

Assessing and Improving Quality Management Program Among Small and Medium Enterprises in Afghanistan

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Abstract

This paper presented a tool for assessing and improving quality management among SMEs in Afghanistan. The tool is derived based on the review of previous quality management models. It is based on six principles including ownership and management commitment towards quality, customers' orientation, managing suppliers' relations, staff management, continuous improvement as a routine, and process focus. The significance of the tool is that it provides a simple, quantitative, and self-administered mechanism for identifying the current level of quality management among SMEs. It can also be used to set a benchmark for quality management among SMEs in Afghanistan. At a broader level, the tool can be used by manufacturing and services-based SMEs in Afghanistan for improving the quality of the products/services, and processes. In this study, the tool is proposed along with its principles, and its application is illustrated in a local organization.

Keywords: *Quality management, improvement, tool, SMEs, Afghanistan*

Introduction

The proposed tool in this paper is based on total quality management (TQM) which refers to a systematic approach to the development of such attitudes and control which enable the prevention of quality-related problems in an organization (Crosby, 1997). The quality management can also be viewed as a systematic approach to enhancing competitiveness and flexibility through planning, organizing, and understanding each activity, and involving everyone at each level (Kiran, 2016; Oakland, 2012). The prime objective of the quality management approach is to develop such a system in an organization that ensures not only prevention but also continuous improvement of the quality of products, services, and processes within an organization (Ross, 2017). Based on the review of previous quality management models, a tool is developed which consist of six principles. The tool is applied to a small level travel agency for assessing its quality management program.

1.1 Context of the Study

The context of the study is the small and medium-size enterprises in Afghanistan. The reason for selecting this particular scope is that this sector was neglected by the government despite its huge significance for the Afghanistan economy. For example, Afghanistan did not have any clear SME strategy during its first eight years after the US invasion. A strategy was formed in 2009 but not implemented until 2011. The focus of the Afghanistan SMEs development strategy is developing imports, capacity building, market information, donor coordination, export promotion, and government support for target industries. Based on SMEs development strategy, there is some support provided to SMEs in Afghanistan such as training programs and microfinance but still, the sector is facing huge challenges including uncertainty, reduction in market confidence, high level of dependence on donor organizations for start-up support, limited access to credit, and lack of quality control and creativity. To overcome such challenges, the SMEs in Afghanistan need scientific research to improve their capacity in order to compete in the 21st-century globalized world. One avenue of improvement is the quality management program of SMEs. In this study, a tool is proposed which can be a useful contribution as it provides a framework for mapping the current state of quality management of SMEs and provides guidelines for bringing improvement in the future.

1.2 Scope of the Study

The scope of the study is Small and Medium size enterprises operating in Afghanistan. The tool which is proposed in this study is about assessing the quality management of SMEs in Afghanistan.

1.3 Significance of the Study

In this paper, a tool for assessing the extent of quality management activities of SMEs in Afghanistan is proposed. The tool can be used for assessment of quality management program and as a benchmark for improving the quality management program among SMEs in Afghanistan. The tool is developed based on the review of the literature and guidelines provided by experts. The tool is based on the work by previous experts in the field of total quality management (TQM) including Saraph, Benson, and Schroeder (1989); Ahire, Golhar, and Waller (1996); Bayazit (2003); and Karuppusami and Gandhinathan (2006). The tool is easier to understand, self-administrable, and managerial staff of SMEs can be easily trained to utilize it. The tool can be utilized by local SMEs for mapping their current quality management program status and guidelines for improvement

