"Readiness of small and medium enterprises to apply total quality management standards: Evidence from Kosovo"

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READINESS OF SMALL AND MEDIUM ENTERPRISES TO APPLY TOTAL QUALITY MANAGEMENT STANDARDS: EVIDENCE FROM KOSOVO

Abstract

Applying effective management methods for small and medium enterprises (SMEs) is a crucial commitment to compete in the market. Total quality management (TQM) is a well-known systematic method that increases business competitiveness and improves performance. Accordingly, the purpose of this paper is to examine the gap between current SMEs' management quality in relation to the management standards recommended by TQM. This quantitative research was conducted with representatives of 76 relevant SMEs out of 370 contacted through the official platform for business registration. Firstly, 12 relevant critical success factors (CSFs) have been identified and validated with Cronbach's alpha and item statistics and further applied to measure SMEs' performance. One sample statistic is applied for CSF indexing, and one sample t-test is used to test the raised hypothesis. According to the research findings, human resource management performs with an average score of 3.95 out of 5, information management 3.89 out of 5, and continuous improvement 3.77 out of 5, while customer focus performs with a low score of 3.32 out of 5, and training and education with 3.14 out of 5. The raised hypothesis confirms that SMEs are not at the level of TQM standards, and this is supported by a reliability value of alpha ($p = 0$). This paper contributes to the literature by providing insights into current SMEs' management quality and offers a validated model, which can be applied to measure SMEs' managerial quality.

Keywords	small and medium enterprises, total quality management, readiness to change, Kosovo
JEL Classification	M00, L26, O32

INTRODUCTION

SMEs operate in a dynamic environment with constant competition and have the greatest impact on the development of the country's economy, job creation, and the development of the private business sector. Therefore, businesses are constantly looking for new methods to cope with the challenges they face. This circumstance forces them to find and apply innovative management methods and standards in order to excel and be effective in every business action (Talib et al., 2011). This means that SMEs have to be committed to selecting the most appropriate managerial methods and adapting them to their business, requiring employees to be willing to change according to the new methods.

TQM, an innovative managerial concept, stands out for making continuous improvements in enterprise processes and product quality and is a proven concept for quality management (Hietschold et al., 2014). This managerial concept offers creative methods and sustainable standards for SME quality management. TQM is a widespread management philosophy that, instead of dealing with the correction of prob-

lems, stands out more for their prevention by making continuous improvements (Toke & Kalpande, 2020). This methodology is effective because it is customer-focused, requires commitment from leadership and employees, and enhances ongoing training and education.

Although the TQM standards are very useful for each organization, SMEs still do not manage them so easily. SMEs face challenges in effectively implementing all critical success factors (CSFs), which are considered the main tasks that ensure the successful implementation of the TQM concept. Therefore, a study to understand and measure the managerial quality of SMEs in Kosovo is relevant because it enables an understanding of their managerial level compared to TQM standards.

1. LITERATURE REVIEW

Business systems face the need for change and the necessity for rapid adaptation (Vidgen et al., 2017). To be competitive in dynamic environments, businesses must focus on improving skills in many aspects. Some systems that portray 21st-century skills include financial and entrepreneurial skills, but there is also a need for other skills such as problem-solving, collaboration, and digital literacy (Geisinger, 2016). According to Whysall et al. (2019), the transformation of business environments that is being influenced by the fourth industrial revolution is accompanied by the indisputable need for effective human resource management. In this dynamic and competitive business era, businesses are facing challenges in talent management by focusing on securing those with the skills and capacities to create value and provide a competitive advantage to the organization (Faria et al., 2015). Moreover, with the support of employees, leadership and top management play a crucial role in achieving business excellence by creating a positive atmosphere for effective work, boosting motivation, and enhancing job satisfaction (Strom et al., 2014). Empowering workers and preparing them to embrace changes in business is also a challenge that is not easily achieved without continuous training and education, but it is essential to keep up with the competition (Li et al., 2018).

