Total quality management and corporate culture: constructs of organisational excellence

Z. Irani a,*, A. Beskese b, P.E.D. Love c

a Information Systems Evaluation and Integration Network Group (ISEing), Department of Information Systems and Computing, Brunel University, Uxbridge, Middlesex, UK

b Department of Industrial Engineering, Istanbul Technical University, 80680, Macka, Istanbul, Turkey

c School of Management Information Systems, Edith Cowan University, Churchlands Campus, Perth, WA 6018, Australia

Abstract

There is a need for an appropriate culture to support the scope of Total Quality Management (TQM). Customer focus, systems approach, teamwork, involved management and continuous improvement are the aspects of TQM that facilitate improved organisational success, growth, and competitiveness. Many companies are now complementing continuous improvement with innovation, which is seen as the successful exploitation of new ideas. A clear synergy appears between these two corporate success factors as they are often integrated under an appropriate corporate culture for exploitation. The results of this can support substantial improvements in business performance and competitiveness of the company. With this in mind, this paper discusses the concept of corporate culture, places this social construct within the arena of TQM, and highlights the relationships that exist among culture, quality, and competitiveness using a case study.

Keywords: Corporate culture; TQM; Continuous improvement; Case study.

1. Introduction

In order to be a competitor in the global market, companies must study the leading examples of quality. The key to success as identified by these examples is to recognise the importance of innovation and quality; thus, the concept of Total Quality Management (TQM) should be the driving force behind the changes taking place within today’s organisations. There is no single best approach to implementing the TQM philosophy. An approach unique to the needs and culture of the organisation must be developed. (Sohal and Terziiovski, 2000)

Many researchers, if not all, agree that Total Quality is somehow linked to organisational culture. The term “Total Quality Culture” is frequently used in the literature, but there still exists a disagreement on whether TQM involves changing a culture to achieve total quality or whether it means using the existing culture. Many companies undertaking TQM programmes have, in recent times, switched their attention from applying the tools and techniques of TQM to attempting to align their TQM programme with their prevailing organisational culture (Maull et al., 2001). Advocates of organisational excellence eschew the problems associated with achieving a flexible, adaptable and committed workforce in organisations (Reeves and Bednar, 1994). This is because they lack a dominant and coherent culture, in which values, commitments and approaches are likely to diverge, which can present a barrier to co-operation, joint action and problem solving across the organisation. Thus, managers should periodically analyse the relevance of corporate values to the evolving organisational environment. As a result, enabling managers to adapt and nurture the constructs that support the development of an aspired organisational culture.

This paper discusses the concept of corporate culture, and places this social construct within the arena of Total Quality Management (TQM). Using a case study from Velden Engineering Ltd, an award-winning UK company, the relationship between culture and strategy are discussed. In addition, the paper identifies individual and organisational characteristics that facilitated best practice
through the adoption of strong leadership and organisational management.

2. Total quality management

TQM can be defined as the agreed company-wide and plant-wide operating work structure, documented in effective, integrated technical and managerial procedures, for guiding the co-ordinated actions of the people, the machines, and the information of the company and plant in the best and most practical ways to assure customer quality satisfaction and economical costs of quality (Zairi, 1991). Thus, it can be concluded that TQM itself, is the desired culture of an organisation committed to customer satisfaction through continuous improvement. Many organisations have already realised that their only way of surviving in today’s competitive global market is to become a successful “total quality organisation” (Bohoris, 1995). Similarly, it is noted in the literature that there is significant association between TQM activities and organisational competitiveness. (Corbett and Rastrick, 2000; Najmi and Kehoe, 2000; Pool, 2000; Prabhu et al., 2000; Terziovski and Samson, 2000; Zairi and Whymark, 2000a; Zairi and Whymark, 2000b; Zairi et al., 1994) Since Total Quality Management calls for continuous improvement, it will be inevitable that new concepts for maintaining innovation and quality will emerge to lead organisations to the next century and beyond (Liu and Kleiner, 2001).

