

SUSTAINABLE ENTERPRISE EXCELLENCE: COHESION OF TQM/BE MODELS, ISO STANDARDS AND SUSTAINABILITY

Excelência Empresarial Sustentável: Coesão do Modelo TQM/BE, padrões ISO e Sustentabilidade

**Muhammad Tasleem¹, Nawar Khan¹, Syed Tasweer Hussain Shah¹,
Muhammad Saleem¹, Asim Nisar²**

1 National University of Sciences and Technology, Islamabad, Pakistan

2 Centres of Excellence in Science and Applied Technologies, Islamabad, Pakistan

E-mail: m.tasleem@ceme.nust.edu.pk; nwr_khan@yahoo.com;
tasweer2001@yahoo.com; ranasaleem096@yahoo.com; aasim_n@yahoo.com

Abstract: There is increased attention in sustainability and sustainable development practices in business industry since last decade. Organizations are under immense pressure to do business that substantially imparts value not only in economical dimension but also satisfy two other important dimensions of sustainability; social and environmental dimensions. In pursuance to excellence organizations have been adopting various strategies and models among which Total Quality Management (TQM) and Business Excellence (BE) models stand up most. However these TQM/BE models are focused to Excellence more in economical terms and less in social and environmental terms. This study attempts to examine the coherence of TQM/BE models with sustainability practices and evaluates the extent to which these models match sustainability criteria. The study proposes to develop a Sustainable Enterprise Excellence (SEE) framework based on TQM/BE models with desired cohesion of ISO standards, guidelines and sustainability reporting indices.

Keywords: Business excellence, ISO standards, sustainability, sustainable excellence, TQM

Resumo: Há uma maior atenção nas práticas de sustentabilidade e desenvolvimento sustentável no setor empresarial desde a última década. As organizações estão sujeitas a uma imensa pressão para fazer negócios que impelem substancialmente não apenas a dimensão econômica, mas também satisfazem outras duas dimensões importantes da sustentabilidade; dimensões sociais e ambientais. Em busca de organizações de excelência, adotaram várias estratégias e modelos entre os quais os modelos de Gerenciamento de Qualidade Total (TQM) e de Excelência Empresarial (BE) se levantam mais. No entanto, esses modelos TQM / BE estão focados em excelência em termos econômicos e menos em termos sociais e ambientais. Este estudo procura examinar a coerência dos modelos TQM / BE com práticas de sustentabilidade e avalia até que ponto esses modelos combinam critérios de sustentabilidade. O estudo propõe desenvolver um quadro de Excelência Empresarial Sustentável (SEE) baseado em modelos TQM / BE com a coesão desejada de padrões ISO, diretrizes e índices de relatório de sustentabilidade.

Palavras-chave: Excelência empresarial, padrões ISO, sustentabilidade, excelência sustentável, TQM

Recebido em: 17/09/2017

Aceito em: 24/12/2017

INTRODUCTION

The concept of sustainability in industries has gained fame and recognition in recent years (Linnenluecke and Griffiths, 2010). Authors in academics side and professionals in working side are much emphasizing now to adopt best practices concerning to sustainability within the organizational system that should ensure social integrity and protection of environment. The emergence of sustainability concepts has fundamentally broadened the scale of organizational mission and operations (Muhamad et al., 2014). It has been argued that organizations are not merely economical units but are responsible components of the society that impart their role for social and environmental progress or deterioration (Tasleem et al., 2015a). The governments, regulatory bodies, customers and other pressure groups putting in force the extended role of organizations. The organizations that realize their role for social and environmental integrity implement sustainable initiatives strategically and seek excellence in operations and growth parameters. Generally, economical progress has been measured as a key driver for success but alongside fulfilling the social responsibility and compliance to environmental regulations drive sustainable development and growth of the organization (Garvare and Isaksson, 2005). It has been reported that excellence can only be seen on the path of sustainable development; and the organization that grows in economical, social and environmental dimensions is actually a Sustainable Excellence Enterprise (Tasleem et al., 2015b).

In seek of excellence organizations have been using various strategies, models and techniques. Among these, Total Quality Management (TQM) can be accounted as the most famous and successful. TQM is a paradigm shift towards continuous improvement aiming to satisfy the needs of customers and all stakeholders. The word 'total' encompasses visioning and making improvement in all concerns; everything within the system and outside the system that come directly or indirectly in contact with organizational business. Proponents have presented various TQM models, however Business Excellence (BE) frameworks such as Malcolm Baldrige National Quality Award (MBNQA), European Excellence Award (EFQM model) and Australian Business Excellence Framework (ABEF) are considered the most suitable (Arumugam et al., 2009). These frameworks promote operational performance and corporate social responsibility practices with emphasis on sustainable results.

In literature, previously much has been written on the importance and significance of sustainable development and its perspective has been determined with quality approach (Broekhuis and Vos, 2003) and TQM/BE frameworks (Isaksson, 2006). It has been recommended to investigate the possibility and implications of coherence of these TQM/BE frameworks in viewpoint of sustainable practices, as the area has not been thoroughly explored. These frameworks assert 'Excellence' in operations and results but do not guarantee sustainability (Talwar, 2011) therefore it is imperative to examine the extent to which these frameworks match sustainability parameters. The amalgamation should result in simplified and single criteria based on sustainability principles (Edgeman and Eskildsen, 2012).

