

MANAGERIAL COMPETENCIES AS CRITICAL INGREDIENTS FOR A TOTAL QUALITY MANAGEMENT INITIATIVE: PERCEPTIONS OF MANAGERS IN A KWAZULU-NATAL PUBLIC SECTOR DIVISION

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ABSTRACT

Total quality management (TQM) plays a pivotal role in organisational effectiveness. When successfully implemented, TQM tightly aligned with the organisation's overall business strategy maximises customer satisfaction and changes mindsets towards continuous quality improvement. One mechanism to accomplish TQM is by attaining managerial effectiveness. Therefore, this study assesses the extent to which the management in a KwaZulu-Natal public sector division displays the roles and competencies outlined in the Competing Values Framework (Quinn, Faerman, Thompson & McGrath, 2003). The study is based on a stratified random sample of 202 managers. Data were collected using a self-developed questionnaire measuring the dimensions of TQM and the roles/competencies needed to create master managers that are crucial to enhancing TQM.

INTRODUCTION

Modern-day, ever-changing business environments are trailing indicators for 21st century organisational managers to anticipate market needs, sustain a competitive advantage and review niche areas in terms of long-term goals. Globalisation itself is multi-dimensional and must be approached with business acumen and strategic vision, taking cognisance of all factors that impact on organisational performance (Mondy, Noe & Premeaux, 2002). This demands that managers capitalise on the emerging trends and are receptive to new ideas, are armed with strategic goals and challenges and make informed choices. In addition, managers need to take cognisance of the current organisational culture and the competencies of the existing leadership when engaging in strategy formulation and implementation. Among a cluster of new tools, such as benchmarking, process reengineering and activity-based management (Chen & Jones, 2007), including organisational sustenance, total quality management (TQM) poses as a gateway to an effective quality journey as it places strong emphasis on collaborations for process improvement and ultimate customer satisfaction. For any TQM initiative to be effective, the cultural environment of the organisation must be results-oriented, emphasising productivity and organisational achievement with dilemmas being resolved effectively and explicitly. In accordance with their TQM initiatives governed by their customer-driven change strategy and the core organisational strategy, managerial leaders are compelled to redefine their roles and to react to opportunities in order to foster improvement initiatives, thereby making quality leadership imperative.

Not many studies have been conducted on why attempts at the implementation of TQM fail (Beer, 2003; Shin, Kalinowski & El-Enein, 1998; Victor, Boynton & Stephens-Jahng, 2000). Conversely, there are no easy prescriptions or simple steps for the TQM concept. Certainly, total quality (TQ) can be undermined if it is inconsistent with the organisation's culture. Therefore, each organisation has to tailor its approach based on potential opportunities and strengths relating to the key organisational indicators in the organisation's culture, namely utmost focus on customer needs and expectations (Evans, 2005), monitoring and controlling of quality (Evans & Lindsay, 2005; Johnson, 1993), participative management (Daily & Bishop, 2003; Evans & Lindsay, 2005; Gitlow, Oppenheim, Oppenheim & Levine, 2005; Whetten & Cameron, 2005; Wicks, 2001), teams and teamwork (Evans & Lindsay, 2005) and continuous top management support, training and learning (Dale, 2003; Quinn, Faerman, Thompson & McGrath, 2003). Managers are therefore responsible for fostering a culture in which commitment to quality is central. The TQM criteria, built on core values, such as visionary leadership, customer-driven excellence, focus on the future, management by fact and a systems perspective, are some of the cultural elements that sustain a TQ environment, evident in high-performing organisations (Evans, 2005). This study focuses on key ingredients that are imperative for the implementation of TQM and adds to the body of knowledge relating to the key indicators of effective organisations.

Dimensions of TQM

Five dimensions of TQM, as discussed below, detail a profound understanding of the factors that constitute a TQM initiative:

External and internal customer needs and expectations

Utmost focus on external customer needs and expectations: Central to a TQM initiative is meeting customer needs to the optimum possible degree (Bowin & Harvey, 2001) and satisfying the end-customer. Achieving customer-driven excellence necessitates the anticipation of customer needs by gaining firsthand information on the needs and expectations of existing and potential customers (Whetten & Cameron, 2005). TQ principles can assist organisations to gather customer information by engaging everyone's participation who face customers in their jobs 'focusing on the processes used to collect information...and continually improving those processes' (Evans, 2005, p. 166) in order to be competitive. Organisational values and vision will only be fruitful if efforts are made to improve organisational performance from the customer's viewpoint.

Internal customers are valued customers across functional areas: Consumers are knowledgeable about their needs and rights and expect excellent service, thereby posing a challenge for employees

who interact with customers (Noe, Hollenbeck, Gerhart & Wright, 2008). Therefore, customer-contact employees need specific knowledge and skills and must be carefully selected, trained and empowered to meet and exceed the expectations of customers (Evans, 2005). Johnson (1993) found that a correlation exists between internal and external customers' needs, and employees (internal customers) that are not treated correctly cannot be expected to treat external customers differently. The success of TQM requires consideration of both internal and external customers' expectations. Internal customers ultimately contribute to the organisation's vision and goals. Failing to understand and meet the needs of employees can result in a product or service of inferior quality, with a detrimental effect on the external customer's satisfaction.

Monitoring and controlling quality

Competitive benchmarking of the organisation's products and practices against the world's best organisations: Competitive benchmarking involves searching for industry best practices that result in superior performance (Evans & Lindsay, 2005) and is essential for accomplishing organisational objectives and performance levels. Organisations can assess performance gaps, set realistic goals and ensure continuous creativity, innovation and improvement. Hence, strengths and weaknesses surface and learning takes place on how to integrate best practices into operations in terms of setting targets, developing strategies and engaging in implementation.

Continuous monitoring of sources of defects with the goal of eliminating their occurrences: A defect may be categorised as a critical defect, major defect or a minor defect (Gitlow *et al.*, 2005). Critical defects need close observation, monitoring and control; minor defects do not, as they are still useable. A TQ environment requires constant improvement of processes so that products and services are within the specification range, are of quality and have zero defects.

Statistical quality control and statistical process control techniques: Statistical quality control expands beyond inspection to focus on identifying and eradicating the problems in the production processes that cause defects (Evans & Lindsay, 2005). It is a tool for monitoring a process to identify special causes of deviation and to signal the need to take corrective action; it provides a rational basis for adopting statistical thinking to control processes, thereby enhancing consistency of output (Evans, 2005). A reliable statistical process control is pertinent and the tools/techniques form an essential part of the overall TQM strategy.

Participative management

Extensive delegation: Delegation can be used as a 'time management tool to free up discretionary time' (Whetten & Cameron, 2005, p. 419), assisting managers to get more work done and to focus on demanding and strategic issues, thereby stimulating their creativity and potential, resulting in growth. This means that managers shift the responsibility, authority and accountability for the execution of tasks to subordinates, while still retaining responsibility. It enables the development of employees' skills and abilities, enabling employees' strengths to be optimised, thereby making them more effective and consequently strengthening the work unit.