TQM is a set of combined managing concepts, a package of models and innovations, and a combination of management mindset with innovative tools and techniques that function in sync with the goal of supporting the organization's quality and striving for sustainable performance (Zairi, 2013). According to Dale et al. (2016), the essence of TQM is for customers to get satisfaction from the strategic improvement of processes and feel

enthusiastic about the way their needs and requirements are understood. Since the 1980s, TQM has been embraced as a suitable managerial philosophy to increase business management skills by improving performance to achieve perfect quality (Dahlgaard-Park et al., 2018). The TQM genesis can be traced to the work of Walter Shewhart in statistical process control at the Bell Laboratories in the USA during the 1920s (Evans & Lindsay, 2001 as cited in Zairi, 2013). The TQM principles have advanced through outstanding contributions of prominent quality innovators, such as Joseph M. Juran, W. Edwards Deming, Philip B. Crosby, Armand Feigenbaum, Kaoru Ishikawa, Shigeo Shingo, and Genichi Taguchi, which in different ways, times, and fields have advanced the TQM standards (Zairi, 2013). According to Haupt and Whiteman (2004), TQM is a model with the potential to improve business performance by focusing on customer satisfaction and creating an atmosphere for teamwork and effective management of employees. TQM paybacks can be gained by accomplishing some imperative tasks, generally denoted as critical success factors (CSFs) (García-Alcaraz et al., 2021); therefore, organizations and businesses need to measure CSFs when presenting TQM (Hietschold et al., 2014).

Many authors have confirmed the importance of CSFs for the implementation of TQM and their role in management quality. According to Sinha et al. (2016), eight quality management CSFs affect SME general managerial performance. In Malaysia, seven CSFs have been identified for the implementation of TQM in SMEs (Nurazree & Hilmi, 2014), while in the Indian context, nine CSFs are considered crucial for SME management quality (Toke & Kalpande, 2020). As an alternative to facing crisis conditions in Greek SMEs, Sainis et al. (2020) have mentioned seven important

CSFs. In Kuwait, the TQM philosophy relies on five specific CSFs that significantly impact the relationship between leadership and SME organizational performance (Sawaean & Ali, 2020). In the Japanese context, 12 essential CSFs are mentioned for the proper functioning of SMEs (Georgiev & Ohtaki, 2020). Furthermore, in South Africa, seven CSFs have been identified to be noteworthy for business excellence (Silima et al., 2021). Following the analysis carried out in South-Eastern Europe by Imeri and Kekale (2013), 12 CSFs play a central role in SME managerial quality level. In Brazil, CSFs have been used to understand the level of application of TQM techniques in SMEs (Oliveira et al., 2019). In the Romanian context, eight important CSFs are proposed to encourage businesses to increase their performance (Diamandescu, 2016); meanwhile, in the German context, 10 CSFs have been proposed as highly effective for managerial quality (Hietschold et al., 2014).

This study aims to understand the relationship between TQM standards and SME quality management. Therefore, it is important to offer some theoretical descriptions for SMEs in the global as well as in the local context. According to Eniola and Entebang (2015), the vast majority of businesses globally are SMEs, which offer profit opportunities for entrepreneurs on the one hand and solutions for reducing unemployment and market development on the other. SMEs are usually defined by the number of employees (Justin et al., 2017). In Europe, SMEs are considered companies with fewer than 250 employees. In the USA, SMEs are divided by size, where small enterprises have up to 50 employees, while large enterprises have fewer than 250 employees. In Japan and South Korea, SMEs have less than 500 employees. According to Sipa et al. (2015), SMEs have a dominant role in the development of the local and international market due to the impact on the growth of marketing, production, and services by being more creative for attracting investments. SMEs represent 99% of businesses in the European Union, providing around 85% of new jobs in the last five years and covering two-thirds of the region's private sector (Gherghina et al., 2020).

From an economic point of view, there are two dimensions of SMEs. There are traditional small ones that do not have a long-term strategy, partici-

pate only in small markets, and implement production processes that are inherited from generation to generation. And there are modern SMEs that use the newest technology, are in constant search of new markets, are competitive, and are constantly trying to be efficient and effective in carrying out activities (Neagu, 2016). The behaviors and abilities of SMEs are continuously influenced by various phenomena, such as globalization, increasing competition, and changes in markets (Bocconcelli et al., 2016). According to Moeuf et al. (2018), SME desire to maintain competitive positions in the market is related to their capacity to face customer behaviors and expectations. The quality of innovation in the product, process, and system management, and the approach and competition management in the market are considered serious gauges (Prasanna et al., 2019). In the end, good managerial SME performance is measured by evaluating the results in income improvement, job increment, and production and export growth (Doh & Kim, 2014).

