A Conceptual Model of Continuous Improvement in Total Quality Management from Islamic Perspective

[1]Afroza Bulbul Afrin, [2]Rafikul Islam

[1]International Islamic University Malaysia (IIUM) and International Islamic University Chittagong (IIUC), Bangladesh, [2]International Islamic University Malaysia (IIUM), Malaysia

Abstract

Continuous improvement (CI), one of the vital principles of total quality management (TQM), is now being practiced in almost every organization regardless their natures, shapes, and sizes. After developing the concept of CI in 1930s, Muslims are using the models and approaches developed by the non-Muslim scholars based on their own cultures and beliefs. The main purpose of conducting this particular study is to develop a new model of CI in TQM from Islamic perspective. After an extensive literature review, the researchers have developed a conceptual model of CI in TQM from Islamic perspective which is named as NAMS Cycle (initial letters of the components) where the main components are *al-nīyah bil ikhlas*, *amal*, *muhāsaba* and *shukr*. All of these components also consist of some other constructs. Both the Muslim and non-Muslim believers will be benefited from this research if they have good faith in the Creator and the Day of Judgment.

Keywords: Total Quality Management; Continuous Improvement; Continuous Improvement from Islamic Perspective; NAMS Cycle

1. Introduction

After 2nd World War when Japan was struggling to survive, W. Edwards Deming and Joseph M. Juran came up with the concept of "quality movement" which resulted "total quality management" (TQM). Now, TQM is not simply a concept, rather a philosophy. Most of the organizations are trying to implement this philosophy in their own premises regardless of their sizes, shapes, natures, and cultures. TQM is defined by many scholars in many ways. By and large, TQM is considered as a philosophy which comprises company-wide efforts that include all employees, suppliers, and customers, and that seeks continuously to improve the quality of products and processes to meet the needs and expectations of customers (Dean and Evans, 2005). Dilworth (1993) stressed that TQ is a culture, not a program like quality control circles. He also states that TQ is total in time, in that, it never ends because there is no level of quality that is "good enough." This statement indicates the important TQ cultural component of continuous improvement (CI). The pillars of TQM are the culture, commitment, involvement, and improvement (Jabnoun, 2008). Without these cultural components, it becomes unlikely to achieve a CI. Like other philosophies, TQM is also based on some principles prescribed by scholars and practitioners (Dean and Evans, 2000; Murray and Chapman, 2003). CI is considered as a vital one among those principles of TQM.

"Good is not good enough; there is always a scope to be better" – keeping this proverb in mind, TQM espouses continuous quality improvement (Mannan and Ferdousi, 2007). TQM is not a one-step activity, but a continuous approach and a never ending process. With a long-term focus, quality improvement becomes a daily activity. To strengthen competitive advantage in the market, organizations must continuously improve quality of products and services which results in cost savings and increased

market share due to a reputation for quality products or services. CI is an essential requirement for any product that a firm produces or any process through which an organization delivers services to its customers and clients (Plenert, 2012; Ahbabi and Alshawi, 2015).

CI is a program dedicated to elevating the minds and talents of all members within the organization. It helps employees by supplying the knowledge to create and the freedom to implement (Murray and Chapman, 2003; Bigelow, 2015). Collaboration, consultation, ingratiation, inspirational appeals, and rational persuasion are significant and strong predictors of employee commitment to CI initiatives, and these tactics are significant drivers of quality (Oakland, 1988; Lam et al., 2015). The supervisor-subordinate relationship is directly related to CI initiatives.

CI models developed by western scholars are rooted in the concept of worldly gain. Remaining within the realm of bounded rationality, the models may not pass the test of time and space because they are not based on divine rules and standards (Osman, 2005). There are also some problems in the existing quality improvement system, and Muslims should endeavor to seek possible solutions to the problems that the existing standards of quality are facing (Musa and Salleh, 2005a). Hence, there is a need to develop a management model suitable for the Muslim culture to prevent cross-cultural myopia. Those models must be based on knowledge from the revealed sources as well as knowledge about today's business environment (Ahmad, 2009).

In Islam, quality management is not overlooked. Rather, quality is very much emphasized in the teachings of Islam. Jabnoun (2008) narrated one Hadith from Bayhaqi, "Prophet Muhammad (saw) said: "Allāh the Almighty wants that when one of you does a job, he/she does it well" (p. 297). Islam embodies perfect quality management. The Arabic word "iṭqān" means perfection, or a spiritual connotation to be loved by Allāh (swt), and also means Allāh's (swt) perfect and flawless creation. Allāh (swt), the almighty has set the examples of ever quality management by creating and maintaining the universe in perfection and with no inconsistency within this[1]. Moreover, for Allāh (swt), it is not enough to be satisfied with the quality of his own works. Indeed, he wants people to do all of their works with best of the quality, and he will judge them on the basis of the quality of their deeds[2]. Thus, to ensure quality in every task is a religious obligation for the Muslims. Believing in only one Allāh (swt) (al-Tawḥīd) makes easy to ensure the quality in our lifelong activities. The contemporary literature on quality management from Islamic perspective show that most of the works are on the elaboration on a list of values embedded in the practice of quality management and there are some improvements in developing some models of quality management. For example, Musa and Salleh (2005b) proposed a model of an Islamic TQ. Fontaine (2008) developed a new model for problem-solving and named this as the "A6H" model. Husain and Abdullah (2005) developed a new value-based customer satisfaction measurement model. Jabnoun (2008) developed Umar's TQM Control Process. It shows that some improvements have been made in developing models of TQM, but no model has yet been developed on CI in TQM from Islamic perspective to help the Muslim Ummah to ensure quality in their daily activities. Here is a research gap and the present work intends to minimize this gap by developing an Islamic model of CI in TQM.