Involvement/Empowerment: TQM requires that managers involve and enable their workers, thereby placing emphasis on workforce empowerment (Grobler, Warnich, Carrel, Elbert & Hatfield, 2006). This implies reducing employee dependence on supervisors and placing greater focus on individual control over (and responsibility for) the work that needs to be undertaken (Gómez-Mejía, Balkin & Cardy, 2004). However, the essential factors in empowerment entails committed people and encouraging employees with regard to risk taking, giving the organisation a competitive advantage (Gómez-Mejía *et al.*, 2004).

When TQM and employee involvement and empowerment are combined, the resultant effects are higher levels of productivity and employee satisfaction (Wicks, 2001).

Coaching: Coaching is essential for the improvement of performance and for the enhancement of specific skills (Meyer *et al.*, 2007) that are much needed by employees to manage with customer complaints and quality improvements. Successful executive coaching enhances growth, facilitates positive organisational change and ensures improved performance (Hauser, 2009). Managers perceive their role as one of providing guidance and answers, identifying weaknesses and diagnosing and solving problems (Gómez-Mejía *et al.*, 2004).

Supportive leadership style: Effective managers are important to the continuous self-renewal and eventual survival of organisations (Bowin & Harvey, 2001) and are imperative in today's organisations, which rely on quality leadership. TQM itself is committed to organisational excellence and astute managers with a repertoire of skills and competencies are needed to ease the mapping of the effective and widening flow of work and information, support and encourage subordinates and prevent elements that enervate the workplace in order to ensure professional vitality and goal accomplishment.

Emphasis on teams and teamwork

In a TQ environment that stresses the importance of cooperative links, the emphasis is on teams and teamwork aimed at breaking down barriers and obstacles among individuals, departments and line and staff functions (Evans & Lindsay, 2005). In a high-performing workforce, team members are knowledgeable about customers, competitors and suppliers and their primary focus is on customers (Bowin & Harvey, 2001).

Continuous top management support, training and learning

Emphasis on continuous top management support: Essential to the successful implementation of TQM is leadership and top management support. Managers need to create a corporate culture that focuses on quality products and services, business processes and people (Bank, 2000). In addition, TQM requires clear communication to cascade from top management to employees in which roles and processes are clarified (Oakland, 2000). The effectiveness of managers with regard to these critical aspects will determine short- and long-term success and organisational survival, viability and profitability.

Emphasis on continuous training and learning: Fundamental to the TQM ideology is to enlighten employees of the goals of customer satisfaction, to train them on how to identify customer needs and fulfill their expectations, and to emphasise the value of their role in enhancing product and service delivery. Organisations that engage in training investment based on proper training needs analysis are able to out-perform those that do not. Well-planned training programmes contribute to effective learning (Meyer *et al.*, 2007) and unveil lucrative opportunities that enhance productivity and transform into outstanding business outcomes, and should therefore be seen as an integral part of the process of TQM (Mullins, 2002).

The above core areas profoundly emphasise the need for managerial competencies and effective managers to continuously drive the TQM challenge effectively. The capability enhancements (knowledge, skill and abilities) of effective managers are important to the continuing self-renewal and for the piloting of organisational systems. Effective managers spend sufficient time on establishing opportunities for improvement, training, teamwork, collective effort, integration and employee commitment, among others, to effectively sustain a quality journey. Djebarni (1996) asserts that managerial effectiveness should be objectively quantified by maximum output, market share and similar criteria, while Luthans (1988, cited in Mullins,

2002) maintains that effective managers are defined in terms of the quantity and quality of standards of performance and the satisfaction and commitment of subordinates, and emphasises that role changes may occur as managers attempt to practice TQ leadership.

The repertoire of managerial competencies evaluated using the Competing Values Framework (CVF)

The framework of managerial competence, the CVF (Quinn *et al.*, 2003), provides a strong foundation for developing managerial competencies and creating master managers in TQM settings. The eight managerial roles (mentor, facilitator, monitor, co-ordinator, director, producer, broker, innovator) flanked by key competencies are placed in four quadrants consisting of four models (human relations model, open systems model, internal process model, rational goal model) (Quinn *et al.*, 2003). The skilful fusion of the eight competencies, as discussed below, allows the manager to function effectively (Quinn *et al.*, 2003).

The influential role of the 'mentor' constitutes the competencies of understanding oneself and others, communicating effectively and developing employees. Managers need to develop leadership skills in themselves and others, which includes the management of employee concerns (Quinn *et al.*, 2003). TQM emphasises open communication between people and departments, and teamwork (Kelemen, 2003). Daft (2005) believes that leaders are 'communication champions', that they are inspirational, that they bring people together for a common purpose and that leader communication is directed at a specific purpose. Similarly, Clappitt (2002, p. 8) maintains that 'effective communication is effective management and vice versa – the catalyzing process for accomplishing the work of the organization'. Hence, organisation-wide communication of information (Oakland, 2000) is imperative and employees that are well informed are productive because they feel involved (Vora, 2004). Furthermore, delegation, a core element of successful management and leadership (Crainger, 1998, cited in Mullins, 2002), improves productivity, highlights a manager-subordinate relationship (Mullins, 2002) and creates free time for managers to immerse themselves in critical chores, such as planning (Kreitner, 2007).

The role of the 'facilitator' entails building teams, using participative decision making and managing conflict. The challenge is to develop leadership styles and use the power of teamwork strategically to disseminate the quality mission (Cooney & Sohal, 2003) and to formulate and implement process-improvement strategies in order to attain real performance improvements (Teare, Munro-Faure, Munro-Faure, Scheuing & Bowen, 1999), thereby contributing to organisational success and high levels of customer satisfaction. Participative management techniques are formulated on the premise that employees should have the chance to give input into decisions that affect them (Quinn *et al.*, 2003). Participation in decision making is an avenue for sense-making and knowledge generation (Ashmos, Duchon, McDaniel & Huonker (2002) and for achieving goal congruence and synchronising organisational efforts (Lengnick-Hall & Lengnick-Hall, 1992) in order to gain a competitive edge. The manager who effectively manages conflict adopts collaborative approaches. Positive conflict fosters better alternatives, higher goals and stimulates creative thinking; whereas with negative conflict, energy is used on interpersonal differences, instead of on attaining goals (Nel *et al.*, 2006).

The 'monitor' role entails managing information through critical thinking, managing information overload and managing core processes. Effective managers think critically by valuing and adhering to intellectual standards (Kelly, 1999), clearly conceptualising the actual issues or problems being experienced and approaching evidence with openness and skepticism (Quinn *et al.*, 2003). Channelling and managing the

flow of information (Quinn *et al.*, 2003) and organising content are imperative managerial skills. Strategic thinking about information overload and effectively managing information is cost saving. The identification of core activities that drive organisational performance need continuous monitoring and improvement, as the quality of those processes contributes to an organisation's overall success.