As in other countries, in Kosovo, SMEs represent a sector that employs the largest number of workers and ensures the well-being of the largest part of society. Furthermore, this sector has a strong impact on economic growth, the creation of jobs, healthy competition, the application of modern technology, and providing more types of products and services (Ahmeti et al., 2015). SME size in Kosovo is categorized into three specific groups, i.e., micro-enterprises with 0-9 workers, small with 10-49 workers, and medium enterprises with 50-250 workers (Kuci, 2018). Based on statistics provided by the Agency for Business Registration, SMEs dominate 99% of the labor market in the private sector. Out of these, 98.4% are micro-enterprises, 1.35% are small enterprises, 0.22% are medium enterprises, and only 0.06% are large enterprises (Berisha, 2020). Accordingly, 82,857 SMEs in Kosovo have not survived in the last 10 years, most probably because of the difficulties they encountered in business management and because they have lost competitiveness with developed countries (Ahmeti et al., 2015). SMEs are struggling to adapt and apply new professional methods and techniques integrated into the social aspect and have skills in the personal aspect (Veliu & Manxhari, 2017). To conclude, the sustainability of SMEs is an essential contributing factor to the

development of the economy, and building upon a set of recognized standards is a prerequisite for Kosovo's economy to flourish (Halilaj, 2021).

The literature review gives a logic and understanding that businesses need new creative management models. Logically, SMEs can benefit from the opportunities that the TQM concept is providing through right CSFs application. Therefore, the purpose of this study is to explore how SMEs in Kosovo manage their business and measure their management quality level with the TQM management standards.

In order to perform the research and to understand the SME level of management quality, two research questions were posed, and one hypothesis was raised and tested:

RQ1:   *How compatible is the management of SMEs with TQM?*

RQ2:   *Where are businesses less and more focused?*

H0:   *The level of SME quality management is not equal to the TQM management standards.*

2. METHODS

The methodology begins with reviewing the literature where suitable CSFs are identified and validated. As suggested by Márcio Tavares Thomé et al. (2014), a six-step process was used to select and retrieve papers in order to identify the relevant CSFs. In the first step, publishers such as Elsevier, Taylor and Francis, Emerald, Springer, and Wiley were selected as reliable sources. Secondly, specific criteria have been set, such as English language only, appropriate keywords, specific timeframe (2017–2023), and only peer-reviewed articles. In the third step, focusing on the title and abstract, the search and selection for relevant papers was carried out. In the fourth step, the selected research papers were read and reviewed. In the fifth step, research papers that were not suitable were excluded. In the sixth step, suitable CSFs were selected and used for the study.

The Delphi technique was applied to validate the identified CSFs. Delphi technique is necessary to achieve uniformity in a field where a lack of agreement or incomplete knowledge is apparent (Giannarou & Zervas, 2014). Sixteen professors with at least a Ph.D. level and experts in the field of business administration participated and gave their judgments regarding the importance of each CSF. Experts responded to the importance of the CSFs on a Likert scale where 1 = not at all, 2 = low, 3 = average, 4 = very important, and 5 = ideal. Only CSFs with an average above 4.0 (very important) were used further for the study. Cronbach's alpha and item statistics were applied to measure the CSF consistency and reliability (Frost, 2024). With Cronbach's alpha, the level of agreement between items is determined on a standardized scale from 0 to 1. The higher the value of Cronbach's alpha, the higher the agreement for the treated items. Usually, scholars apply the value of 0.7 as a reference value, which means that from and above 0.7, it is considered that the items sufficiently agree that the measurement is reliable (Bonett & Wright, 2015). Below is the formula for Cronbach's alpha:

$$\alpha = \frac{N \cdot \overline{c}}{\overline{v} + (N-1) \cdot \overline{c}}, \qquad (1)$$

where N – number of items, c – mean covariance between items, v – mean item variance.

After the CSFs validation, three indicators were established for each CSF, which are further used to construct the questionnaire.

Data collection was carried out through questionnaires with 36 specific questions. This method of data collection is prevalent; it is used especially when the number of questions is large, and it is being adopted by individuals, scholars, businesses, non-governmental organizations, public organizations, and even governments (Kothari, 2004).

By using the database of the state business registration agency and one from the civil society called "Open Businesses," 370 SMEs were identified and contacted. The link to the questionnaire was sent to businesses, contacting only one person at the company who could be either a manager or a distinguished and experienced employee. Out of 370, 76 completed questionnaires were returned by companies of different profiles, such as 37 service enterprises, or 48.7%; 19 production enterprises,

or 25%; 19 service and production enterprises, or 25%; and one sales company, or 1.3%.

The collected data were subjected to three types of analysis: performance calculation using a custom table, CSFs indexing using one sample statistic, and hypothesis testing using a one-sample *t*-test.