This paper attempts to present a comparison of famous TQM/BE models through detailed review of established framework elements in contrast to sustainability parameters. Further it gives analytical results; identifies findings to overcome the gaps and suggests recommendations to address futuristic implications and methodology for coherence. The study is useful in drawing a Sustainable Enterprise Excellence framework based on TQM/BE models.

LITERATURE REVIEW

Sustainability

The concept of sustainability in the business environment has gained popularity in recent years in both literature and practices (Linnenluecke and Griffiths, 2010). Researchers have emphasised the need to follow practices in the organizations that can lead to the path of sustainability. The emergence of concepts of sustainability has radically broadened the scope of organizational mission and operations (Muhamad et al., 2014). One of the major issues in business management is how to form and sustain competitiveness in the world market and thus to ensure long-term profitability (Corredor and Goñi, 2011). Various promotion strategies including quality and productivity related programs have been initiated and adopted by organizations in this regard. Some authors have argued that organizations need to adopt major cultural changes in response to meet environmental and social challenges (Welford, 1998). Few have suggested to up bring the organizational system and culture, other have directed the attention towards strategic policy making and planning for sustainable development (Dyllick and Hockerts, 2002).

The literature suggests that the success of an organization today goes through sustainability (Santos et al., 2012), and this emerging concept has widened and changed the business perspective and strategy from merely economical-financial to social and ecological environment as well (Hubbard 2009). In general, an improvement in the economical performance is measured as strong driver for success (Dale 1999), but now the social responsibility of business has been indicated among the key drivers of corporate performance (Zairi and Peters, 2002).

‘Sustainability’ can mean different things to different organizations. Some organizations do not differentiate between environment and sustainability while other organizations equate sustainability with economic growth (Bansal, 2002). Sustainability is an evolutionary concept that has been arisen as a consequence of adaptation to changing state of circumstances (Muhamad et al., 2014). Sustainable development has been defined as “development that meets the needs of the present generation, without compromising the ability of future generations to meet their own needs” (WCED 1987). It is therefore the role of business units to run and earn not at the cost of environment and the nature.

Elkington (1997) introduced the triple-p perspective. This perspective suggests that an organization has to find a balance between profit-oriented goals and the social and environment dynamics. The ‘bottom line’ is that an organization is not merely an economic-financial unit; at the same it is also responsible to generate benefits to social and ecological environment as well. In many countries governments, regulatory agencies and organizations have adopted sustainability and ‘green’ initiatives to deal with concerns about environmental changes and unwanted depletion of natural resources (Keeble et al., 2003).

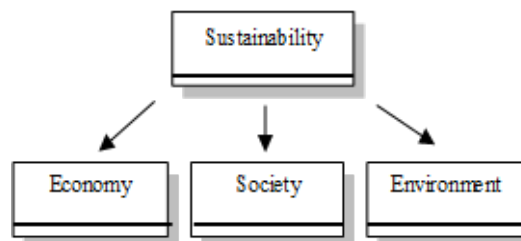


Figure 1. Three Dimensions of Sustainability (Source: Elkington 1997)

Foley (2005) explained that organizational aim for sustainability will be accomplished if it acts to maximize the quality of the products to customers, in consistent to meeting the needs and wants of non-customer stakeholders. This outlook perspective changes the traditional outset of business purpose and initiates a further evolution to advance criteria in the contemporary quality movement (Garvare and Johansson, 2010).

Johansson (2007) explained that in the sustainability perspective the organization has to satisfy the needs and expectations of multiple actors or stakeholders consisting customers, shareholders, co-workers, investors and many others. The needs of each stakeholder are different to others. Many stakeholders have stronger influence over organizational activities so engage the organization to perform organizational sustainability. But there are few other actors in the globe who can be affected by organizational activities but have lesser or week influence over organization. Therefore the gap between the organizational and global sustainability might be present.

Organizational Sustainability

Surviving and continually upgrading the business operations is a great challenge, especially when the business environment keeps changing. ‘Organizational Sustainability’ refers an ability of the organization to successfully address existing business needs and having agility to prepare and strategically respond to future business needs, market and operating environment. According to ISO 9004:2009; “the sustained success of an organization is considered as the result of its ability to achieve and maintain their long-term objectives that pass unfulfilled, in a consistent way, the needs and expectations of its stakeholders, in a balanced and long-term as well”.

Dyllick and Hockerts (2002) also proposed stakeholders based definition of organizational sustainability; ‘meeting the needs of a firm’s direct and indirect stakeholders (such as employees, customers, suppliers, shareholders, government, local communities etc.), without compromising its ability to meet the needs for future stakeholders as well’. A stakeholder can be identified as: “any identifiable group or individual who can affect the achievement of an organization’s objectives or who is affected by the achievement of an organization’s objectives” (RE & Reed 1985).

The conceptual thought is that a firm should assess its performance in relation to stakeholders including governments and local communities, not just those stakeholders with whom it has direct, transactional relationships (Hubbard, 2009). The concept of organizational sustainability has been reported by several authors by using triple bottom line (TBL) that divides results in economic, environmental and social performance (Elkington, 1999). The original issue of sustainability has developed from having a main focus on limits of economic activity to the realization that a balance must be found between business excellence and ecological sustainability (Edgeman, 2000). The three elements of sustainability are shown in Figure 1. It has been reported that strategically consideration and responding of the three dimensions by a firm can enhance its performance (Sharma and Vredenburg, 1998). Organizations that are narrowly focused on achieving economic outcomes alone might miss out sustainability innovations and business opportunities (Senge et al., 2001).

