Research Article • 10.2478/ijcm-2022-0002 IJCM • 58(1) • 22-29

Sustainability over competition: the rise of sustainability in quality management

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Abstract

Purpose. *The field of management has been witnessing a change from the 'business for business' approach to the 'business for all' approach for quite some time now. Even though every firm still seek their own interest while doing business, they are now to do so by caring or at least pretending to care about the needs of other individuals, firms, and society in general. This paper addresses the issue of how sustainable policies have overtaken business within the past three decades and how they have also become relevant in the field of quality management.*
Design/methodology/approach. *Accordingly, the article presents a brief history of how sustainability has found its way into an iron-clad system of competitive endeavour and highlights the requirements of the fashion in which it can be implemented in quality management.*
Findings. *Our theoretical analysis reveals that the way to do this is to address sustainability as a means of meeting some of the most cherished TQM values, namely, customer/stakeholder satisfaction, employee motivation, adaptation to the environment and volatility, and reducing costs/increasing value.*
Originality/value. *The current article contributes to literature that is focused on addressing sustainability, sustainable management and SDGs in quality management. By showing how essential sustainability is in TQM, the current study helps bridge two key elements in management literature.*

Keywords

TQM, sustainability, quality policies, corporate social responsibility, stakeholder approach, sustainable development

INTRODUCTION

Quality management is the pursuit of maximising profits by seeking improvement in every aspect of business, varying from customer satisfaction to product betterment. As Mann (2008) puts it, TQM has been a focal point of management discussions for decades now, though one universal definition has not been agreed upon contended yet, while there are also claims that TQM focuses on the sum of a corporation's activities: its products, people, processes, and of course, its customers. The official definition of TQM by The Deming Prize Committee is a customer and convenience oriented one in which it is defined as a process whereby the quality benchmark sought by customers in terms of products and services is met, while never disregarding economy. The following widely acknowledged definition by Feigenbaum (1988) coins the all-business perspective of TQM: a total quality management deals with/encapsulates customer needs in aggregate, starting with mapping their requirements even before customers start to need the product, all the way up to the acquisition of the product or service in an economical and convenient manner and further to their perception of the product even when they have used it over a decisive time span. Another widely accepted definition by Pfau (1989) also reiterates the versatility of TQM in stating that it is an approach to constantly improving the quality of products with the involvement of all parts of the organisation.
All the elements that are vital or of any discernible importance to quality management can be categorised into tangible facets (hard factors), which are product design, business process, and delivery process; and also, the equally essential intangible ones (soft factors), which are leadership, corporate culture, and HR management and commitment (Sureshchandar & Leisten, 2006).

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Since the 1980s, when natural resources, once considered infinite, started to prove finite, the expectations of the society from corporations have undergone a change from 'just a quality product' to 'quality, along with a concern for the future of the society as well'. This era, therefore, has been marked by the rise of a stakeholder approach. Previously driven by policies based on staying competitive and doing business for the mere benefit of the shareholders, businesses now have an incremental pressure to involve others in the picture. The stakeholder approach means that in the corporate setting, companies function within the interests of various parties, namely, the stakeholders (Clifton & Amran, 2011). In a broader sense, stakeholders are all groups or individuals who have a direct impact on or are impacted by an organisation's activities (Freeman & McVea, 2001), which could involve shareholders, employees, suppliers, NGOs, and the whole society at large. Taking this perspective even further, Freeman and Evan (1988) contend that the environment is another stakeholder and must be treated with equal respect.

The introduction of sustainability as a business concern corresponds to the same era, when 'business quality' became more and more interrelated with 'social quality'. Social quality concerns with respect to business quality are interested in all forms of pollution that is released during production or during the use of product. Therefore, top quality concerns must involve compatibility with societal and environmental well-being, before adjustment to business standards, practicality, and financial aspects (Graham, Shiba, & Walden, 2001).

