Knowledge Management Framework of Human Values for Total Quality Management Implementation

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Abstract

Total quality management (TQM) and knowledge management (KM) assist to grow an organization, but the acquisition of human values which are tacit knowledge by nature for TQM implementation are critical. It is agreeable that human values on individual level are the core for effective implementation of TQM. But despite the popularity of TQM, an absence of knowledge management framework that covers the tacit knowledge of human values identification and assessment for TQM implementation is limited. Human resource (HR) management work closely with quality management personals to motivate and socialize these values, but literature lacks in providing any directions for them about this tacit knowledge of human like values which are required for implementation of TQM. Without this, it is difficult for management to pursue the quality practices implementation. Thus, this research focused on this gap by proposing the knowledge management framework of human tacit knowledge like values identification and assessment for quality implementation. This research could assist HR and quality management to provide better understanding of human values and their level of practicing for implementation of TQM. Besides this, it may assist the HR management to perform the core HR functions such as selection, performance evaluation, and training and development that leads to the implementation of TQM.

Keywords: Total quality management; human values; TQM practices; human Resource; real situation; knowledge management; framework

Abstrak

Pengurusan kualiti keseluruhan dan pengurusan pengetahuan membantu bagi membangunkan sebuah organisasi. Namun begitu pemerolehan nilai-nilai manusia yang berbentuk pengetahuan tersirat untuk perlaksanaan TQM adalah kritikal. Nilai manusia pada tahap individu merupakan teras bagi perlaksanaan TQM yang berkesan. Walaupun TQM terkenal, kerangka pengurusan pengetahuan yang merangkumi pengetahuan tersirat tentang pengenalpastian dan penilaian perlaksanaan TQM adalah terhad. Pengurusan sumber manusia dan pengurusan kualiti peribadi berkait di antara satu sama lain untuk merangsang dan menyesuaikan nilai manusia itu tadi tetapi literatur yang menunjuk arah berkenaan pengetahuan tersirat nilai manusia yang diperlukan untuk perlaksanaan TQM masih berkurangan. Tanpa literatur sukar bagi pengurusan meneruskan perlaksanaan amalan kualiti. Oleh itu, kajian ini menfokus kepada jurang kajian yang dinyatakan tadi dengan mencadangkan kerangka pengurusan pengetahuan bagi pengethaun tersirat manusia seperti pengenalpastian dan penilaian nilai-nilai manusia bagi perlaksanan kualiti. Kajian ini boleh membantu HR dan pengurusan kualiti menyediakan kefahaman nilai-nilai manusia dan tahap amalan bagi perlaksanaan TQM yang baik. Selain itu, ia boleh membantu pengurusan HR melaksanakan fungsi-fungsi teras HR seperti pemilihan, penilaian prestasi, dan latihan dan pembangunan yang membawa kepada perlaksanaan TQM.

Kata kunci: Pengurusan kualiti keseluruhan; nilai manusia; amalan TQM; sumber manusia; situasi sebenar; pengurusan pengetahuan; kerangka

■1.0 INTRODUCTION

Despite the popularity of TQM implementation in industry, an absence of theoretical framework that offers a sound platform for practice is a serious limitation. Implementations of TQM are often performed without understanding the core requirements for its implementation. In absence of such framework for TQM that brings together its practices and the valued essentials, its implementations becomes challenging for quality and HR management.

Although a lot of research has been conducted for TQM and its prosperity, but less research was performed related to the exploration of human factors that contributes for TQM implementation. While it is agreeable that human factors like values are tacit in nature and essential for TQM implementation that brings attention towards its exploration into apart. These human or personal values at individual level are considered as core for the effective implementation of TQM (Dahlgaard-Park, 2012; Ertürk, 2012; Moccia, 2008; Siltaoja, 2009). The last decade shows the scholars interest towards human values for business organization and have emphasized these values as potential resource for the implementation of TQM (Dahlgaard-Park, 2012; Guest, 2011; Moccia, 2008; Pfeffer & Veiga, 1999). The acquisition of such tacit knowledge of human values is always crucial and difficult task to apply under the umbrella of knowledge management.