Zairi and Liburd (2001) define sustainability in the organizational perspective as “the ability of an organisation to adapt to change in the business environment to capture contemporary best practice methods and to achieve and maintain superior competitive performance”. Linnenlueke and Griffiths (2010) extended and used the term ‘corporate sustainability’ instead of ‘organizational sustainability’ and presented its closer examination and link to organizational culture. They identified a number of significant barriers and obstacles for change towards sustainability related culture. They highlighted barriers like organizational rigidity and presence of organizational subcultures in the organization.

Measuring Sustainability

Measuring performance is not easier, especially when ‘what is to be measured’ in the circumstances keeps changing (Tasleem et al., 2015a). Sustainability index is a performance indicator that drives the organization to design new products catering the needs and aspects to environment, economic and social aspects (Hassan et al., 2012). Some researchers are working on a sustainability measurement system that complements these quality management system principles. The European Corporate Sustainability Framework aims to expand the Business Excellence model to consider wider perspectives outside the organization. Hubbard (2009) has discussed the details of four conceptual approaches in measuring sustainable organizational performance. These are (1) adapting a macroeconomic system model (2) the quality approach (3) the Triple Bottom Line and (4) expanded Balanced Scorecard. Sustainability index is one of the indicators that allow company to design new products that cater to environment, economic and social aspects, which is main factor of sustainability requirements.

Sustainable Enterprise Excellence

The fundamental concept of excellence in business theory outlines the basis for achieving sustainable organizational excellence. Excellent organizations achieve and sustain outstanding levels of performance that meet or exceed the expectations of all their stakeholders. As an organization or enterprise its ability to pursue, achieve and maintain excellence makes it a Sustainable Excellence Enterprise (Tasleem et al., 2015b). An SEE organization, can exist in different sizes and shapes, but can effectively operate in diverse environments with diverse stakeholder constituencies. All SEE organizations share a common mindset that is based on a number of attributes and ways of working that separate them from the crowd.

The concept of SEE is new in literature and has been used by authors (Edgeman, 2013; Elmholt, 2013; Edgeman and Eskildsen, 2014) to describe its connotation in the perspective of organizational practices with regard to social, environmental and business dimensions. Edgeman (2013) described SEE as;

“Sustainable Enterprise Excellence balances the complementary and competing interests of key stakeholder segments, including society and the natural environment and increases the likelihood of superior and sustainable competitive positioning and hence long-term enterprise success that is defined by high-level organizational resilience and robustness and by continuously relevant and responsible governance, strategy and actions that produce superior results. This is accomplished through organizational design and function that emphasize innovation, enterprise intelligence & analytics, operational, supply chain, customer related, human capital, financial, marketplace, societal, and environmental performance. Sustainable Enterprise Excellence integrates ethical, efficient and effective (E3) enterprise governance with 3E (equity, ecology, economy) Triple Top Line strategy throughout enterprise culture and activities to produce Triple Bottom Line 3P (people, planet, profit) results that are simultaneously pragmatic and innovative and that provide foresight suggestive of next best practices and sources of competitive advantage.”

SEE Strategies

Organizations develop and adopt different strategies to achieve certain missions and goals. To become a successful SEE organization, the organizations will require to plan and focus on the targets related to all aspects of business practices. Organizations operate in unpredicted market environments with varying modes of customers. The risks can be converted to opportunities with excellent planning and execution processes.

In pursuance to success, organization can adopt various strategies including cost efficiency, quality, productivity, innovation, benchmarking and many more. These strategies can be used in isolation, integration or in sequential form. Total Quality Management (TQM) can also be a preferred organizational strategy to attain excellence. Breja (2012) advocated that sustainability of excellence is linked between the business strategy, quality strategy and the positive effect of TQM. Authors have emphasized to augment TQM or business excellence frameworks for SEE strategy (Talwar, 2011; Elmholt, 2013). There is also much emphasize over the use of environmental management standards and guidelines to incorporate sustainable development practices.

One of the major reasons to use TQM or business excellence framework strategy is that these frameworks or models not only outline criteria for excellence in results but also overcast a holistic view of business practices and performance. Since sustenance cannot be maintained if a single a business aspect is neglected to address, therefore it is imperative to outline SEE framework on the basis of some holistic business models.

TQM

Total Quality Management (TQM) is a field of philosophy that has been evolved from quality management and quality assurance system. The basic premise and purpose of TQM is the continuous improvement in operational activities, for achieving growth in production and sales with higher level of satisfaction of customers and other associated stakeholders. TQM therefore always evolves along with the changes in the business environment. TQM can be framed as a way of working that largely focuses on realizing customers' needs and expectations with continual improvement approach through a total system perspective. In recent days the scope of TQM has been enlarged and various elements, which lie outside the organizational boundaries, have to be managed directly or indirectly under its umbrella. Organizations cannot sustain in excellence mode until ensuring implementation of environmental standards and practices, and recognizing and performing societal role positively.

Almost all of the countries in the world have established and implemented their own national quality award (NQA) schemes which are dated from different times. Talwar (2011) has listed one hundred awards in his study. Mostly these NQA systems have been established under some respective ministry of economic development or through other governmental or regulatory agency, but at the same the role of the industrial and research and development sectors is also imperative in such initiatives.