The competencies linked to the 'co-ordinator' role are managing workflow and projects, designing work and managing across functions. While project managers use common sense and have basic management skills (Turk, 2007), their influence is crucial to a project's success. When organisations control the design of work processes, work should be simple, standardised and specialised, and supervision and pay incentives should be used to motivate individuals for better task performance (Lawler, 1992, cited in Quinn *et al.*, 2003). Hatchuel and Weil (1999) believe that design-oriented organisations are favourable to learning cycles, which are conducive to, for example, the regeneration of objects and skills, and steer processes that create new concepts. In addition, Meyer *et al.* (2007) believe that cross-functional teams can be created to improve processes. Some guidelines for managing cross-functionally is to clarify goals, hold team members accountable for performance, keep cross-functional teams small with the correct combination of people, provide current and pertinent information, train members by means of teamwork and process management, clarify expectations and encourage team members to be creative in their roles (Quinn *et al.*, 2003).

The focus of the 'director' role is communicating a vision, setting goals and objectives, and designing and organising. A vision provides a view of possibilities, fosters greater commitment than task or goal statements (Whetten & Cameron, 2005) and is central to leadership effectiveness (Kouzes & Posner, 1995). Accordingly, Meyer *et al.* (2007) assert that if a leader has a vision for quality services, each member internalises this vision, irrespective of his or her level or position in the organisational structure. An organisation's goals determine inputs and outputs, and the success in attaining its goals is a basis for organisational performance evaluation and effectiveness (Mullins, 2002). Managers can enhance the effort-performance expectancies by assisting employees to achieve their performance goals (Nel *et al.*, 2006). Design and organisation are driven by the vision and strategy, and while every design has strengths and weaknesses, effective organisational design enables organisations to transform their ability to do business (Rodgers, 2002, cited in Winfield, Bishop & Porter, 2004).

The enactment of the 'producer' role is evident in the productivity of managerial leaders. The role consists of working productively, fostering a productive work environment and managing time and stress while balancing competing demands. Managers foster a productive work environment largely through the control organisations have over information, knowledge, rewards and power, that is, in terms of how empowering an environment they create. However, in order to optimally achieve a productive work environment, managers must have the power of understanding and knowing how to skilfully leverage the intrinsic motivators of meaning, competence, self-determination and impact (Quinn *et al.*, 2003). In the producer role, the leader aims to manage time and stress, as role stress results in problems relating to communication and interpersonal relationships and can negatively affect morale, thereby leading to the mismanagement of an organisation's greatest asset – human capital (Winfield *et al.*, 2004), and impacting on its performance and effectiveness at the workplace (Mullins, 2002).

The 'broker' presents and negotiates envisioning change and engages in finding better ways to do things. The role entails building and maintaining a power base, negotiating agreement and commitment, and presenting ideas (effective oral

presentations). Power is often defined as essentially 'the ability to produce; the capacity to mobilize people and resources to get things done' (Kanter, 1983, p. 213). A part of a manager's job is to 'effectively and appropriately build a base of legitimacy, information, and influence from which to serve the needs of their unit and their organization' (Cohen & Bradford, 1990, cited in Quinn *et al.*, 2003, p. 264). When a new idea is developed, idea champions in the broker role promote the idea enthusiastically, building support and inspiring others, overcoming resistance and ensuring implementation of the innovation (Robbins, 2003).

The 'innovator' role involves living with and managing change, and thinking creatively. Planned change aims at improving the organisation's ability to adapt to environmental changes (Robbins, 2003). The key to living with change is having a vision that provides direction and purpose. Living with change is, however, a necessity, while becoming initiators of change means being creative and progressive. 'Today's managers are challenged to create an organizational culture and climate capable of evoking the often hidden creative talent of every employee' (Tischler, 2004, cited in Kreitner, 2007, p. 234). Creativity requires creative and analytic thinking, with new ideas and solutions that may be generated by means of brainstorming (Quinn, *et al.*, 2003). People's creativity needs to be immersed with organisational resources, capacities and systems if new ideas are to be fruitful (Bilton, 2007). Strategic change necessitates a focus on 'customer, market, product/service, or technological opportunities and challenges' in order to be competitive (Evans, 2005, p. 410) as well as the continuous improvement of process changes implemented by the manager in the innovator role in order to bring about sustainable culture change (Evans & Lindsay, 2005).

Objectives of the study

- To evaluate the extent to which the management cadre in a KwaZulu-Natal public sector division is accomplishing the dimensions needed for TQM (customer needs and expectations, monitoring and controlling quality, participative management, teams and teamwork, continuous top management support, training and learning)
- To assess the extent to which the management cadre displays the competencies as outlined in the CVF (mentor, facilitator, monitor, co-ordinator, director, producer, broker and innovator roles)
- To investigate the relationship between the dimensions of TQM and the managerial roles needed to create 'master managers', as outlined in the CVF
- To assess the extent to which the managerial roles or competencies necessary for creating master managers have the potential to enhance the accomplishment of TQM.

RESEARCH DESIGN

Research approach

The research methodology was designed to determine the relationship between the managerial competencies/roles and the dimensions of TQM. The aim is to recommend strategies to develop managerial competencies thereby enhancing the accomplishment of TQM.

Respondents

The population comprised of middle, senior and top management in a large public sector department in eThekweni (Durban, KwaZulu-Natal province) in South Africa. The population was comprised of approximately 400 managers. A sample of 202 subjects was drawn using a stratified random sampling technique to ensure proportionate representation from the strata of the designated groups of interest, that is, managers. According to the population-to-sample size table by Sekaran (2003), the corresponding minimum sample size for a population of 400 is 196, thereby confirming the adequacy of the

sample size for this study while securing a 51% response rate. In terms of the composition, 12.9% of the sample consisted of top managers, 32.7% were senior managers and 54.4% were middle managers. The adequacy of the sample was further determined using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (0.794; 0.768) and the Bartlett's Test of Sphericity (12233.455, $p = 0.000$; 2975.330, $p = 0.000$) for the five TQM dimensions and the eight managerial roles respectively, which indicated suitability and significance. The results indicate that the normality and homoscedasticity preconditions are satisfied.

Measuring instrument

Data were collected using a self-developed questionnaire consisting of three sections, namely Section A (biographical information), Section B (comprising 55 items relating to the five dimensions of TQM) and Section C (comprising 40 items pertaining to the eight managerial roles needed to create master managers as outlined in the CVF). The biographical data relating to level of management was collected using a nominal scale with pre-coded option categories, and the items in Sections B and C were measured using a five-point Likert scale ranging from strongly disagree (1), disagree (2), neither agree/nor disagree (3), agree (4) to strongly agree (5). The questionnaire was formulated on the basis of identifying recurring themes that surfaced during the literature review as well as the competencies outlined in the CVF and items included in the questionnaire related directly to the constructs being measured. This ensured face and content validity. Furthermore, in-house pre-testing was adopted to assess the suitability of the instrument. Pilot testing was also carried out using 12 subjects, selected using the same procedures and protocols adopted for the larger sample. The feedback from the pilot testing confirmed that the questionnaire was appropriate in terms of relevance and construction.