Research undertaken by Corbett and Rastrick (2000) suggests that most quality tools associated with TQM do not generally produce advantage, but certain tacit behavioural features—such as open culture, employee empowerment, and executive commitment—can produce advantage.

3. Corporate culture

Hofstede (1991) states that corporate culture has been a fashionable topic since the early 1980s. At a time when the management literature began to popularise the claim that the excellence of an organisation is contained in the common ways by which its members have learned to think, feel and act. For many years, especially during the last two decades, corporate culture has been acknowledged as an important component of organisational success. (Gore Jr, 1999; Corbett and Rastrick, 2000)

The term corporate culture is one of the most frequently used clichés, with precise definitions varying within the normative literature. Johnson and Scholes (1984) define corporate culture as being “the deeper level of basic values, assumptions and beliefs, that are shared by members of an organisation”. These values, assumptions, attitudes and beliefs are reflected within an organisational culture. In fact, they are manifested in many ways such as the rites, rituals and routines that take place within an organisation, the language used, the stories, legends and myths that are told and re-told, the symbols, logos and artefacts that are found throughout the company. Therefore, an organisational culture is considered to be a set of collective norms that govern the behaviour of people within the company. An organisational culture is characterised by members’ shared ability to understand specific concepts within the organisation (Karathanos, 1998).

At a basic level, culture may be defined as “the way we do things around here” or “the way we think about things around here” (Williams et al., 1994). The key feature is that culture is taught to new members as the correct way to behave, thus perpetuating organisational survival and growth. (Maull et al., 2001) A widely accepted definition of culture including this feature is:

“The pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaption and internal integration, and that have worked well enough to be considered valid, and, therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.” Schein (1984)

Essentially, corporate culture is a soft, holistic concept with, however, presumed hard consequences. Hofstede (1991:p18) refers to such culture as “the psychological assets of an organisation, which can be used to predict what will happen to its financial assets in five years time”.

Several researchers, such as Kotter and Heskett (1992) have concluded that corporate culture may hurt or help a firm’s performance. For example, in Fortune’s all star ranking, General Electric earned the highest honour in 1998 since it has spent years developing a corporate culture in which executives have the autonomy to swoop in and take advantage of sudden shifts in markets (Kahn, 1998).

A strong organisational culture enables the smooth flow of information and nurtures harmony among its members (Karathanos, 1998). Improvements in work culture and internal communication thus improve customer (internal and external) satisfaction, which is essential for market growth and profitability in the long term (Lakhe and Mohanty, 1994). A strong corporate culture will assist members of a diverse workforce in establishing a super-ordinate organisational identity, and in identifying shared, super-ordinate goals. Noteworthy, however, Schneider and Northcraft (1999) suggest that such cultures may be difficult to cultivate.

Successfully reacting to changes in the global marketplace requires a flexible and adaptable corporate culture.
(Elashmawi, 2000). Yet, advocates of organisational excellence tend to obscure the problems associated with achieving a flexible, adaptable and committed workforce in organisations. This is because they seem to lack a dominant and coherent culture, where values, commitments and approaches are likely to diverge and where the divergence seems likely to present a barrier to cooperation, joint action and problem solving across the organisation (Barratt, 1992). Thus, according to Karathanos, (1998) managers should periodically analyse the relevance of corporate values within their organisations to examine how adaptive it is to environmental changes. With this in mind, managers need to gain an understanding about how they can promote a culture that is adept to learning on how to change through participation, teamwork and empowerment of workers—all of which are considered necessary for effective quality management.

4. TQM and corporate culture

While TQM has separate origins from the culture movement, the two fields have recently converged with the idea that to achieve “excellence” and “quality”, it is necessary either to change or work with the culture of an organisation (Lewis, 1996). Implementation of TQM requires changes to the shared assumptions, frames of reference, and understanding that most organisations have developed through interaction with their environment. These changes will impact basic beliefs and values that employees hold about work. (Ngowi, 2000) This is why many companies are now attempting to identify their organisational culture prior to implementing their TQM programme. (Maull et al., 2001)