Nearly all the awards contour the principal objective of boosting operational performance of the organizations and industries to produce quality goods or services with TQM approach. TQM as award system has been successfully adopted by every kind of sector. There are private sector organizations (Heras, 2006; Kaynak, 2003; Powell, 1995) and public sector organizations (Kanji and Sa', 2007; Sharma and Hoque, 2002; Hammons and Maddux, 1990) that implemented TQM and achieved success (Tari and Espinosa, 2007). The prime focus, somehow, is being slightly shifted from the outset of an award or recognition towards gauging the running performance of the operations, and of the organization as a whole, against higher objectives for excellence. In this view foundation of self-assessment methodologies is a march towards continuous improvement process (Williams et al., 2006; Ford and Evans, 2006; Ritchie and Dale, 2000). Literature suggests that self-assessment using TQM award model has been carried out by private (Samuelsson and Nilsson, 2002), public (Sharma and Hoque, 2002) and by both type of organizations (Wilkes and Dale, 1998).

Business Excellence Models

Over time TQM has evolved into a much broader concept and because many Business Excellence (BE) models are inspired by TQM the terms are often used indiscriminately (Klefsjö et al., 2008). Different researchers and authors argued that the relationship of elements used in quality awards describe best TQM practices and proposed these award systems can be considered as valid TQM frameworks (Curkovic et al., 2000; Bou-Llusar et al., 2009).

Malcolm Baldrige National Quality Award (MBNQA)

A major step forward in quality management was made when the Malcolm Baldrige Award framework was developed in the United States in 1987. The vast need for the generation of appropriate standards and guidelines for TQM implementation kept the countries in struggle to set models for self-appraisal and managing quality practices and issues. The first such effort was made in the United States in the form of comprehensive criteria in pursuing world-class quality. The Congress launched the Malcolm Baldrige National Quality Award (MBNQA) in 1987. The aim was to generate quality awareness, endorse quality achievements and to propagate successful strategies. This award is granted annually after the assessment of the applicant organizations separately in five categories.

This framework represents a comprehensible and internationally recognized TQM/BE model (Israr and Gangele, 2014). The award criteria are non-prescriptive and address seven elements or categories with several sub-categories.

European Quality Award (EQA)

The European quality award (EQA) model was developed by the European Foundation for Quality Management (EFQM) in 1992. The EFQM was found in 1988 by fourteen giant European businesses in order to raise competitiveness through TQM philosophy and practices. The EFQM formulated a comprehensive model in facilitation of the purpose. The award model and the allied self-assessment approach have directed a new wave in the quality movement.

The EFQM Model was launched in 1992 as a framework for the assessment of the organizations competing to win EQA. Now it is the most widely used TQM/BE framework in Europe and it has been adapted by many countries of other regions as their national quality award. Studies have shown that the EFQM approach provides a broader framework for evaluation and improvement of quality and business success.

Core Concepts of TQM/BE Models

The holistic view of TQM/BE consists of multiple core concepts as identified by Miguel & Cauchick (2005) and Porter and Tanner (2004). These core concepts establish the premise of business purpose for the organizations and reflect their shades in award criteria. TQM/BE models are framed on the core concepts that mainly include;

- Leadership
- Customer
- Learning
- Innovation
- People
- Partnership
- Fact-Based Management
- Social Responsibility
- Results

Pojasek (2007) has presented following core principles of a universal framework for business sustainability;

- Leadership
- Stakeholders
- Systems Thinking
- People
- Continuous Improvement
- Information and Knowledge
- Business Responsibility
- Sustainable Results

Benefits of Using the TQM/BE Models

Many organizations across the world are utilizing TQM/BE models. Some may participate formally in a national award program, but most simply use these as a way to improve their operational performance. Others use to get impact on financial gains. Various studies have confirmed the link of the financial and operational performance with TQM/BE frameworks (Kanji and Sa 2007; Corredor & Goni 2011).

TQM/BE models and criteria have now extensively been used for self-assessment (Wilkes and Dale, 1998; Tari and Espinosa, 2007). Organizations identify the gaps through self-assessment process and implement the improvement areas to potentially attain competitive edge in market. The implementation of TQM/BE models also result in improved customer satisfaction and employee motivation and performance (Tasleem et al., 2015a).

METHODOLOGY

In this paper theoretical approach has been adopted as a method to investigate the concepts of sustainability and business excellence models through literature studies. The detailed literature review highlights the important aspects of these concepts which further establish the need to identify the degree of coherence.

The study takes the most three famous and recognized TQM/BE models; MBNQA, EFQM and ABEF models; and attempts to search their realization with modern sustainability practices in perspective to build SEE based organizations. The study is carried out with literature review and analytical comparison of the models and, further it discusses the results in the form of findings and gaps. The study then proposes a path to develop an SEE framework with slight alterations to existing TQM/BE models.

COMPARISON AND DISCUSSION

This section draws the comparison of TQM/BE models; MBNQA, EFQM and ABEF models; in relation to sustainability concepts and principles. The comparison highlights few gaps and findings which are discussed below;

-The MBNQA framework does not have any element that prominently identifies sustainability practice or performance, as the EFQM and the ABEF frameworks do.

-Though sustainability aspects are presented at few places in the MBNQA criteria, however its demonstration in totality is very vague. There is requirement for sustainability strategy and deployment in the 'Leadership' category and 'Leadership and Governance Outcomes'. The 'Leadership' category illustrates further parts 'Governance and Societal Responsibilities' and 'Creating a Sustainable Organization' thereby represents sustainability. However this refers to economic sustainability.