Research procedure

The research was only conducted after ethical clearance was obtained for the study and upon completion of a pilot study.

Measures

The validity of the questionnaire was assessed using factor analysis. A principal component analysis was used to extract

TABLE 1
Factor analysis: Validity of the instrument measuring the dimensions of TQM

FACTOR	EIGENVALUE	% OF TOTAL VARIANCE
1	11.37	12.50
2	8.08	8.87
3	7.33	8.05
4	5.20	5.72
5	4.79	5.26

TABLE 2
Factor analysis: Validity of the instrument measuring managerial roles

FACTOR	EIGENVALUE	% OF TOTAL VARIANCE
1	4.52	11.30
2	3.10	7.56
3	2.69	6.66
4	2.46	6.00
5	2.42	5.90
6	2.26	5.51
7	2.12	5.18
8	1.90	4.64

initial factors and an iterated principal factor analysis was performed using SPSS with an Orthogonal Varimax Rotation. In terms of the dimensions of TQM (Section B), five factors with latent roots greater than unity were extracted from the factor loading matrix and only items with loadings > 0.5 were considered to be significant (Table 1). Furthermore, when items were significantly loaded on more than one factor, only the one with the highest value was selected.

The reliability of Section B of the questionnaire relating to the dimensions of TQM was determined using Cronbach's alpha coefficient (alpha = 0.959). This alpha coefficient indicates a very high level of internal consistency of the items and hence a high degree of reliability.

In terms of the validity of Section C of the questionnaire (managerial roles and competencies), the eight roles as outlined in the CVF were generated (Table 2).

The items assessing the managerial roles were also reflected as having a very high level of internal consistency and reliability, with the Cronbach's alpha coefficient being 0.893.

Administration of the measuring instrument

The questionnaires were administered over a three-month period and subjects were expected to respond to the self-report measure using the scale provided. Completed questionnaires could either be posted in the attached self-addressed envelope or sent electronically to the researchers.

Statistical analysis

Descriptive statistics (means, standard deviations) were used to evaluate the first two objectives of the study. Inferential statistics (correlation, multiple regression) were used to assess the third and fourth objectives, which respectively relate to the two hypotheses of the study:

Hypothesis 1: The managerial roles determining management effectiveness significantly correlate with each of the dimensions and sub-dimensions of TQM respectively.

Hypothesis 2: The managerial roles significantly account for

the variance in contributing to accomplishing TQM in the organisation.

Data were captured using Excel (Version 5), processed with Simstat and presented using tabular and graphical representations.

RESULTS

Descriptive analyses: Assessment of the dimensions of TQM

To determine the extent to which the managers perceive that they are fulfilling the dimensions critical for accomplishing TQM, five main dimensions and their sub-dimensions were evaluated using a five-point Likert scale. The higher the mean score value, the greater the extent to which the dimension is being fulfilled in terms of attaining TQM (Table 3). It must be noted that although the mean differences are negligible, it is significant considering the results are an average of a sample of 202 subjects.

Table 3 indicates that managers perceive that the following key dimensions, in descending level, are being attained in accomplishing TQM:

- Continuous top management support, training and learning (mean = 3.557)
- Customer needs and expectations (mean = 3.288)
- Monitoring and controlling quality (mean = 3.173)
- Participative management (mean = 3.163)
- Teams and teamwork (mean = 3.076)

While the aforementioned would indicate that efforts to accomplishing TQM are productive, thereby fulfilling the first objective, when the mean scores are compared against a maximum attainable score of 5 it clearly reflects room for improvement, with the greatest area for improvement being teams and teamwork.

In terms of customer needs and expectations, the focus was on external customers and internal customers. Table 3 indicates that in this organisation managers perceive that there is greater

TABLE 3
Descriptive statistics: Key dimensions of TQM

DIMENSION	MEAN	VARIANCE	STD DEV.	MIN.	MAX.	CONFIDENCE INTERVAL	
						Lower	Upper
Customer needs & expectations	3.288	0.355	0.596	1	5	3.204	3.373
Focus on customer needs/expectations (external)	3.308	0.419	0.647	1	5	3.218	3.398
Focus on internal customers	3.240	0.442	0.665	1	5	3.147	3.333
Monitoring and controlling quality	3.173	0.354	0.595	1	5	3.089	3.257
Continuous benchmarking	3.264	0.418	0.647	1	5	3.174	3.354
Continuous monitoring of sources of defects	3.260	0.556	0.746	1	5	3.156	3.364
Statistical quality control	3.016	0.622	0.789	1	5	2.906	3.126
Participative management	3.163	0.434	0.659	1	5	3.070	3.257
Extensive delegation	3.166	0.467	0.684	1	5	3.071	3.261
Involvement/Empowerment	3.049	0.729	0.854	1	5	2.930	3.168
Coaching	3.343	0.752	0.867	0	5	3.223	3.464
Supportive leadership style	3.272	0.852	0.923	0	5	3.144	3.400
Teams and teamwork	3.076	0.490	0.700	0	4	2.977	3.175
Continuous top management support, training & learning	3.557	0.292	0.540	1	5	3.481	3.634
Continuous training and learning	3.645	0.271	0.521	2	5	3.572	3.717
Continuous top management support	3.487	0.449	0.670	1	5	3.394	3.581

TABLE 4
Descriptive statistics: Managerial roles needed to create master managers

ROLE	MEAN	% TO WHICH MANAGERIAL ROLE IS BEING FULFILLED	VARIANCE	STD DEV.	MIN.	MAX.	CONFIDENCE INTERVAL	
							Lower	Upper
Mentor	3.659	73.19	0.326	0.571	1	5	3.52	3.72
Facilitator	3.256	65.13	0.439	0.662	1	5	3.59	3.94
Monitor	3.799	75.99	0.334	0.578	2	5	3.62	3.80
Co-ordinator	3.550	70.99	0.397	0.630	1	5	3.54	3.75
Director	3.277	65.53	0.496	0.704	1	5	3.26	3.53
Producer	3.395	68	0.406	0.637	1	5	3.20	3.47
Broker	3.613	72.26	0.306	0.554	1	5	3.49	3.71
Innovator	3.627	72.54	0.266	0.516	2	5	3.61	3.77

focus on external customers (mean = 3.308) than internal customers (mean = 3.240). Frequency analyses were computed to obtain greater insight into managerial perceptions. With regard to utmost focus on external customer needs and expectations, 61.4% of the managers agree and a further 9.9% strongly agree that their organisation strives to be competitive by exceeding customer expectations. Furthermore, 63.4% agree and 4.5% strongly agree that employees who interact directly with external customers are carefully trained. However, 3.5% of the managers disagree that the needs and expectations of customers are identified by using a formal approach. In addition, 14.4% of the managers disagree and a further 2.0% strongly disagree that employees who interact directly with customers are carefully empowered.