Although knowledge management and TQM both assist for organizational growth and development, but acquiring tacit knowledge and managing them is critical. Authors argued in literature that integration of TQM and knowledge management is useful for organization

(Jens & Su Mi, 2006; Ju, Lin, Lin, & Kuo, 2006). Thus it is important to theorize the knowledge management integrated framework of human values identification and assessment for TQM implementation that expands its broader usage.

Thus, this research aimed on emphasizing on the need of tacit knowledge management like exploring and managing the human values in real situation as hand on practice for managers for TQM implementation. Based on this, KM framework for human values is proposed in this paper that could assist the management to have better understanding of human values and their status of implication for the implementation of TQM practices.

The paper comprises of following sections; section II describes the literature review of knowledge management, TQM and human values for the implementation of TQM. Section III describes the proposed KM framework for HR managers to implement the TQM philosophy. Section IV comprises of discussions that followed by the section V which describes the conclusion.

■2.0 LITERATURE REVIEW

This section describes the describes the literature review on knowledge management, TQM, human values for the implementation of TQM, and HR management for managing human values for implementing TQM.

2.1 Knowledge Management

Authors have defined Knowledge Management (KM) differently that results in lack of standardized definition. In this research, we adopted the following definition of KM:"Knowledge management is the process of capturing a company's collective expertise wherever it resides databases, on paper, or in people's heads-and distributing it to wherever it can help produce the biggest payoff" (Hibbard, 1997). KM is a process for creation of knowledge, managing and sharing it not only within organization but also outside of organization. Managing knowledge required the systematic approach from process point of view that can create, retrieve and share knowledge (Lee, Yang, & Yu, 2001).

Before we go further, it is important to discern the definition and concept of knowledge. Authors have described knowledge as a comprehensive concept of understanding and know how that increases an organization's ability for effectual action (Nonaka, 1994). Generally, knowledge refers to the facts, figures, and information etc of someone or something that helps in decision making and able to make a state of being aware. It can be further categorized such as explicit and tacit knowledge (Gupta, Iyer, & Aronson, 2000; Nonaka, 1994).

Tacit knowledge is defined as know-how, unwritten, hidden and inherent inside an individual whom is difficult to translate and codify (Lee, *et al.*, 2001; Nonaka, 1994). It is also described as the knowledge that is in your mind that you get with experience. Moreover, explicit knowledge is defined as data which is either technical or in academic information that is written in a formal language (Ooi, Teh, & Chong, 2009). Similarly, articulation of explicit knowledge can be fin the form of rules, guidelines and principles (Nonaka, 1994).

2.2 Total Quality Management

TQM concept has been explained by many scholars and each has emphasized the total involvement in improving and controlling work processes keeping in view of human involvement in their implementation. Flynn *et al*. (1994) define TQM as: "An integrated approach to achieving and sustaining high quality output, focusing on the maintenance and continuous improvement of processes and defects prevention at all levels and in all functions of the organization, in order to meet or exceed the customers' satisfaction". Similarly, Hellsten & Klefsjö (2000) define TQM as systematic way of managing the tools, technologies and values which emphasize on the core beliefs and satisfaction of not only the external customers, but also of internal customers who are the core to practice the quality in organization.