The main purpose of the present study is to develop a new model of CI in TQM from Islamic perspective through an exploratory research based on extensive review of published literatures, relevant verses from the Holy Qur'an, principles and traditions of Prophet Muhammad (saw) and the sayings and practices of the companions of Prophet (saw) and other Muslim scholars. The traditional Islamic epistemology (theory of knowledge) provides all the necessary safeguards against all kinds of philosophical deviations (Bakar, 2008). Islam is the religion of unity (*al-Tawḥīd*). It espouses the idea

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1   "We have certainly created man in the best of stature" (At-Teen, 95:4)." He, Who created the seven heavens one above another: No want of proportion wilt thou see in the Creation of [Allah] Most Gracious. So turn thy vision again: Seest thou any flaw? Again turn thy vision a second time: [thy] vision will come back to thee dull and discomfited, in a state worn out" (Al-Mulk, 67:3-4). Thou seest the mountains and thinkest them firmly fixed: But they shall pass away as the clouds pass away: [such is] The artistry of Allah, who disposes of all things in perfect order: For he is well acquainted with all that ye do (Al-Naml, 27:88).

2   "He, Who created death and life to test you whom of you is best in deed" (Al-Mulk, 67: 2).

of the hierarchy and unity of knowledge and of modes of knowing. *Tawḥīd* means literally "making one" or "asserting oneness" (Gibb and Kramers, 2001). In consequence, it is applied theologically to the oneness *(waḥdānīya, tawaḥḥud)* of Allāh (swt) in all its meanings. Technically, "the science of *Tawḥīd* and the qualities" (*'ilm al-Tawḥīd wa 'l-ṣifāt*) is a synonym for "the science of *kalām*." Unity is far from being a simple idea; it may be internal or external; it may mean that there is no other God except Allāh (swt), who has no partner (*sharīk*); Allāh (swt) is a Oneness in Himself; he is the only being with real or absolute existence (*al-ḥakk*); all other beings having merely a contingent existence; it may even be developed into a pantheistic assertion that Allāh is All. Knowledge of this unity may be reached by the methods of systematic theology (*'ilm*) or by religious experience (*ma'rifa, mushāhada*); again, it may be pure contemplation or philosophical speculation. In consequence, *Tawḥīd* may mean simply "there is no god but Allāh" (swt). As the absolute Truth (*al-ḥaqq*), Allāh (swt) is the source of all other truths. Usually, the ontology of *Tawḥīd* has been elucidated by three aspects; first, *Tawḥīd al-Rububiyyah* means that Allāh (swt) alone is the absolute lord of creation. Second, *Tawḥīd al-Uluhiyyah* means that none else in mind or form can be worshiped except Allāh (swt) as the one and absolute in his purity having no form. Third, the attributes of Allāh (swt) are his own and cannot be demonstrated by the worldly meanings of such attributes (Choudhury, 2015b). The attributes of Allāh (swt) (*asma al-ḥusna*) are complete in meaning. However, their moral meanings can be used in deriving laws, formalism, behavior, and standards of living experience (Choudhury, 2015a; Choudhury, 1997). According to Islam, man has been equipped with all the necessary facilities of knowing which enables him to know all that he needs to know[3]. But only one source of knowledge is Allāh (swt) and man cannot know anything from those without his willingness[4].

Therefore, the epistemological paradigm of this particular study is based on the idea of unity (al-*Tawḥīd*). The fundamental epistemological foundations of the *Tawḥīdic* worldview are the Qur'an and the Sunnah. The secondary epistemic medium is the contributions of scholars in Islam used to interpret the doctrines of the divine law in the light of the Qur'an and the Sunnah. Keeping in view the constructed essentiality of the unified world system through continuous learning, the final realization of all-accumulated ultimate knowledge stock occurs in the hereafter. Thus, the hereafter is referred to as the great event in the Qur'an (Choudhury, 2015). Learning systems are governed by the episteme of unity of knowledge as explicated by the Qur'an and the Sunnah (prophetic guidance). These together form the foundation of every Islamic methodological inquiry and application (Choudhury and Harahap, 2009). Hence, to be successful in the life hereafter and to enter into paradise is the ontological standpoint of this particular study. It does hold a unified and coherent vision of what the array of methodologies to do the research. To speak of methodology is to speak of ways or methods by means of which man can gain knowledge of reality. Islamic methodology of knowledge (*al-'ilm*) deals indeed with the essential relationship between the hierarchies of man's faculties of knowing and the known.

2. Conventional Approaches to Continuous Quality Improvement

The term CI is used widely to compete successfully in the market. Imai first used the term "CI" in 1986 (Murray and Chapman, 2003) but the concept was used in the 1930s when Walter Shewhart oriented

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3   He, Who has made everything which He has created most good: He began the creation of man with [nothing more than] clay, And made his progeny from a quintessence of the nature of a fluid despised: But He fashioned him in due prop ortion, and breathed into him something of His spirit. And He gave you [the faculties of] hearing and sight and feeling [and understanding]: Little thanks do ye give! (Al-Sajdah, 32:7-9).

4   Allāh (swt)! There is no god but He,-the Living, the Self-subsisting, Eternal. No slumber can seize Him nor sleep. His are all things in the heavens and on earth. Who is there can intercede in His presence except as He permitteth? He knoweth what [appeareth to His creatures as] before or after or behind them. Nor shall they compass aught of His knowledge except as He willeth. His Throne doth extend over the heavens and the earth, and He feeleth no fatigue in guarding and preserving them for He is the most high, the Supreme [in glory] (Al-Baqarah, 2:255).

three-step scientific process of improving quality (Shewhart, 1939). He later revised this idea into a cyclical concept. Shewhart (1939. p. 45) wrote, "These three steps must go in a circle instead of in a straight line. It may be helpful to think of the three steps in the mass production process as steps in the scientific method. In this sense, specification, production, and inspection correspond, respectively, to hypothesizing, carrying out an experiment, and testing the hypothesis. The three steps constitute a dynamic scientific process of acquiring knowledge." His concept evolved into what became known as the Shewhart cycle. CI is also observed in Juran Quality Trilogy – quality planning, quality control, and quality improvement.

Deming closely reviewed Shewhart's works. At the age of 39, he edited a series of lectures Shewhart delivered to the U.S. Department of Agriculture and eventually became the basis of Shewhart's 1939 book. Deming presented a new version of the cycle in 1950 during an 8 day landmark visit to Japan sponsored by the Japanese Union of Scientists and Engineers (Deming, 1950; Deming, 1986; Deming, 1993).