With monitoring and controlling quality, Table 3 indicates that in this organisation managers perceive that the focus on competitive benchmarking (mean = 3.264) and continuous monitoring of sources of defects (mean = 3.260) are almost equal, followed by statistical quality control (mean = 3.016). Against a maximum attainable score of 5, there is room for improvement in each of the dimensions. Frequency analyses were computed to obtain greater insight into managerial perceptions. With regard to competitive benchmarking, 65.3% of the managers agree and a further 5.4% strongly agree that they find that action plans are developed to ensure improvement. However, 11.4% of the managers disagree and a further 1% strongly disagree that their organisation sets realistic goals by benchmarking. With regard to continuous monitoring of sources of defects, 60.4% of the managers agree and a further 7.4% strongly agree that by observing, monitoring and controlling sources of defects, the occurrences of defects are eliminated. Furthermore, with regard to statistical quality control, 10.4% disagree and a further 4.5% strongly disagree that they find control charts to be of importance to determine process capability.

In terms of participative management, Table 3 indicates that managers in this organisation perceive that there is greater focus on coaching (mean = 3.343), followed by supportive leadership style (mean = 3.272), extensive delegation (mean = 3.166) and, lastly, involvement/empowerment (mean = 3.049). With regard to a supportive leadership style, 65.8% of the managers agree and a further 3% strongly agree that in their organisation effective teams contribute to achieving optimum levels of productivity.

Table 3 reflects that in this organisation, the mean score for teams and teamwork (mean = 3.076) against a maximum attainable score of 5 indicates that there is some room for improvement. Frequency analyses were computed to obtain greater insight into managerial perceptions. With regard to teams and teamwork, 43.1% of the managers agree and a further 2% strongly agree that decision making is allowed in teams and that there is flexibility. However, 16.3% of the managers disagree and a further 2.5% strongly disagree that

they understand the benefits of using quality circles for quality issues relating to the organisation. Furthermore, 20.3% of the managers disagree and a further 4.5% strongly disagree that an ingredient of high-performing teams in their organisation relates to a formal team-building technique that is used to identify strengths, weaknesses and areas for improvement.

With regard to top management support, training and learning, Table 3 reflects that in this organisation, managers perceive that the focus on continuous training and learning (mean = 3.645) is greater than continuous top management support (mean = 3.487). These mean scores against a maximum attainable score of 5 indicate that there is some need for improvement in these sub-dimensions. Frequency analyses were computed to obtain greater insight into managerial perceptions. With regard to continuous training and learning, 73.3% agree and a further 7.9% strongly agree that their organisation invests in training and education for achieving excellence. In addition, 72.1% of the managers agree and a further 8% strongly agree that their organisation recognises the need for a proper training needs analysis on an ongoing basis. Furthermore, 68.3% of the managers agree and a further 5% strongly agree that training and education shape the behaviour and attitude of employees towards fulfilling customer expectations optimally. With regard to continuous top management support, 61.7% of the managers agree and a further 17.4% strongly agree that they strive to create a corporate quality culture in which services and people are central. In addition, 61.4% of the managers agree and a further 5.4% strongly agree that employees are constantly guided and encouraged by managers working with subordinates so that organisational goals are promoted. Furthermore, 61.4% of the managers agree and a further 3.5% strongly agree that their organisation focuses on developing the competencies of employees in order to ensure continuous improvement. In addition, 61.9% of the managers agree and a further 3.5% strongly agree that their organisation implements policies and procedures consistently to protect the institution.

Descriptive analyses: Assessment of managerial roles needed to create master managers

Descriptive statistics were computed for the managerial roles determining management effectiveness. The higher the mean score value, the greater the extent to which the managers possess and fulfill the specified role (Table 4). It must be noted that although the mean differences are negligible, it is significant considering the results are an average of a sample of 202 subjects. In order to assess the extent to which managers possess the competencies and fulfill the roles necessary to operate as managers and contribute to the accomplishment of TQM, a percentage was computed based on the mean score values and the maximum attainable score of 5 (Table 4).

The managerial roles in descending level of fulfillment based on the mean scores values and percentages in Table 4 are presented

below and the mean score values against a maximum attainable score of 5 indicate that there is still room for improvement in every one of the managerial roles. Frequency and percentage analyses in each of the managerial roles reflect the following:

In the 'monitor' role, information is managed through critical thinking, managing information overload and managing core processes. When calculated as a percentage (75.99%), it can be deduced that managers perceive that they are satisfying their monitor role to a large extent. In this role, 69.3% of the managers agree and a further 25.7% strongly agree that critical thinking allows them to formulate clear arguments. In addition, 66.3% of the managers agree and a further 23.3% strongly agree that they are able to construct their statements and react to the statements of others effectively. Furthermore, 61.9% of the managers agree and a further 19.8% strongly agree that they do not lose sight of outputs, even with their busy schedule. In addition, 60.4% of the managers agree and a further 6.4% strongly agree that managers in their organisation are able to effectively operate and control core processes.

In the 'mentor' role, the manager develops and helps people, and engages in skill building and training opportunities, which includes the understanding of self and others, communicating effectively and developing employees (Quinn *et al.*, 2003). When calculated as a percentage (73.19%), it can be deduced that managers perceive that they are satisfying their mentor role to a fair extent. In this role, 65.3% of the managers agree and a further 28.7% strongly agree that they fully understand their strengths, weaknesses, behaviours and reactions in different situations. In addition, 66.7% of the managers agree and a further 5.5% strongly agree that there is a correlation between effective communication and work unit improvements, while 12.4% of the managers disagree and a further 2.0% strongly disagree that employees' competencies are developed by delegating more responsibilities to them and by providing feedback to them.

In the 'innovator' role the manager is creative, manages organisational changes and facilitates change, identifies trends

and envisions innovations (Quinn *et al.*, 2003). When calculated as a percentage (72.54%), the deduction is that managers believe that they are fulfilling their innovator role fairly with some room for improvement. In this role, 67.3% of the managers agree and a further 14.9% strongly agree that creative thinking allows them to formulate new ideas. In addition, 71.3% of the managers agree and a further 9.9% strongly agree that creativity enables them to establish new combinations in their work environment. Furthermore, 72.8% of the managers agree and a further 18.8% strongly agree that they realise that their organisation is compelled to make changes due to changing needs and circumstances. However, 20.3% of the managers disagree and a further 1.5% strongly disagree that the routine in their organisation shifts their focus away from possible outcomes.

Managers in the 'broker' role negotiate agreement and commitment. The broker presents and negotiates ideas effectively, is persuasive and influential, acquires resources, and acts as a liaison and spokesperson (Quinn *et al.*, 2003). When calculated as a percentage (72.26%), the deduction is that managers perceive that they are adequately satisfying their broker role with some room for improvement. In this role, 67.7% of the managers agree and a further 21.4% strongly agree that they consider networking to be an important skill at all levels in their organisation. In addition, 74.8% of the managers agree and a further 13.9% strongly agree that they are able to help employees solve problems and reach agreements effectively. On the contrary, 20.8% of the managers disagree and a further 3% strongly disagree that most decisions in their organisation are made through negotiations.

