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ADVANCES IN GLOBAL SERVICES AND RETAIL MANAGEMENT

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## The Role of Quality Management Applications for Corporate Reputation

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### Abstract

In today's conditions, the content of the concept of stakeholder has expanded and its importance has increased in organizations. The increase in the expectations of the stakeholders from the institutions they are involved in is a result of this situation, and one factor in their decision to continue the stakeholder relationship is the stakeholders' corporate reputation evaluations. Corporate reputation, which is defined as a set of values that express how the organization is perceived by social stakeholders, is a reflection phenomenon that is evaluated not only for customers but also for employees, and it has become one of the factors that will provide competitive advantage for the organizations. Corporate reputation, which is defined as a set of values that express how the organization is perceived by social stakeholders, is a reflection phenomenon that is evaluated not only for customers but also for employees and has become one of the factors that will provide a competitive advantage for enterprises. The increasing expectations of the stakeholders from the institution will cause the reputation perceptions of the employees who are the element of stakeholder to change. In providing competitive advantage, it will be of particular importance to evaluate which quality management applications are more preferred and seen as more effective by businesses from the perspective of employees who voluntarily participate in these quality management applications. A product that is qualified as quality in the eyes of the customer is also positioned interactively with the reputation of the manufacturer, and the company has a general perception of respectability as a result of the cumulative sum of these positioning. Corporate reputation evaluations of customers and employees show similarities in terms of quality management practices, and in this context, it will be examined to what extent the quality management practices in which employees play a role will differentiate corporate reputation evaluations from the perspective of employees. The purpose of the study is to determine the effectiveness of quality management practices which are JIT / Kanban, 5S, quality function deployment (QFD), quality circles, six sigma, total productive maintenance (TPM), benchmarking, and poke-yoke practices and examine to what extent it has a differentiating role in corporate reputation evaluations that are evaluated by employees. According to the findings of the research, TPM is considered as the most beneficial among quality management applications. The application of quality management tools other than JIT differentiates employees' corporate reputation evaluations. The strongest relationship among quality management applications is found for JIT and QFD. The strongest linear relationship among quality management practices and corporate reputation was found for QFD.

**Keywords:** quality management applications, corporate reputation, total quality management techniques

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## Introduction

In today's increasingly competitive conditions, businesses are exposed to changes as proactive or reactive. This change leads to the conclusion that in order for businesses to survive, they must provide products or services which meet the expectations of customers or much more. Profit has become the result of compliance with customer expectations due to that change. However, the definition of quality has also changed. Quality has become dependent on products which produced by competitors based on the new perspective of quality as a consequence of changing, together with the level of satisfaction offered to the customers (Bozkurt, 1993). Through, Grönkross (2001) "Service Quality Dimensions", Garvin (1988) "Dimensions of Quality" can be concluded that conforming to customer expectations in the product or service provided will also increase the corporate reputation in the eyes of the customer. In this context, utilization from quality management application has gained more importance today. Which quality management application are more preferred and effective in the Total Quality Management approach adopted by enterprises will draw attention to a field study that needs to be examined in almost every business line in the production and service sectors under increasing competition conditions. Participation of the employees in the quality management practices which are JIT/Kanban, 5S, quality function deployment (QFD), quality circles, six sigma, total productive maintenance (TPM), benchmarking and poke-yoke is based on voluntariness. In this context, it may be the right approach to get information from the employees who voluntarily participate in these applications about the preferred quality management applications used in organizations and to evaluate the benefits they provide. Another change that took place in the organizational environment is increase of responsibility towards stakeholders due to increase the variety and number of stakeholders and the increase in their expectations from the organizations. As one of these stakeholders, the employees of the institution are also an element that takes an active role in the process of production the product or service to be offered to the customer through the quality management practices they voluntarily participate in. Firms that provide products and services to the extent desired by the customer will be regarded as reputable by the employees of the institution compared to competitors. Corporate reputation, which will be seen as a necessary factor in order to provide a competitive advantage (McMillan and Maheshkumar 1999), is an effective factor in the evaluations of the employees about their institution and in the decision to continue or terminate the stakeholder relationship which also related with organizational commitment and job satisfaction (Alniacik et al., 2011). Corporate reputation, which is evaluated as highly reputable by employees in a competitive organizational environment where it is increasingly difficult to meet the expectations of its stakeholders, is an informal tool that can be used to meet employee expectations. It can be stated that corporate reputation varies in the context of quality and that a product or service that is evaluated as quality by customers will also show the corporate reputation of the businesses that offer this product or service. This evaluation can also be made by the employees depending on the effective use of the quality management practices used in the process of providing quality products and services to the customers of the institutions. Corporate reputation refers to the determination of the status of the business in the eyes of the customers and other stakeholders, and so the perception of reputation in the eyes of the stakeholders changes dynamically. In today's conditions where the employee turnover rate increases and it is difficult to retain skilled labor, creating corporate reputation can be seen as an effective way for employees whose expectations are increasingly difficult to meet. A product that is qualified as quality in the eyes of the customer is also positioned interactively with the reputation of the manufacturer. Thus, the general perception of reputability as a result of the cumulative sum of these positions and is