2. Review of Previous Quality Management Models

The principles proposed in this study for quality management assessment are based on the work of previous experts. For this purpose, nine quality management models are reviewed. One such model is proposed by Saraph, et al., (1989) consisted of leadership commitment, product design, quality department, supplier quality management, training, employee relations, and quality data and reporting. A quality management model suggested by Ahire, et al., (1996) consisted of the commitment of top management, supplier quality management, customer focus, benchmarking, design quality management, internal quality information usage, SPC usage, employee empowerment, involvement, employee development, supplier's performance, and product quality. Flynn and Schoeder (1995) proposed a model consisted of seven dimensions including top management support, quality information system, process management, workforce management, supplier involvement, product design, and customer involvement. Powell (1995) proposed a model of quality management based on top management commitment, effective communications, and employee involvement. The quality management model as proposed by Black and Porter (1995) consisted of ten factors including people and customer management, supplier partnership, communication, customer satisfaction, external interface management, strategic quality management, teamwork, operational quality planning and improvement measurement systems, and corporate quality culture. A model developed by Rao, Solis, and Raghunathan (1999) validated 13 principles of quality management including top management support, strategic quality planning, quality information availability, quality

information usage, employee training, employee involvement, product/process design, supplier quality, customer orientation, quality citizenship, benchmarking, internal quality results and external quality results. The proposed principles of quality management by Bayazit (2003) included upper management support, customer focus, employee involvement and commitment, quality education and training, teamwork, and use of statistical techniques. A model proposed by Rad (2005) included top management commitment and stability, employee involvement, focus on internal and external customers, strategic quality planning, teamwork and quality culture, open communication, continuous improvement, management by facts to solve problems, focus on customer satisfaction, building positive relationships with suppliers and partners, and monitoring and evaluation of quality. Karuppusami and Gandhinathan (2006) based on an extensive review of literature, proposed 56 important principles of quality management model out of which the top five are the role of management leadership and quality policy, supplier quality management, process management, customer focus, and training. Based on the models proposed by the experts, the current study proposes a new model. The principles utilized in this study are based on their relevance to the SMEs and the local context of Afghanistan.

3. Research Methodology

The research methodology for this study is based on the review of the literature only. For this purpose, nine previous quality management models are reviewed and based on the relevance, six factors are identified. The procedure is that common factors were identified among all these models and then they were rated based on their relevance for the SME sector in Afghanistan. Based on the subjective assessment, the author selected six principles discussed in the next section.

4. Principles of Quality Management Assessment Tool for SMEs in Afghanistan

The proposed tool is based on the six principles as depicted in Figure 1 below. The six principles are based on the local context of Afghanistan and provide a combination of quality management practices that can be easily managed by SMEs. These principles are justified on the ground that they are suitable for SMEs in this local context. Their details are as follows:

Figure 1: Principles of Quality Management Assessment Tool for SMEs in Afghanistan



Source: Author's compilation

4.1 Ownership and Management Commitment

The ownership and management commitment in the model is about commitment towards the development of quality within an organization by its owners and top management (Kiran, 2016). Ownership and top management commitment are important since they can commit resources for quality as well as can create vision and goals towards the development of quality. In the SME context, the owner and top management are normally the same people and are responsible for allocating suitable resources for quality function development. If ownership is committed towards quality, it can develop quality-related vision, goals, and communication of these goals across the organization (Dale, Papalexli, Bamford, & van der Wiele, 2016). Ownership can also develop a suitable culture in an organization that facilitates quality development (Petrick, 2017). Here, it is useful to discuss that for quality management, a facilitative culture is required. The absence of such a culture will make quality management function to grow very difficult. In general, ownership and top management can play three key roles including developing a quality vision, developing quality values, and focusing on continuous improvement. Practically speaking, if ownership has appointed some managers for running the day to day management activities of an organization, then those managers also need to show the right commitment towards quality and play the roles as described in this

principle. In the Afghanistan context, often the SMEs are owned by individuals or families who hire experienced professionals for running the day to day management of SMEs. Thus, this factor requires that the owner or manager needs to be committed to the quality management of an organization.