The manager in the 'co-ordinator' role maintains smooth work processes, including the structure and flow of the system, manages projects, designs work and manages across functions (Quinn *et al.*, 2003). When calculated as a percentage (70.99%), the deduction is that managers believe that they are sufficiently fulfilling their co-ordinator role. In this role, 63.2% of the

TABLE 5
Intercorrelations : Dimensions and sub-dimensions of TQM and managerial roles determining management effectiveness

Dimensions and sub-dimensions of TQM	r/p	MANAGERIAL ROLES							
		Mentor	Facilitator	Monitor	Co-ordinator	Director	Producer	Broker	Innovator
Utmost focus on external customer needs and expectations	r p	0.371 0.000*	0.477 0.000*	0.509 0.000*	0.300 0.000*	0.407 0.000*	0.559 0.000*	0.313 0.000*	0.281 0.000*
Internal customers	r p	0.427 0.000*	0.523 0.000*	0.556 0.000*	0.410 0.000*	0.449 0.000*	0.491 0.000*	0.350 0.000*	0.230 0.000*
Competitive benchmarking	r p	0.357 0.000*	0.408 0.000*	0.442 0.000*	0.398 0.000*	0.534 0.000*	0.487 0.000*	0.330 0.000*	0.360 0.000*
Continuous monitoring of sources of defects	r p	0.489 0.000*	0.386 0.000*	0.386 0.000*	0.379 0.000*	0.370 0.000*	0.435 0.000*	0.291 0.000*	0.233 0.000*
Statistical quality control	r p	0.489 0.000*	0.424 0.000*	0.450 0.000*	0.403 0.000*	0.471 0.000*	0.408 0.000*	0.273 0.000*	0.377 0.000*
Extensive delegation	r p	0.482 0.000*	0.597 0.000*	0.665 0.000*	0.373 0.000*	0.639 0.000*	0.660 0.000*	0.453 0.000*	0.308 0.000*
Involvement/empowerment	r p	0.478 0.000*	0.566 0.000*	0.565 0.000*	0.298 0.000*	0.436 0.000*	0.477 0.000*	0.362 0.000*	0.394 0.000*
Coaching	r p	0.273 0.000*	0.200 0.000*	0.247 0.000*	0.278 0.000*	0.324 0.000*	0.280 0.000*	0.317 0.000*	0.332 0.000*
Supportive leadership style	r p	0.340 0.000*	0.364 0.000*	0.334 0.000*	0.254 0.000*	0.392 0.000*	0.326 0.000*	0.382 0.000*	0.348 0.000*
Teams and teamwork	r p	0.485 0.000*	0.641 0.000*	0.558 0.000*	0.416 0.000*	0.465 0.000*	0.498 0.000*	0.304 0.000*	0.311 0.000*
Continuous training and learning	r p	0.513 0.000*	0.421 0.000*	0.510 0.000*	0.519 0.000*	0.534 0.000*	0.476 0.000*	0.444 0.000*	0.417 0.000*
Continuous top management support	r p	0.583 0.000*	0.561 0.000*	0.568 0.000*	0.404 0.000*	0.565 0.000*	0.525 0.000*	0.548 0.000*	0.435 0.000*

* p < 0.01

TABLE 6

Correlation: TQM (combined dimensions) and managerial roles determining management effectiveness (combined dimensions) (N = 198)

TQM (COMBINED DIMENSIONS) AND MANAGERIAL ROLES DETERMINING MANAGEMENT EFFECTIVENESS		DIMENSIONS OF TQM	MANAGERIAL ROLES DETERMINING MANAGEMENT EFFECTIVENESS
Dimensions of TQM	r	1	
	p		
Managerial roles determining management effectiveness	r	0.790	1
	p	0.000*	

* p < 0.01

managers agree and a further 23.9% strongly agree that with their specific skills they are able to plan and monitor projects.

In the 'producer' role, managers are productive, motivated, and committed (Quinn *et al.*, 2003). Producers are expected to be task-oriented, work-focused, to accept responsibility, to work productively, and to manage time and stress (Quinn *et al.*, 2003). When calculated as a percentage (68%), the deduction is that managers perceive that they are fulfilling their producer role to a moderate extent. In this role, 69.3% of the managers agree and a further 15.8% strongly agree that in order to be competitive, they continuously stress the importance of high performance. Areas for improvement were assessed and it was found that 14.4% of the managers disagree and a further 5.9% strongly disagree that in their organisation individuals work productively to foster a productive work environment. In addition, 12.9% of the managers disagree and a further 8.9% strongly disagree that their organisation strives to optimise time management and to minimise stress management.

The manager in the 'director' role examines the organisation's existence, what needs to be achieved and how it can be accomplished (Quinn *et al.*, 2003). When calculated as a percentage (65.53%), it can be deduced that managers perceive that they are satisfying their director role satisfactorily. Areas for improvement were therefore assessed. It was found that in this role, 13.9% of the managers disagree and a further 2.0% strongly disagree that every effort is made to translate organisational goals into sub-goals at various levels of the organisation. In addition, 23.8% of the managers disagree and a further 5.9% strongly disagree that with regard to design and organisation their organisation tends to move towards a horizontal and flatter structure.

In the 'facilitator' role, the manager facilitates collective effort, builds cohesiveness and morale, manages conflict and balances the needs of individuals and groups (Quinn *et al.*, 2003). When calculated as a percentage (65.13%), the deduction is that managers believe that they are fulfilling their facilitator role to a satisfactory extent. In this role, 68.3% of the managers agree and a further 8.4% strongly agree that they find that high-performing teams emerge by the manner in which work groups are staffed, structured and trained. Areas for improvement were also assessed. It was found that 17.8% of the managers disagree and a further 4.0% strongly disagree that their organisation provides an effective team-building environment that values various opinions and open resolution of conflict. Furthermore, 13.9% of the managers disagree and a further 5.9% strongly disagree that in their organisation participatory decision making is practised so that employees have a say in decisions that affect them. In addition, 14.4% of the managers disagree and a further 5.4% strongly disagree that in their organisation the effective management of conflict increases positive outcomes.

Evidently, the results of the study (Table 4) reflect that the cohort of managers in this study perceive that they are fulfilling the various role in varying degrees, thereby fulfilling the second objective of the study.

Inferential statistics

Hypothesis 1

The managerial roles determining management effectiveness significantly correlate with each of the dimensions and sub-dimensions of TQM respectively (Table 5).

Table 5 indicates that each of the managerial roles determining management effectiveness correlate with each of the dimensions and sub-dimensions of TQM respectively at the 1% level of significance. Hence, Hypothesis 1 may be accepted. In particular, the following strong significant relationships are noted:

- Teams and teamwork and the facilitator role ($r = 0.641$; $p = 0.000$)
- Extensive delegation and the monitor role ($r = 0.665$; $p = 0.000$), the director role ($r = 0.639$; $p = 0.000$) and the producer role ($r = 0.660$; $p = 0.000$) respectively

In order to confirm the relationship between the managerial roles and TQM, the Pearson product moment correlation coefficient was computed for the combined dimensions of both variables (Table 6).