considered highly reputable by the employees of the organizations. Employees from the basis of the reputational efforts of organizations. Unless effective participation and unity of purpose, it is not possible to create a successful corporate reputation (Quirke, 2000). In this respect, it will be an expected result to perceive a high level of corporate reputation with the perspective of the employees of the quality management practices which realized with the voluntary participation of the employees. The concept of "everyone's participation" in quality practices gains importance on this subject as well. All employees and their departments take responsibilities and roles in the process of gaining reputation due to the quality management practices they take part in.

The importance of taking advantage of quality practices assimilating in the management process becomes even more understood due to meet the international standards, technology utilization on the business process, changing of providing service. Quality management brings along an approach that will allow the development of an appropriate strategy, with the data revealed by the methods and techniques applied for the formal and informal aspects of the organization in systematic integrity. This dynamic process, which will be implemented with the active participation of the employees, will also affect the reputation evaluation of the organizations. With the increasingly widespread use of quality management practices (JIT/Kanban, 5S, Quality Function Deployment (QFD), Quality Circles, Six Sigma, Total Productive Maintenance (TPM), Benchmarking, Poke-Yoke) in all sub-business lines of the production and service sectors, it becomes important to determine and compare the benefits and efficiency of quality management applications. There are three main research questions in the study. The both of them are which quality practices are utilized depending on the total quality management approach adopted in today's increasingly competitive conditions and at what level their effectiveness will be evaluated by the employees. The third research question of the study is what impact quality management applications will have on employees' corporate reputation evaluations.

### **Theoretical Framework and Hypotheses**

Corporate reputation is the sum of the perceptions in the minds of the stakeholders. The concept of reputation is often confused with the concept of image; The corporate reputation is an asset that can only be gained as a result of the long-term efforts of the enterprise when the image can be obtained in a short time (Chun, 2005). Being able to survive in the competition in the sector is also a success that will be realized depending on corporate reputation (McMillan and Maheshkumar 1999). According to Herrbach and Mignonac (2007); Reputation has three main importance in terms of employee management. Firstly, organizations that have a good reputation attract a more qualified workforce. Secondly, corporate reputation also affects organizational commitment as well as employee turnover. Thirdly, reputation can also affect employee attitudes and behaviors in the work environment (Öksüz, 2008). Employees are an important factor in the reputation-building process of the business. While the organization is gaining a competitive advantage due to its corporate reputation which is built through qualified employees, the company also struggling to attract a qualified workforce owing to its corporate reputation.

Factors such as the reputation of the product's brand in the market, or the consumer are satisfaction with a different product of the same brand, cause the customer to perceive all the products of that brand as quality (Kavrakoğlu, 1996). Therefore, the quality of products and services offered to customers also plays a decisive role in reputation. Products and services act as an interface between customers and the organization, an important factor in reputation building (Lewis, 2003). The

positioning of products and services with high quality is interpreted by customers as a positive reputation of the institutions that offer these products and services. For this reason, institutions that offer high-quality products and services are mostly institutions with high reputations (Carmeli and Tishler, 2005). Businesses can benefit from quality management practices in order to provide quality products and services, to achieve efficient production, to achieve cost minimization targets, to meet customer demands and expectations, and to increase their reputation with the advantages provided by these objectives. Not only is there a correlation between quality management practices and quality performance, but also between quality performance and competitive advantage (Flynn et al., 1995). The quality practices included in the study are as follows:

**JIT:** The just-in-time production system is a material management system that aims to ensure that the materials and equipment required for production are where they are needed to be used when necessary and zero inventory. It was applied by Toyota for the first time in Japan and cards called "Kanban" were used.