In his new version of the cycle, Deming emphasized constant interaction among the four steps of design, production, sales, and research. He highlighted that these steps should be rotated, keeping the quality of product and service as the main focus. This new version is referred to as the Deming Cycle or plan–do–study–act (PDSA) Cycle. Deming described it as a flow diagram for learning and improvement of a product or a process (Moen and Norman, 2009). Along with PDSA Cycle, many other approaches/methodologies have been evolved to implement the CI in practice. The following sections discuss some of those approaches briefly.

The Japanese word *Kaizen* means CI activities and is often reflected in the limited context of shop-floor improvement activities. Today, this concept is broadly defined to include ongoing improvement activities involving everyone in the organization (Imai, 1986). *Kaizen* is based on the belief of people's inherent desire for quality and work. It requires sharing, caring, commitment, and different leadership based on personal experience and conviction. It teaches that not a day should go by without some kind of improvement in the company. As an ongoing process, it signifies small improvements in the status quo because of ongoing efforts. It generates both process-oriented and people-oriented thinking in the sense it is directed toward improving processes. It is concerned more with the process than the forthcoming results.

5-S is an important step toward TQM. Over the past century, the Japanese formalized the technique and named it 5-S practice. Professor Sam Ho (Ho, 2014) improved and defined its terms in English/Chinese and developed the world's first 5-S Audit Checklist which was used for training in Malaysia under an Asian Development Bank Quality Expert assignment in 1993-94 at SIRIM. The 5-S steps are: Seiri (Structurise), Seiton (Systematise), Seiso (Sanitise), Seikuetsu (Standerdise), and Shitsuke (Self-discipline).

Just-in-time (JIT) is another imperative and well-practiced tool for CI. Since the early 1980s, JIT production has received great interest. The JIT philosophy concentrates on improving manufacturing efficiency by eliminating non-value added activities and minimizing inventory (Lau, 2000). JIT practices are used by many manufacturers as a powerful tool for continuous manufacturing improvement based on the significant reduction of inventory and work in progress in all phases of the new/recast manufacturing process. This philosophy emphasizes materials flow, not on materials storage (Kamoun and Yano, 1996). JIT manufacturing concentrated on increasing manufacturing efficiency by eliminating all forms of waste and minimize inventory (Lau, 2000). Today, more and more North American firms and firms in many other countries use it to produce the right parts in the right place at the right time. Traditionally, inventory has been viewed as an asset. However, the JIT view is that inventory does not add value but incurs costs. JIT views inventory as a symptom of poor management and a method of hiding inefficiencies and problems (Sanchez and Perez, 2001; Singh and Ahuja, 2014).

Six Sigma refers to a measure of quality that strives for near perfection. James Harrington defined, "Six Sigma is simply a TQM process that uses process capability analysis as a way of measuring progress" (Harrington, 2001). Six Sigma stands for Six Standard Deviations from the arithmetic mean. It is a process of the quality goal. It, thus, falls into the category of process capability (C_p) technique.

The Six Sigma method provides techniques and tools to improve the capability and reduce the defects in any process. It uses a variety of statistics to determine the best practices for any process. Statisticians and Six Sigma consultants study the existing processes and determine the methods that produce the best overall results. Six Sigma ensures that 99.9997% of all products produced in a process are of acceptable quality. Six Sigma allows only a maximum of 3.4 defects per million opportunities. If a process fails to meet this criterion, it is re-analyzed, altered, and tested to identify any possibility of improvement. If no improvement is found, the process is re-analyzed, altered, and tested again. This cycle is repeated until an improvement becomes visible. Once an improvement is found, it is documented, and the knowledge is spread across other units in the company so they can implement this new process and reduce the defects per million opportunities.

The concept of lean, also known as Toyota Production System, includes defining the value of any system by differentiating value-added and non-value-added actions and eradicating waste so that every step adds value to the system (Antony, 2011). It emphasizes on proficiency, to produce products and services at the lowest cost as fast as possible.

Lean methodology is a systematic approach of restructuring the works which increase business revenue, reduces costs, and improves customer satisfaction by eliminating unnecessary activities that are considered wasteful. The lean process is faster, efficient, and economical, and delivers satisfactory quality to customers (Antony, 2011). This approach focuses on maximizing process speed of service, provides a means for quantifying and eliminating the cost of complexity, provides tools for analyzing process flow and delay times at each activity in a process, and creates process speed by reducing costs and cycle time with efficiency (Laureani and Antony, 2011).

The service organization needs to implement Lean and Six Sigma approaches together to reduce costs and improve customer satisfaction because speed and quality cannot be separated when improving processes. Both methods are necessary when working to improve customer satisfaction by eliminating unnecessary costs and waste (Laureani and Antony, 2011). The Six Sigma application focuses more on the reduction of variation, whereas the Lean method focuses on removal of waste by reducing cycle time. Now the question is why Lean and Six Sigma together are required to improve the business processes? Lean and Six Sigma together are required to improve business processes (Heavey et al., 2014) because:

i. Six Sigma does not directly address speed or reduce invested capital;
ii. Lean increases productivity but does not provide any tool to fix seen or unseen quality issue; and
iii. Both enable the reduction of the cost of complexity.

Lean Six Sigma can be applied for the eradication of waste applying DAMAIC structure. This application emphasizes on CI processes, customer satisfaction, and better financial performance for organizations. Many other authors suggest for another integrated approach of CI, like Balanced Score Card Six Sigma (Heavey et al., 2014).

Besides the above approaches of CI, other approaches are practiced in organizations to improve quality. Some studies showed that different approaches to CI are equally effective in driving improvements in both technical and social systems, even though there are significant differences in the project size, type, location, and industrial sector (Jin and Doolen, 2014). Other studies stated that the success of the use of CI approaches depends on the culture of the organization and the capability of the managers and the leaders to implement those approaches effectively (Robinson, 2015). The author suggested that every unique culture of the organization should follow unique approaches of CI to ensure improvement in quality.