-There is one of the requirements to ensure ethical behavior and societal responsibilities in the "Governance and Societal Responsibilities" part which can be considered for the social element of sustainability. Similarly there is requirement to maintain safe, secure and supportive work climate in the 'Workforce Focus' category.

-In the MBNQA criteria, only 85 points can be seen to fall under social and environmental sustainability equivalent to 8.5% of total points (Elmholt, 2013).

-The sustainability aspect is more prominent in the EFQM framework and is incorporated the 'Society Results' category thereby representing sustainability. The category carries 100 points and is subdivided in two parts; 'Perceptions' (75 points) and 'Performance Indicator' (25 points). Edgeman and Eskildsen (2012) argue that 'Perceptions' might not represent the sustainability initiatives but 'Performance Indicator' deals with sustainability dimension.

-In the EFQM criteria, only 25 points or 2.5% accounts for sustainability which is more related to social dimension.

-Comparatively, the latest ABEF 2011 version is more focused on the sustainability aspects which superseded 2007 version. The 'Customers' category has been replaced with 'Customers and other Stakeholders' category and the 'Success and Sustainability' category with 'Results and Sustainable Performance' category. The criterion holds a holistic view of the enterprise and is more focused on sustainability in terms of performance and results.

PROPOSED SEE FRAMEWORK

The current TQM/BE models present holistic view of business practices, however these do not completely overcast social and environmental dimensions of sustainability practices. Nevertheless a single framework cannot contain the whole elements since there are large number diversified models and guidelines. But the existing TQM/BE models lack in social and environmental measures, in particular, and in sustainability measure, in general. The existing TQM/BE models can be expanded to single SEE framework with appropriate alterations.

Pojasek (2007) recommended a universal business sustainability framework and asserted that various elements of sustainability can be captured in a framework that has application to all organizations. Talwar (2011) emphasized to establish TQM/BE based sustainability framework. Few researchers have worked to propose sustainability measurement system that complemented TQM frameworks. The European Corporate Sustainability Framework endeavors to extend the BE model to incorporate other dimensions external to the organization. Olaru (2010) carried out research study, with focus on SMEs from Romania, on the integrated approach to sustainability principles with European Excellence Model for the objective to assess the satisfaction degree of requirements relating to human health and environmental protection.

Authors of this paper suggest that an SEE framework can be developed on the basis of TQM/BE criteria while increasing the proportions of sustainability measures and practices into it. ISO standards and guidelines, for example, Environmental Management System (EMS) standard (ISO 14000) or ISO guidelines on sustained performance (ISO 26000), can be useful if few of its vital clauses are included to strengthen existing TQM/BE models. Similarly a few major sustainability indices can be incorporated in the 'Results' category of existing TQM/BE models. A proposed path to develop an SEE framework is presented as Figure 2.

The very reasons to couple TQM model and sustainability approaches can be numerous. First reason is intuitive; both quality and sustainability carry positive meanings. The goals related to the achievement of best quality and long-term sustainability are the need of the time and appeal to everybody. Secondly both concepts focus on stakeholder value rather on shareholder value. Sustainable development supplements to create value not only for the present stakeholders, but also for the generations of stakeholders yet to come (Latham, 2012). Thirdly both concepts demonstrate mechanism to create and assess 'impacts' and 'results' vital to business activities. The organizational performance is measured in non-financial areas as well. However the extent and scope carry dissimilarities between each model to certain degrees.

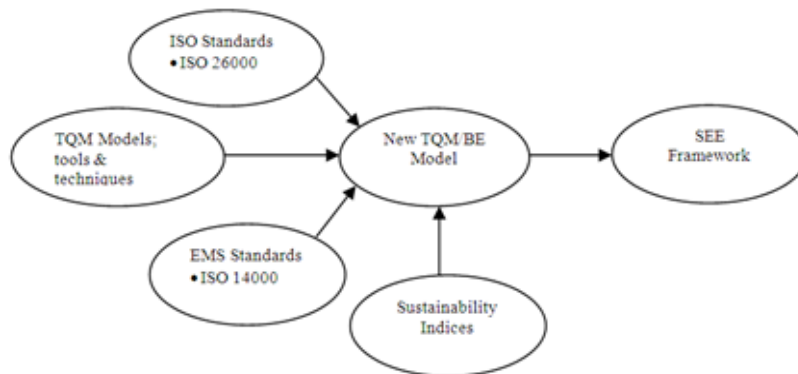


Figure 2. Proposed path to SEE Framework (source: own)

ISO 14001 – Environmental Management System (EMS) Standard

Authors have related the impact of environmental characteristic with TQM and performance (Fuentes-Fuentes et al 2004) and have suggested to progress sustainable development by using ISO 14001 standard (MacDonald, 2005).

ISO - The International Organization for Standardization – is an international body that develops series of standards on multiple practices associated to management or technical workmanship. It collaborates more than 160 national standards institutes, as its members, from all over the world. It has more than 18,000 standards grouped in different series like ISO 9000 (quality management) or ISO 14000 (environmental management). ISO 9001 and ISO 14001 are among the best known and internationally most widely used standards.