**5S:** It is a technique that develops a process to improve the work environment (Çiçek, and Biçer, 2013). "5S Technique" is a management systematic that has been introduced in Japan and includes a series of activities aimed at eliminating the problems that cause mistakes, defects, and injuries in workplaces (Keleş et al., 2013). The 5S implementation consists of five stages: Sort, Set in Order, Shine, Standardize, Sustain.

**QFD:** Quality function deployment developed by Dr. Yoji Akao was first implemented in Kobe shipyards. The name of the method in Japanese is "Hin Shitsu, Ki Nou, Ten Kai". (Guinta and Praizler 1993). Mizuno and Akao see QFD as a quality system that tries to ensure customer satisfaction within TQM. (Zultner, 1993; Alpaykut, 2014).

**Quality Circles:** Quality circles originating in Japan mean "Jishu Kami" in Japan, which means self-directed. Quality circles are meet to conducted to discuss and resolve various problems of an institution such as efficiency, effectiveness, and quality. They are small groups of employees that are entirely volunteering and meet regularly. These working groups consist of 4-6 employees in small-scale enterprises, 6-10 in medium-scale enterprises, and 8-12 in large-scale enterprises (Katzan, 1989).

**6 Sigma:** Six Sigma, a flexible system in order to increase business performance, is often described as "an advanced technique used for engineers and statisticians to fine-tune products and processes." Although measurement and statistics are the main components, they are not the input of the whole process (Baş, 2003)

**TPM:** Total productive maintenance can be defined as "productive maintenance through small group activities where the participation of all employees is anticipated" (Kılıç and Ayvaz, 2016). The primary purpose of total productive maintenance is to extend the life of machinery and equipment and to eliminate the loss of labor, materials, and time caused by malfunctions (Chaneski, 2002; Karaman, 2004; Chan et al., 2005; Görener & Yenen; 2007).

**Benchmarking:** Used for continuous improvement (Yeşilbayır, 2007). In benchmarking, efforts are made to ensure that the element adapted to the benchmarking is the best available and suitable for the organization.



Poke-Yoke: Poka-Yoke, first introduced by Toyota engineer Shigeo Shingo; is a combination of the words Poka, meaning carelessness, and Yoke, meaning elimination (Shingo, 1986). The poor quality product occurs as a result of the manufacturing error process. (Çetin et al., 2001) Poka-Yoke is an error prevention effort (Pojasek, 2003).

Employees are a key element in the reputation-building process and a resource in building the reputation of the organization. Reputation is an organic phenomenon that has strategic importance for institutions, has a dynamic structure that is constantly changing, and needs to be observed and corroborated (Rosa de Carvalho; 2004). Employee engagement imposes an obligation for businesses which striving to build corporate reputation. According to Harris and Chernatony (2001), employees form an interface between the internal and external environment and can have a strong influence on consumers' perceptions of both the brand and the organization. When considering the dimensions of service quality, as the effectiveness of the use of quality management practices increases, employees participating in these practices are more likely to consider their organizations reputable. Corporate reputation for employees is based on the past representation of the organization (Carmichael, 1984). It is seen that the corporate reputation built in the long term is shaped by the experience with the organization in terms of the employee and thus the perception is built. Horizontal hierarchy, top management support for the development of creativity, providing opportunities for the development of employees, establishing a volunteer-based work environment, and lifelong learning is factors affecting the perception of an organization by employees (Öksüz, 2008). Corporate reputation in the eyes of employees can be increased due to that factor if it implements properly with the quality management philosophy and culture.

Employees are also involved as a resource in creating the organization's reputation, according to the resource-based theory. All of the traits that enable the organization to design and implement strategies are included in the tangible and intangible resources featured in Resource-Based View. It is divided into four types, the intangible aspects being human resources and organizational resources (Barney, 1991; Pires and Trey, 2018). According to the Resource-Based View, corporate reputation, which may be considered one of the most valuable intangible assets, is built on the backs of employees.

