“Critical success factors towards the implementation of total quality management in small medium enterprises: a comparative study of franchise and manufacturing businesses in Cape Town”

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Critical success factors towards the implementation of total quality management in small medium enterprises: a comparative study of franchise and manufacturing businesses in Cape Town

Abstract

Total quality management (TQM) gained popularity in large enterprises since its inception. However, small to medium enterprises (SMEs) still lag behind when it comes to the successful implementation of TQM in their entities. This study is based on the premise that SMEs do not have adequate implementation of TQM in their business operations. This may negatively impact on their performance and profitability. Therefore the research question that emanates in this study asks: *to what extent do SMEs implement TQM in their business operation?* The authors adopt a quantitative approach with the use of questionnaires to collect data from SMEs in the manufacturing sector and franchises in Cape Town, South Africa. The major findings indicate that SMEs that implemented TQM in their operations were more successful than those that did not. The majority of the SMEs still need to adopt this approach to enhance their business performances. It is recommended that SMEs should not only focus on cost reduction but also quality improvement, employees' involvement in decision making and extensive training. These are consistent with extant literature. A novel contribution of this study is the similarity and disparity of responses from a comparison of target groups – the franchises and the manufacturers.

Keywords: total quality management (TQM), SMEs, franchise, critical success factors, manufacturing, performance measures.
JEL Classification: A3, M4, D2, D3, L6.

Introduction

Total quality management (TQM) is an integrative philosophy for continuously improving the quality of products and processes (Bou-Llusar, Escrig-Tena, Roca-Puig and Beltran-Martın, 2009), and uses strategy, data, effective communication and involvement at all levels of employees to integrate quality discipline into the culture and activities of the organization. Total employee commitment can be obtained by involving all levels of employees in order to succeed in implementing TQM in the SMEs, but they will need to arrange qualified people to come and train all employees of the enterprise to understand what total quality management is, and the importance of quality in the design process of a product or a service (Yusof and Aspinwall, 2000).

Recent work, as delineated in Yusuf and Aspinwall (2000), displays a remarkable agreement that companies seeking to achieve organizational excellence should adopt TQM. The need for an improved understanding of the critical factors for total quality management implementation is becoming more important (Yusuf and Aspinwall, 2000). Despite the overall contribution of small to medium enterprises (SMEs), however, every year thousands of SMEs fail due to a lack of management skills and knowledge (Terziovski, 2010). The main reasons for the failure of SMEs range from inadequate accounting systems to the inability to cope with growth. Further, an overall lack of strategic management with an inability to plan a strategy to reach the customer and failure to develop a system of controls to keep track of performance may lead to failure of SMEs (Ng and Kee, 2012). The task of TQM implementation in SMEs can be made easier only through an understanding of critical success factors (CSF) which are relevant to SME's. Critical success factors are defined as those critical areas of managerial planning and action that must be practised to achieve effective quality management in a business unit (Zairi, 1996). One of the main difficulties in studying critical factors of total quality management is how to define and measure them before they become critical (Zairi, 1996). According to Porter and Parker (1993) some organizations focus on specific areas such as quality management systems or statistical process control, whereas others take a holistic approach by implementing TQM program covering all the key areas. Without a clearly defined strategy, a business has no sustainable basis for creating and maintaining a competitive edge in the market place (Teece, 2010). Studies show that poor and ineffective strategic planning can result in business failure within the first five years and show that there is a positive relationship between strategic planning and business performance (Sadikoglu and Zehir, 2010). Effective strategies tend to increase business performance and profits. Innovative tools, such as total quality management, can be utilized to help improve performance, profits and organizational structure (Sadikoglu and Zehir, 2010).