Scholars have argued that refashioning of these practices is important for TQM implementation. Numerous studies have described TQM differently, but they have identified some common practices of TQM which are important for its implementation. in this research, TQM practices are selected from the work of Zakuan and Yusof (2007) who have identified common TQM practices based on the review of existing studies. The detail of these TQM practices is shown in Figure 1.
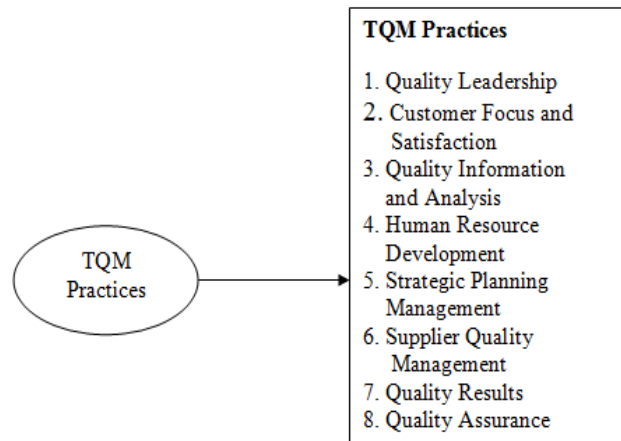
TQM Practices

1. Quality Leadership
2. Customer Focus and Satisfaction
3. Quality Information and Analysis
4. Human Resource Development
5. Strategic Planning Management
6. Supplier Quality Management
7. Quality Results
8. Quality Assurance

Figure 1 TQM Practices
(Adopted from Zakuan & Yusof, 2007)

2.3 Human Values and Importance for TQM Implementation

Human values are the individual level characteristic and provide guidance for behavior such as honesty, personal growth, trust, integrity etc. they are considered as guiding philosophy for actions and behavior (Chandrakumara, 2011). They act as guideline to think and act according to the situations that what is right, good, or desirable (Rokeach, 1973; Schwartz, 2005). Human values cannot be isolated from situation (Pommeranz, Detweiler, Wiggers, & Jonker, 2011). They changed according to the situation such as individual will focus on sincerity, respect, and consistency while in situation of serving the customer whereas hard working, knowledge sharing and learning is more important in generating the quality results. Human values exploring in real situation is critical. Although scholars have described an assortment of values inventories which explored out of context, as respondents of such exploratory surveys used to rank or rate based on given an inventory which does not reflect the real situation. It actually emphasized respondents' personality or preference in life that sets the result out of context (Pommeranz, *et al*., 2011; Siltaoja, 2009).

Implementation of TQM philosophy is heavily influenced by the human personal construct such as values and considered critical for its implementation (Dahlgaard-Park, 2012; Ingelsson, Eriksson, & Lilja, 2012; Talwar, 2009). These values are considered as unique human competence that determines the quality and assist in implementing the management practices (Chandrakumara, 2011; Izzo & Withers, 2007). Last decade is evident about the increasing interest of scholars towards human values for business organization (Dahlgaard-Park, 2012; Moccia, 2008). They have emphasized on values as potential resource for the implementation of TQM. In particular, implementation of quality is the name of "mind set" that humans holds and motivated from their personal values (Jens & Su Mi, 2006). They highlighted that these values at individual level are considered as core for the effective implementation of TQM (Ertürk, 2012; Moccia, 2008). Therefore, identification and assessment of human values should be in real situation for implementation of TQM.

2.4 Importance of HR Management for Managing Human Values for TQM Implementation

HR management is one of the essential and core aspect to support for design, implement and managing the various quality implementation programs (Dahlgaard, Dahlgaard, & Edgeman, 1998; Ingelsson, *et al*., 2012; Talwar, 2009). They played vital role in TQM planning, assessment and implementing process. They used different approaches to motivate the employees. They are involved in socializing the human values among existing employees for implementing the quality practices. The last decade is evident of increasing interest of scholars and practionars to accent the closed working of HR personals with quality department to implement the quality philosophy, but still the results are invariant (Dahlgaard, *et al*., 1998; Talwar, 2009). HR management are lacking with awareness of and knowledge about what human values which are required for the implementation of TQM practices. Due to this, it is impossible for them to shape and implement the practices of TQM effectively. Such baseline information act as guideline, especially for HR management while practicing basic HR functions such selecting the new employees, training and development, socializing values among existing employees etc.