The institutional theory, which defines the environment not as an objective and technical environment outside the organization, but as a socially constructed institutional environment that both affects and is affected by the organizations, suggests that the compliance of the enterprises with the institutions will legitimize them. Thus, legitimacy for socially acceptable businesses facilitates the provision of resources necessary for the survival of organizations by employees as members of the social shareholders. In this context, employees who provide labor as a production factor to the institutions they are involved in can be one of the actors that create a corporate reputation that can be effective in the survival of businesses. Institutions, on the one hand, make it possible for people to act by offering options about how to behave in which situation, on the other hand, they limit human behavior to certain options (Özen, 2013). Scott (1995) expressed the example of moral dimension, which he defined as one of the three mechanisms of corporate compliance, as the total quality management practice of companies. In this context, the use of total quality management tools as an institution that has gained legitimacy in the survival of the institutions can be associated with the seeing valuable of these practices. This institution can be associated with the employee, who is the element that provides the labor factor that will provide

legitimacy for the survival of the organizations. As an institution adopted in organizational structures that have gained legitimacy and become isomorph in the business line, the legitimacy of quality management practices can be strengthened by internalization by employees in a moral pattern. Accordingly, as a positive result, corporate reputation will emerge depending on the quality management practices defined as a legitimacy tool. According to the theoretical information explained, the following hypotheses can be proposed regarding the relationship between quality management applications and employees' corporate reputation evaluations.

### *Hypotheses*

- **H1:** The implementation of JIT / Kanban has an effect on the corporate reputation evaluated by the employees.
- **H2:** The implementation of 5S has an effect on the corporate reputation evaluated by the employees.
- **H3:** The implementation of quality function deployment (QFD) has an effect on the corporate reputation evaluated by the employees.
- **H4:** The implementation of quality circles has an effect on the corporate reputation evaluated by the employees.
- **H5:** The implementation of Benchmarking has an effect on the corporate reputation evaluated by the employees.
- **H6:** The implementation of six sigma has an effect on the corporate reputation evaluated by the employees.
- **H7:** The implementation of total productive maintenance (TPM) has an effect on the corporate reputation evaluated by the employees.
- **H8:** The implementation of Poke-Yoke has an effect on the corporate reputation evaluated by the employees.

Quality management tools serve the tools adopted in the understanding of total quality management such as low cost, increasing quality in the production and service process, and finding quick solutions to customer needs. Therefore, it is expected that there will be a meaningful relationship between the benefit and utilization activities of quality management tools in terms of their intended use. The hypothesis to be proposed in this context;

- **H9:** There are significant correlations among quality management applications implemented by the organizations.

### **Methods**

#### *Sample*

The sample of the research consists of top, mid-level managers and junior administrative officers. 122 participants which were chosen from different sectors in managerial positions in the research were determined by convenience sampling.

### ***Data Collection and Analysis Techniques***

In the research, the quantitative research method was used and data were collected through scales. Benefits and Usage Effectiveness of Quality Management Practices Scale is developed for this purpose. In the study, descriptive statistics, Cronbach alpha reliability coefficient for scales, factor analysis with varimax rotation for structural validity of corporate reputation scale are utilized to examine the reliability and validity. Correlation analysis between variables and Mann-Whitney U test were used to investigate the proposed relations through the hypotheses.

### ***Development of Benefits and Usage Effectiveness of Quality Management Practices Scale***

Categorically measured questions evaluating whether the quality management practices in organizations are applied to JIT / Kanban, 5S, quality circles, six sigma, total efficient maintenance (TPM), benchmarking, and poke-yoke. There are three more questions for each practice for the organizations that implement the practices. These 24 questions have been prepared with a comprehensive literature review (Çiçek, Biçer, 2013; Yeşilbayır, 2007; Bozkurt et al. , 2002; Cebeci, 2011; Hoerl and Snee, 2002; Chaneski, 2002; Karaman, 2004; Chan et al. , 2005; Görener ve Yenen; 2007; Pojasek, 2003) as well taking into account the theoretical framework of the quality management tools in question.