The hypothesis measures the difference between the mean of managerial quality of SMEs and the hypothetical value of TQM, which is equal to 5.

$$H0: \mu \neq \mu_0, \qquad (2)$$

where the μ – average management quality of SMEs is not equal to μ_0 which represents the hypothetical optimal value – 5.

$$t = \frac{\overline{X} - \mu_0}{SE}, \qquad (3)$$

where $\overline{X}$ is the calculated average value of managerial quality μ_0 is the hypothetical optimal value – 5 and SE is the Standard Error of the mean.

3. RESULTS AND DISCUSSION

Table 1 presents CSF ranking related to their appearance in the literature. Table 2 provides CSFs validation results. Table 3 shows the indicators performance. Finally, Table 4 presents the CSFs indexed values and Table 5 shows the hypothesis test results.

Table 1. CSFs ranking according to the appearances

TQM CSFs	Source	Nr of appearances
Customer Focus (CF)	Sinha et al. (2016), Nurazree and Hilmi (2014), Toke and Kalpande (2020), Sainis et al. (2020), Sawaean and Ali (2020), Georgiev and Ohtaki (2020), Silima et al. (2021), Imeri and Kekale (2013), Diamandescu (2016), Hietschold et al. (2014).	10
Leadership and Management (LM)	Sinha et al. (2016), Nurazree and Hilmi (2014), Toke and Kalpande (2020), Sainis et al. (2020), Sawaean and Ali (2020), Georgiev and Ohtaki (2020), Silima et al. (2021), Oliveira et al. (2019), Diamandescu (2016), Hietschold et al. (2014).	10
Supplier Focus (SF)	Sinha et al. (2016), Nurazree and Hilmi (2014), Toke and Kalpande (2020), Georgiev and Ohtaki (2020), Imeri and Kekale (2013), Oliveira et al. (2019), Hietschold et al. (2014).	7
Employee Involvement (EI)	Sinha et al. (2016), Sainis et al. (2020), Georgiev and Ohtaki (2020), Silima et al. (2021), Imeri and Kekale (2013), Diamandescu (2016).	6
Strategic Planning (SP)	Nurazree and Hilmi (2014), Toke and Kalpande (2020), Silima et al. (2021), Imeri and Kekale (2013), Oliveira et al. (2019), Hietschold et al. (2014).	6
Process Management (PsM)	Nurazree and Hilmi (2014), Toke and Kalpande (2020), Georgiev and Ohtaki (2020), Silima et al. (2021), Diamandescu (2016), Hietschold et al. (2014).	5
Continuous Improvement (CI)	Sinha et al. (2016), Sawaean and Ali (2020), Georgiev and Ohtaki (2020), Imeri and Kekale (2013), Diamandescu (2016).	5
Analysis, Measurement (AM)	Nurazree and Hilmi (2014), Georgiev and Ohtaki (2020), Silima et al. (2021), Imeri and Kekale (2013), Hietschold et al. (2014).	5
Quality Culture (QC)	Sainis et al. (2020), Sawaean and Ali (2020), Georgiev and Ohtaki (2020), Imeri and Kekale (2013), Hietschold et al. (2014).	5
Human Resource Management (HMR)	Nurazree and Hilmi (2014), Toke and Kalpande (2020), Oliveira et al. (2019), Hietschold et al. (2014).	4
Information Management (IM)	Nurazree and Hilmi (2014), Toke and Kalpande (2020), Georgiev and Ohtaki (2020), Hietschold et al. (2014).	4
Training and Education (TE)	Georgiev and Ohtaki (2020), Imeri and Kekale (2013), Hietschold et al. (2014).	3
Management by Facts (MbF)	Sinha et al. (2016), Diamandescu (2016).	2
Empowerment (E)	Sainis et al. (2020), Imeri and Kekale (2013).	2
Project Management (PrM)	Sinha et al. (2016), Oliveira et al. (2019).	2
Impact on Society (IoS)	Toke and Kalpande (2020), Hietschold et al. (2014).	1
System Approach of Management (SAM)	Sinha et al. (2016).	1
Company-Specific Business Results (CSBR)	Toke and Kalpande (2020).	1
Vision Sharing (VS)	Sainis et al. (2020).	1
Role of Quality Department (RQD)	Georgiev and Ohtaki (2020).	1
Teamwork (T)	Imeri and Kekale (2013).	1
Democratic Management Style (DMS)	Imeri and Kekale (2013).	1

Table 1 summarizes the information regarding the suitable CSFs for implementing TQM standards. Eleven relevant papers were reviewed, and 22 suitable CSFs were identified, which were treated by 25 different authors in 10 different contexts.