In this context, authors Ingelsson, *et al*. (2012) emphasized in his work that importance of selection strategy as crucial for the implementation of TQM philosophy. He argued that selecting the right person with right values can facilitate the TQM implementation. He relates these values with shared organizational values. But it is also observed in literature that scholars has emphasized these values are personal construct that should be explored in a real situation and cannot relate with general values (Pommeranz, *et al*., 2011; Schwartz, 2005). Author Chandrakumara (2011) has described in his study that "…values should not always be meshed with organization".

Human values are considered as the baseline for the modern business practices, as author argued that "… values determine the quality and management practices" (Chandrakumara, 2011). Based on the review, it is argued that awareness and knowledge about the relevant values which are required for implementation of TQM are needed among the quality and HR management. Without such knowledge of required human values in a real situation, it is impossible for both quality and HR management to shape the implementation of TQM practices more effectively. Thus, KM framework is proposed to address this issue which is described in the next section.

2.4.1 Adoption of Knowledge Framework

Markedly, it is found that KM and TQM dispense notably to the wing of performance for any organization. Last two decades shows scholars interest towards TQM and KM and have described the models and framework. It is observed that scholars has analyzed and reviewed the existing models and frameworks and highlight that they support each other. Regarding the human values for TQM implementation, few authors have proposed model and framework. In the researchers best knowledge no study was revealed to nurture the capability of TQM implementation by proposing the management of tacit knowledge of human values identification and assessment.

Broadly, KM is practiced with two approaches: one is codification and secondly personalization (Davenport & Prusak, 2000; Hansen, Nohria, & Tierney, 1999). Codification refers to the process driven approach focuses mainly on documentation. It describes the documentation, rules and procedures that provide help for its users to find the desired information in certain situation. "The aim of codification is to put organizational knowledge into a form that makes it accessible to those who need it (Davenport & Prusak, 2000). The personalization approach refers to the knowledge that has not been codified and commonly referred as tacit knowledge. Systematic approach can be arranged to acquire tacit knowledge so that it can be shared. In this regard, investment is made to develop the systematic approach, where knowledge is shared not only face-to-face but also using technologies such as knowledge management systems.

With respect to the KM approaches such as codification and personalization, mostly quality approach focused on codification such as collecting data, measurement data, procedures etc. whereas employee experience, personal constructs such as values required for TQM implementation not captured due to their tacit nature. It is observed in literature these values are essentials and required for implementation of TQM that remains limited in identification and assessment for TQM practices. Thus personalization approach that permits tacit knowledge acquisition and sharing to occur remain limited in quality practices. We believe that managing tacit knowledge such as human values identification and assessment play an important role for quality and HR management to implement TQM effectively. It assists them to devise plans for shape quality implementation practices and reinforce values among employees.

■**3.0 KNOWLEDGE FRAMEWORK OF HUMAN VALUES**

Managing knowledge about human values for TQM implementation is crucial. TQM field lacks with any approach that can explore and manage the required human values in a real situation for its implementation. Such management of human values which are tacit in nature, a KM framework is proposed in this research that could assist HR and quality management by providing a better understanding of required human values and their status of implication for the implementation of TQM practices. This proposed framework consist of two main modules i.e. identification and assessment of relevant human values in a real situation for implementation of TQM practices. This framework intends the automated system for such identification and assessment of human values for TQM implementation. Figure 2 shows this framework.
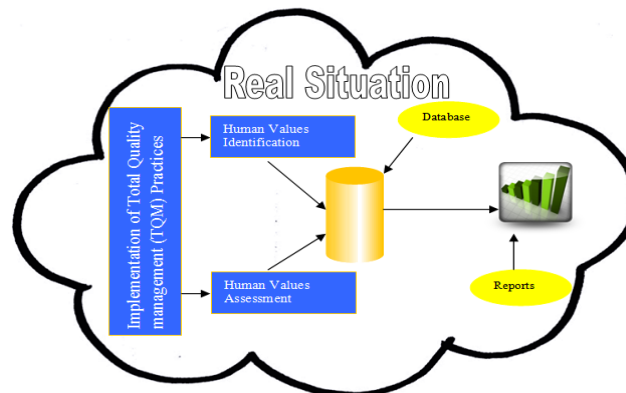