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To be successful in the marketplace, each part of the organization must work properly together towards the same goals, recognizing that each person and each activity affects and in turn is affected by the performance and attitude of others within the organization (Rahman and Bullock, 2005). To improve competitiveness, organizations are looking for a higher level of effectiveness across all functions and processes and are choosing TQM as a strategy to stay in business. There should be an increase in awareness of senior executives, to recognize that quality is an important strategic issue, and reflects an important focus for all levels of the organization (Zu, Fredendall and Douglas, 2008). Performance management is like budgeting; it is required in every organization; it is unmanageable and difficult; it never comes out exactly as you planned and managers always whine, but you would never get rid of budget planning just like you should never get rid of performance appraisal because no matter how flawed the process is, it is good business practice. With the implementation of a new design of the existing performance appraisal system, organizational-wide management team training, and upper-management commitment and support, businesses may not only improve the effectiveness of their employee performance appraisals, but also will most certainly experience residual benefits as well, resulting from greater employee engagement and organizational commitment as well as potential budget savings by eliminating the leniency trend resulting in overstated merit increases and overcompensation of performance that is more appropriately graded as satisfactory. Many organizations also use the Malcolm Baldrige National Quality Award (MBNQA) and other quality standards criteria to measure their own quality performance such as leadership, information and analysis, strategic quality planning, human resource development and management, management of process quality, quality and operational results, and customer focus and satisfaction (Tummala and Tang, 1994).

According to Sila (2007), TQM has a positive effect on business performance in SMEs and could be used to improve SME performance. Many studies found that TQM could be used by SMEs with considerable success (Ghobadian and Gallear, 1996). Introducing TQM in SMEs helped to sharpen SMEs' market focus to make them more efficient and improve their competitiveness (Singh and Ahuja, 2012). It also leads to better product quality of SMEs by improving product quality; SMEs can benefit from decreased costs and maximized profits (Belay, Helo, Takala, and Kasie, 2011). TQM has been widely considered as an effective management tool to provide small and large businesses with stability, growth and prosperity (Belay et al., 2011). TQM principles have been developed over many years; the concept was derived from three core principles, namely achieving customer satisfaction, striving for continuous improvement and encouraging the full involvement of the entire workforce (Gobadian and Galler, 1997). Hence the aim of this study is to determine the extent to which SMEs implement TQM in their business operations.

The ensuing sections encompass extant literature on overview of SMEs manufacturing and franchise businesses, TQM and performance measures, research methodology, results and discussion, conclusion and recommendation for further studies.

1. Overview of SMEs manufacturing and franchise sector

SMEs are generally defined as businesses that do not have more than 500 employees, although the majority of countries define them as having up to 250 and others not more than 100. Small businesses are further characterized as entities with a low skills base, and tend to employ incompetent people or owners who themselves have little or no education (Thong, 2001; Nichter and Goldmark, 2009). SMEs limited resources, such as financial and managerial skills, time and trained employees, are common among these enterprises, which lead to a failure of expansion and growth in competitive environments, and deficiency in technological implementation that often results in the loss of market share (Nichter and Goldmark, 2009; Okpara, 2011).

Manufacturing can be described as the process of converting raw materials into finished products (Le Roux and Lotter, 2003), taking place through the use of manpower, machines and tools to achieve the desired output; that is, finished goods. Manufacturing entities are distinguished from other forms of business through innovation and the supply of commodities on a large scale. Manufacturers are clustered under the various categories of production, such as basic and fabricated metal products, clothing and footwear, pulp and paper products, food, beverages and tobacco, apparel, chemicals, rubber and plastics, and furniture (Kesper, 2001). Researchers have highlighted that SMEs are regarded as the driving force for the national economy (Naimy, 2004; Effah and Light, 2009), which is a result of less paperwork in the formation of business, unlike their counterparts the large organizations that require numerous legalities and complexities. The SME sector is usually focused on the basis that SMEs are the "engine for growth", although market imperfections and institutional weaknesses prohibit them from growth (Beck and Demirguc-Kunt, 2006). SMEs are often faced with a segregated level of decision-making, which makes it difficult for these entities to overcome their challenges as a collective. The decision-making level may be effective when every member of the organization in the manufacturing business is involved, thus enabling

effective decisions that aim for a higher satisfaction level (Jansen, Curseu, Vermeulen, Geurts and Gibcus, 2011; Hilmersson, 2014).

