Total Quality Management and employees' involvement: A case study of an Australian organisation

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Total Quality Management and employees' involvement: A case study of an Australian organisation

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Although much has been said about people being the primary resource in an organisation practising Total Quality Management (TQM), this area has been neglected by many companies implementing TQM. This paper presents a detailed case study of an Australian organisation that is recognised as a 'quality' company and discusses a number of issues relating to employee involvement. The case study finds that employee involvement was a major focus of the company when TQM was first implemented. However, this was lost when the company became more outward focused. The lack of ongoing employee involvement at the shop-floor level has been identified as a major reason for the non-sustainability of TQM in the organisation.

Keywords: Total Quality Management; employee involvement; Australia; case study

Introduction

Total Quality Management (TQM) has been defined by Kanji (1990) as achieving total quality by involving all employees. Kanji and Asher (1993) further defined it as a process of management based on people, emphasising teamwork and quality achievement through people. TQM is differentiated from other management practices because of its emphasis on continuous improvement. TQM today places much emphasis on human relations despite its origins in statistical and engineering backgrounds. Wilkinson (1995) describes it as a 'soft model' due to qualitative rather than quantitative aspects, such as focusing on total customer satisfaction, involving employees in decision making, working in groups and management of employees being given the highest priority. Any quality system can be copied by benchmarking but each company needs its own people to implement a system (Kanji, 1995). A survey conducted on 250 Turkish organisations found that employee involvement and commitment, teamwork, upper management support and quality education and training as the most important factors for a successful implementation of TQM processes (Bayazit, 2003).

Although much has been said about people being the primary resource in an organisation practising TQM, this area has been neglected by companies implementing TQM. There is a need therefore to redesign the HR cycle of selection, performance appraisal, reward and development to reflect quality at each stage of the cycle (Yong & Wilkinson, 2001). The literature on TQM suggests that increasing human resource utilisation (leadership, training, participative management, rewarding/appraisal systems, decision-making process) appears to have not been given as much emphasis as it should have been, resulting in the low success rates of many TQM programs. This paper attempts to fill this gap by presenting a case study that analyses the human element in the implementation and sustainability of TQM in an Australian manufacturing organisation. Specifically, we address two questions.

● How crucial has employee involvement been in the sustainability of TQM in this organisation?
● How did it benefit the organisations and the employees?

The remainder of this paper is structured as follows. The next section presents a review of the relevant literature. Next, the case study methodology is described followed by the detailed results from the case study. Finally, our conclusions are presented.

Literature review

Employee involvement and TQM

Organisations consist of human beings, and are dependent on them for their existence. Organisational activities become more efficient when individuals differing in birth, and personal characteristics can be directed to working towards the common goals of the organisation (Ozawa, 1993). In the new millennium, companies can gain a competitive advantage through people. The human resources of a company are what differentiate one company from another because committed and competent people can increase productivity and improve quality. Unfortunately, although most companies are aware of this and claim people as its most important asset, they tend to get neglected (Mak, 2000). Many Chief Executive Officers (CEOs) are beginning to realise that finding good people has become an increasingly important key to the survival of the business (Yasuo, 1980).

Traditional employee involvement was to achieve a twofold objective: first, to create a sense of belonging towards the organisation through a high degree of commitment; and second, to enable employees to make changes in their working environment by giving suggestions for improving performance. However, implementation of these suggestions was solely at the discretion of the management (Magjuka, 1993).

The concept of Total Quality Management emphasises continuous improvement and this requires participation of every individual in the company (Gunasekaran, 1999). Hence, employee involvement is vital for the success of any TQM program. A survey conducted by *HR Focus* (1993) involving 1000 companies shows that employee involvement was rated as one of the top three concerns by 46% of the respondents. Juran (1986) stated that understanding the human situation associated with jobs would greatly help in solving technical problems. It has been found that 48% of barriers to implementing a successful TQM programs were caused by people (Tamimi & Sebastianelli, 1998).

Kanji and Asher (1993) defined TQM as a process of management based on people and emphasised the importance of people in achieving quality. Thus, employee involvement is crucial in the achievement of TQM. The more organisations utilise employee involvement capabilities with TQM, the more positive results they will attain in the gaining of employee satisfaction, quality of work life, performance outcomes, profitability and competitiveness (Pun & Chin, 1998). Dale and Cooper (1993) have described employee involvement in an organisation practising TQM as obtaining employee participation and interest in the process of improving quality. Empowering and involving employees at all levels is the way to achieve business success as per the chief executives of some of the most quality conscious companies in the USA and other parts of the world. The Chairman of General Electric has said that getting every worker to have a new idea every day is the way to achieving success (Sun et al., 2000). It is assumed that once all employees are empowered to meet the inherent challenges in a quality environment they will work towards continuous quality improvement (Shearer, 1996).