Table 6 reflects that there is a strong, significant relationship between TQM and management roles determining management effectiveness ($r = 0.790$; $p = 0.000$). Hence, Hypothesis 1 is confirmed at the 1% level of significance. Their interconnectedness implies that any improvement in any one dimension will have a rippling effect on the other dimensions, thereby enhancing the managerial roles and having the potential to accelerate the accomplishment of TQM.

Hypothesis 2

The managerial roles significantly account for the variance in contributing to accomplishing TQM in the organisation (Table 7).

Table 7 indicates that the managerial roles (mentor, facilitator, monitor, co-ordinator, director, producer, broker and innovator) significantly account for 63.9% of the variance in determining TQM. The remaining 36.1% of the variance in TQM may be due to other factors that lie outside the jurisdiction of the study. Hence, Hypothesis 2 may be accepted. However, the managerial

TABLE 7

Multiple Regression: Managerial roles contributing to accomplishing TQM

MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD ERROR OF THE ESTIMATE
	0.806*	0.649	0.639	0.32319
Model	Beta	In	t	P
Mentor role	0.283		4.498	0.000
Facilitator role	0.387		6.377	0.000
Monitor role	0.251		4.105	0.000
Co-ordinator role	0.176		2.790	0.006
Director role	0.385		6.889	0.000
Producer role	0.379		6.203	0.000
Broker role	0.221		3.799	0.000
Innovator role	0.192		3.340	0.001

roles impact on the accomplishment of TQM in varying degrees, which in descending level of impact, based on beta values, are:

- Facilitator role (beta = 0.387)
- Director role (beta = 0.385)
- Producer role (beta = 0.379)
- Mentor role (beta = 0.283)
- Monitor role (beta = 0.251)
- Broker role (beta = 0.221)
- Innovator role (beta = 0.192)
- Co-ordinator role (beta = 0.176).

DISCUSSION

The results indicate that managers perceive that the following are imperative for accomplishing TQM:

- Utmost focus on customer needs and expectations (internal and external customers)

One of Deming’s principles of quality management is that if one cannot recognise one’s customer, one does not know what one is embarking on and cannot learn to improve (1986, cited in Anyamele, 2005). Likewise, Evans (2005) maintains that essential to high-performing organisations is the need for customer-driven quality. In this study it was found that managers perceive that both internal and external customer needs are important in assuring quality. Similarly, Johnson (1993) maintains that employees (internal customers) that are not treated correctly cannot be expected to treat external customers differently, and therefore employee satisfaction is a prerequisite to attaining customer satisfaction (Freiberg & Freiberg, 1997, cited in Vora, 2004; Heskett, Sasser & Schlesinger, 1997).

- Monitoring and controlling quality relating to competitive benchmarking, continuous monitoring of sources of defects and statistical quality control.

Oakland (2000) believes that the connection between benchmarking and TQM are clear, but effective benchmarking requires the concept to be integral to the organisation and to be effectively ‘cascaded down’ to all employees (Camp, 1993). The importance of continuous monitoring of sources of defects is also emphasised by Chaudhry (2005), who maintains that staff have to become proactive and focus on the source of a problem and not just an ‘immediate solution to a specific defect’. In addition, Deming and Juran, who introduced statistical quality control, convinced managers in Japan that continuously controlling and improving quality would lead to improved productivity and new world markets (Evans & Lindsay, 2005).

- Participative management relating to extensive delegation, involvement/empowerment, coaching and a supportive leadership style

Similarly, Daily and Bishop (2003) found that an organisation may attain a more successful quality system if it implements a TQM programme that is complemented by genuine employee involvement effort. Delegation too is imperative, but the recipients of the delegation should have the skills and capability to conduct the delegated responsibilities (The Teal Trust, 2008); the leader should enable people to do a better job and not simply instruct them how to do a job, the manager must not be autocratic and must be willing to let go of decision making (Korukonda, Watson & Rajkumar, 1999) and to transform from a traditional leadership environment to a shared one (Professional Education, 2009).