These gave rise to corporate social responsibility (CSR) taking hold in the business world, because firms had to care about society or at least pretend to care. Ideally, CSR deals with how prepared a company is to assess and recuperate its effects on all parties, namely, the stakeholders, which makes it a question of the long-term impacts of the firm on society. In this process, it also deals with its enduring brand value, derived from how sustainable its activities are (Frankental, 2001). CSR, then, is the struggle between the economically driven corporate activities and the environmentally driven ones, whose distinction can be summarised as seeking profit while also considering what is sustainable and what is in the best interest of the stakeholders (Cavagnaro & Curiel, 2012).

It is estimated that given the current trend of business is maintained, it will take two planet Earths to generate the annual needs of the humankind by 2030. According to Karabell & Cramer (2010), the much-coveted Western lifestyle will be impossible to achieve, as it would take four planet Earths to provide for the whole population if each individual were to lead the life of the average American. The statistics are also unfavorable with respect to renewable resources: it takes one and a half years to compensate for our yearly use of renewable resources (Casey & Sieber, 2016).

Former TQM policies treated the environment as an item on their checklist that was at best a way to ensure that their quality policies had some form of relationship to stakeholder concerns. However, this perspective is doomed to fail as it lacks corporate vision and any regard for the damage it may inflict on third parties (Hawken, Lovins, & Lovins, 2010). As a result, the aforementioned definitions of TQM are no less true today than they were when they were first asserted about thirty years ago; however, many aspects of TQM must now be seen through the lenses of sustainability.

BACKGROUND

Sustainability can be defined as maintaining economic development, environmental performance, and social equity (Kuei & Lu, 2012). The sustainability perspective in essence suggests that organisations must balance their profit-seeking activities with the societal and environmental goals of their operations (Tasleem, Khan, & Nisar, 2018). Accordingly, sustainable management refers to the applications of sustainability across various fields from business to personal life. Therefore, the concept of sustainable management is a synthesis of sustainability and management. In 2015, the United Nations' member states embraced what is officially referred as the Sustainable Development Goals as a part of the 2030 agenda. Consisting of 17 overarching goals and 169 concrete targets, the SDGs act as a blueprint addressing critical problems that need to be solved to achieve a better and sustainable present and future. The SDGs include diverse topics from poverty and gender equality to responsible consumption and production. With their implications for business and quality management, the SDGs have been receiving increasing attention in private sector as well as public sector (Hacking, 2019). Jonker (2000) explains how sustainability has found its way into business, organisations, and quality management by stating:

> 'Where nature had once to be discovered and understood, now there is overwhelming evidence that over the past 100 years or more mankind has become "hijackers" of its natural surroundings.… The discussion now has moved environmentalism towards sustainability and the way organisations can and must play their part. Supported by legislation and an agreed audit scheme (ISO 14000 and EMAS 14000), organisations are forced to take preventive measures verifiable by a third party. Parallel to this there also has been a growing concern about the way organisations socially and ethically operate in a global society (p.743).

Though there have been attempts to incorporate societal and environmental aspects of products into quality management, the treatment of sustainability and its relevant elements as an integral part of quality assurance is still limited, which leads to a narrow understanding of how business and sustainability is linked (Ramanathan, 2020). In view of the fact that traditional approaches of excellence and quality management are only manageable in highly stable environments, more research into bridging quality management and excellence and sustainability is highly needed. The literature suggests that survival in such a volatile environment requires agility, dynamism, and adaptation and highlights the importance of a systematic integration of sustainability in all aspects of business from leadership to human resources (Metaxas & Koulouriotas, 2014). In that sense, Abbas (2020) states that future research should focus on examining the relationship between the core elements of TQM and corporate sustainability.

The ambiguity about quality and sustainability as to what comes into play during implementation has largely been dismissed through quality assurance standards such as ISO. Transparency once was a luxury, an 'extra burden' on businesses, especially on matters of social responsibility. Organisational costs, logistics, even annual revenues were merely revealed for the sake of legislative purposes; unlike today, when standards make firms voluntarily become part of the 'reveal your business' bandwagon. ISO standards today directly, openly and blatantly address the Sustainable Development Goals (SDGs) contended by the UN. Business costs and their shares in the financial inputs and outputs of sustainability have become internationally standardised; from the minor-scale community SDGs (ISO 37101, 2016) to macro-SDGs (ISO 9001) of nationwide capacities.