The scale has been pilot studied. First of all, questions about the benefit and usage effectiveness of eight quality management practices determined based on the literature were applied to five people, three of whom were low and middle-level managers in the production sector and two of them from the service sector. Thus, the duration was determined and received feedback about the comprehensibility of the questions. The average time to fill in the questionnaire is 8,5 minutes. As a result of the feedback received, the questions were not changed. Thereafter, the scale was then applied to 30 people and the internal consistency reliability for all subscales was Cronbach's alpha: It was determined respectively as JIT: 0.769; 5S: 0.767; QFD: 0.625 (after question 3 removed due to low reliability); Quality Circles: 0.60; Six Sigma: 0.966; TPM: 0.731; Benchmarking: 0.953; Poke-Yoke 0.891 and all of them above the acceptable threshold value of 0.6 (Özdamar, 2004; Kılıç and Ayvaz, 2016; Sekaran & Bougie, 2016). The internal consistency coefficient of the whole scale was calculated as 0.974. For the determine face validity of the scale, 24 questions which are about benefits and usage effectiveness of eight quality management practices evaluated by three academicians which are research area is quality management The view of all three academics is that the scale questions are appropriate. It is known that the limited number of organizations that eight quality management practices are applied together. However, it is known that organizations have preferred some of these quality management practices according to the ease of implementation, cost, and usage benefits. Therefore, it was not deemed necessary to perform a factor analysis for all scale items. It was deemed appropriate to make an evaluation for benefits and usage effectiveness of eight quality management practices which is/are implemented by organizations.

### ***Corporate Reputation Scale***

The scale which has 6 questions was used to examine corporate reputation. Çiftçioğlu (2008) who are referred to the “Most Admired Companies” criteria of Fortune Magazine that consist of 8-item which are quality of management, quality of products or services, innovativeness, long-term

investment value, financial soundness, ability to attract, develop and keep talented people, responsibility to the community and the environment, the wise use of corporate assets instead of “ability to attract, develop and keep talented people” in the original scale, Çiftçioğlu asked the participants two-item as "My workplace has a more qualified workforce compared to its competitors" and "My workplace invests more in its employees compared to its competitors." 6 items of 9 items which are developed after the addition of these two items that were considered to be the most determinative among the questions were selected.

## Findings

TPM (Total Productive Maintenance) was evaluated as the most beneficial and efficient quality management practice by participants. The quality management practice that is considered to provide the lowest benefit is QFD (Quality Function Deployment).

**Table 1.** Benefits and Usage Effectiveness of Quality Management Practices

	Arithmetic Mean	Standard Deviation
JIT	4,27	0,65
5S	4,10	0,88
QFD	3,95	0,75
Quality Circles	4,20	0,63
Six sigma	4,29	0,93
TPM	4,42	0,60
Benchmarking	4,10	0,88
Poke-Yoke	4,18	0,67

According to Table 2, all values are above the acceptance limit ( $x > 0,7$ ) (Sekaran and Bouige, 2016).

**Table 2.** Reliability and Validity of Benefits and Usage Effectiveness of Quality Management Practices Scale

	Cronbach alpha
JIT	0,804
5S	0,785
QFD	0,911
Quality Circles	0,854
Six sigma	0,926
TPM	0,836
Benchmarking	0,949
Poke-Yoke	0,790

**Table 3.** Structural Validity and Reliability of Corporate Reputation Scale

Factor	Items	Factor Loads	Eigenvalue	Explained Variance (%)	Reliability
1	1. The organization I work for has a better management approach compared to its competitors.	0,921	4,171	69,519	0,908
	3. The organization I work for has more environmental responsibility than its competitors	0,874			
	2. The organization I work for has a better product/service quality compared to its competitors.	0,863			
	5. The organization I work for is more innovative compared to its competitors	0,843			
	6. The organization I work for has a more qualified workforce compared to its competitors.	0,828			
	4. The institution I work for has greater capital strength compared to its competitors.	0,648			
	Kaiser-Meyer-Olkin		0,904		
	Bartlett's Test of Sphericity	Approx. Chi-square	484,513		
		df	15		
		Sig.	0,00		

As a result of the factor analysis, a single factor emerged for corporate reputation variables. Factor loads of all items are explained variance of the scale are acceptable values (Özdamar, 2004)

**Table 4.** Effects of Whether Quality Management Tools Being Implemented or Not on Corporate Reputation. (Mann-Whitney U test)

	<i>z</i>	<i>p</i>
JIT	-1,896	0,058
5S	-2,794	0,005
QFD	-2,67	0,007
Quality Circles	-2,091	0,037
Six sigma	-2,976	0,003
TPM	-2,989	0,003
Benchmarking	-2,526	0,012
Poke-Yoke	-2,311	0,021

Based on the Table 4 findings, it can be said that there is no significant difference for evaluation of corporate reputation concerning the existence of JIT as a quality management technique implemented by the organization. However, there are significant differences in the evaluation of corporate reputation with respect to the existence of quality management practices.