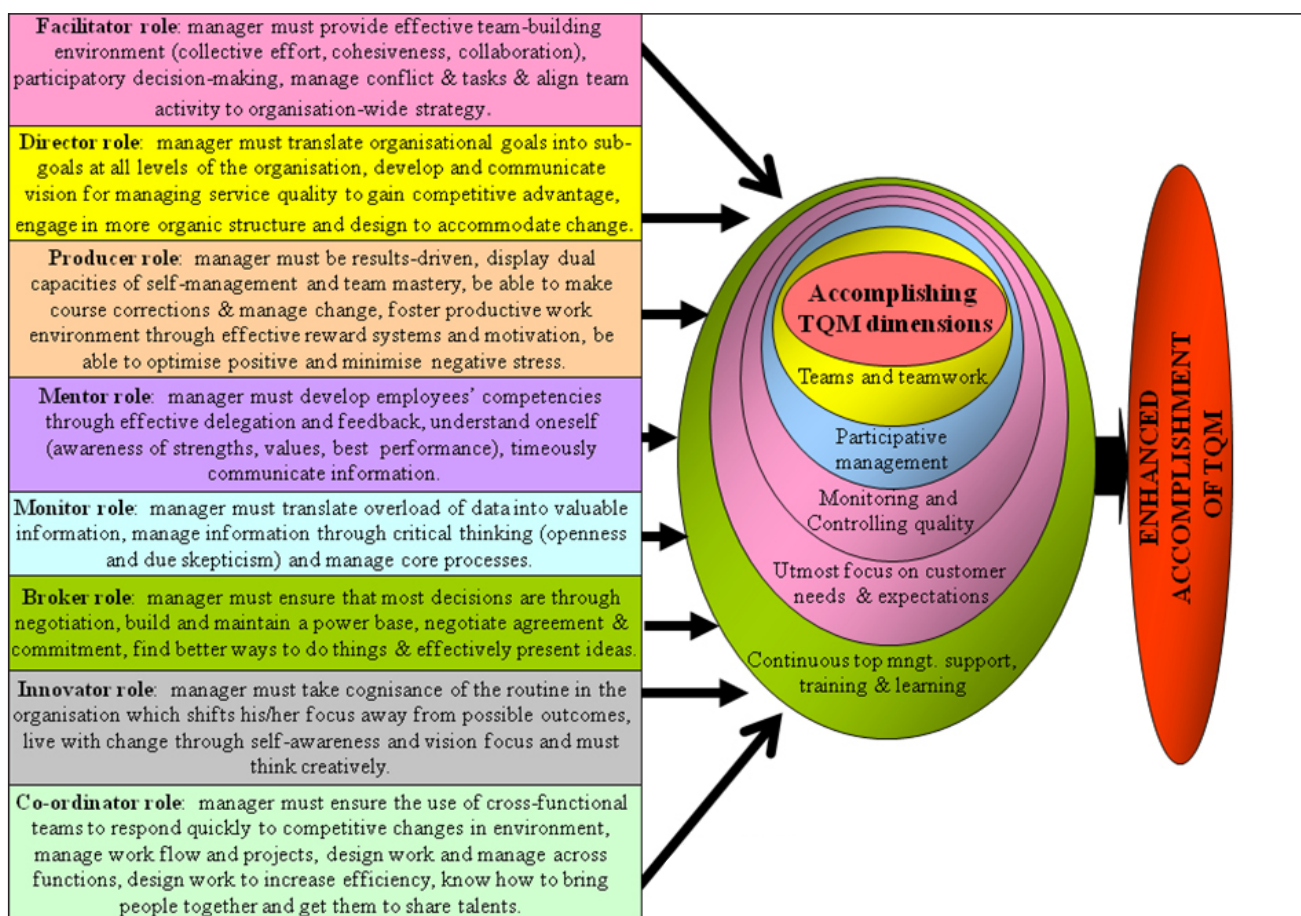


FIGURE 1
Recommendations for enhancing managerial roles or competencies, thereby enhancing the potential to accomplish TOM

- Effective teams and teamwork

The results of this study reflect that managers perceive that teamwork is imperative for attaining performance excellence and customer satisfaction. Therefore, teamwork is considered the 'execution vehicle' for organisational success (Kirchner, 1995).

- Continuous top management support, training and learning.

Chien (2003, cited in Chien, 2004) stresses that the chances of lifelong learning should be provided to all employees to promote organisational performance. In terms of management support, managers must not only request zero defects and improved productivity without providing workers with the methods to achieve them (Korukonda *et al.*, 1999).

In addition, the results of this study indicate that the cohort of managers of the KwaZulu-Natal public sector division perceive that the managerial roles (mentor, facilitator, monitor, co-ordinator, director, producer, broker, innovator) are necessary for creating master managers and have the potential to significantly influence the accomplishment of the aforementioned dimensions of TQM and of TQM in itself. Facilitation is important as it involves personal service to the customer (Energy Performance Contracting, 2003), encourages co-operation (Bacal, 2008) and uses the power of teamwork to deliver real performance (Teare *et al.*, 1999). Furthermore, monitoring is essential to maintaining high performance in both individuals and groups (Quinn *et al.*, 2003), identifying strengths and weaknesses (National Australia Bank, 2008) and assessing 'process behaviour' (American Society for Quality, 2008). The co-ordinator role is essential in managing across functions and focuses on organisational processes that cross functional boundaries and functional teams while the director role in TQM is essential as it develops and communicates a vision, which is imperative in a leader-follower relationship (Quinn *et al.*, 2003). While the manager in the producer role stimulates a productive TQM environment, in the broker role today the broker has become more of a coach, assisting employees to make a decision on what plan works best for their specific situation (Starner, 2008). Finally, the innovator in the TQM setting nurtures the latent abilities for innovation that lie in each individual in attempts to create an innovative culture (Kelley, 2007). Kreitner (2007) adds that goal setting and empowerment are two sound management practices that create the urgency for speedier innovation. However, researchers stress that if innovation is to be fostered in the conventional organisation, management's roles and practices need innovations as well, and without a corporate strategy to accomplish corporate goals, innovation will be misdirected (Heskett, 2007).

Recommendations

The intercorrelations in this study reflect that the managerial roles and the dimensions determining TQM significantly interrelate with each other. Based on these significant results of the study, recommendations are graphically presented (Figure 1) with the aim of ultimately enhancing the accomplishment of TQM.

Accomplishing TQM implies that the dimensions of TQM must be enhanced first. Hence, recommendations regarding the key dimensions of TQM are provided below to serve as guidelines for implementation and for greater success of TQM initiatives in the future:

- Utmost focus on customer needs and expectations (internal and external customers)

Managers need to ensure that they use a formal approach to identify the needs and expectations of customers and carefully recruit, select, train and empower employees, especially those who interact directly with customers.

- Monitoring and controlling quality

Managers need to adopt benchmarking in order to set realistic goals in the organisation, monitor sources of defects in order to ensure constant improvement and implement statistical quality and process control charts to indicate its importance and to determine process capability.

- Participative management

- When delegating, managers should ensure that employees have sufficient time as demanded by the task and thereafter ensure that employees perceive the occurrence of job flexibility.
- With regard to involvement/empowerment, managers should institute employee rewards based on the organisation's performance and ensure that employees have a certain amount of latitude to their disposal.
- Managers should coach and counsel employees to prepare them for the standards of performance required for the improvement of skills, and should coach employees to manage customer complaints effectively.
- Managers should adopt a supportive leadership style and ensure that employee development and empowerment of employees take place in the organisation to achieve optimum levels of productivity.

- Effective teams and teamwork

Managers should institute a formal team-building technique as an ingredient of high-performing teams to identify strengths, weaknesses and areas for improvement. They need to:

- Ensure continuous top management support, training and learning
- Guide and encourage employees by encouraging behaviours that are consistent with quality values and must inspire and motivate employees.
- Guide individuals for successful task completion and encourage them to engage in activities that support organisational goals.
- Develop people for continuous improvement of the organisation's capability, which involves focusing on effective communication, training, teamwork, empowerment and educating employees on merging organisational processes in order to participate effectively in a TQM initiative.

However, as is evident in Figure 1, the effective accomplishment of TQM requires competent managers. Hence, when engaging in a TQM initiative it is important to first create master managers. Figure 1 provides recommendations for accomplishing these managerial roles or competencies (mentor, facilitator, monitor, co-ordinator, director, producer, broker, innovator roles), as outlined in the CVF by Quinn *et al.* (2003), which will enhance the attainment of the dimensions needed for realising TQM.

Limitations

The sample represents only one public sector department and therefore limits the generalisability of the results to the private industry and other public sector institutions. However, the results of the study provide greater insight into managerial perceptions of the readiness of management in the public sector in terms of possessing the competencies and roles needed to successfully engage in TQM initiatives.

Suggestions for further research

This study focused on accomplishing TQM through management effectiveness. Future studies can emulate and expand on the effectiveness criteria, for example the decentralisation of activities can be assessed. Furthermore, this study focused on the perceptions of managers from a public sector division regarding managerial competencies as critical

ingredients for a TQM initiative. Comparative studies with two organisations, perhaps one public and one private sector institution, may produce significant findings while taking cognisance of influential biographical correlates (tenure, age, race and gender of managers).

Conclusion

The implementation of the strategies and recommendations depicted in Figure 1 will enhance managerial roles (mentor, facilitator, monitor, co-ordinator, director, producer, broker, innovator), thereby creating master managers who will be equipped to successfully attain the dimensions contributing to TQM (focusing on customer needs and expectations, monitoring and controlling of quality, participative management, teams and teamwork and continuous top management support, training and learning) and accelerating the realisation thereof. Evidently, the fundamental requirement to accomplishing TQM is to develop quality-driven leadership to act as an effective vehicle for the ultimate improvement initiative.

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