3. An Islamic Approach to Continuous Quality Improvement

In the Islamic system, management and any other mundane affairs of life are linked with man's mission in life. This leads to the philosophical underpinnings of quality management in the Islamic framework. Broadly speaking, the philosophical underpinnings of human life and the management of its affairs in the context of the Islamic worldview are classified into four: (1) *Tawhid*, (2) *Risalah*, (3) *Khilafah,* and (4) *Akhirah* (Sadeq, 1996).

Al-Tawḥīd affirms that the unique Allāh (swt) created man in the best of forms for the purpose of worshiping and serving him[5]. It also affirms that the purpose consists of man's vicegerency for God on Earth[6]. *Al-Tawḥīd* tells us that God, being beneficent and purposive, did not create man in sport or in vain[7]. Oneness is the prime attribute of Allāh (swt). Divine oneness is the singular moral foundation of "everything" entreating socio-scientific intellection in the Islamic worldview (Choudhury, 2015a). In this ontological sense, this concept of cognizant oneness means that the ultimate and indissoluble absoluteness and completeness of creatorship, knowledge, will and power over all things, rest with Allāh (swt) alone. Because Allāh (swt)'s oneness belongs to the domain of purity (*Ikhlas*), removed from the material and cognized worlds, it marks the topological domain of the fullness and purity of the knowledge stock (Choudhury, 2015b). It exogenously by itself creates, governs, and acts on the created universes of all kinds, abstract, and evident. By itself, the precept of oneness of God is not causally affected by anything. It creates all but is never created of itself, or by any other. Oneness is the derived prime attribute of the divine law as the guidance and completeness of all laws. Morality and its derived ethics are endogenous relations that arise from the complete phenomenology of the unity of knowledge when premised in the episteme of the unique and universal conscious oneness. In the Islamic code which unifies all mundane and other aspects of life in the normative bondage of the Islamic worldview, quality is of such importance that the merit of one's performance is judged by its quality more than quantity. Quality deserves the highest attention in management. This is because a low-quality management will be transmitted to the entire organizational system. A high-quality management, on the other hand, is expected to be reflected in the blood stream of the organization nurturing high-quality performance. For this reason, Islam emphasizes on quality management (Ahmad, 2006).

In Islam, quality is a process of positive changes for excellent performance in all human endeavors. It is a long-term process of CI. Every individual and organization must work to show quality performance by following proper approaches and planning. Quality performance cannot be narrowly understood since quality products and services that are produced must satisfy customer demands. From the Islamic perspective, an organization must focus on "quality workers, effective leadership, good management, and appropriate structural set up" as the four elements of quality and productivity (Sadeq, 1996). It is also the responsibility of an organization to meet the expectations of the customers in the best possible way and with best quality products or services. This responsibility is evident in some Hadiths[8].

A poor quality performance may bring an adverse outcome. For example, *salah* (prayer) has been ordained for Muslims in many *ayats (sentences)* of the Qur'an and Sunnah, but a severe consequence

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5   "I have only created Jinns and men, that they may serve Me" (Aldzaariyat, 51:56).
     "We have indeed created man in the best of moulds" (At-Tiin, 95:4).
     "But He fashioned him in due proportion, and breathed into him something of His spirit. And He gave you [the faculties of] hearing and sight and feeling [and understanding]: Little thanks do ye give! (As-Sajdah, 32:9).
6   Behold, thy Lord said to the angels: "I will create a vicegerent on earth." They said: "Wilt Thou place therein one who will make mischief therein and shed blood?- whilst we do celebrate Thy praises and glorify Thy holy [name]?" He said: "I know what ye know not" (Al-Baqarah, 2:30).
7   "Does man think that We cannot assemble his bones?" (Al Qiyaamah, 75:3).
     "Did ye then think that We had created you in jest, and that ye would not be brought back to Us [for account]?" (Al-Mu'minun, 23:11).
     "Not for [idle] sport did We create the heavens and the earth and all that is between!" (Al-Anbiyaa', 21:16).
8   The Prophet (saw) said, "None of you will have faith till he wishes for his (Muslim) brother what he likes for himself" (Al-Bukhari, 1:2:12).
     "A Muslim is the one who avoids harming Muslims with his tongue and hands" (Al-Bukhari, 1:2:9).
     The Prophet (saw) said, "None of you will have faith till he wishes for his (Muslim) brother what he likes for himself" (Al-Bukhari, 1:2:12).
     He also said, "A Muslim is the one who avoids harming Muslims with his tongue and hands" (Al-Bukhari, 1:2:9). Narrated Abu Musa (ra): 'Some people asked Allah's (swt) Apostle (saw), "Whose Islam is the best? i.e (Who is a very good Muslim)?" He replied, "One who avoids harming the Muslims with his tongue and hands"' (Al-Bukhari, 1:2:10).

has been declared for those who offer a poor quality *salah[9]*. Similarly, *sawm* (fasting) has been made obligatory for Muslims[10]. Valuable benefits of *sawm* have been mentioned[11]. However, the *sawm* becomes useless when it is not of high quality[12]. Therefore, excellence is a requirement not only in big matters but also in matters like slaughtering an animal[13].

4. CI and Waste in Islam

In most cases, wastage causes poor quality. These happen both in our personal activities and the activities through which we serve others. Islam prohibits any type of wastage of resources (*niyamah*). A Muslim must make every effort to remove wastage around him, at home, workplace, or in society, even when faced with confrontation. A common example would be to control the use of water, food, and electricity according to needs. Wastage of resources such as material in the workplace, man-hours, machine-hours, human potential, and time should also be minimized and properly utilized. While 100% elimination is not possible, it should nevertheless be an aim through continuous effort. Muslims should find this easier than others because they have been clearly instructed to avoid wastage in the Holy Qur'an: "*For the wasteful are the brothers of Satan; and Satan is ungrateful to his Lord*" (Al-Isra, 17:27). To ensure quality in every task is a religious demand for a Muslim. These tasks include both to worship Allāh (swt) and to serve the people or the creation.