One may consider manufacturing firms to be the heart of innovation; however SMEs are lagging behind innovativeness, regarded as key for these entities to sustain themselves in a competitive environment. Innovations may come in various forms, such as capability to produce and introduce new products that suit the market and attain the customer satisfaction level (Margues and Ferreira, 2009). Therefore, much attention is required to ensure that the manufacturing sector is well-developed with a set of TQM implementations and performance measurement systems are in place. Improving the performance of the supply chain in manufacturing through the implementation of TQM is inevitable when one considers the impact of this sector on the national economy with no exception to franchise businesses.

According to Williamson (1992) the term 'franchising' originates in French, and can be defined as 'a granting of right' or 'an exemption'. Franchising is a legal business agreement between two partners, the franchisor and the franchisee. The franchisor, who has previously established a market-tested business package of products or services, enters into a continuing contractual relationship with a number of franchisees, typically small-business owners, who must operate their businesses according to the franchisor's specified format (Curran and Stanworth, 1983). On one hand the franchisor provides a well-established method of operation, support and advice on the setting up of the new franchisees, and also guarantees continuing support to the franchisees (Paik and Choi, 2007). While, on the other hand, the franchisee pays a lump-sum entrance fee and other charges for regular services, such as royalty on sales, advertising fees, or marketing levy (Fulop and Forward, 1997). Franchising has the potential to offer an appropriate strategy and governance structure due to its flexibility and local adaptation compared to company-owned stores (Yin and Zajac, 2004). For the purpose of this study franchise is defined as a business that has been granted a right to use a certain brand through an agreement between the franchisor and the franchisee.

2. Total quality management

TQM origins can be traced back to 1949 when the Unions of Japanese Scientists and Engineers formed a committee of scholars, engineers and government officials devoted to improving Japanese productivity, and enhancing their post-war quality of life and "American firms began to take serious notice of TQM around 1980" (Powell, 1995; Brun, 2011).

Some of the first seeds of quality management were planted as the principles of scientific management swept through U.S. industry. Businesses clearly separated the processes of planning and carrying out the plan, and union opposition arose as workers were deprived of a voice in the conditions and functions of their work. The Hawthorne experiments in the late 1920s showed how worker productivity could be impacted by participation. TQM is described as a corporate culture that is characterized by increased customer satisfaction through continuous improvement, involving all employees in the organization (Anvari, Ismail and Hojjati, 2011; Kalra and Pant, 2013). Again Hellsten and Klefsjo (2000) define TQM as a management system in continuous change, which consists of values, techniques and tools where the overall goal of the system is increased customer satisfaction with a reduced amount of resources. TQM is a philosophy aimed at achieving business excellence through the use of integrated systems and the application of tools and techniques, as well as the management of soft aspects such as human motivation in work (Yang, 2005; Zadry and Yusof, 2007). Berry (1991), on the other hand, defines the TQM process as a total corporate focus on meeting and exceeding the customer's expectations and significantly reducing costs resulting from poor quality by adopting a new management system and corporate culture. Using a three-word definition, Lakhe and Mohanty (1994) further define TQM as:

- Total: Every person is involved (its customers and suppliers).
- Quality: Customer requirements are met exactly.
- Management: Senior executives are fully committed.

The term TQM was initially coined in 1985 by Naval Air Systems Command to describe its Japanese-style management approach to quality improvement (Bemowski, 1992). Since the 1970s simple inspection activities have been replaced or supplemented by quality control, quality assurance, and many companies began to work towards TQM (Vuppalapati, Ahire and Gupta, 1995). In the 2000s TQM became a philosophy of a broad and systemic approach to managing organizational quality such as the ISO 9000 series, and quality award program such as the Deming Prize and the Malcolm Baldrige National Quality Award which specify principles and processes that comprise TQM (Temtime, 2003).