When giving a generic outlook on the implementation of ISO standards, the levels of standardisation lie in five dimensions: strategies, programmes, projects, plans, and services; along with guidelines on collective work and communication. In short, though TQM and sustainability have been individually and interactively unspecified concepts, they hold a universally essential and definite ground in SDGs right beside the uniform conceptual business background.

In summary, although a vast amount of research has been conducted on the necessity of sustainability in business in many industries, macro corporate policies like TQM need the integration of sustainability. This paper tries to address this issue, showing how sustainability has a non-incidental, but systematic and strategic place in quality management; not just items in a checklist, but core elements of TQM, such as customer satisfaction, HR policies, adaptivity, reducing cost, and improving value, are closely related to sustainability issues. How sustainability has a direct contribution to these core aspects of TQM is discussed in the current study. While sustainability is becoming a corporate agenda in circumstantial topics, its value is too great to leave it to individual sensitivities, and thus it needs to become a well designed, integral corporate policy (Dieck-Assad, 2013). Companies often tend to pay more attention to the tangible or hard elements of TQM and disregard its intangible elements though success is also dependent on taking advantage of these intangible assets (Collins & Watkins, 2006). Following the implications and suggested future research orientations of earlier studies, the current study contributes to the body of work focused on bridging TQM and sustainability. More specifically, we examine how sustainability relates to both tangible and intangible aspects of TQM.

BRIDGING SUSTAINABILITY AND TOTAL QUALITY MANAGEMENT

Sustainability as a means of satisfying customer-stakeholder expectations

The stakeholder approach has altered the way companies seek profit in irreversible magnitude. Profit being the central motivation behind conducting business notwithstanding, as it is directly correlated with customer and stakeholder satisfaction, companies must now consider sustainability as a means to convince customers that their activities will not destroy their chance of a better future (Bruntland Commission, 1987). Striking examples all around the world have made it even more indispensable – whether it is an international agreement (eg the Paris Agreement on Climate Change) or environmental catastrophes such as the BP oil spill in the Mexican Gulf or Chernobyl – more consumers are now looking for product sustainability and social awareness in companies (Casey & Sieber, 2016).

Furthermore, the communicative activities of companies and the public have been greatly affected by social media. As a result of the tremendous volume of public engagement in social media as well as big corporations, firms find themselves more obliged to monitor social media (Yılmaz, 2016). What they find, as a result, is that stakeholders especially end customers, have a more powerful position of agenda setting than in the past when the public had almost no influence in the one-way nature of public communication. In this respect, companies who are more social media savvy have a sharper edge in innovation and competitiveness (Salim, Rahman, Wahab, & Muhammed 2020). Thanks to social media, the environment is now on the agenda of many more people, and people can spread information about companies and their products (Milliman, Gonzalez-Padron, & Ferguson, 2012), the result of which is that companies cannot turn a blind eye to social and environmental factors when designing their long-term strategies (Lubin & Esty, 2010).

Quality management involves the creation of value at every stage such as design, customer perception, and product placement. The ultimate goal of this should be to build a stronger intangible chain of values such as brand, reputation, and culture. As suggested before, social concerns such as sustainability have become a primary source of intangible value creation. The main pressing sustainability considerations are climate, industrial pollution, food safety, and the exhaustion of natural resources. Outer compulsion directed from social awareness, lawmakers, and competition urges companies to convert regular business activities to sustainable ones (Paillé, Chen, Boiral, & Jin, 2012).
In a nutshell, the more societal, legal, and financial pressures arise, the more companies will seek to become more sustainable in the eyes of their stakeholders. Not only will they increase sustainable policies, but they will also have to report their sustainability, how eco-friendly they are, announcing in a transparent manner the numbers that manifest their eco-footprint (Lubin & Etsy, 2010).