Organisational culture influences people’s actions and behaviours. It also alters their actions in the perceptions of all aspects of their work including quality (Reeves and Bednar, 1994). Consequently, Calori and Sarnin (1991); Sinclair and Arthur (1994); Klein et al. (1995); Lewis (1996), and Corbett and Rastrick (2000) have proffered a relationship that exists between the constructs of quality and organisational culture. Research undertaken by Klein et al. (1995), for example, demonstrated that culture has a direct impact on service quality. This research used Cooke and Lafferty’s Organisational Culture Inventory scale to quantitatively measure culture and found a positive correlation between perceived levels of quality and the constructive and aggressive/defensive styles of culture (see Cooke and Rosseau, 1988). However, changing to a genuine focus on quality is usually a transformation that involves a radical readjustment of a company’s internal culture. (Sandholm, 1999)

The implementation of TQM is not an easy task, as it requires a total change in organisational culture, shifting of responsibility to management, and continuous participation of all in the quality improvement process (Lakhe and Mohanty, 1994). In a study undertaken by Sluti et al. (1995), it was shown that a strong corporate culture could improve quality, and operational and business performance. Mandal et al. (1999) identifies the cultural change as the single most important inhibitor of quality policy implementation. Samson (1997), on the other hand, states:

“Many organizations had previously attempted quality circles, as in parts of Europe and the USA, because these had been interpreted as being the answer to rising levels of manufacturing competitiveness in Japanese companies. History has told us that the majority of these initiatives either did not work at all or fell away after achieving some successes. One of the reasons for this is the lack of appropriate human resource and cultural policies and encouragement.”

It is argued that the major problems associated with the TQM adoption have been lack of understanding about the degree of organisational commitment required. In addition, Reavill (1999) suggests that organisations need to also take into account the significant time scale involved for the organisation’s culture to adjust to the underpinning philosophy of TQM.

An organisation that is committed to TQM has a culture based on commitment to customer satisfaction through continuous improvement. Such a culture can vary between organisations but nevertheless has certain fundamental principles that can be implemented to secure a greater market share, increased profits and reduced cost. In the UK for example, business excellence has been used to develop the quality culture, which is also embedded in the TQM philosophy (Kanji and Yui, 1997). Examples of the successful implementation of TQM by best practice organisations can be found in Zairi and Whymark (2000a,b).

TQM is a philosophy that organisations can use to improve their performance but, often there is an overemphasis on its tools and techniques, which may take precedence over the need to create a culture, that is open to change (Page and Curry, 2000). Lakhe and Mohanty (1994) claims that the following measures are essential to obtaining cultural change:

- the organisations policies, procedures and processes must emphasise quality;
- everyone in the organisation must have a clear understanding of the importance of quality in achieving their business objectives;
- people at all levels must be aware of the requirements and needs of the customer;
- the structure of the organisation should allow for continuous improvement;
- there should be integration of internal and external customer requirements in the business plan;
• use of customer-based measures of performance is important;
• there is a need to develop strong communication lines;
• customer commitment should be fostered; and
• emphasis on customer-oriented values and beliefs must be supported by top management.

5. Culture and strategy

The impact of a corporate culture on a strategy has long been recognised (Hofstede, 1991). Much of the literature suggests that employees in a strong organisational culture have a sense of mission, which may in turn improve productivity. In essence, individuals within a strong organisational culture know what is expected of them and thus react positively when confronted with change. Conversely, employees involved with a weak organisational culture tend to spend a great deal of time deciding what they should do and how they should do it.

A culture is good only if it fits its context, i.e. the objective conditions of the industry or the business strategy itself. In other words, the better the fit, the better the performance, and a changing environment can undermine a good fit. (Corbett and Rastrick, 2000) The notion of a culture-strategy fit holds for a strategy to be successful in a strong culture, as it must be formulated in accordance with the existing culture. A strategy regardless of its strengths will not be successfully accepted, if it is outside the bounds of the culture. On the other hand, if the culture is weak, it can easily adapt to any type of strategy, with success in this case depending solely on the strength of the strategy. Clearly, the most effective combination is a strong strategy matched by a strong culture. Furthermore, it can be postulated that if a strategy and culture fit together, the resulting success will strengthen the culture, which in turn enforces the strategic fit. Sandholm (1999) claims that an effective strategic quality plan is reliant on cultural change. It is this change that may provide the required fit.