Therefore, CI is a basic requirement in Islam, which is evident in a Hadith narrated by Bukhari and Muslim to this effect: "A successful man is whose today is better than yesterday, an unlucky one is whose today is worse than yesterday, and a deceived man is whose today is the same as yesterday" (Ahmad and Fontaine, 2011. p. 302). Prophet Muhammad (saw) said, "He whose 2 days are equal (in accomplishment) is a loser" (Al Daylamy).

Sayyidina Ali (ra) narrated that if one's today's activities are not better than those of yesterdays, he/she is not a good Muslim (Alam, 1983). Hence, it is the obligation for every good Muslim to try again and again to develop his/her daily activities in both personal life and social/organizational life.

5. The Conceptual Model of CI from Islamic Perspective

Because the vision of a Muslim is to enter paradise in the life hereafter, the mission statement consists of *Ibādah*, to worship Allāh (swt), the overriding objective of every activity will be to please him by obeying the injunctions of the Qur'ān and Sunnah. It is equally significant for Muslims as an individual and/or as an organization. Having this objective in mind, the researchers have developed a CI Model naming NAMS Cycle to serve the nation to continuously improve the quality of their activities. Figures 1 and 2 describe the cycle while the following section details its various components. To develop the conceptual model, the researchers have collected data through extensive literature review.

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9   "So, woe to those who pray, but are unmindful of their prayers" (Al-Ma'un, 107:4-5).
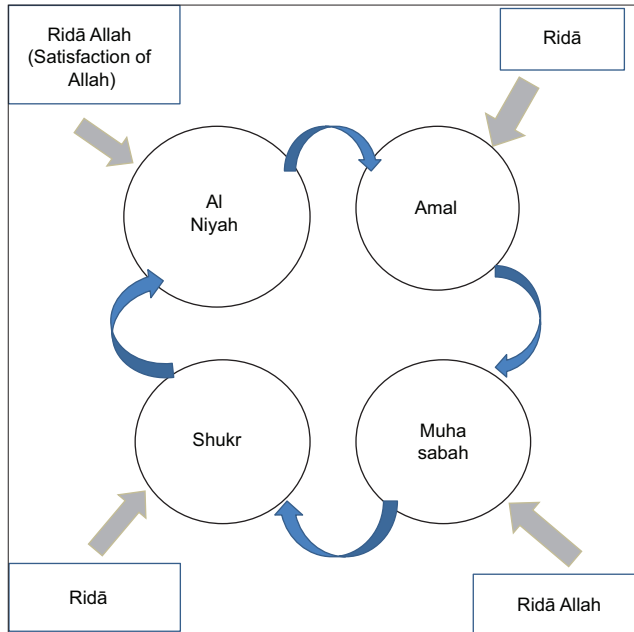
10   "O ye who believe! Fasting is prescribed to you as it was prescribed to those before you, that ye may [learn] self-restraint" (Al-Baqarah, 2:183).

11   Allāh's (swt) Prophet (saw) said, "Allāh (swt) said, 'All the deeds of Adam's sons (people) are for them, except fasting which is for Me, and I will give the reward for it.' Fasting is a shield or protection from the fire and from committing sins. If one of you is fasting, he should avoid sexual relation with his wife and quarreling, and if somebody should fight or quarrel with him, he should say, 'I am fasting.' By Him in Whose Hands my soul is' The unpleasant smell coming out from the mouth of a fasting person is better in the sight of Allāh (swt) than the smell of musk. There are two pleasures for the fasting person, one at the time of breaking his fast, and the other at the time when he will meet his Lord; then he will be pleased because of his fasting" (Al-Bukhari 3:31:128).

12   The Prophet (saw) also said, "Whoever does not give up forged speech and evil actions, Allāh (swt) is not in need of his leaving his food and drink (i.e. Allāh (swt) will not accept his fasting)" (Al-Bukhari, 3:31:127).

13   Prophet (saw) said, "Allāh (swt) has decreed good for everything. When you kill, do it in the best way; and when you slaughter (an animal for sacrifice), do it in the best way. So, every one of you should sharpen your knife and let the slaughtered animal die comfortably" (Al- Muslim).

Figure 1: NAMS Cycle

In that model, they show two phases where the Figure 1 consists of the main components and Figure 2 consists of the constructs of the components (Figure 1).

The cycle starts with *al-nīyah bil ikhlas* and followed by *amal*, *muhāsaba* and *shukr*, again returning to *nīyah*. These steps appear suitable for individual level practice. It should be remembered that an organization is built and run by individuals. Hence, if the individuals can follow these steps effectively in their own areas of responsibilities, organizations will be benefited accordingly. In every step, organizations need to do the activities described in Figure 1.

5.1. *al-Nīyah bil Ikhlās*

The first component of the NAMS model is *al-nīyah bil ikhlās* which means for Muslims every action will be started with a clear or pure intention of pleasing Allāh (swt) by achieving some specific objectives. This component includes.
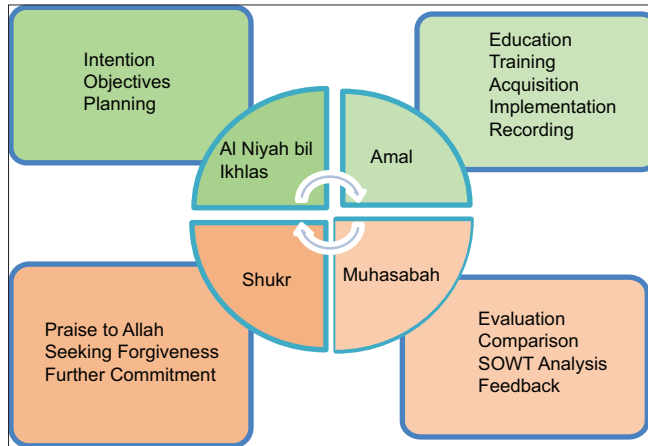
5.2. Intention (*nīyah*)

In Islam, the initial stage of doing any task is to clarify the *nīyah* (intention behind the action). The doer must be honest, clear, and pure about the *nīyah* because the result of every task depends on the doer's *nīyah*[14]. The *nīyah* of an organization reflects in its vision and mission. The highest principle of

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14 'Umar bin Al-Khattab (ra) narrated that he heard Allāh's (swt) Apostle saying, "The reward of deeds depends upon the intentions and every person will get the reward according to what he has intended. So, whoever emigrated for worldly benefits or for a woman to marry, his emigration was for what he emigrated for" (Al-Bukhari, 1:1:1).
Sayyidina Abu Bakra (ra) said, "I have heard Allāh's (swt) Apostle (saw) saying, 'When two Muslims fight (meet) each other with their swords, both the murderer as well as the murdered will go to the Hell-fire.' I said, 'O Allāh's (swt) Apostle (saw)! It is all right for the murderer but what about the murdered one?' Allāh's (swt) Apostle (saw) replied, "He surely had the intention to kill his companion" (Al-Bukhari, 1:2:30).