Customer focus and leadership and management are the most prominent CSFs and appeared in 10 papers. The supplier focus factor appeared in seven papers, while employee involvement and strategic planning appeared in six papers. The CSFs such as process management, continuous improvement, analysis and measurement, and quality culture have appeared in five papers, while HRM and information management have appeared in four papers. The CSF as training and education has appeared in three papers. The three CSFs, management by facts, empowerment, and project management, have appeared in two papers. While six CSFs, such as impact on society, system approach of management, company-specific business results, vision sharing, role of quality department, teamwork, and democratic management style, have appeared only one time each.

Table 2. Cronbach's alpha – Reliability statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.949	19

Table 2 shows the result of the 19 experts' agreement regarding the importance of CSFs. The value of Cronbach's Alpha is .949 and this tells that there is highly accepted consistency value among experts regarding the CSFs assessment. This means that experts have given similar assessments of the importance and suitability of CSFs as useful to be implemented by SMEs, and as such can be applied for the purpose of this study.

In addition, the study performed an item statistics analysis. The results bring values for the average of each CSF and make it possible to rank them according to their importance.

Table 3. CSFs validation – Item statistics

CSF	N	Min	Max	Mean	Std. Deviation
CF	16	5	5	5	0
LM	16	5	5	5	0
CI	16	4	5	4.81	0.403
TE	16	4	5	4.81	0.403

CSF	N	Min	Max	Mean	Std. Deviation
T	16	4	5	4.81	0.403
HRM	16	4	5	4.75	0.447
IM	16	4	5	4.75	0.447
PsM	16	4	5	4.69	0.479
EI	16	4	5	4.63	0.5
QC	16	4	5	4.63	0.5
PrM	16	4	5	4.56	0.512
AM	16	3	5	4.13	0.806
SP	16	3	5	3.63	0.619
SP	16	3	4	3.56	0.512
IoS	16	3	5	3.56	0.629
MbF	16	3	4	3.44	0.512
CR	16	3	4	3.44	0.512
VS	16	2	4	3.19	0.75
SM	16	2	4	3.13	0.719
RQD	16	2	4	3.13	0.719
Democratic Management (DM)	16	2	4	2.81	0.655
Valid N (listwise)	16				

Note: CF = Customer Focus; LM = Leadership and Management; SF = Supplier Focus; EI = Employee Involvement; SP = Strategic Planning; PsM = Process Management; CI = Continuous Improvement; AM = Analysis, Measurement; QC = Quality Culture; HMR = Human Resource Management; IM = Information Management; TE = Training and Education; MbF = Management by Facts; E = Empowerment; PrM = Project Management; IoS = Impact on Society; SAM = System Approach of Management; CSBR = Company-Specific Business Results; VS = Vision Sharing; RQD = Role of Quality Department; T = Teamwork; DMS = Democratic Management Style.

Table 3 shows the CSFs ranking according to their importance to be implemented by SMEs. Statistical annotations are given only for 12 CSFs that have reached the average value of 4, because only those are validated and further used for the research purpose. CSFs such as customer focus and leadership and management have the minimum and maximum values of 5 in terms of importance, which also marks the average of 5 and are listed in the first two positions. The CSFs as continuous improvement, training and education, and teamwork have a minimum value of 4 and a maximum of 5 and score an average of 4.81 and 0.403 std. deviation, and thus are ranked in positions from 3-5 in order of importance. The CSFs as HRM and information management are ranked in positions 6 and 7. These two CSFs have minimum values of 4 and a maximum of 5, while the average score is 4.75 with std. deviation of 0.447. The CSF as process management also has a minimum value of 4 and a maximum of 5 but the mean for this CSF is lower at 4.69 and std. deviation is higher than 0.479, and thus ranks 8th in terms of impor-

tance. Employee involvement and quality culture factors share the minimum and maximum values at 4 and 5; their mean is 4.63, while the std. deviation is 0.5 and take positions 9 and 10 in terms of importance. The project management factor has a minimum value of 4 and a maximum of 5, marking an average of 4.56 with a std. deviation of 0.512 and is ranked 11th. While the CSF as analysis and measurement has a minimum value of 3 and a maximum value of 5 which marks an average of 4.13 with std. deviation 0.806 and is positioned as the 12th in the group of CSFs to be implemented by SMEs.

The analyses continued by formulating three indicators for each CSF, which were also used for the questionnaire and were evaluated by the business representatives.