According to the findings from several research reports, quality management is likely to remain as an important corporate strategy in the days to come (Liu and Kleiner, 2001). A corporate culture aiming at continuous improvement and TQM is mentioned as an important factor that enhances the companies’ capabilities, especially for innovation. (Zwetsloot, 2001). Emphasising and rewarding a super-ordinate goal like quality within a diverse organisation may not only improve quality, but also reduce conflicts and misunderstandings among diverse employees by providing them a unifying purpose, language, and culture, where none previously existed (Schneider and Northcraft, 1999). The experiences of a best practice UK organisation in implementing a TQM strategy and developing a strong corporate culture are now presented and discussed.

6. Research methodology

The research reported in this paper required a methodology that captured the thoughts and actions of all the people within an organisation and, in doing so, supported an investigation into the social constructs of a company’s culture. A case study was considered to be the most appropriate research strategy, which according to Bonoma (1985) makes use of interviews, and relies heavily on verbal reports and unobtrusive observation as primary data sources. As a result, a case study tends to make use of research methods that provide qualitative rather than quantitative data, which enabled the researchers to capture the complexity and dynamism of organisational settings.

The research design phase involved reviewing the normative literature on TQM and organisational culture. This was then followed by the identification of a suitable research strategy. The strategy adopted during this empirical enquiry was that of a single fieldwork case study. The second and third phases concerned the case study data collection, and the subsequent analysis of data. A questionnaire served to provide a semi-structured interview agenda for use in discussions with directors, managers and shop-floor operatives. It also enabled the researcher to ask standardised questions of the interviewees. All interviews were tape recorded and later transcribed. In an attempt to counteract any bias, which may have affected the accuracy of the qualitative data collected, a process of data triangulation was adopted (Jick, 1979).

7. Case study experiences at Velden Engineering (UK) Ltd

Velden Engineering (UK) Ltd is a dynamic, ambitious company, with best practice ideals and world-class aspirations. Velden’s core business is precision subcontract engineering, which primarily involves manufacturing a wide variety of parts, products and assemblies, for a large number of customers, in diverse industries. Velden remains a privately owned company, whose radical ideas on employee empowerment, and the implementation of continuous improvement makes them stand out from the crowd.

The company appears to be ahead of the competition in many ways, especially when benchmarked against traditional British subcontract companies. The evidence is that Velden is an award winning Inside (UK) Enterprise Demonstration Company, for the UK Department of Trade and Industry (DTI, 1993), and was described as an exemplar company when awarded an Investors in People (Donnelly, 1995).

Velden’s culture and philosophy is one that has been nurtured and developed over the last 20 years, and has
not needed to undergo any major cultural changes (Irani et al., 1997a; Irani and Sharp, 1997). However, it has not been without its problems and sceptics. Culture in any company is the underlying belief that pervades the organisation about how business should be conducted, and about how employees should behave and be treated (Love et al., 1998).

Velden’s cultural framework includes its guiding philosophy, and core values and beliefs, which are combined into a mission statement. The mission statement should act as a concise development from core values and beliefs, and should convey what the organisation’s role in society. Velden’s mission statement clearly translates its philosophy into tangible goals that will move the organisation forward and make them perform to their optimum. Their mission is to survive, expand, and prosper by developing people to provide a professional, responsive, efficient, flexible, green, total quality service, with absolute commitment to the customer and supplier.

The company’s guiding philosophy forms an integral part of their culture, and drives the organisation forward. The leaders within Velden through their thoughts and actions subsequently shape this. The company culture reflects the vision of the organisation rather than the vision of a single leader, and has evolved over time, although core elements have been maintained. The company’s core values and beliefs represent the organisation’s basic principles, about what is important in business, its conduct, its social responsibility and its response to changes in today’s competitive environment. It acts as a guiding force, with clear and authentic values, which are focused on employees, suppliers, customers, and society at large and stakeholders.