Sustainability for HR and motivation

One of the most important stakeholders of an organisation is without a doubt the employees. Their performance and sense of belonging have a direct impact on the outcome of an organisation's activities. Quality management, whose application rests upon the staff, requires not only their willingness but also their eagerness, which seems to be a rare quality. It is noted that for employee satisfaction the most important factors are morality (a sense of doing something worthy), collegiality (a friendly working environment) and financial security, within the order of mention (Casey & Sieber, 2016) It is also noteworthy to state that the human nature seeks spiritual self-realisation before money, which one would assume would be the other way around. In parallel with the given information, Gallup Institute's report (2013) lays out other remarkable statistics collected from 142 countries across the world about job satisfaction: 13% of employees feel genuinely connected to their workplace while 24% feel resolutely disconnected. In other words, those who are not committed to their work, who potentially perceive their organisation in a negative, even malicious manner are twice as numerous as those who actually like their jobs.
In such a grave employment climate, employees become another focal point that pushes companies towards sustainability concerns. Where staff with high engagement and desirable qualifications is rare, it will get even harder for companies to employ that staff unless they address their ethical needs, for which sustainability offers a rock-solid, universal option (Renwick, Redman, & Maguire, 2012). After bringing companies' core values in line with employee expectations – thus loyalty – the staff will become fully engaged and will contribute to the sustainability of the organisation.
Furthermore, besides organisational outcomes, quality management strategies also rest upon the shoulders of the personnel (Ahmad & Schroeder, 2002). For this reason, HR departments have a dire obligation to conduct meticulous employment processes; however, companies have a bigger obligation to implement ethics as a core value since people have stronger motivation when they achieve worthiness (Dahlgaard-Park, 2013).
Proof of this can also be derived from behavioural economics, where empirical data have shown that morality is the primary motivational aspect of humanity instead of selfishness and competition (Camerer, 2004). Classical economics, considered a science of empirical data, used to function on the basis that human nature is driven merely by egotistical and greedy goals; however, there is now a biological basis for the opposite: by wiring the brain, it has been shown that catharsis and acts of kindness are perceived as more 'innate' qualities of humankind (Gintis, 2000). All this adds up to the fact that organisations have one more motivation to apply sustainability in quality management: employee satisfaction by giving them a sense of belonging and serving a higher cause than just making ends meet.

Sustainability for Adaptation

It should come as no surprise that one of the most common analogies for organisational sustainability comes from environmental patterns of survival. Organisations, like species, have a life cycle: they are born, shaped by the shifts in their environment, develop complex skills of survival, and they all eventually perish. TQM strategies aim to preserve the company by constantly improving several aspects of organisational habits, thus making it fit for competitive markets and ensuring longevity (Vandenbrande, 2021). However, like nature, markets undergo periods when volatility takes precedence over stability. At times like these, a business perspective that prioritises sustainability by becoming more proactive becomes essential rather than following the traditional 'quality for survival' approach (Dervitsiotis, 2004).
Drastic shifts often come as a result of technological leaps, major privatisations, or significant changes in society or the economy. These phenomena often mean less focus on improving performance and more on averting crises because performance enhancing strategies are usually generated for times of stability (Dervitsiotis, 2007). Sustainability offers the proactive aspect or the agility that is needed to become more adaptive to unforeseen circumstances. Furthermore, statistically, the frequency

of major social, economic, and environmental changes has doubled within past decades, making volatility 'the new normal' (Tideman, Arts, & Zandee, 2013).

Ashby's (2013) law of requisite variety suggests that a high level of complexity is the only way to recover from crises brought about by the environment. In other words, the organisation's versatility should be no less than that of the challenges that it faces, and its capabilities should be able to conquer the variability of threats. Organisations need to evolve to the challenge, as after their evolution is complete, their complexity determines whether they survive and thrive or perish (Dervitsiotis, 2004).

We must then ask what capabilities help firms through these phases of adaptation. Titus, Covin, & Slevin (2011) suggest a two-dimensional sustainability approach for this conundrum: because a systematic corporate culture is hard to copy, the first step should be a systematic staff selection policy that, if needed, should be regenerated from the beginning. This policy must be strictly applied with a sustainable value-centred perspective. Second, encouraging the staff to be more creative, companies must nurture flexibility and lead the way to constant development and innovation. It must be kept in mind that corporate survival and advancement lie in both predetermined and spontaneous capabilities. To conclude, crises could transform into opportunities as long as leadership keeps an open mind and encourages creativity to emphasise sustainability over short-sighted tactics.