ISO 14000 is a family of standards that cover environmental management concerns where ISO 14001 represents the environmental management system (EMS). ISO 14001 is well recognized EMS framework and has been adopted as a national standard by a large number of ISO member countries. Implementation of ISO 14001 EMS framework leads to address environmental sustainability practices that can assist organizations to achieve sustainable performance in world market.

The ISO 14001 EMS standard addresses organizational processes, products and services relating to environmental performance through (Plan-Do-Check-Act) PDCA methodology. There are total eight main clauses in the standard, in which last five clauses are for implementation and auditing. The standard requires communicating environmental policy, establishing and monitoring environmental objectives, establishing procedures and maintaining records, and controlling environmental losses with focus on continual improvement. Implementation of ISO 14001 EMS framework leads to address environmental sustainability practices that can assist organizations to achieve sustainable performance in world market.

ISO 26000 - Social Responsibility Guidelines

ISO 26000 is new addition in the family of ISO standards. The standard was created with the involvement of area specialists and experts of more than 90 countries and 40 regional organizations. Its clauses are set to opt on volunteer basis and not for the purpose of certification, regulatory or contractual use. The standard intends to describe the guidance on social responsibility; therefore, it does not specify particular requirements to comply.

ISO 26000 is a voluntary standard which can be opted by the organizations to objectively address social development. The standard intends to promote common understanding on social responsibility and its principle practices. ISO 2000 exhibit principles of social responsibility as: accountability, transparency, ethical behavior, respect for stakeholder interests, respect for the rule of law, respect for international norms of behavior, and respect for human rights.

The standard addresses seven core subjects including; organizational governance, human rights, labour practices, the environment, fair operating practices, consumer issues, and community involvement and development. There are total seven clauses in the standard which support systematic adoption of its practices. Clause 3 gives the understanding on the characteristics of social responsibility and its relationship with sustainable development. Clause 4 exhibits social responsibility principles necessary to address core subjects and issues. Clause 5 imparts the recognition of social responsibility and the identification and engagement of stakeholders. Clause 6 gives the requirement of core subjects and issues of social responsibility. Clause 7 gives guidance on the integration of core subjects and issues throughout the organization.

Sustainability Indices

There are various initiatives such as the Global Reporting Initiative (GRI), the Dow Jones Sustainability Index (DJSI), Environmental Performance Index (EPI), the AA1000 AccountAbility series, and SustainAbility that look beyond shareholder value and exhibit measurement of social and environmental impacts for sustainability performance.

The Global Reporting Initiative

The GRI Sustainability Reporting exhibits a standardized approach to disclosure, transparency and comparability among companies that use it. The GRI Reporting mechanism sets out the principles and measures that organizations can use to gauge and report their economic, social and environmental performance. The GRI guidelines propose a large number of indicators within economic, environmental and social performance, but do not mention any quality indicators. The GRI indicators in the economic dimension are mainly traditional ones based on company net sales (Isaksson, 2006).

The Environmental Performance Index

The Environmental Performance Index (EPI) ranks how well countries perform on high-priority environmental issues in two broad policy areas: protection of human health from environmental harm and protection of ecosystems.

The Dow Jones Sustainability Index

Dow Jones Sustainability Index (DJSI) is an index that is consistent with the aforementioned sustainability concepts and the TBL accounting management (economic, social and environmental benefits). The index is used to rank the companies according to their TBL results. The DJSI was introduced in 1999 by the Dow Jones Indexes of New York and Sustainable Asset Management (SAM) Group of Zurich and cover more than 10% of top companies that appear in the Dow Jones Global Index and pursue environmental, social and economic sustainability reporting (Christofi, 2007).

The DJSI has been introduced and used to give options to many investors in finding the socially responsible investment opportunities. DJSI is estimated and evaluated through many sources and assessment of documents including SAM questionnaires distributed to CEOs and head of investors, annual financial reports, sustainability reports, health and safety reports, environmental reports, social reports, special reports, company brochures and website, media and stakeholder reports, press releases, public articles, personal contacts and stakeholder commentary data available over the past year.

The AA1000 AccountAbility Standards Series

AccountAbility has established series of AA1000 standards. The AA1000PS Principles provide the foundation for understanding of performing sustainability practices; the AA1000AS (2008) help to achieve sustainability assurance and the AA1000SES (2005) develops accountable stakeholder engagement process.

The AA1000 AccountAbility demonstrates three Principles which are: The Foundation Principle of Inclusivity, the Principle of Materiality and the Principle of Responsiveness. The Principle of Inclusivity determines and engages all the stakeholders. The materiality process develops the recognition of the most significant and relevant material issues for an organization and its stakeholders. Responsiveness determines the decisions, actions and performance related to material issues.

The AA1000 AccountAbility Principles aim to develop an accountable and strategic approach to sustainability among the organizations that opt to practice. These principles and practices become helpful in understanding, managing and improving organizational sustainability performance.

AA1000AS (2008) assurance standard supports to align the non-financial as well financial aspects for sustainability reporting. It provides means to evaluate how organizations manage sustainability and achieve resulting performance.

The AccountAbility AA1000 series standards demand that an organization fully identifies and engages stakeholders requirements and completely understands the sustainability issues that can impact its economic, social, environmental, and long-term financial performance and then to develop responsible business strategies and accountable performance objectives.