The success of Velden’s corporate culture can be attributed to a number of key enablers, which have proven to be ingredients for success for organisational excellence in both Velden’s core and non-core business activities. Continuous improvement and innovation as noted in Fig. 1 form the genesis of these enablers.

The success of Velden has been based on its proactive application of TQM principles and the development of an open culture that is able to adapt to changes imposed on its internal and external environment. Velden’s organisational structure is horizontal and is used to support its Self-Directed Work Teams (SDWT) (Irani et al., 1997b), which form the basis of the organisation’s ability to learn and be innovative in its manufacture/service/product delivery (Irani et al., 1997c).

At the heart of Velden’s strategy is that of a customer-supplier focus thus, strategic alliances (SA) with its customers and suppliers are fundamental to achieving organisational excellence. The SAs are integral part of the Velden’s approach to organisational learning and knowledge management. The company differentiates between training and education (education is seen as broadening one’s sights and vision, whereas training is seen as skills based). The benefits of this have cascaded down the supply chain with Velden operating an open door policy in support of developing the intellectual assets of its SA.

7.1. Continuous improvement and innovation

Innovation is not a new concept and is not synonymous with invention, although invention may be part of the innovation process. It is synonymous with the good management of all the company functions. It is a dynamic process and should be an essential part of any business strategy and everyday practice. The UK based Board Room report of April 1993 suggests that innovating firms tend to have a larger market share, higher growth rates and profit, than none innovators. In today’s highly competitive market, delighting customers is most important (Griffin et al., 1995). Markets for products are now characterised by a far greater ability to ‘shop around’ and choose preferred suppliers. This applies whether the buyer is an individual customer, small business or a major enterprise. As a consequence, the requirement for a business to be competitive and satisfy its customers as well as, or better than its rivals is fundamental to the success and growth of the business. Therefore resulting in the need to ‘innovate’ or face the alternative, liquidate. However, such might only be possible if within an organisational setting there is commitment by the workforce that often stems from an appropriate culture.

Continuous improvement and innovation are considered to be the life-blood of many companies, and there is nothing so stultifying to those companies—or to the people in it—as a belief that the old ways must be the best ways. An organisation that tries to stand still may not survive. The implementations of these concepts require a blend of creativity, clear thinking, and the ability to get things done. It requires thinkers and doers to work closely together.

Such an environment has been created within Velden and forms an integral part of the company culture. The success of Velden’s approach to continuous improvement and innovation has been dependent on the characteristics of the individuals employed within the company, which have developed and nurtured by management over several years. These factors ultimately reflect the corporate culture and are summarised below:

7.2. Individual characteristics

Individual characteristics that encourage innovation and continuous improvement include:

- a clear initial view of the results that are desired—
The ability to clearly define the aims and benefits of the project being considered;

- the ability to get support not only from management but also from their colleagues; there is a need to build a coalition in which everyone shares equally in the belief that the project is worthwhile;
- courageous employees—take calculated risks when setbacks occur;
- the ability to handle interference or opposition to the project—resistance can be open but it often takes a passive or covert form: criticism of the plans, foot dragging, late responses to questions, or arguments over allocation of time and resources amongst projects. Covert resistance can be the most dangerous;
- leaders who are good at getting people into action—to mobilise and contribute fully to the project, by using a participative management style; and
- the force of character to maintain the momentum of the project, especially after the initial enthusiasm for the project has waned.

7.3. Organisational characteristics

Organisational characteristics that encourage innovation and continuous improvement include:

- a free flow of information that allows managers to find ideas in unexpected places and pushes them to combine fragments of information;
- close and frequent contact between work sections and an emphasis on lateral as well as vertical relationships;
- a tradition of working in teams and sharing credit; and
- managers who believe in innovation and provide the necessary resources and support.