4.2 Customer Orientation

The proposed tool for SME management in Afghanistan includes customer orientation. Customer orientation is emphasized in the literature of quality management and most quality gurus such as Ishikawa and Juran also stressed on organizations to be customer-oriented (Beckford, 2016). Customer orientation means an organization needs to understand the requirements of the customer and develop products/services and processes which meet and exceed customer's expectations (Oakland, 2012). The advantage of customer focus is that it will lead to a more satisfied customer which is beneficial in terms of retaining customers and repeat sales (Petrick, 2017). In Afghanistan local SME context, the customer orientation requires that management of the SMEs get in touch with customers, and obtain customer feedback by using different mechanisms such as customer surveys, focus groups, or interviews. It is easier to obtain customer feedback in the context of SMEs; however, the real challenge is to meet the customers' requirements given the limited resources which SMEs possess (Goetsch & Davis, 2010).

4.3 Managing Suppliers Relations

Managing suppliers' relation is present in most quality management models (e.g. Ahire, et al., 1996; Goetsch & Davis, 2010; Oakland, 2012) and it is also included in the model presented in this study. The idea of managing suppliers' relations is that organizations need to develop close and long-term relationships with key suppliers which will assist organizations in obtaining high-quality raw material or input which will benefit in managing the quality of products/services (Yeng, Jusoh, & Ishak, 2018). Several large-scale organizations such as Toyota and McDonald now consider suppliers as part of their organization and even involve in supplier development by providing suitable training (Samson, 2017). This function also requires organizations to select suppliers based on quality rather than price alone (Gomez, Costa, & Lorente, 2017). The benefit of managing suppliers' relations is that it enables maintaining the quality of products. The suppliers' relations are also emphasized by most quality gurus including Deming and Ishikawa. In the Afghanistan SME context, most of the suppliers are international exporters from Pakistan, India, China, Iran, and Turkey. It is recommended that SMEs in the supply chain develop long term

relationships with wholesalers, distributors, and exporters from these countries in order to source the best quality raw material or products.

4.4 Staff Management

Staff management is about systematic hiring, training, developing, rewarding, and managing the performance of the staff (James, 2017). All quality gurus emphasized to develop human resource and give importance to people-related issues. Quality experts also recommend that employee-related activities such as quality circles, suggestion schemes, employee involvement, and teamwork also need to be given attention in order to improve the quality of the products and processes (Zirar, Radnor, & Charlwood, 2015). SMEs need to provide suitable training and development activities to staff so that it can improve their productivity as well as the quality of the work (Goetsch & Davis, 2010). SMEs also need to focus on designing a suitable reward system that motivates staff. Here, it is recommended that a reward system may be linked with quality function. Employee involvement in decision making may be fostered in order to take advantage of the potential which employees possess. For any quality management program, employee involvement is quite important as suggested by most quality experts such as Deming, Juran, and Ishikawa (Oakland, 2012; Ross, 2017). In the Afghanistan SME context, due to the small size of the workforce, it is easier to develop staff and involve them in decision making. However, it is possible that most SMEs cannot allocate enough resources for developing staff. Furthermore, due to market uncertainty, many SMEs owners are hesitant to invest in human resources. It is recommended that SMEs in Afghanistan must focus on staff development despite the minimum resources available. For staff development, SMEs can look for external opportunities. For example, government support scheme or foreign or local donors-based programs which can be used to train staff.

4.5 Continuous Improvement as a Routine

The idea of continuous improvement as a routine in quality management context is that the organization's management and staff continuously monitor their products/services and processes and look for ways to improve the products and processes on a continuous basis (Kiran, 2016). In other words, the continuous improvement may become part of organizational routine. A related example can be the Japanese method of Kaizen which requires employees to meet regularly and identify the quality-related issues and come up with some suitable solutions (Farrington, Antony, & O'Gorman, 2018). Organizations can also utilize the popular Deming model which is based on the plan, do, check, and act stages for

continuous improvement. Alternatively, Six Sigma can also be used to bring standardization in the organizational processes and reducing defects. If continuous improvement becomes part of the organizational routine, it can be a source of competitive advantage for SMEs.

