate that HACCP (Hazard Analysis and Critical Control Points) is a system with which the identification, assessment and control of the hazards that are significant for food safety are carried out. In the Republic of North Macedonia, the implementation of HACCP food quality standards is regulated by the Law on Food Safety adopted in 2004.

Furthermore, 46.7% of the hotels in the sample possess an ISO 45001:2018 certificate for a safety and health management system in the workplace, whereas 2 respondents did not answer the question.

Then, 40.6% of the hotels in the sample possess an ISO 9001:2015 quality management system certificate and the same percentage (40.6%) apply the ISO 26000:2010 social responsibility guideline.

Less than a third of the hotels in the sample, or 29.6%, possess an ISO 14001:2015 environmental management system certificate.

Finally, only 21.9% of hotels apply two or more management systems in business process management.

From the general characteristics and implemented management systems of the organizations that contain the research sample shown in Table 4, it can be concluded that in more than half of the hotels the organizational structure is functional.

In terms of management systems, the majority of hotels possess an ISO 22000:2019, HACCP certificates, while for the rest these percentages are lower. This indicates that towards achieving excellence, it is necessary to increase awareness among hoteliers about business process management, strict compliance with the legal regulations and the appointment of responsible persons who will follow the introduction of the management systems until they are fully implemented.

Thereafter, the findings of the research are elaborated in relation to the frequency of the application of different management systems in accordance with the different sizes of organizations by number of employees (Table 4). For this purpose, the hypothesis was tested: X1: Different management systems are predominantly applied in the management of hotels in the Republic of North Macedonia. Table 4 presents descriptive statistics relating to the predictor variables number of quality employees and the criterion variable quality management systems.

Table 4. Descriptive statistics for the predictor variables number of quality employees and the criterion variable management systems

		Number of employees			In total
		Up to 25	26-50	Over 50	
ISO 9001:2015	%	0	38.5	61.5	100
	n	0	5	8	13
ISO 14001:2015	%	0	25	75	100
	n	0	2	6	8
ISO 45001:2018	%	0	42.9	57.1	100
	n	0	6	8	14
ISO 22000:2018	%	21.1	36.8	42.1	100
	n	4	7	8	19
HACCP	%	21.4	50	28.6	100
	n	6	14	8	28
ISO 26000:2010	%	0	53.8	46.2	100
	n	0	7	6	13
Integrated system	%	0	0	100	100
	n	0	0	7	7

For the testing of this hypothesis and determining the frequency of use (the proportion of cases in different sizes of organizations) of each of the management systems, the method of cross tabulations – Pearson's χ2 (chi-square) test was applied, as shown in Table 5.

Table 5. Pearson's χ2 chi-square test

Management systems		Value	Number of degrees of freedom	Statistical significance
ISO 9001:2015	Pearson's χ2 chi-square	17,149	2	.000
	Probability percentage	23,355	2	.000
	Two-way linear association	16,065	1	.000
	Cramer's V	.745		.000
	n	32		
ISO 14001:2015	Pearson's χ2 chi-square	11,813	2	.003
	Probability percentage	13,005	2	.001
	Two-way linear association	10,041	1	.002
	Cramer's V	.661		.003
	n	27		
ISO 45001:2018	Pearson's χ2 chi-square	15,536	2	.000
	Probability percentage	21,265	2	.000
	Two-way linear association	14,727	1	.000
	Cramer's V	.720		.000
	n	30		

ISO 22000:2018	Pearson's χ2 chi-square	7,385	2	.025
	Probability percentage	10.209	2	.006
	Two-way linear association	4,016	1	.045
	Cramer's V	.480		.025
	n	32		
HACCP	Pearson's χ2 chi-square	2,286	2	.319
	Probability percentage	3,059	2	.217
	Two-way linear association	2,214	1	.137
	Cramer's V	.267		.319
	n	32		
ISO 26000:2010	Pearson's χ2 chi-square	9,457	2	.009
	Probability percentage	12,302	2	.002
	Two-way linear association	9,036	1	.003
	Cramer's V	.544		.009
	n	32		
Integrated management systems	Pearson's χ2 chi-square	36,880	2	.000
	Probability percentage	27,592	2	.000
	Two-way linear association	17,360	1	.000
	Cramer's V	.917		.000
	n	32		