Figure 2: Expansion of NAMS cycle

Al-Tawḥīd is that whatever a Muslim will do, will do only for pleasing Allāh (swt). In the Qur'an Allāh (swt) has asked people, "*Say, truly my prayer, and my sacrifice, my life and my death (all) are only for Allah, the Cherisher of the world, no partner hath He: This I am commanded and I am the first of those who submit to His will*" (Anam, 6: 162-163).

From the above verses, it is clear that whatever a Muslim does, intention must be to satisfy Allāh (swt) by following his instructions. Like an individual, an organization must have good intention to serve the people by producing *halal* products and services with fair prices and without making any harm to the customers. At this stage of the newly developed model, the organization needs to fix the noble vision of pleasing Allāh (swt), the Creator and the Owner of the whole universe, mission of the organization, set the activities that will be treated as ibadah to Allāh (swt) and also fix an intention of taking initiatives to improve the quality of their activities, products, and/or, services.

5.3. Objectives (*al-ahdaaf*)

According to the *nīyah*, the doer/decision maker will have to set objectives to be achieved through organizational activities. These objectives indicate the destination of any task. To describe objectives, Sayyidina Ali (ra) said, "The objective of the clouds is not the rain, rather it is the fruits to be produced" (Jabnoun, 1994). When a Muslim intends to do any task, the objectives should be clearly specified and well known to the doer. The objectives of fasting are to learn self-restraint[15]. Allāh (swt) mentions in the Qur'an, "*When Allāh (swt) announced to the angels that He was about to create man and to establish him on earth as vicegerent for Him, the angels said: Would you establish on earth a creature that sheds blood and works evil, while we adore you, and praise you constantly? Allāh (swt) answered: I have a purpose/objective which you do not know*" (Al-Baqarah, 2:30).

If Allāh (swt) wanted, he could have easily created man and sent him on the earth, but he did not do so. He announced his intention of creating man in front of the angels and stated his objective. Here is a clear indication of setting clear and specific objectives as the precedence of intention which can bring *falah* for mankind. At this stage, the organization has to set the specific objectives of making any improvement in quality having intention to satisfy Allāh (swt) through serving customers with better quality.

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15   "O ye who believe! Fasting is prescribed to you as it was prescribed to those before you, that ye may (learn) self-restraint" (Al-Baqarah, 2:183).

5.4. Planning (*takhteet*)

Ahmad (2006) contends organizations must ensure that their planning brings quality and good output. He continued in saying, Allāh (swt) loves man's those actions which are carried out thoroughly and with perfection. To strive for perfection, reflection must take place in all man's actions, thus including in the act of planning.

Planning wisely is an important task in Islam. The Prophet Muhammad (saw) lived a planned and rational life. The Qur'ān tells us that Allāh (swt) created this universe according to his plan. In the same vein, the pathway of accomplishing a task in an organization should be clearly stated. Duties and responsibilities will be assigned properly, and persons should be authorized according to the nature and requirement of the assigned task.

Sayyidina Ali (ra) once said that plan your work daily, because every day comes with new concerns (Alam, 1983). About planned activity, Sayyidina Abdullah Ibn Umar Faruq (ra) said that you should do the earthly activities in such a way that you will remain alive for ever and at the same time work for the hereafter in such a way that you will die soon (Jabnoun, 1994). At this planning stage, the organization has to clearly state about what type of improvement will be made, how much will be made, where it will be, who will be responsible to do that, when the improvement will be done and how much costs will be allocated for that.

6. *Amal* (Implementation of Plans)

6.1. Education (*at-ta'leem*)

After proper planning, the next step is to inform people their duties and responsibilities and delegate the authority to complete their tasks. At the beginning of the *nobuwah* (prophethood), Prophet Muhammad (saw) used to visit the Cave of Hira Mountain. When he turned 40, the Angel Jibreel (as) came and commanded him to read. Muhammad (saw) replied: "I cannot read." Jibreel (as) embraced him until he could hardly breathe, and let him go saying: "O Muhammad, Read." Again Muhammad (saw) replied: "I cannot read." Jibreel (as) embraced him for the second time. He then ordered him to read for third time; when he did not, he embraced him tightly until he could not breathe, and then let him go saying: "(O Muhammad), *Recite with the Name of your Robb. Who created, created man, out of a (mere) clot of congealed blood: Proclaim! And your Robb is Most Bountiful*" (Alaq, 96: 1-3).

This incident teaches us that whenever responsibility is given, the person must be educated accordingly and be taught how the duties and responsibilities can be executed to ensure the improvement of quality.

6.2. Training (*at-tadreeb*)

Having duties, responsibilities, and power, people need to learn how to operate the relevant tools, techniques, and use the technology to perform their jobs. Employee training is essential to keep his/her knowledge updated and sharpening the aptitude by equipping themselves with the necessary skills required to thrive in the present day competitive working environment. After creating Adam (as), the first man, in the Qur'an, Allāh (swt) says, *"And He taught Adam the nature of all things; then He placed them before the angels, and said: "Tell me the nature of these if ye are right"* (Al-Baqarah, 2:31).