According to Rahman and Bullock (2005) and Lewis, Pun and Lalla (2006), critical success factors include leadership, customer focus, quality culture, teamwork, training, communication, product design and employee involvement. According to a study on TQM, quality improvement and performance measurement done by Abdullah, Uli and Tari (2009) the authors identified six critical success factors encompassing leadership, supplier quality

management, reward and recognition, teamwork, education and training, and customer focus on performance. Kumar, Garg and Garg (2011) aver that generally TQM is a comprehensive procedure for improving quality, productivity and competitiveness in the international marketplace. In addition, Yang (2005) concurs that total quality management is a general section of management which emphasizes competitive advantage, quality improvement, and customers' requirements. Total quality management may be regarded as effective in decision making, problem solving and as having a prominent role in the continuous improvement of organizations.

TQM is therefore a solution for improving the quality of products in developing economies so that they are acceptable in the global market. However most organizations in developing countries suffer from a lack of employee involvement and participation in quality improvement efforts; a lack of management commitment and motivation; a perception of quality as an optional extra; a traditional belief that quality costs money; a lack of cooperation between suppliers and dealers; management and trade unions; unorganized and indifferent customers; and a lack of established standards (Djerdjour and Patel, 2000). TQM calls for a cultural transformation which requires employee involvement at all levels and a spirit of team work among customers, suppliers, employees and managers. Employee involvement, participation and empowerment form the cornerstones of TQM. There are certain essential principles which can be implemented to secure a greater market share, increase profits and reduce costs (Richardson, 1997) such as a continuous improvement of all systems and processes in an organization which is essential for TQM success.

3. Implementation of TQM in SMEs

Quality advocates such as Saraph (1989) and Abdulla et al. (2009) have identified several critical principles for successful TQM practices like: top-management roles, customer focus, supplier relations, benchmarking, quality-oriented training, employee focus, zero-defects, process improvement, improvement tools and techniques, education and training, reward and recognition, and quality measurement. Sila and Ebrahimpour (2002) found in their theoretical investigation that the following factors were most frequently addressed within TQM definitions: (A) Customer focus and satisfaction; (B) Employee training; (C) Leadership and top management commitment; (D) Teamwork; (E) Employee involvement; (F) Continuous improvement and innovation; (G) Quality information and performance measurements. Zairi (1996) states that one of the main difficulties in studying critical factors of TQM is how to define and measure them before they become critical. Studies done by several authors report problems in TQM implementation because of the following reasons: low quality standards; failure to measure quality; lack of incentives for employees consistently to provide quality goods and services; and insufficient commitment by management to implement quality (Radovisky, Gotcher and Slattsveen, 1996; Tatikonda and Tatikonda, 1996; Zadry and Yusof, 2006). In a study of CSF's, in which they derived a set of the eight critical factors of quality management, Saraph (1989) defined these critical factors as those critical areas of managerial planning and action that must be practised to achieve effective quality management in business units (Saraph, 1989). Successful TQM implementation can only come from radically challenging and changing the culture of the organization (Zairi, 1996). Management must establish a quality policy and support quality activities economically, morally and by managing resources; and they should also set a good example by actively taking part in the practical work because, if management does not show in their actions that quality is at least as important as, for example, costs and on-time delivery, the co-operators will not do it either (Magutu, Mbeche, Nyaoga, Nyamwange, Onger and Ogoro, 2003).

4. Advantages and disadvantages of TQM

The disadvantages encountered by SMEs when it comes to the implementation of TQM is the owner or manager's lack of flexibility and rigidity, the focus on short-term objectives and activities, the lack of technical expertise, managerial time and financial resources; these are all major obstacles for the implementation of TQM in SMEs (Nichter and Godmark, 2009). However, they also have their own advantages: the natural visibility of leadership, the proximity to the customer and the flexibility (Yosuf and Aspinwall, 2000; Temtime, 2003). Employees are versatile and usually have a good understanding of the overall profitability of the organization, thus they are committed to the business's improvement (Yosuf and Aspinwall, 2000; Temtime, 2003). The decision-making process is simpler and less bureaucracy exists in SMEs than in large organizations (Ghobadian and Gallear, 1997). Some of the problems of TQM in SMEs are that SMEs are not interested in TQM or they may be interested in TQM but do not know how to implement it. SMEs do not have the basic infrastructure to support them to succeed in implementing TQM (Buranajarukorn, Gibson and Arndt, 2006). SMEs tend to have less qualified personnel (Moreno-Luzon, 1993). The successful implementation of TQM will result in improved employee involvement, improved communication, increased productivity, improved quality and less rework, improved customer

satisfaction, reduced costs of poor quality and improved competitive advantage (Anthony, Fergusson, Warawood and Tsang, 2004).