Sustainable Organization Performance Index

Hubbard (2009) used Sustainable Organization Performance Index based on Sustainable Balance Scorecard and Orlando's index of sustainable organizational performance. Orlando's index approach has been trialed in the US city of Orlando. He argued that a single sustainability indicator is intuitively attractive and consistent with single economic indicators for GNP or GPI. Organizations are already under stress to make way to measure and report their environmental, social and economic performance. It is expected that organizations will start measuring sustainable performance soon. This will require firms to adopt a stakeholder view of value, and develop strategies that take into account more than simply shareholder performance.

CONCLUSION

Organizations, all over the world, have been struggling to get excellent performance in business activities through applications of best practices. The world leading organizations which are currently at par are now concerned to sustain their excellence and to become Sustainable Excellence Enterprise (SEE). Therefore development and implementation of SEE framework is imperative. TQM and BE frameworks have been proven strategies for improving organizational excellence and performance. These TQM/BE models can also be useful to augment sustainability practices.

Authors and researchers have emphasized to use and extend existing TQM/BE models to incorporate sustainability measures. This paper presents the highlights of the importance of sustainability and TQM practices and investigates the coherence of TQM/BE models with sustainability concepts. The findings are discussed which assert that existing frameworks are to be revisited to incorporate more scorings for sustainability practices, related to social and environmental aspects and sustainability indices. A path to develop an SEE framework is proposed with suggested areas.

This paper is limited to the use of theatrical based approach to develop a TQM/BE model based SEE framework. Empirical examination of the proposed framework methodology can be carried out as future research to investigate its practical implications.

REFERENCES

- Arumugam, V., Chang, H.W., Ooi, K.B., & Teh, P.L. (2009). Self-assessment of TQM practices: A case study, *The TQM Magazine*, 21(1), 46–58.
- Bansal, P. (2002). The corporate challenges of sustainable development, *The Academy of Management Executive*, 16, 2, 122–131.
- Bou-Llusar, J.C., Escrig-Tena, A.B., Roca-Puig, V., & Beltrán-Martín, I. (2009). An empirical assessment of the EFQM excellence model: Evaluation as a TQM framework relative to the MBNQA Model, *Journal of Operations Management*, 27(1), 1-22.
- Broekhuis, M., & Vos, J.F.J. (2003). ‘Improving organizational sustainability using a quality perspective’. MSc dissertation. Groningen: University of Groningen.
- Breja, S.K., Banwet, D.K., & Iyer, K.C. (2011). Developing a creative? inventive framework for strategic management and sustainable business excellence, *International Journal of Productivity and Quality Management*, 8(1), 1-32.
- Corredor, P., & Goñi, S. (2011). TQM and performance: Is the relationship so obvious?, *Journal of Business Research*, 64(8), 830–838.
- Christofi, A., Christofi, P., & Sisaye, S. (2012). Corporate sustainability: historical development and reporting practices. *Management Research Review* 35(2), 157-172.
- Curkovic, S., Vickery, S., & Dröge, C. (2000). Quality related action programs: their impact on quality performance and firm performance, *Decision Sciences*, 31(4), 885-902.
- Dale, B.G., Van der Wiele, A., & Van Iwaarden, J.D. (1999). TQM: An overview, *Managing Quality*, 3–33.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability, *Business Strategy and the Environment*, 11(2), 130–141.
- Edgeman, R. (2013). Innovation & governance driven sustainable enterprise excellence & resilience. Working paper. *Corporate Governance: The International Journal of Business in Society*.
- Edgeman, R.L. (2000). Best business excellence: An expanded view, *Measuring Business Excellence*, 4(4), 15–17.
- Edgeman, R., & Eskildsen, J. (2014). Modeling and assessing sustainable enterprise excellence, *Business Strategy and the Environment*, 23(3), 173-187.
- Edgeman, R., & Eskildsen, J. (2012). Viral innovation: integration via sustainability and enterprise excellence, *Journal of Innovation and Best Business Practice*, 13.

Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century*. Oxford, UK: Capstone Publishing Limited.

Elkington, J. (1999). Triple bottom line: implications for the oil industry, *Oil Gas Journal*, 97(50), 139–141.

Elmholt, K.L., & Sondrup, A. (2013). ‘Sustainable enterprise excellence from a SME perspective: a theoretical approach’. Master degree dissertation. Aarhus: Aarhus University.

Foley, K.J. (2005). *Meta management: A stakeholder/quality management approach to whole-of-enterprise management*. Standards Australia.

Ford, M.W., & Evans, J.R. (2006). The role of follow-up in achieving results from self-assessment processes, *International Journal of Quality & Reliability Management*, 23(6), 589-606.

Fuentes-Fuentes, M.M., Albacete-Sáez, C.A., & F.J. Lloréns-Montes. (2004). The impact of environmental characteristics on TQM principles and organizational performance, *Omega* 32(6), 425-442.

Garvare, R., & Johansson, P. (2010). Management for sustainability—a stakeholder theory, *Total Quality Management*, 21(7), 737–744.

Hammons, C., & Maddux, G. (1990). Total quality management in the public sector, *Management Decision*, 28(4), 15-19.

Hassan, M.F, Saman, M.Z.M., Sharif, S., & Omar, B. (2012). An integrated MA-AHP approach for selecting the highest sustainability index of a new product, *Procedia-Social and Behavioral Sciences*, 57, 236–242.

Heras, I. (2006). How quality management models influence company results: Conclusions of an empirical study based on the Delphi method, *Total Quality Management & Business Excellence*, 17(6), 775-94.

Hubbard, G. (2009). Measuring organizational performance: Beyond the triple bottom line, *Business Strategy and the Environment*, 18(3), 177–191.