The chi-square for independence between the ISO 9001:2015 quality management system and number of employees (organization size) is statistically significant χ^2 (2, 32) = 17.149, $p < .01$, with Cramer's V = .745 which represents high level of connectivity. This means that organizations differ significantly in terms of the application of the ISO 9001:2015 quality management system, i.e., the ISO 9001:2015 quality management system is used notably more in larger organizations.

The chi-square for independence between the ISO 14001:2015 environmental management system and number of employees (organization size) is statistically significant χ^2 (2, 27) = 11.813, $p < .01$, with Cramer's V=. 661, which represents a high level of connectivity. That is, organizations differ significantly in terms of applying the ISO 14001:2015 quality management system. From the obtained results, it can be concluded that the environmental management system ISO 14001:2015 is used notably more in larger organizations.

The chi-square for independence between the ISO 45001:2018 occupational health and safety system and the number of employees (organization size) is statistically significant χ^2 (2.30) = 15.536, $p < .01$, with Cramer's V= .720, which represents a high level of association. Organizations differ considerably in terms of the application of the ISO 45001:2018 occupational health and safety system, i.e., the occupational health and safety system is used much more in the larger organizations.

Chi-square for independence between the food safety management system ISO 22000:2018 and the number of employees (the size of the organization) is statistically significant χ2 (2.32) = 7.385, p<.01, with Cramer's V=.480, representing a high level of association. Organizations vary widely in their implementation of the ISO 22000:2018 food safety management system, i.e., the food safety management system ISO 22000:2018 is implemented a lot more in the larger organizations.

Chi-square for independence between the HACCP food safety system and the number of employees (the size of the organization) did not find a statistically significant result χ2 (2,32) = 2.286, p>.01. This means that the proportion of organizations in terms of size does not differ significantly in the application of the HACCP food safety system, or the application of this standard in relatively the same measure is present in small, medium and large organizations. Furthermore, the chi-square for independence between ISO 26000:2010 CSR management system and number of employees (organization size) is statistically significant χ2 (2,32) = 9.457, p<.01, with Cramer's V=. 544, which represents a high level of connectivity. That is, organizations differ significantly in terms of the implementation of the ISO 26000:2010 social responsibility management system, with larger organizations significantly more likely to have implemented this social responsibility management system.

The chi-square for independence between the variable multiple management systems combined in an integrated system and the number of employees (the size of the organization) is statistically significant χ2 (2,32) = 36.880, p<.0.1, with Cramer's V = .917, which represents very high level of connectivity. Organizations differ significantly in terms of the application of multiple management systems combined into an integrated system with this being much more prevalent in organizations with over 50 employees.

Considering the analysis above, statistically significant differences in the degree of use were found between different sizes of organizations for all quality management systems except HACCP (food safety system). These results are in line with the expectations because the hotels that are organizations of interest for this research work with food. Consequently, regardless of size and number of employees, hotels that serve food are expected to have an implemented HACCP system.

Regarding the use of other management systems, this is significantly more a case in the organizations with over 50 employees.

In addition to the standards that are a prerequisite for a hotel to reach a higher rank (in the context of stars), hotels that are part of a franchise must have implemented integrated management systems. With that, they are more competitive on the market and give the impression of reliability and professionalism.