**Table 5.** Correlation Values Among Variables

	JIT	5S	QFD	Quality Circles	Six Sigma	TPM	Benchmarking	Poke-Yoke	Corporate Reputation
JIT	1								
5S	0,679**	1							
QFD	0,726**	0,366**	1						
Quality Circles	0,477**	0,554**	0,624**	1					
Six sigma	0,420*	0,632**	0,423*	0,682**	1				
TPM	0,465**	0,503**	0,621**	0,623**	0,675**	1			
Benchmarking	0,679**	0,634**	0,366*	0,554**	0,632**	0,503**	1		
Poke-Yoke	0,530**	0,532**	0,713**	0,503**	0,317	0,689**	0,532**	1	
Corporate Reputation	0,319*	0,388**	0,727**	0,351**	0,124	0,417**	0,305**	0,302*	1

Note. \*Correlation is significant at the 0.05 level; \*\*Correlation is significant at the 0.01 level

According to Table 5, the strongest relationship is considered as the relationship between JIT and QFD among each quality management practice. There is no significant relationship exist between Poke-Yoke and Six Sigma, the lowest significant relationship was found between Benchmarking and QFD. The strongest linear relationship among quality management practices and corporate reputation was found for QFD. The second strongest relationship is determined between corporate reputation and TPM. There is no significant relationship between Six Sigma and corporate reputation. JIT, which does not cause to differentiate significantly in terms of corporate reputation assessment as quality management implementation, demonstrated a significant, but very low-level positive relationship with corporate reputation.

## Conclusions

The study was carried out to search for answers to two research questions. The first is to detect which quality management tools are found more effective and useful in the field. According to the results, the most useful quality management technique is TPM for individuals. One reason for this, TPM is utilized for all fields in the production sector much heavier than the other techniques. TPM is one of the major improvement practices in the production sector (Chan et al., 2005), that guarantees higher quality of product and also improve overall equipment efficiency due to team support (Morales Mendez, J. D., and Rodriguez, R. S., 2017). Higher product quality is the term

that also affects reputation, may lead companies to implement TPM as most useful. The least preferred quality management technique is QFD because it is difficult to apply and requires some technical knowledge in detail. Especially management engineers and industrial engineers utilize these techniques with expertise for developing quality processes. The usefulness of this difficult technique causes the employees to perceive the organization as more reputable. Organizations that implement QFD, a quality management practice that is difficult to implement, can also contribute to organizations attracting skilled labour. For this reason, the correlation between QFD and corporate reputation is reported most among other quality management practices. The second-highest level correlation of quality management practice with corporate reputation belongs to TPM. This result is based on the evaluation of JIT as the most useful quality management technique for department managers.

According to results, there are significant differences in the evaluation of corporate reputation with respect to the existence of quality management application implemented by the organization except for JIT. Therefore, H1 is rejected, and H2, H3, H4, H5, H6, H7, and H8 is accepted. There is a high-level correlation value between JIT and QFD. QFD as the least preferred quality management technique is believed to support the quality development process at a low level depending on participants' evaluations. For that reason, there is no significant difference for evaluation of corporate reputation with respect to the existence of JIT as a quality management tool. The other reason for this insignificant effect can be related to JIT characteristics. JIT can be seen as a required consequence for the customer in terms of delivering on time without any delay. This normal circumstance could not result in a high level of corporate reputation for the employees. As for the second reason, JIT is perceived as only a production industry, not related to the service sector (Rasid et al., 2018). In addition to the production sector, service systems require the employee to present the service on time for the customers depending on process design that is similar to the production sector. Service quality is more subjective and difficult to measure compared to product quality. Due to reputation and communication which are some of the dimensions of service (Parasuraman et al., 1988; Zengin, Erdal, 2000), the attitude of the employees providing the service towards the customer is effective on the quality perceived by the customers. In this context, it can be said that quality management practices in which employee participation plays an active role will also play a role in employees' attitudes to customers.

As for H9, there are significant correlations among the benefits evaluations of quality management applications except for the relationship between Poke-Yoke and Six Sigma. Therefore, it can be concluded that H9 is partially accepted.

The acceptance of hypotheses except H1 shows that the implementation of the quality management practices which are 5S, QFD, Quality Circles, Six Sigma, TPM, Benchmarking, and Poke-Yoke have an impact on corporate reputation evaluated by employees.