4.6 Process Focus

The last principle in the proposed model of quality management is the process focus. A process means how an organization transforms input into the output. Mostly, the process includes different things such as input conversion into output, production process, assembly lines, housekeeping, benchmarking, administration, and so on (Oakland, 2012). For quality management, it is required that an organization gives greater focus to its processes (Chang, 2016). In SMEs context, mostly, processes are short, repetitive, and easily manageable. However, it is recommended that SMEs should give proper attention to the processes, conduct some research, benchmark its processes against major players, and always strive to improve its processes. By focusing on its processes, SMEs can improve the quality of its products/services and processes which can lead to other favorable outcomes (Tennant, 2017). SMEs can also utilize some process improvement techniques such as the development of flowcharts or process mapping for bringing improvements in its processes (Salah & Rahim, 2019).

5. The Quality Management Tool

Based on principles of quality management as discussed in the previous section, a quality improvement tool is proposed that can be used to judge the adequacy of the quality management by SMEs in Afghanistan. The tool can be used for two functions including assessment as well as a benchmark or guide for bringing improvements in a quality management function. For using this tool, someone from management can conduct a few interviews or observations for identifying where a particular SME stands against the criteria used in the tool. The tool is based on six principles and have sub-dimensions. The procedure is that for each sub-dimension, the score will be awarded based on the current level of quality management program of SME. Later, the score of individual dimensions can be used to calculate the total score. Here, it is important to mention that the procedure for assigning a specific score for a specific dimension or sub-dimension is based on subjective assessment. It can be done by one person who performs the function of a rater or more than one person can be used for decreasing individual subjectivity in the process. The proposed tool is provided below.

Table 1: A Tool for Assessing and Improving Quality Management Program

Ownership and Management Commitment towards Quality				
Low commitment				High commitment
Ownership and management show no interest in quality-related programs	Ownership and management take little interest in quality-related program	Ownership and management take moderate interest in quality-related program	Ownership and management take a high interest in quality-related program	Ownership and management take a very high interest in quality-related program
1	2	3	4	5
No allocation of resources for quality programs	Minimum allocation of resources for quality program	Moderate allocation of resources for quality program	High allocation of resources for quality program	Very high allocation of resources for quality program
1	2	3	4	5
No one in ownership or management is a quality role model	Only a few people in ownership and management are quality role models	Some people in ownership and management are quality role models	Most people in ownership and management are quality role models	All people in ownership and management are quality role models
1	2	3	4	5
Customer Orientation				
Low Customer Orientation				High Customer Orientation
Products are not meeting the needs of the customer	Fewer products are meeting the needs of the customer	Some products are meeting the needs of the customer	Most products are meeting the needs of the customer	All products are meeting the needs of the customer
1	2	3	4	5
No mechanism in place for obtaining customer feedback	Basic mechanism in place for obtaining customer feedback	Moderate mechanism in place for obtaining customer feedback	Satisfactory mechanism in place for obtaining customer feedback	Advanced mechanism in place for obtaining customer feedback
1	2	3	4	5
No mechanism for identification of customer needs	Reactive Mechanism is in place for identification of customer needs	Preliminary level mechanism for proactive identification of customer needs	Good mechanism for proactive identification of customer needs	Advanced mechanism for proactive identification of customer needs
1	2	3	4	5
No customer relationship management	Preliminary customer relationship	Moderate customer relationship	Well-developed customer relationship	Advanced customer relationship