Conclusion
The purpose of this research was to analyze the current situation in the hotel industry, to analyze the possibilities for the improvement of business processes in the hotel industry, and finally, to propose a model for improving these processes. The research within this paper aimed at determining the degree of application of different management systems for management in organizations, which was implemented by using the statistical method of cross tabulations, i.e., with the Pearson's chi-square test (Tab. 5). Based on the conducted analyzes of independence between the management systems and the number of employees (the size of the organization), it was found that there is a statistically significant relationship between the management systems: ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 22000 :2018, ISO 26000:2010, i.e., several management systems are combined in an integrated system and the criterion variable number of employees (organization size). A significant connection was not found only with the HACCP system and this partially confirms the hypothesis that reads: Different management systems are predominantly applied in the management of hotels in the Republic of North Macedonia, as shown in Table 4.

The conclusion is that the process orientation in management is more prevalent in the larger organizations, in contrast to smaller and medium-sized organizations where the functional organizational structure dominates. Taking into account that 75% of the surveyed employees work in medium and small organizations, it is not possible to fully determine the dominance of using the process orientation, as shown in Table 4. That is, according to what is shown in Table 43, in the hotels in the Republic of North Macedonia, the management based on the concept of process orientation is predominant.

Analyzing the direction in which the hotels in the Republic of North Macedonia should move, it can be indicated that managing the hotels by applying the principles of process orientation and process approach, the management manages the entire value chain of its products and services. By focusing and relying on the manner of the actual work performance and applying a logical order of activities in the processes, a more reliable picture of the business is obtained and the managerial work becomes more rational and clearer.

Analyzing the hotel industry in the Republic of North Macedonia, it can be indicated that in the increasingly competitive market, the issue of quality has become more and more important for the hotel industry. This is influenced by a number of factors, such as the expansion of consumer rights and the alleged emergence of "new" tourists who are more aware of quality. In addition, the greater competition has caused hotels to become increasingly aware of the importance of quality as a source of competitive advantage. Quality components in the hospitality industry that can be used to develop and implement service quality systems are: thinking about guest service, determining what guests want, developing a process to deliver what guests want, training staff, systems implementation, evaluation and modification of the service delivery system.

Furthermore, quality self-evaluation of the hotel industry (usually through comment cards in guest rooms or online questionnaires) is very important for hoteliers to be able to identify and solve the problems. Regular and systematic analysis of evaluation results can lead to a wide range of advantages, including: measuring the degree of alignment with customer needs and expectations and comparing the results with perceived quality, further, acting as a basis for a strategic process, determining actions for improvement, as well as controlling competitiveness in quality with the help of the Benchmarking strategy.

Quality assurance is a long-term investment that is a cost component, but this investment is always less than operating with "poor" quality. Managers should identify, record and reflect the profit impact of quality and prioritize quality improvement processes through knowledge and implementation of various management systems. There are various mechanisms aimed at achieving better quality in tourism services. Different management systems should make quality service a top priority for both them and their employees. Top recommendations for guest services that can achieve successful and profitable results include: focus on quality service and least satisfaction; retaining existing guests by exceeding their expectations; continuous quality improvement; employment, regular training and strengthening of service-oriented employees; the search for best practices through measurement; implementing quality accreditation through various schemes, such as eco-labels, ISO and EFQM.

REFERENCES

References

Bohdanowicz, P., Simanic, B., & Martinac, I. V. O. . (2005). Environmental training and measures at Scandic Hotels, Sweden. . *Tourism Review International,* , 9(1), 7-19.

Campanella, J. (1999). Principles of quality costs: Principles, implementation, and use. . *In ASQ World Conference on Quality and Improvement Proceedings* (p. 507). American Society for Quality.

Dervitsiotis, K. N. (2000). Benchmarking and business paradigm shifts. *Total Quality Management*, 11(4-6), 641-646.

Dighe, A., & Bezold, C. . (1996). Trends and Key Forces Shaping the Future of Quality. *Quality Progress*, 29(7), 89.

Foster, T. S. (2001). *Managing quality, an integrative approach.* Upper Saddle River: prentice-hall inc.