Table 4 shows the results obtained from the survey with business representatives. The results show that some CSFs and indicators perform poorly and some better, but none of them perform completely according to TQM recommendations. For customer focus indicators, over 49.17% indicate that it is up to the average level, while 50.83% indicate that their businesses are customer-focused. For

Table 4. CSFs and indicators performance

CSF	Indicators	Not at all	Slightly	Moderate	Very	Completely
CF	Customers included in the brand	6.60%	15.80%	27.60%	38.20%	11.80%
	Feedback through surveys	13.20%	13.20%	23.70%	42.10%	7.90%
	Keeping customers informed of changes	7.90%	6.60%	32.90%	36.80%	15.80%
LM	Leaders and managers provide the necessary resources	1.30%	5.30%	26.30%	53.90%	13.20%
	Leaders and managers are helpful and cooperative	0.00%	3.90%	28.90%	50.00%	17.10%
	Leaders and managers are qualified and updated	3.90%	9.20%	26.30%	36.80%	23.70%
CI	Creative approach for capturing and using opportunities	3.90%	13.20%	27.60%	40.80%	14.50%
	Use of social networks for continuous learning	0.00%	2.60%	21.10%	38.20%	38.20%
	Online lessons with webinars	1.30%	10.50%	30.30%	31.60%	26.30%
TE	Financial resources for training and education	6.60%	18.40%	44.70%	25.00%	5.30%
	Continuous training for employees	7.90%	14.50%	44.70%	27.60%	5.30%
	Training based on performance measurement	6.60%	15.80%	30.30%	32.90%	14.50%
T	Honest relationships between employees	1.30%	2.60%	31.60%	44.70%	19.70%
	Employees respect and commit to the company's goals	0.00%	1.30%	43.40%	38.20%	17.10%
	Trust between employees	1.30%	5.30%	34.20%	42.10%	17.10%
HRM	Visible and clear organization structure	2.60%	3.90%	19.70%	34.20%	39.50%
	Roles, positions, and responsibilities are respected	0.00%	2.60%	19.70%	50.00%	27.60%
	Honest relationships between employees	1.30%	2.60%	31.60%	44.70%	19.70%
IM	Webpage administration	5.30%	10.50%	23.70%	28.90%	31.60%
	Fast and accurate flow of information	0.00%	5.30%	21.10%	40.80%	32.90%
	Use of equipment to increase visibility	3.90%	6.60%	15.80%	36.80%	36.80%
PsM	Identifying the causes of problems with advanced techniques	5.30%	13.20%	23.70%	46.10%	11.80%
	Ability to alert quickly about the problem in the process	1.30%	7.90%	23.70%	50.00%	17.10%
	Continuous risk management	1.30%	11.80%	32.90%	42.10%	11.80%
EI	Involvement of employees in decision-making	3.90%	7.90%	42.10%	32.90%	13.20%
	Using the knowledge of employees	0.00%	7.90%	32.90%	44.70%	14.50%
	Employee motivation with rewards	9.20%	7.90%	36.80%	31.60%	14.50%
QC	Integrity strategy	6.60%	3.90%	14.50%	47.40%	27.60%
	Everyone's values and beliefs are respected	6.60%	7.90%	22.40%	44.70%	18.40%
	Code of ethics	5.30%	10.50%	30.30%	35.50%	18.40%
PrM	Project management based on structured systems	3.90%	11.80%	30.30%	35.50%	18.40%
	Experts for project management	5.30%	10.50%	42.10%	26.30%	15.80%
	Specific tools and techniques for project management	5.30%	13.20%	35.50%	36.80%	9.20%
AM	Quality analysis with advanced techniques	6.60%	11.80%	22.40%	31.60%	27.60%
	Regular performance measurement with advanced techniques	2.60%	6.60%	25.00%	40.80%	25.00%
	Analysis of consumer behavior with advanced techniques	13.20%	13.20%	23.70%	42.10%	7.90%

Note: CF = Customer Focus; LM = Leadership and Management; PsM = Process Management; CI = Continuous Improvement; AM = Analysis, Measurement; QC = Quality Culture; HMR = Human Resource Management; IM = Information Management; TE = Training and Education; PrM = Project Management; T = Teamwork.