Sustainability as a means of reducing cost, increasing value

When quality strategies first took over markets, they led to a revolutionary paradigm shift: the previous fallacy that competitive price and quality would not coexist was crushed (Lubin & Etsy, 2010). Some pioneering quality policy focus was on reducing cost, waste, and risk, whose peripheral result was directly correlated with environmental sustainability. When these policies were taken further, they started to implement production lines designed to become more proactive in lowering flaws in end results, again lowering waste, which is one of the primary concerns of sustainable development. Companies took this even further and started to apply TQM policies and Six Sigma approaches to maintaining sustainability by utilising the standard tools of these approaches, such as value-stream mapping, cause-and-effect analyses, and pareto diagrams (Lubin & Etsy, 2010). This indicates the symbiotic nature of the relationship between quality and sustainability: not only does sustainability foster quality, but quality policies might also be used to enhance sustainability.

Quality projects, originally designed for a higher level of competitive edge, have contributed not only to profits, but also to environmental gains. As mentioned above, quality reforms have a direct impact on the environmental footprints of organisations with a lower amount of raw materials needed for their activities, saving energy and water to an unprecedented degree. The big picture can also be viewed upside down: turning to more sustainable policies brings financial payoffs. Sustainability is not just a moral responsibility towards society and the future to minimise the damage directly caused by the company, it is also an opportunity to increase revenues (Vandenbrande, 2021).

An exemplary case is that of 3M, who are renowned for their quality-driven corporate culture. They are making use of this quality experience to implement sustainability in their activities by using a lean Six Sigma approach, whose starting point was to increase quality both in operations and production to become more energy-efficient and generate less waste and carbon emission (Lubin & Etsy, 2010). Another great example of this would be Wal-Mart, who by incorporating sustainability into their business operations managed to save $200 million per year, also releasing 200,000 tonnes of carbon gases less. Such activities have also resulted in a halo effect, turning their 'capitalist' or 'invasive' image into a more favourable and environmentally friendly one (Thiele, 2016). While emissions and operational costs can be measured with great precision, this added brand value to companies' corporate image would be hard to measure.

Sustainability of sustainability

While many authors define sustainability within the scope of environmental concerns (Thiele, 2016; Scoones, 2007), sustainability, as the name intimates, is also concerned with the continuation of leadership and corporate policies. The average life cycle of a corporation is about 40 years in Europe and the USA (Dervitsiotis, 2004), which is an indication of how the usual strategies fall short of becoming long-term. Classic types of 'good' leadership based on personal charisma and heroism have failed to guarantee longevity, as heroes, too, eventually die or retire. What this implies is that for a long-lasting sustainability policy, the training of leaders and employees should be treated as an inseparable aspect of long-term quality management.

Whether it comes from external stakeholders or from within the corporation, the need for an impetus towards environmentally friendly policies is needed exponentially. This pressure is felt by upper management as well as by employees who are at the receiving end of such policies. Corporations often hesitate to apply sustainable policies since that requires a large-scale engagement in all levels of the organisation in the long run (Cantor, Morrow, & Montabon, 2012). Employees might display the same reluctance, as the new policies often mean a radical change in deep-rooted traditions of practice. As a result of these, most sustainability policies – though many start with fervent discourse – end up becoming no more than discourse,

namely 'greenwashing' (Baumgartner & Ebner, 2010). Although every corporate action towards a better corporate image is well received, such actions are doomed to perish if not rooted in actual practice.

To elaborate, in addition to implementing sustainable business policies, leaders have the great burden of leaving a legacy of a values-based corporate culture. This also means developing new management habits, procedures, and even executive titles specifically designed for what sustainability inherently entails. A shining example of this might come from the emergence of CIOs, whose part in companies used to be dubious, and few organisational processes were treated within the realm of IT departments. Today, however, CIOs have become an indispensable part of a majority of organisations, with well-defined job descriptions related to all departments of a company. Lubin and Etsy (2010) assert that implementing sustainability requires the introduction of a C-level management resembling the emergence of CIOs. The pioneers of this have already come to play but with little certainty as to where their jurisdiction begins and ends. They point out that while CSOs have uncertain job descriptions today, they must be responsible for the formal transformation of companies into a more sustainable one, as well as for the allocation of funds and staff positions. The way to do this is by mobilising capabilities towards well-defined goals and formalising sustainability policies.