Isaksson, R. (2006). Total quality management for sustainable development: Process based system models, *Business Process Management Journal*, 12(5), 632-645.

Israr, M., & Gangele, A. (2014). ‘A comparative analysis between small and medium scale manufacturing company through total quality management techniques’. Paper presented in International Conference on Industrial Engineering and Operations Management. Bali, Indonesia.

- Johansson, P. (2007). 'Quality management and sustainability- Exploring stakeholder orientation' Master degree dissertation. Sweden: Lulea University of Technology.
- Kanji, G., & Sa', P. (2007) Performance measurement and business excellence: the reinforcing link for the public sector, *Total Quality Management & Business Excellence*, 18(1), 49-56.
- Kaynak, H. (2003). The relationship between total quality management practices and their effects on firm performance, *Journal of Operations Management*, 21(4), 405-35.
- Keeble, J.J., Topiol, S., & Berkeley, S. (2003). Using indicators to measure sustainability performance at a corporate and project level, *Journal of Business Ethics*, 44(2-3), 149-158.
- Klefsjö, B., Bergquist, B., & Garvare, R. (2008). Quality management and business excellence, customers and stakeholders: Do we agree on what we are talking about, and does it matter?, *The TQM Journal*, 20(2), 120-129.
- Linnenluecke, M.K., & Griffiths, A. (2010). Corporate sustainability and organizational culture, *Journal of World Business*, 45(4), 357-366.
- MacDonald, J.P. (2005). Strategic sustainable development using the ISO 14001 standard, *Journal of Cleaner Production* 13(6), 631-643.
- Miguel, P., & Cauchick, A. (2005). A comparison of quality and business excellence programs in the world, *Revista de Ciencia & Tecnologia*, 35-46.
- Muhamad, M.R., Ebrahim, Z., & Hami, N. (2014). The influence of innovation performance towards manufacturing sustainability performance. Paper presented in International Conference on Industrial Engineering and Operations Management. Bali, Indonesia.
- Pojasek, R.B. (2007). A framework for business sustainability. *Environmental Quality Management*, 17(2), 81-88.
- Porter, L., & Tanner, S. (Eds.) (2012). *Assessing business excellence*. London: Routledge.
- Powell, T.C. (1995). Total quality management as competitive advantage: A review and empirical study, *Strategic Management Journal*, 16(1), 15-37.
- RE, F.R.R., & Reed, D.L. (1983). Stockholders and stakeholders: A new perspective in corporate governance, *California Management Review*, 25(3), 88-106.
- Ritchie, L., & Dale, B.G. (2000). Self-assessment using the business excellence model: a study of practice and process, *International Journal of Production Economics*, 66(3), 241-54.
- Samuelsson, P., & Nilsson, L.E. (2002). Self-assessment practices in large organizations: experiences from using the EFQM excellence model, *International Journal of Quality & Reliability Management*, 19(1), 10-23.

- Santos, G., Rebelo, M., Barros, S., & Pereira, M. (2012). Certification and integration of environment with quality and safety—a path to sustained success, INTECH Open Access Publisher, 193–218.
- Senge, P.M., Carstedt, G., & Porter, P.L. (2001). Next industrial revolution, MIT Sloan Management Review.
- Sharma, U., & Hoque, Z. (2002). TQM Implementation in a public sector entity in Fiji: public sector reform, commercialization and institutionalism, *The International Journal of Public Sector Management*, 15(5), 340-60.
- Sharma, S., & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities, *Strategy Management Journal*, 19(8), 729–753.
- Talwar, B. (2011). Business excellence models and the path ahead, *The TQM Journal*, 23(1), 21-35.
- Tari', J.J., & Espinosa S.J. (2007). EFQM model self-assessment using a questionnaire approach in university administrative services, *The TQM Magazine*, 19(6), 604-614.
- Tasleem, M., Khan, N., & Masood, S.A. (2015a). Integrated role of TQM and technology management in organizational sustainability. Paper presented in International Conference on Industrial Engineering and Operations Management. Dubai, U.A.E.
- Tasleem, M., Khan, N., Masood, S.A., & Nisar, A. (2015b). Driving TQM/BE Model based Sustainable Excellence Enterprise Framework. Paper presented in International Conference on Operations Excellence and Service Engineering. Orlando, Florida, USA.
- WCED. (1987). World Commission on Environment and Development. Our common future. Oxford: Oxford University Press.
- Welford, R., & Jones, D. (1998). Beyond environmentalism and towards the sustainable organization, *Corporate Environmental Management 1—Systems and Strategies*, 237-257.
- Wilkes, N., & Dale, B.G. (1998). Attitudes to self-assessment and quality awards: a study in small and medium-sized companies, *Total Quality Management*, 9(8), 731-739.
- Williams, R., Bertsch, B., Wiele, A.V., Iwaarden, J.V., & Dale, B. (2006). Self-assessment against business excellence models: A critique and perspective, *Total Quality Management & Business Excellence*, 17(10), 287-300.
- Zairi, M., & Liburd, I.M. (2001). TQM sustainability—A roadmap for creating competitive advantage in integrated management. Paper presented in 6th International Conference on ISO 9000 and TQM. Ayr, Scotland.
- Zairi, M., & Peters, J. (2002). The impact of social responsibility on business performance, *Managerial Auditing Journal*, 17(4), 174–178.