Hammer, M. (1990). Reengineering work: Don't automate, obliterate. *Harvard business review*, 68(4), 104-112.

Heleta, M. (2008). *Menadžment kvaliteta.* Univerzitet Singidunum.

Heleta, M. (2010). *Projektovanje menadžment sistema životne i radne sredine.* Univerzitet Singidunum.

Jayaram, J., Handfield, R., & Ghosh, S. . (1997). The application of quality tools in achieving quality attributes and strategies. . *Quality Management Journal*, 5(1), 75-100.

Kratsu, H. (1995). Concept engineering points in developing hit products. *JUSE, Societas Qualitatis*, 9(2).

Luburić, R. (2014). Total quality management as a paradigm of business success. *Journal of Central Banking Theory and Practice*, 3(1), 59-80.

Medina-Muñoz, D., & García-Falcón, J. M. . ((2000)). Successful relationships between hotels and agencies. *Annals of Tourism Research*, 27(3), 737-762.

Mitreva, E. (2010). Реинженеринг на деловните процеси-темел во примената на TQM стратегијата. *Списание "Економија и бизнис"*, 13(147), 21-23.

Mitreva, E. (2011). Model-integral methodology for successful designing and implementing of TQM system in Macedonian companies. *International Journal for Quality Research*, 5(4), 255-260.

Mitreva, E. (2012). The need for planning and implementing educational activities in Macedonian companies. *International Journal for Quality Research*, 6(2), 143-149.

Mitreva, E., & Filiposki, O. . (2012). Proposal methodology of the subsystem-internal standardization as part of TQM system. *International Journal for Quality Research*, 6(3), 251-258.

Mitreva, E., Chepujnoska, V., & Chepujnoski, G. . (2008). QC-CE-PYRAMID model in the designing of the information system within a company. *Macedonian Journal of Chemistry and Chemical Engineering*, 27(2), 163-168.

Mitreva, E., Sazdova, J., & Gjorshevski, H. . (2018). Management with the Quality Control System in the Hotel Industry in Macedonia. *Tem Journal*, 7(4), 750-757.

Mitreva, E., Sazdova, J., & Gjorshevski, H. (2019). Quality management system applications in the hotel industry in Macedonia. *Quality-Access to Success*, 20(170), 68-72.

Mitreva, E., Tashkova, S., & Gjorshevski, H. . (2019). Optimization of business processes in a transport company in the Republic of North Macedonia. . *TEM Journal*, 8(3), 879-887.

Ojwaka, P. M. (1999). *Process Modelling for Planning and Management of Facilities: A Re-Engineering Approach.* Tampere University of Technology.

Parashar, M., & Singh, S. K. . (2005). Innovation capability. *IIMB Management Review*, 17(4), 115-123.

Šaković Jovanović, J., Vujadinović, R., Mitreva, E., Fragassa, C., & Vujović, A. . (2020). The relationship between E-commerce and firm performance: The mediating role of internet sales channels. *Sustainability*, 12(17), 6993.

Sasaoka, H. (1995). The QC circle evolution from TQC to TQM, a management perpective. *JUSE, Societas Qualitatis*, 9(4).

Stoiljković, V., Stoiljković, P., & Stoiljković, B. . (2009). The EFQM excellence model implementation in West Balkans. . *In Fifth International Working Conference „Total*

Quality Management–Advanced and Intelligent Approaches , (pp. 31st May–4th June (pp. 61-67)).

Sugiyama, T. (1996). Application of quality methods and techniques in automotive component industry. *In International Conference on Quality, Yokohama* , (pp. (pp. 175-178)).

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, 180, 227-234.*, 227-234.

Vusić, D. (2007). Poslovna izvrsnost. *Tehnički glasnik*, 1(1-2), 51-54.

Westcott, R. T. (2014). Modular Kaizen: Continuous and Breakthrough Improvement. *Quality Progress*, 47(4), 61.