5. Performance measures

Performance is defined as the degree to which an operation fulfils the performance objectives in order to meet the needs of the customers (Slack, Chambers and Johnston, 2001). Performance measurement is a critical factor for assessing effective management. Without measuring something, it is difficult to improve it. Therefore, improving the organizational performance requires identifying and measuring the impact of total quality management (Schroeder, Linderman, Liedtke and Choo, 2008).

Studies indicate that there are various measures such as organizational performance, business performance, operational performance, financial and non-financial performance and quality performance (Demirbag, Tatoglu, Tekinkus and Zaim, 2006). Some researchers, including Brah, Tee and Rao (2002) and Koh, Demirbag, Bayraktar, Tatoglu and Zaim (2007), measure performance in two dimensions: operational performance and organizational performance. Operational performance is the performance of the internal operation of a company in terms of cost and waste reduction which leads to improvement of the quality of products, improvement of flexibility, improvement of delivery performance, and productivity improvement (Sila, 2007). These are primary measures because they follow directly from the actions taken during the application of TQM, while organizational performance is measured by financial measures such as revenue growth, net profits, profit to revenue ratio and return on assets as well as non-financial measures including the capacity to develop a competitive profile, new-products development, market development and market orientation; these are secondary measures because they are a consequence of TQM implementations (Koh, Ghosh and Fawcett, 2007; Sila, 2007). In this study the researchers adopted performance measures that have been suggested by Brah et al. (2002), Demirbag et al. (2006) and Sila (2007) for the purpose of this research. To some degree these are in line with findings that indicate that there is a significant association between TQM practices and operational and organizational performances (Handfield et al., 1998; Anderson and Sohal, 1999; Demirbag et al., 2006; Sila, 2007; Salaheldin, 2009).

6. Design methodology

This is a descriptive research as the main intention of the research was to describe a certain problem at hand, with the main intention of providing recommendations to help mitigate the research problem. This study was quantitative in nature where a structured questionnaire was used to collect the data. A structured questionnaire was deemed appropriate because it was not time-consuming and the questions were of a simple nature to state as much relevant information as possible. A total of 156 (92 franchises and 64 manufacturing entities) questionnaires were completed and analyzed. The study adopted a non-probability sampling methods which is purposive in nature. The questionnaires were purposively distributed to owners and managers of SME franchises and manufacturers as they were believed to have the necessary skills and knowledge to answer the questionnaires. The population was unknown and a door-to-door approach was used to collect data from the franchise stores and manufacturing firms in Cape Town.

The questionnaire was developed in three categories. The first section comprised biographical information of the respondents in the study. The respondents were required to provide information regarding the role that they play in their organizations, the number of employees, the type of industry in which their businesses were operating, the number of years their businesses have been in existence and their capital. Section B comprised 24 questions which were asked to determine the perception of the owners and managers of the CSF of TQM implementation in their organizations. These questions were asked in the form of a Likert scale where respondents were asked to circle the number they felt was most appropriate for each factor on the following scales: 1 = very low, 2 = low, 3 = high, 4 = very high. similarly section c comprised 13 questions on performance on a scale of 1-4 from 1 (very low) to 4 (very high), and respondents had to indicate the level of their firm's performance.

7. Validity and reliability

Validity refers to the extent to which an instrument measures what it ought to (Jackson, 2009; Burns and Burns, 2008; Pietersen and Maree, 2007). There are different forms of validity as described by authors however construct validity was used in this study. In this research construct validity is viewed as the most important form of validity (Jackson, 2009). A construct validity measurement instrument measures the extent to which an instrument captures the theoretical concept it is designed to measure (Jackson, 2009; Burns and Burns, 2008). The Cronbach Reliability Coefficient was also used as a test of construct validity whereby the main purpose was to classify items that belong together becausethey were answered similarly and therefore measure the underlying construct (Burns and Burns, 2008; Pietersen and Maree, 2007).