Angel Jibreel (as) taught Prophet Muhammad (saw) how to pray (*Salat*) by praying with him. The Prophet Muhammad (saw) then requested his followers to follow his example in prayer. For the Muslim Ummah, there is 1 month (Ramadan) out of 12 in a year for training. In such ways, training is emphasized in Islam to carry out tasks effectively and efficiently.

In the newly developed model, at this stage, the organization, after educating people, will have to arrange some training sessions for them who are in need of such training to implement the plan successfully.

6.3. Acquisition (*at-tanfeej*)

After proper education and training, people need to be provided the required equipment and materials to accomplish their tasks. The organization must acquire those quality equipment and materials from available sources to do the tasks efficiently. In the life of Prophet Muhammad (saw), we can see that in any crisis, he used to accumulate the commodities and distribute them among the seekers. Specifically, before starting any battle, he used to accumulate the materials needed to conduct the battle and distributed them among the fighters. This indicates that, in Islam, acquisition and distribution are emphasized. To enhance quality, the smooth flow of required resources is vital. The resources should be adequate, not excessive that may cause wastage.

6.4. Implementation (*at-tisaab*)

Having the supporting materials, the next step is to implement the plan to bring the improvement in quality. At this step, the doer must be careful because the result of any task depends on the sincerity and efficiency of doing the task. Failure to implement the plan may be a cause of loss. A number of related verses in the Qur'an state that if anyone has good intention, s/he will get one reward and if s/he implements that in action, will get double.

However, it should be remembered that the outcomes of the implementation of any decision depend on Allāh (swt), Who says: "*Then, when you have taken a decision, put your trust in Allah. Lo! Allah loveth those who put their trust (in Him)*" (Al-Imran 3:159).

6.5. Keeping record (*at-tasjeel*)

Every task must be recorded, so that nothing will be missing at the time of counting and evaluating. It will help to audit properly, to reward, or punish the doer rightly. As Allāh says, "*But verily over you (are appointed angels) to protect you, kind and honorable, writing down (your deeds): They know (and understand) all that ye do*" (Al-Infitr, 82: 10-12).

"*On that Day will men proceed in companies sorted out, to be shown the deeds that they (had done). Then shall anyone who has done an atom's weight of good, see it! And anyone who has done an atom's weight of evil, shall see it*" (Al-Zilzal, 99:6-8).

"*Behold, two (guardian angels) appointed to learn (his doings) learn (and noted them), one sitting on the right and one on the left. Not a word does he utter but there is a sentinel by him, ready (to note it)*" (Q'af, 50:17-18).

Every individual should keep his/her own record so that he/she can realize the status of his/her activities and improve daily. Along with individuals, organizations also have to record the activities of their employees so they can appraise their employees' performance justly.

6.6. *Muḥāsaba*

The Arabic verbal noun *Muḥāsaba* means accounting. In mystical theology "*muḥāsabat al-nafs*" means "inward accounting, spiritual accounting." *Muḥāsaba* is the learned doublet of *ḥisab*. "Umar said, "Take account of your souls yourselves (*ḥasibu anfusakum*) before account is made of them, weigh them before they are weighed (in the divine balance, al-*Mizan*), and prepare yourselves for the supreme examination" (Tirmidhi, Sunan, 38). In this model, Muhasaba consists of the following factors.

6.6.1. *Evaluation (at-taqeem)*

In this step, the recorded results will be collected and examined qualitatively and quantitatively. Allāh (swt) declared in the Holy Qur'an that every atom of good and bad deeds will be evaluated at the Day of Judgment and nobody will be exempted: "*(It will be said to him:)Read thine (own) record: Sufficient is thy soul this day to make out an account against thee*" (Al-Isra, 17:14).

This indicates that people will evaluate their own works and superiors will evaluate the subordinates' works justly. A structured format will be used here to evaluate the performance of the employees.

6.6.2. Comparison and constructive analysis (muqarabatun wa tahleelulbinaa')

The outcomes will be compared with the set objectives and plans. Analysis should be constructive. In Islam, everything is Allāh's (swt) concern and falls within the realm of the religious imperatives. Allāh (swt) describes a faithful as: "*The Believers, men and women, are protectors one of another: They enjoin what is just and forbid what is evil: They observe regular prayers, practice regular charity, and obey God, and His Apostle. On them will God pour His mercy: For God is Exalted in power, Wise*" (At-Tawbah, 9:71). And directs us to: "*Help ye one another in righteousness and piety, but help ye not one another in sin and rancour: Fear Allah, for Allah is strict in punishment*" (Mayadah, 5:2).

Prophet (saw) said, "Muslims are like mirror for each other, whenever he sees any wrong with others, it is his duty to remove it" (Tirmidhi). In every sphere of life, Muslims should cooperate in good deeds and improve their activities through constructive analysis. In this way, Muslims can improve the quality of their tasks in personal life as well as social and organizational life.

6.6.3. Identifying strong and weak points (tahdeedu nuqaatilquu wati wadda'f)

SOWT analysis is needed to point out the strong points that will help *organizations* achieve their goals. A proper and thorough *SOWT* analysis helps organizations strategically. It is the backbone of an organization's strategic planning. Further, human beings are imperfect. They also have some weak points along with their strong ones. It is important to *recognize* the weak points as early as possible so that corrective measures can be taken to improve on those weaknesses.

6.6.4. Feedback (rududalfa'l)

Feedback plays an extremely important role in CI. Every person has a right to know what he/she has done. In an organizational context, if they do any good, they should be rewarded; and if there is any wrong, they may need counseling and mentoring to improve the quality of their tasks. Nobody is responsible for the faults of others as Allāh says, "*Namely, that no bearer of burdens can bear the burden of another; that man can have nothing but what he strives for*" (An-Nazm, 53: 38-39).

"*(Then) shall each soul know what it hath sent forward and (what it hath) kept back*" (Infitr, 82:5).

Therefore, the feedback should be fare and in time. A fare and timely feedback may motivate the employees to do better in future.