leadership and management indicators, 29.03% evaluate up to average and claim that leaders and managers are not correct in their commitment, while 70.97% have evaluations above average. Regarding the indicators for continuous improvement, 36.83% say that the application of this factor is up to average, while 63.17% say that it is above average. For the training and education indicators, 63.16% say that it is not applied or partially applied, while 36.84% say that this factor is very or completely applied. For the teamwork indicators, 40.34% indicate that they are applied up to the average level, while 59.66% indicate that they are correct or complete. Regarding the HRM indicators, 28% prove that they are applied up to average, while 72% prove that they are very much or completely applied. The results by the information management indicators say that 30.74% are applied up to the average, while 69.26% estimate that they are applied a lot or completely. By the process management indicators, 41.37% say they are applied up to average, while 58.63% say they are applied above average or completely. The employee involvement indicators seem to be balanced, with 49.54% saying it is up to average and 50.46% saying it is above average. Assessments for quality culture indicators estimate that 36% are applied up to average, while 64% are applied correctly or completely. The implementation of the project management indicators is estimated at a low level, where 52.63% evaluate the implementation as up to average while 47.37% evaluate it above average. Last but still very important, 41.7% of the analysis and measurement indicators are evaluated up

to average, while 58.3% indicate that they are applied very or completely in accordance with TQM standards.

Furthermore, in order to have unique values for each CSF, the indexing of the values of the relevant indicators was performed. The indexed values are equal to the sum of the averages of the indicators divided by 3.

$$Indexed\ value = \frac{(X_1 + X_2 + X_3)}{3}. \qquad (4)$$

Table 5 shows the indexing results of the indicator values for each CSF. In terms of the indexed averages, the best score is achieved by HRM with a mean value of 3.9561 to continue with information management, 3.8947, and continuous improvement, 3.7719. The fourth best applied CSF by SMEs is leadership and management, with a mean value of 3.7325; the fifth in a row is teamwork with 3.7281, and the sixth is quality culture, which scores with 3.6579 indexed mean value. Process management turns out to be the seventh best applied CSF by SMEs, followed by analysis and measurement, which is eighth with a mean value of 3.5307, and ninth employee involvement with an indexed mean value of 3.4871. The tenth ranked CSF is project management with 3.4035, the eleventh is customer focus with 3.3246, and the last is training and education with 3.1491 mean value. This analysis shows that the customer focus factor, which was the most prominent CSF in the literature review, shows the lowest SME readiness to be implemented.

Table 5. CSFs indexed values/one-sample statistics

CSF	N	Mean	Std. Deviation
CF	76	3.3246	0.99922
LM	76	3.7325	0.72423
CI	76	3.7719	0.83836
TE	76	3.1491	0.93713
T	76	3.7281	0.72768
HRM	76	3.9561	0.81166
IM	76	3.8947	0.86617
PsM	76	3.5702	0.84821
EI	76	3.4781	0.8526
QC	76	3.6579	0.98428
PrM	76	3.4035	0.95113
AM	76	3.5307	0.95867

Note: CF = Customer Focus; LM = Leadership and Management; EI = Employee Involvement; PsM = Process Management; CI = Continuous Improvement; AM = Analysis, Measurement; QC = Quality Culture; HMR = Human Resource Management; IM = Information Management; TE = Training and Education; PrM = Project Management; T = Teamwork.

Table 6. One-sample *t*-test analysis

CSFs	Test Value = 5					
		df	Sig. (2–tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CF	−14.618	75	0.000	−1.67544	−1.9038	−1.4471
LM	−15.258	75	0.000	−1.26754	−1.4330	−1.1021
CI	−12.770	75	0.000	−1.22807	−1.4196	−1.0365
TE	−17.218	75	0.000	−1.85088	−2.0650	−1.6367
T	−15.238	75	0.000	−1.27193	−1.4382	−1.1056
HRM	−11.212	75	0.000	−1.04386	−1.2293	−0.8584
IM	−11.124	75	0.000	−1.10526	−1.3032	−0.9073
PsM	−14.696	75	0.000	−1.42982	−1.6236	−1.2360
EI	−15.562	75	0.000	−1.52193	−1.7168	−1.3271
QC	−11.887	75	0.000	−1.34211	−1.5670	−1.1172
PrM	−14.633	75	0.000	−1.59649	−1.8138	−1.3791
AM	−13.361	75	0.000	−1.46930	−1.6884	−1.2502

Note: CF = Customer Focus; LM = Leadership and Management; EI = Employee Involvement; CI = Continuous Improvement; AM = Analysis, Measurement; QC = Quality Culture; HMR = Human Resource Management; IM = Information Management; TE = Training and Education; PrM = Project Management; T = Teamwork.

Next, as the last step for this study, the raised hypothesis was tested. Hypothesis testing was performed using the one-sample *t*-test method.