Reliability is of importance in a study for one to ascertain if a measure used is effective for assessing reliability; this is the extent to which a measuring

instrument is consistent and stable for allowing the replication of the findings (Jackson, 2009; Burns and Burns, 2008; Pietersen and Maree, 2007). Should a measure be reliable, one can be confident that all items that make it up are consistent with each other, and that should one use it again with the same individuals they would be rated similarly, as in the first instance (Rule and John, 2011; Lapanand Quartaroli, 2009). This can also apply to a situation whereby two or more different people conduct similar research at varying times and obtain similar results. Jackson (2009), Burns and Burns (2008) and Pietersen and Maree (2007) have identified different types of reliability test, namely test retest, equivalent form, split half and internal. For the purpose of this study, internal reliability testing was applied using the Cronbach alpha coefficient based on inter-item correlation (Pietersen and Maree, 2007). A strong correlation on one hand was denoted by a high internal consistency which led to the alpha coefficient being close to one while on the other hand a weak correlation would lead to an alpha coefficient correlation close to zero. Pietersen and Maree (2007) prescribe the following as a generally acceptable level of reliability.

The overall Cronbach coefficient for the questionnaire was .90, comprising 23 questionnaire items on CSF of TQM (.919) and 13 questions on performance measures (.867). All these coefficients are highly accepted as they are close to 1.0 (Pietersen and Maree, 2007).

8. Results and discussion

The following Tables present some demographic information about the respondents and their businesses.

Table 1. Business type

	Frequency	Percent	Valid percent	Cumulative percent
Franchise	92	59.0	59.0	59.0
Manufacturing	64	41.0	41.0	100.0
Total	156	100.0	100.0	

Table 2. Respondent's role

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Production manager	22	14.1	14.1	14.1
	General manager	79	50.6	50.6	64.7
	Marketing manager	5	3.2	3.2	67.9
	Other	50	32.1	32.1	100.0
	Total	156	100.0	100.0	

Table 3. Number of employees

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1-50	44	28.2	28.2	28.2
	51-100	98	62.8	62.8	91.0
	101-200	8	5.1	5.1	96.2
	201-250	6	3.8	3.8	100.0
	Total	156	100.0	100.0	

Table 4. Type of industry

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Food and beverage	79	50.6	50.6	50.6
	Textile garments and leather	32	20.5	20.5	71.2
	Wood and furniture	13	8.3	8.3	79.5
	Metal, machinery and equipment	12	7.7	7.7	87.2
	Other	20	12.8	12.8	100.0
	Total	156	100.0	100.0	

Table 5. Number of years of business in existence

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1-5	69	44.2	44.2	44.2
	6-10	24	15.4	15.4	59.6
	11-15	14	9.0	9.0	68.6
	16-20	10	6.4	6.4	75.0
	20 and above	39	25.0	25.0	100.0
	Total	156	100.0	100.0	

Table 6. Start-up capital

		Frequency	Percent	Valid percent	Cumulative percent
Valid	R1 000 000	57	36.5	37.7	37.7
	R1 000 001-R5 000 000	60	38.5	39.7	77.5
	R5 000 001-R10 000 000	13	8.3	8.6	86.1
	More than R10 000 000	21	13.5	13.9	100.0
	Total	151	96.8	100.0	
Missing	System	5	3.2		
Total		156	100.0		

Food and beverage stores were more dominant amongst all industry types, followed by textile garment and leather industries when compared with wood, furniture and metal.

From the above information we can comprehend that the majority of businesses have been in existence for one to five years with a decline in number of between six to twenty. However, companies that have been in existence for more than twenty years were more than those between six and twenty years.

Furthermore, respondents were also asked to indicate the number of personnel they employ to determine the size of respective franchises and manufacturing businesses in Cape Town. Most of these businesses have 51 to 100 employees, followed by 1 to 50, with the least being 201 to 250 employees. Again most businesses have invested between one million and five million rands to finance their start-up.