In this study, in which the concept of corporate reputation, which is increasingly important, is examined in the context of quality management practices applied by organizations, the perception level of the employees about the institutions they work for has been investigated. These two concepts, which have common aspects such as attracting a qualified workforce and providing quality products and services, make organizations to be considered as more preferred by their stakeholders. Especially in today's organizational environment where it is very difficult to meet the expectations of the employees as a stakeholder in increasing competition conditions, creating

a good corporate reputation in the eyes of the employees will provide an important advantage in order to achieving the goal of attracting potential job candidates to the organization and retain employees who are skilled labour. The research has an importance for the intersection between theory and practice. This is an unique study that examines how benefiting from quality management applications in the context of management literature will have an impact on employees' corporate reputation evaluations.

Limitation of the study, an overall assessment has been designed, regardless of sub-business segments in the research, production and service sectors. Repeating the study specific to the sub-business lines to be determined from the production and service sectors will reveal clearer information about the sector and business lines. However, the fact that not all of the quality management applications are used at the sampled organizations revealed a limited amount of data in making the efficiency and benefit evaluation of the quality management applications for the same organization. Further validation studies can be conducted for the Benefits and Usage Effectiveness of Quality Management Practices Scale owing to the increase in number of data to be obtained from businesses that apply more than one quality management technique.

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## Appendix

### Benefits and Usage Effectiveness of Quality Management Practices Scale (Likert Scale: 5 = Strongly agree; 3 = Somewhat agree; 1= Strongly disagree)

- JIT/Kanban is implemented in your organization. Yes ( ) No ( ). If it implemented please use the scale provided, decide how much you either agree or disagree with each statement.

Statement	1	2	3	4	5
Raw material stock costs are minimized due to Just In Time stock management approach					
Wastage in the production process is minimized due to the Just In Time stock management approach.					
Owing to Just In Time stock management, general production expenses, labor expenses, material expenses that occur during the production stages are minimized.					

- 5S is implemented in your organization. Yes ( ) No ( ). If it implemented please use the scale provided, decide how much you either agree or disagree with each statement.

Statement	1	2	3	4	5
Documentation and reporting has been facilitated regularly..					
Positive improvements have been observed in the cleaning of the working environment in the applied sections.					
Unnecessary inventory stock has decreased.					

- Quality Function Deployment (QFD) is implemented in your organization. Yes ( ) No ( ). If it implemented please use the scale provided, decide how much you either agree or disagree with each statement.

Statement	1	2	3	4	5
QFD is seen as an effective key in creating customer and market definition.					
Due to QFD, a product / service production process based on value creation is provided.					
QFD is used effectively to determine how to meet customer needs					

- Quality Circles is implemented in your organization. Yes ( ) No ( ). If it implemented, please use the scale provided, decide how much you either agree or disagree with each statement.

Statement	1	2	3	4	5
Employees have started to have a more active role and responsibility in decision-making processes.					
Employees have begun to approach corporate problems in a more relevantly.					
There has been an increase in cooperation between employees also departments.					

- Six Sigma is implemented in your organization. Yes ( ) No ( ). If it implemented please use the scale provided, decide how much you either agree or disagree with each statement.

Statement	1	2	3	4	5
Due to the six sigma practice, defects have been decrease.					
There has been a reduction in the cost and wastages of the processes					
Organizational commitment of the employees has been affected positively					

- Total Productive Maintenance (TPM) is implemented in your organization. Yes ( ) No ( ). If it implemented please use the scale provided, decide how much you either agree or disagree with each statement.

Statement	1	2	3	4	5
Due to Total Productive Maintenance, the efficiency of machineries and equipments have increased.					
The active participation of employees is an important element in the TPM process.					
Total Productive Maintenance reduces labor, material and time loss.					

- Benchmarking is implemented in your organization. Yes ( ) No ( ). If it implemented please use the scale provided, decide how much you either agree or disagree with each statement.

Statement	1	2	3	4	5
Organization I work for, has reached a better point due to the Benchmarking					
Owing to Benchmarking, it has become easier for us to reach development goals					
Benchmarking contribute to providing better product / service delivery.					

- Poka-Yoke is implemented in your organization. Yes ( ) No ( ). If it implemented please use the scale provided, decide how much you either agree or disagree with each statement.

Statement	1	2	3	4	5
Manufacturing defects have been reducing due to Poke-Yoke.					
Employees participated more actively in business processes					
Poka-Yoke is used effectively in the continuous improvement process.					