programs in place	management programs in place	management programs in place	relationship management programs in place	management programs in place
1	2	3	4	5
Managing Suppliers Relations				
Weak Management of Suppliers Relations ←			→ Strong Management of Suppliers Relations	
No focus on managing suppliers' relations	Short term relations with supplier	Few short terms and few long-term relations with supplier	Mostly, long term relations with supplier	Well-established strategic long-term relations with supplier
1	2	3	4	5
Supplier selection is always based on price with little regard for quality	Supplier selection is mostly based on price with little regard for quality	Supplier selection is based on price with moderate regard for quality	Supplier selection is based on price with high regard for quality	Supplier selection is based on quality with price as secondary criteria
1	2	3	4	5
No information sharing with suppliers	Some information sharing with suppliers	Moderate information sharing with suppliers	High level of information sharing with suppliers	Very high level of information sharing with suppliers
1	2	3	4	5
No participation in supplier development	Little participation in supplier development	Moderate participation in supplier development	High participation in supplier development	Very High participation in supplier development
1	2	3	4	5
Staff Management				
Weak People Management ←			→ Strong People Management	
No training & development program for staff	Very few training & development programs for staff	Few training & development programs for staff	High number of training & development program for staff	Very high number of training & development program for staff
1	2	3	4	5
No focus on staff involvement e.g. quality circles, quality teams, suggestions schemes	Little focus on staff involvement e.g. quality circles, quality teams, suggestions schemes	Moderate focus on staff involvement e.g. quality circles, quality teams, suggestions schemes	High focus on staff involvement e.g. quality circles, quality teams, suggestions schemes	Very high focus on staff involvement e.g. quality circles, quality teams, suggestions schemes
1	2	3	4	5

of production equipment	of production equipment	of production equipment	of production equipment	of production equipment
1	2	3	4	5
No use of statistical process control	Basic use of statistical process control	Moderate use of statistical process control	Advanced use of statistical process control	Very sophisticated use of statistical process control
1	2	3	4	5
No benchmarking is done	Basic level benchmarking is done	Moderate level benchmarking is done	Advanced benchmarking is done	Strategic benchmarking is done
1	2	3	4	5
No standardization in processes	Basic level standardization in processes	Moderate level standardization in processes	Advanced standardization in processes	Very sophisticated standardization in processes
1	2	3	4	5

Score Range= 24 to 120

Score Interpretation

24= Very Poor Quality Management (Needs radical improvement)
25-48= Poor Quality Management (Needs major improvement)
49-72= Moderate Quality Management (Space for Improvement)
73-96= Good Quality Management (Close to ideal)
97-120= Excellent Quality Management (Benchmark for other)

Source: Author's compilation

By using the above-mentioned tool, an SME can evaluate its quality management progress. If the score for most dimensions and aggregated falls in the lower end, then it means this SME needs a high level of improvement in its quality management program. If most dimensions fall in the moderate range, then it shows that some progress is made but still there is room for improvement. If most dimensions fall in high or very high category, so it shows that this SME has done excellent work in terms of quality management.

6. An Illustration of the Proposed Quality Management Assessment Tool

The above-mentioned tool is utilized in assessing the quality management of a small-scale travel agency based in Kabul, Afghanistan. The travel agency employs about 25 people and was interested in judging the

quality of its overall operations. The study utilized brief interviews with the management and employees of the company to determine where it stands based on the proposed tool.

In the above-mentioned example, the travel agency is giving high importance to the customer and supplier quality management but little regard for people management and moderate in terms of top management commitment, continuous improvement, and process management. The computed score is 53 which shows that there is still room for improvement in terms of its quality management program. The suggestions to the client were that they need to focus on people management by involving them in decision making, and employee training and development related activities. Other suggestions included improving processes and institutionalization of continuous improvement.

7. Conclusion

The objective of the paper is to propose and test a tool for assessing the quality management program among SMEs in Afghanistan. Based on the review of literature, six principles of quality management are identified including ownership and management commitment towards quality, customer orientation, managing suppliers' relations, staff management, continuous improvement as a routine, and process focus. The significance of this tool is that it is based on the work of previous experts and is customized according to the local context of SMEs in Afghanistan. Application of the tool is tested in a small organization (travel agency) for assessing the quality management program. Based on the literature and its application, it can be concluded that at preliminary level, the proposed tool shows promising theoretical rigor and practical applicability. Further critical review and empirical application are welcome from the scholarly community.

8. Limitation of the Study

A limitation of the study is that the principles are derived based on the subjective assessment of the previous quality management models by the author. Alternatively, the technique of focus group or interviews could be conducted to derive such principles but due to the resources (financial and human) limitations, the study did not utilize such approach. Furthermore, the study only tested the proposed tool on one single organization which is also a limitation. Future researchers are encouraged to apply and report the applicability and limitations of the proposed tool.

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