9. Results and discussion on TQM critical success factors

The Tables below provide an illustration of ranking with regard to CSF of TQM in franchises and manufacturing businesses.

Table 7. Ranking of the CSF of the franchise businesses

	N	Minimum	Maximum	Mean	Std. deviation
Management of customer relations	92	2	4	3.74	.489
Customer orientation	92	2	4	3.68	.553
Inspection and checking work	92	1	4	3.64	.656
Supplier quality	92	2	4	3.61	.592
Customer and market knowledge	92	1	4	3.58	.615
Quality goals and policy	92	2	4	3.55	.618
Leadership	92	2	4	3.55	.562
Process control	92	2	4	3.50	.602
Product and service design	91	1	4	3.48	.689
Continuous improvements	92	2	4	3.45	.669
Resource conservation and utilization	92	1	4	3.45	.618
Employee involvement	92	1	4	3.43	.684
Top management support	92	2	4	3.42	.683
Supplier relations	92	2	4	3.42	.683
Use of information technology	92	1	4	3.42	.715
Employee training	92	2	4	3.42	.715
Organizational culture	91	1	4	3.37	.677
Team building and problem solving	92	2	4	3.35	.733
Benchmarking	92	2	4	3.29	.688
Assessment of performance of suppliers	92	2	4	3.28	.731
Enterprise performance metrics for TQM	92	2	4	3.26	.677
Realistic TQM implementation schedule	91	2	4	3.24	.656
Resource value addition process	90	2	4	3.23	.582
Employee empowerment	92	1	4	3.17	.779
Valid N (listwise)	89				

Table 8. Ranking of the CSF of the manufacturing businesses

	N	Minimum	Maximum	Mean	Std. deviation
Management of customer relations	64	2	4	3.67	.619
Customer orientation	64	2	4	3.61	.581
Quality goals and policy	64	1	4	3.53	.755
Supplier relations	64	2	4	3.53	.616
Supplier quality	64	2	4	3.52	.666

Table 8 (cont.). Ranking of the CSF of the manufacturing businesses

	N	Minimum	Maximum	Mean	Std. deviation
Customer and market knowledge	64	1	4	3.50	.667
Inspection and checking work	64	2	4	3.42	.730
Top management support	64	1	4	3.39	.809
Continuous improvements	64	1	4	3.30	.830
Resource conservation and utilisation	64	1	4	3.27	.740
Organisational culture	64	1	4	3.27	.782
Team building and problem solving	64	1	4	3.25	.816
Product and service design	64	1	4	3.25	.854
Process control	64	1	4	3.23	.750
Employee involvement	64	1	4	3.22	.845
Assessment of performance of suppliers	64	1	4	3.17	.846
Use of information technology	64	1	4	3.06	.974
Employee training	64	1	4	3.05	1.030
Employee empowerment	64	1	4	3.02	.864
Resource value addition process	64	1	4	2.92	.697
Benchmarking	64	1	4	2.86	.941
Enterprise performance metrics for TQM	64	1	4	2.70	.971
Realistic TQM implementation schedule	64	1	4	2.50	.891
Valid N (listwise)	64				

In a comparison between manufacturing and franchises, the management of customer relations and orientation received a high degree of significance in their operations. The profitability (sales) and sustainability (longevity) of business operations depend on the patronage of customers; hence it is understandable that there is emphasis on customer relations. Of interest is that manufacturing businesses focus more on quality goals and policy, supplier relations and then market knowledge and inspection. Employee empowerment, training and involvement are also regarded as essential in manufacturing businesses. Franchise stores focus more on inspection and supplier quality than supplier relations and quality goals and policy. These are also not far-fetched. Manufacturing businesses rely on raw material supply flow from their suppliers; hence a good relationship is of immense importance. There are usually quality standards (from the Bureau of Standards, for instance) that must be met and maintained. On the other hand, franchises usually have a tried and tested system in place from their franchisor; hence there is less emphasis on market knowledge, supplier relations and training. These are all covered by the franchisor in many cases. They, however, are interested in quality supplies as these translate into their sales to their customers. It is also interesting to realize that employee empowerment is regarded as the least significant critical success factor for TQM in franchise businesses. Generally the perception of these entities on CSF of TQM concurs with Abdulla et al. (2009) who postulate that supplier quality management, reward and recognition, leadership and customer focus are key for the success of TQM.