6.7. Shukr

6.7.1. Praise to Allāh (swt) (shukr)

Shukr means giving thanks to Allāh (swt). In good or bad situations, a good Muslim always thanks Allāh (swt). With anything good they say "Alḥamdulillāh" and facing difficulties, they say "Inna lillahi wa inna ilaihi rājiuun."

Allāh (swt) says, "*Any who is (so) grateful does so to the profit of his own soul: But if any is ungrateful, verily God is free of all wants, Worthy of all praise*" (Luqman, 31:12).

In organizations, there should be a culture of *shukr* to Allāh (swt) along with thanking their peers and superiors. If anything is good, the culture should be to say *Alḥamdulillāh*, and *jajak Allāh al khair*. This culture helps the employees to remember Allāh (swt) in all the time, and their relationship will be closer among each other and also with Allāh (swt).

6.7.2. Seeking forgiveness (al-istegfer)

Al-istegfer means to seek pardon for any mistake – intentional or unintentional. It demands that the person feels the mistake by heart, and commit not to repeat the same mistake. *Tawbah* urges the individual to do more good work to compensate for the wrong he/she has done, in addition, he/she needs to abstain from doing wrong. Allāh (swt) says, "*verily, if any of you did evil in ignorance, and thereafter repented, and amend (his conduct), lo! He is Oft- forgiving, Most Merciful*" (Anam, 6:54).

According to the Qur'anic description, the Holy Prophets Adam (as), Younus (as), Musa (as) and Zakariyah (as), all made mistakes and were blessed by Allāh (swt) because they made *tawbah*, and *istegfer*. Prophet Muhammad (saw) did not make any mistake as a prophet in his life but always made *istegfer* because within *tawbah/istegfer* there is hidden prayer for seeking help of Allāh (swt). There are three conditions of accepting *tawbah*: i) Feeling remorse, ii) feeling guilty, and iii) making a commitment not to repeat the mistake in future. Allāh (swt) says, "*When comes the Help of God, and Victory, and thou dost see the people enter God's Religion in crowds, celebrate the praises of thy Lord, and pray for His Forgiveness: For He is Oft-Returning (in Grace and Mercy)*" (Nasr, 110:1-3).

According to Islamic norm, *istegfer* is not only for committing mistake but also when there is any victory, Muslims also need to pray for forgiveness, and there should be a practice of making *istegfer* so that people do not commit the same mistake again and again. In this way, the individual, as well as the organization, will be able to improve the quality of their activities continuously.

6.7.3. Commitment for future improvement (al iltijaamu minajli mustaqbil)

Learning from the past, individuals and organizations have to be committed to improvement in future. This requires a good *nīyah*. Hence, the process goes back to the starting point of the cycle.

7. Prerequisites for Successful Implementation of the Newly Developed Model of CI

After developing the model, next question is how to implement this. To implement/operationalize the newly developed NAMS Cycle of CI, an organization needs to fulfill the prerequisites stated below:
1. Top management commitment
2. A strong motivated work team.

7.1. Top management commitment to implement the model

Ideally, everyone in the organization should be committed. However, according to Deming's research (1986) some 64% of the problems in quality are caused by management and the system they create. Therefore, commitment by management should come before that of the front-line workers. Because, in the organizations, usually, decisions are made by the top management body, so it is the first prerequisite that the top management should have a good intention and strong commitment to implement the newly developed model in their organization. Having a strong commitment, they need to ensure all the necessary arrangements to ensure the model runs through.

7.2. To develop a strong motivated work team to implement the model

Only top management commitment is not enough to achieve an objective unless the necessary steps are executed by the right group of people. "One of the more important ingredients, if not the most, for successful; high quality and excellent management is still the age-old one, that is human factor or personnel who actually performs all the tasks in the whole organization" (Alhabshi and Ghazali, 1994. p. 1). And to be successful in achieving the goals and objectives, mission and vision of an organization, top management should develop the manpower according to their needs by providing them proper

training and education. Therefore, the second but equally important prerequisite for implementing the newly developed CI model from Islamic perspective is to develop a strong motivated work team imbued with Islamic values.

The success of early Muslims and the companions of the Prophet (saw) are largely due to their culture and values. In a pre-Islamic era, there were some positive values, and Islam also reinforced them such as courage, generosity, and directness. Besides these, Jabnoun (2008) described other 18 values in Islam which were practiced by the companions of Prophet (saw). Ishak and Osman (2016) described (on the basis of systematic literature review) 18 Islamic values which are applicable in quality management. Most of those values are similar to the values described by Jabnoun (2008). From those Islamic values, the researcher is going to mention the values in Islam which will be required to inculcate into the employees when they will be trained up to implement the newly developed model of CI. The following is the marged list of required Islamic and professional values:

1. *Tawḥīd* and freedom from tyranny
2. *Taqwa*
3. *Istiqamah*
4. *Ikhlas*
5. *Iḥsān*,
6. Abstaining from *Ḥarām*
7. Unity of purpose
8. Humbleness
9. Trust
10. Brotherhood
11. Dignity and respect for other
12. Cost efficiency
13. Time efficiency
14. Quality/diligence
15. Flexibility
16. Fairness
17. Cooperation
18. Long-term orientation
19. Discipline
20. Participative management
21. Innovativeness/eagerness to learn and to share knowledge
22. Responsibility and accountability
23. Openness
24. Justice
25. Optimism
26. Consistence
27. Patience
28. Thankfulness
29. Tawakkul.

8. Conclusions

To make the conventional approach of CI more fruitful, PDCA/PDSA Cycle, Kaizen approach, JIT management, 5-S, Six Sigma, and DAMAIC have been developed, and the study is ongoing to improve the approaches. Organizations are concerned with learning and practicing these approaches to improve quality. In the Islamic approach, no supporting model has been developed regarding practices in organizations. In the present paper, the researchers have taken an initiative to develop a model of CI in TQM from Islamic point of view named NAMS Cycle, which is an inseparable part of *Shariah*

Compliance Management. To implement this model, a group of people (top level) from organizations will be trained about the implementation process of the model. Those trained group members will be able to train other members within the organization. After developing the model, the next step is to test the practicability of this model in organizations. Future research is needed to implement and evaluate the merits of the model.

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