DISCUSSION

The current study has been undertaken in an attempt to demonstrate theoretically how both soft and hard elements of TQM can and must be infused with values inherent in sustainability and sustainable management. Contributing to recent debates over the need to bridge sustainability and TQM, the current paper shows how the most significant TQM values can include an element of sustainability. From adopting a stakeholder approach, involving cost reduction and profit-seeking activities of corporations, to employee satisfaction and leadership, sustainability can contribute a lot to TQM practices and enhance organisations in diverse ways. Ali, Mahat, and Zairi (2010) justifiably define TQM as a substantial change to an organisation's culture affecting many aspects of organisational values and practices. With respect to some critical factors related to HR in TQM context, the authors identify such aspects as leadership, customer focus, teamwork, training, motivation, and so on as pivotal to successful quality initiatives in higher education context. Our analysis also reveals that the interplay between sustainability concerns and soft elements of TQM are critical to organisational success, in view of the growing number of stakeholders that are highly concerned about the environment. Previous research has already demonstrated how positive attitudes towards the organisation can contribute to organisational change initiatives (Renwick, Redman, & Maguire, 2012). It is also suggested that staff also play a great role in developing and implementing quality management strategies (Ahmad & Schroeder, 2002). In that sense, the integration of sustainability not only helps managers develop a higher cause that will motivate the staff towards achieving these goals but also strengthen the organisation.

Another important aspect of modern organisations is that transparency and accountability are key elements that need to be addressed. In view of the role of diverse stakeholders in agenda setting and changing attitudes towards the environment, companies no longer have the privilege to hide from the society regarding the outcomes of their activities (Lubin and Esty, 2010). Therefore, taking sustainability into account in quality practices is critical and highly needed for organisational survival. Social media, in that sense, also play a substantial role (Milliman, Gonzalez-Padron, & Ferguson, 2012). It seems that organisations will face more pressures from the society and need to address sustainability in their operations. A more sustainable TQM helps them become more proactive and contributes to the overall success. Negligence of sustainability, on the other hand, may have dramatic consequences in a highly volatile and competitive market in that it reduces organisations' capabilities to adapt.

To conclude, in the current paper, we have tried to address some critical junctures where sustainability and quality initiatives in TQM meet. It becomes more and more evident that sustainability, either taken as a necessity or regarded as a valuable asset for the future survival of organisations, is something that needs to find its way into organisational quality policies and their successful implementation. Despite earlier ambiguity surrounding the concept of sustainability and SDGs, we are now also developing standards, assessments, and criteria to evaluate how sustainable organisations are and to what extent they address sustainability in their quality concerns. This means that the earlier organisations bridge TQM and sustainability, the better their chances are in a highly unstable environment. Whether they are large corporations with operations globally, small-sized startups, or local initiatives, it seems that there are soft and hard elements of TQM into which sustainability can find its way.

CONCLUSIONS

Stressing that integration of sustainability as a central element into TQM policies is vital and highly needed with respect to the core values of TQM and related quality management policies and practices, this article is focused on how sustainability can indeed contribute to several key aspects of TQM practices. More specifically, the article has examined how sustainability can interplay with TQM practices and act as a means towards addressing customer and stakeholder expectations, increasing staff effectiveness and motivation, adapting to a highly volatile and changing environment, achieving higher profits, and ensuring effective leadership. It seems that when firms act in a more sustainability-orientated manner in designing and implementing quality management practices, they increase their chances of success in not only achieving their traditional profit-oriented goals but also enabling customer satisfaction and effective management. Therefore, raising the awareness of organisations of the benefits of sustainability in relation to their overall quality management policies and practices can increase their chances of survival and success in the long run and result in sustainable TQM practices. The current article, in that sense, contributes to the literature that is focused on bridging the concept of sustainability and TQM by discussing the potential venues where these two can be integrated. Further theoretical and empirical studies can be conducted so that models that can guide organisations through their adoption and implementation of more sustainable TQM policies and practices can be developed.

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