10. Results and discussion on performance measures

The Tables presented in this section provide a list of performance measures used in both manufacturing and franchise in ranks.

Table 9. Ranking of performance measures in franchise businesses

	N	Minimum	Maximum	Mean	Std. deviation
Improving the quality of products	91	1	4	3.56	.581
Market orientation	90	1	4	3.50	.691
Market development	91	2	4	3.47	.621
New products development	91	2	4	3.42	.700
Capacity to develop a competitive profile	91	0	4	3.38	.742
Improving delivery performance	91	2	4	3.38	.727
Revenue growth	90	1	4	3.37	.694
Improving flexibility	90	2	4	3.29	.707
Profit to revenue ration/ margin	88	1	4	3.27	.769
Net profits	90	2	4	3.27	.700
Return on assets	89	1	4	3.25	.758
Waste reduction	91	1	4	3.15	.829
Cost reduction	91	1	4	3.08	.778
Valid N (listwise)	86				

Table 10. Ranking of performance measures in manufacturing businesses

	N	Minimum	Maximum	Mean	Std. deviation
Improving the quality of products	64	1	4	3.59	.635
Improving delivery performance	64	1	4	3.52	.642
Capacity to develop a competitive profile	64	2	4	3.33	.668
Improving flexibility	64	2	4	3.27	.696
Market orientation	64	1	4	3.16	.821
New products development	64	1	4	3.16	.979
Revenue growth	64	1	4	3.13	.745
Market development	64	1	4	3.11	.819
Waste reduction	64	1	4	3.08	.896
Net profits	64	1	4	3.05	.805
Cost reduction	64	1	4	3.02	.845
Profit to revenue ration/net margin	64	1	4	2.94	.710
Return on assets	64	1	4	2.92	.914
Valid N (listwise)	64				

Improving the quality of products is the highly measured metric for both entities. Again, the businesses have their customers in mind. Product improvement is for the benefit of their customers – which relates to customer relations earlier addressed. However, manufacturing businesses seem to focus more on delivery performance, the capacity to develop a competitive profile and to improve flexibility prior to market orientation and market development. Manufacturing businesses also take high regard of waste reduction and cost reduction when compared with franchise businesses. Manufacturing businesses would endeavor to minimize wastage, especially abnormal ones. They will be more interested in the speedy delivery of raw materials. In contrast, franchise stores are more market oriented; they focus more on market development and new product development. According to Koh et al. (2007) and Sila (2007) these measures are secondary; hence the consequence of TQM implementation. Noticeably franchise businesses are more interested in the market within which they operate and how to increase their market share (and profits) by being innovative around customer tastes and needs. They place less importance on performance measures than on waste reduction and cost reduction.

Conclusion

This research study was conducted on a TQM level by small and medium enterprises in the franchising and manufacturing industry through the use of a quantitative research and survey research through questionnaires. A total of 156 (92 franchises and 64 manufacturing businesses) questionnaires were completed and collected for analysis. The aim of the study was to determine the extent to which SMEs implement TQM in their businesses. From the research conducted it is evident that respondents were aware of performance measures regarding total quality management. According to this study it was evident that the management of customer relations was the most important critical success factor in both franchise and manufacturing SME businesses. Improving the quality of products was the most important performance measure for both entities. However, manufacturing firms' respondents focused more on operational measures, whereas franchise stores focus on organizational measures.

Recommendation and further studies

This study was not entirely free from limitations as the population of franchises and manufacturing businesses were unknown. Therefore our sample size may be biased as it may not be a representative of the population and a larger sample may be used in the future to allow generalization. It is thus important for enterprises to place more emphasis on operational measures to achieve more success; this will lead to improved organizational performances.

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