Figure 2 KM framework of human values

Values identification is the first core aspect of framework that emphasize on identifying the human values in a real situation for the implementation of TQM practices. Such real time identification of values needed the techniques that support this notion. In order to get such techniques, an exploratory study is required that evaluate the suitable techniques for identifying human values in a real situation. These techniques later on will be included as input for the development of identification module of this human values KM system.

Values assessment of this framework based on the input of values identification module. This assessment is to assess the level of practicing human values against each TQM practices. Multi rater assessment approach is proposed against each TQM practices in this research that can get avoid an y biasness in assessment. This assessment is designed according to the scoring scale like 1 for low and 5 for high. The scoring of relevant human values will be conducted by different assessors for in each TQM practices to avoid any biasness in the results. Such values assessment module will assist management to get better understanding of required human values and their status of implication for the implementation of TQM practices respectively.

Implementation of TQM generally consists of certain practices such as Leadership, quality results, customer focuses, and information and analysis etc. This part of framework explains the basic connection with the values identification and assessment. In other words, identification and assessment must be conducted against each TQM practice.

Repository represents the human values master database that records the identified and assessed human values. This values repository represents as baseline for generating the reports and results graphically. These results infer the implication status about human values for TQM implementation.

■4.0 DISCUSSION

Based on the review, it is observed that recently few scholars have emphasized the HR functions as core element for TQM implementation. This research focuses to fill literature gap by proposing KM framework of human values- tacit in nature is proposed. Hence, proposed framework could provide better understanding of required human values and their status of implication for the implementation of TQM practices in organization. In particular, it assists for the implementation of certain TQM practices to improve. Management could get assistance of awareness and tacit knowledge from this framework about not only the required values to implement the certain TQM practices, but also while performing basic HR functions such as selection, training and development and performance and evaluation etc. This could act as baseline that shows that what values they must look for while recruiting or selecting the employees for certain designation. This will also help in socializing the values among existing employees for quality implementation.

4.1 Theoretical Implications

This research describes a contemporary research in TQM field and has significance on theoretical and managerial perceptions. Based on theoretical implication perception, this is one of the few studies that contemplate to propose tacit knowledge management such as human values identification and assessment for TQM implementation. Although it is observed in literature that studies have highlighted the importance of human values for TQM implementation, but those studies are limited to describe the importance of tacit knowledge management for its effective implementation. Thus, KM framework theorized the base for human values acquisition and management for implementation of TQM and calls attention for more in-depth research in this area. In management perspective, this research assists to assess the level of practiced human values for TQM implementation. Management can foresee the implication of tacit knowledge and can devise plans for shape TQM practices effectively. Such research will provide valuable insight for scholars to cultivate the future agenda in the importance of HR management functions for implementation of TQM field.

4.2 Future Work

By following the KM framework of human values for the TQM implementation, an automated tool for exploring and managing the human values in a real situation is needed. Furthermore, this research further encourages more practical research on development of such knowledge management system for quality management practitioners and academicians. It is also anticipated to evaluate the KM framework and the industrial application from industry by introducing formal propositions. Moreover, the investigation of HR strategies and their success after the implementation of the proposed tool in the industry is another future dimensions in this field.

■5.0 CONCLUSION

Knowledge management such as tacit knowledge is an essential element that contributes to the implementation of TQM. The proposed knowledge management framework in this research closes the gap in literature for the human values identification and assessment for TQM implementation. Furthermore, this framework advances the literature regarding the knowledge management system and industrial applications to address this gap and to apprehend the quality practitioners and the academicians. As for evaluation, empirical analysis is warrant that should evaluate and enhance the KM framework.

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