8. Conclusions

This paper stresses the importance of a strong total quality culture as a key element of improving organisational competitiveness. To survive in a rapidly evolving global market, customers and their needs should govern all the activities within an organisation. For most organisations this will require a change in their internal culture. The core concept of TQM, that is the customer focus, linked with a continuous improvement plan that is supported by innovation can build a strong culture, which can positively improve an organisation’s competitiveness and performance. Velden Engineering (UK) Ltd. is an award winning and outstanding subcontract organisation which has realised this long before. Their story of success through the development of a Total Quality Culture told in this article can be used by other organisations as a model in the attainment of organisational excellence. Characteristics of the individuals employed within the company and the general organisational characteristics are listed as a key to success for the companies desiring to be successful in the quest for quality.

References


Professor Zahir Irani has a chair in Information Systems Evaluation and the Director of Postgraduate Studies in the Department of Information Systems and Computing, Brunel University (UK). Having worked for several years as a project manager, Dr Irani retains close links with industry, and is a non-executive director to a leading engineering company. He consults for international organisations such as Royal Dutch Shell Petroleum, DERA, BMW and Adidas, and has taken part in UK-Government funded trade missions to the Middle East and Gulf region. Dr Irani reviews research proposals submitted to both the European Commission and the National Science Foundation (NSF) in the USA. Dr Zahir Irani leads a multi-disciplinary group of International PhD students that research information systems evaluation and application integration. He is a Visiting Scholar to the University of Salford (UK) and a Visiting Professor at Deakin University (Australia) and Arab Academy of Science and Technology (Egypt). He is the editor-in-chief of the established Journal of Logistics Information Management and European Editor of the Business Process Management Journal. He has co-authored a teaching text-book on information systems evaluation, and written over 100 internationally refereed papers and received ANBAR citations of research excellence. He has spoken at conferences and guest seminars world wide, and is internationally known for his scholarly work in the area of information systems evaluation and application integration. Dr Irani is on the editorial-board of several journals, as well as co-and-mini-track chair to international conferences such as ICSTM-2002, ECITE, AMICS and HICSS. He has edited special issue journals, and publishes in leading international scholarly journals that include: Journal of Management Information Systems, European Journal of Information Systems, Information & Management, International Journal of Production Economics, to name but a few. Dr Irani has received numerous grants and awards from funding bodies that include the Engineering and Physical Sciences Research Council (EPSRC), Royal Academy of Engineering, Australian Research Council (ARC), DERA, Dept of Trade and Industry and European Commission. Further details are available at: http://www.brunel.ac.uk/~csstznii/

Dr. Ahmet Beskese is an Assistant Professor at Istanbul Technical University Management Faculty, Department of Industrial Engineering (Turkey). He is an industrial engineer and holds higher degrees in Engineering Management. He also gives courses on Quality Management and Logistics Information Systems at the Continuous Education Centre of Istanbul Technical University. He visited the Centre for Quality and Productivity Improvement, University of Wisconsin—Madison (USA) as an honorary associate in 1999, and the Department of Information Systems and Computing, Brunel University (UK) as a research fellow in 1999–2000. He gave lectures on Information Systems Management, and Decision Support and Executive Information Systems at Goldsmiths College, University of London, as a visiting tutor during his visit to UK in 2000. He is a member of International Ergonomics Association, and National Institution of Ergonomics (founding member). He held several projects especially on Quality Management and Reorganisation. He participated in the organisation committees for some congresses, and on the editorial board of a book on various topics of Industrial Engineering. He has several refereed conference papers and articles especially on Total Quality Management and Quality Assurance Systems.

Dr. Peter Love is an Associate Professor in the School of Management Information Systems at Edith Cowan University (Australia) and Asia Pacific Editor for Logistics Information Management and Business Process Management Journals. He retains close links with industry, and serves on several government working committees. He has an M.Sc in Construction Project Management from the University of Bath in the UK and a Ph.D in Operations Management from Monash University in Australia. He has a wide range of industry experience, which he gained in the UK and Australia working as consultant project manager and a commercial manager for a multi-national contracting organization. Dr Love’s research interests include supply chain management, quality management, IS project management and strategic information systems evaluation. He has co-authored/edited four books and has authored/co-authored over 200 internationally refereed research papers and received ANBAR citations of research excellence.