As can be seen in Table 6, by all CSFs that were part of the one-sample *t*-test analysis, the *t*-value is a negative value and the *p*-value is .000, which is smaller than the standard alpha value of .05. This result is positive and statistically significant which asserts that there is no difference between the sample mean and the population mean, so, the sample used to perform the analysis is reliable. More technically, the result shows that the assumption of the null hypothesis is true where the quality management level of SMEs is not equal to the TQM standards. Table 5 also shows the negative values presented in the mean difference column, where the gap between the actual values of readiness and the ideal ones required by TQM standards are presented. The gap for training and education factor is 1.8508 points, for customer focus is 1.6754 points, for project management is 1.5964 points, for employee involvement is 1.5219 points, for analysis and measurement is 1.4963 points, for process management is 1.4298 points, for quality culture is 1.3421 points, for teamwork is 1.2719 points, for leadership and management is 1.2675 points, for continuous improvement is 1.2280 points, for information management is 1.1052 points, and for HRM is 1.0438 points.

The measurements regarding the level of application of CSFs recommended by TQM standards show that a high percentage of Kosovo businesses do not apply them at the appropriate level. The results show that SMEs in Kosovo implement TQM standards only to an average level, and there is a significant gap in achieving their full application. The lowest results, with the largest gaps compared to TQM standards, were recorded precisely in the most important CSFs according to the TQM concept, such as training and education and customer focus. Conversely, the narrowest gaps were recorded in CSFs such as human resource management, information management, and continuous improvement.

The results show that SMEs do not care enough about involving consumers in business branding, are not fully active in conducting surveys to get feedback and fail to keep consumers informed of changes they make. Leaders and managers sometimes do not provide all the tools and materials necessary to do the work; they are not always cooperative, and not all are qualified and updated. SMEs are not creative enough to capture the opportunities offered by the industry and do not manage to fully adapt to changes brought by information technology based on websites. SMEs do not allocate enough budget for training and continuous education and do not select, measure, and evaluate talents worth investing in.

The analyses also highlight gaps in teamwork where employees are not familiar with business goals, and there is a lack of full trust between people in the enterprise. Employees are not fully and always clear about their duties, roles, and responsibilities. Some companies are more serious about investing in information technology and the visibility of operations, but not all are at the level recommended by TQM. Many enterprises still do not have a website at all and do not use social networks for advertising and increasing visibility. Quality with continuous improvement management shows that there are still challenges with the application of contemporary techniques, the application of alerts for critical cases, and risk management. SMEs have challenges and are reluctant to involve employees in decision-making, they do not benefit from the knowledge that talented employees have. There are SMEs who do not apply rewarding those who really deserve it.

As for the quality of the culture, not all enterprises compile and implement normative documents for the culture and ethics of the company; average assessments are observed on respecting each other's values and beliefs. Regarding the way of project management, there are evaluations that show an unsatisfactory level regarding the structuring and application of standards; real experts are not always included, and modern techniques and methods are not always applied. A relatively large percentage say that no measurements of consumer behavior are made, and if they are made, a large percentage say that advanced techniques and methods are not applied to make the right and useful measurements.

CONCLUSION

The purpose is to analyze the SMEs quality of management in Kosovo and compare it with the recommended TQM standards. In the first research phase, 22 critical success factors (CSFs) were identified, where after their treatment and analysis with scientific methods, 12 of them were validated as suitable.

On the one hand, the paper confirms that CSFs such as customer focus, leadership and management, training and education, teamwork, continuous improvement, human resource management, and information management are the most valued by business management experts. On the other hand, training and education and customer focus are the most challenging to be implemented. Consequently, SMEs should be committed as a priority to improve these factors. To comply with TQM standards, SMEs should create effective plans for continuous training and education for the staff and must build strategies that raise awareness for increased customer focus.

From a managerial perspective, this study offers 12 validated CSFs that are essential to be implemented and promising for high managerial quality for all SMEs. From an SME and scientific perspective, the analysis offers a list of indicators that will enable effective performance measurement of management quality.

Considering the results achieved, the current management quality in Kosovo's SMEs is not equal to TQM standards. Therefore, businesses should be more ready to change and improve toward TQM standards in order to be highly competitive in doing business. However, to be correct, it should also be mentioned that there are SMEs that strongly claim to be fully in accordance with TQM standards and recommendations.

AUTHOR CONTRIBUTIONS

Conceptualization: Engelbert Zefaj.
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Formal analysis: Engelbert Zefaj.
Investigation: Engelbert Zefaj.
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