Employee involvement has also been described as empowering employees to make decisions regarding the solving of problems at their level in the organisation – the reason being that it is advantageous to employees who are actually involved in a job to have control over improvement of the process since they are in the best position to make a decision (Pace, 1989). However, the actual authority to make changes lies with the managers, and the employees are given responsibility without the sufficient power and authority (Velury, 2005). Responsibility in terms of decision making relevant to the employees and administrative power needs to be delegated to the employees for effective participation. Hence, involvement in decision making is intrinsically at the heart of the TQM concept. Participation without power will result in suggestions not being implemented, which leads to frustration in the employees (Sun et al., 2000).

Self-management and participatory management are two tools of empowerment available to managers. In participatory management, employees are given partial decision-making authority and responsibility along with the support and encouragement to put forward ideas for continuous quality improvement regarding all aspects of the organisation. The implementation of ideas is at the discretion of management. Employee suggestion schemes and/or quality circles are used in this method of participatory management. The other strategy, self-management, involves employees being given total authority, responsibility and accountability not only to recommend solutions and put forward new ideas but also to implement those ideas. Self-managed teams are an example of this type of empowerment (Dimitriades, 2001). However, these empowerment strategies may not be appropriate for a particular organisation or even for some employees. Therefore, quality leaders need to take into consideration the nature of employees as well as their skills and ability before deciding on either empowerment strategy (Dimitriades, 2001).

TQM and teams

Katzenbach and Smith (1993, p. 45) define a team as 'a small group of employees working towards a common goal for which they are mutually accountable'. Teams in organisations practising TQM have been considered an essential element towards successful implementation as teams improve the process of problem solving and producing results quickly and economically (Oakland, 1989). Dahlgaard et al. (1998) also stated that developing a culture of team work and cooperation is vital to the success of any TQM program. Moreover, by working in teams the members will cooperate with each other and share the necessary information because the entire team will be responsible for quality rather than a single individual (Daily & Bishop, 2003).

Wilkinson et al. (1992) have described the two main types of teams in TQM as policy deployment teams and task teams. Policy deployment teams consist of quality councils, process quality teams and quality improvement teams whose task is to shape, plan and implement quality goals, policies and strategy. The purpose of policy deployment teams is to determine the role of every function in the organisation in relation to the quality goals of the organisation. A quality mission statement is usually compared with the day-to-day running of the organisation and the deployment team will discuss changes if necessary to keep in line with the quality mission statement (Wilkinson et al., 1992).

Effect of TQM on employees

TQM implementation depends mainly on the capability of the front line workers and thus it is important that they should be treated in a manner whereby they can act as the tools of quality (Daily & Bishop, 2003). There are two seemingly opposed views on the consequences of TQM on employees. On the positive side, McNealy (1993) states that TQM is a tool for employee empowerment and participation. Proponents of TQM state that the aim is not to increase control over employees but reduce it through increased participation and empowerment (Wilkinson et al., 1997). However, on the negative side, Kerfoot and Knights (1995) state that TQM results in more work for employees and greater managerial control. Management control can be over activities, procedures, working instructions, materials, equipment, products, maintenance, waste etc. Apart from some notable exceptions, companies that incorporate TQM often end up using tools and technology in contrast to the principles of TQM, which emphasise total employee involvement. Therefore, these companies are not run any better than those without TQM (Powell, 1995). Furthermore, management teams have used TQM to justify downsizing, de-layering and outsourcing, thereby creating cynicism in the workforce (Page & Curry, 2000).

The issue of whether employees perceive their jobs in the quality environment to be controlling as opposed to empowering has been raised by Klein (1989, 1991) and Parker (1991). They have stated that workers at the shop-floor level see a TQM program as coercive and controlling rather than empowering, due to increased pressure on them continuously to improve quality. This can lead to resistance towards a TQM program at the shop-floor level.

TQM and culture

All organisations have individual and unique cultures as well as subcultures that determine all actions, operations and relationships in the organisation. Schein (1992) has identified three levels of culture – artifacts, values and beliefs, and underlying assumptions. The underlying assumptions that employees have about accepting TQM are a major factor in the success or failure of the program since culture dictates the acceptance or rejection of any organisational change.

Kanji and Wallace (2000) state that creating a quality culture within an organisation is one of the crucial conditions for the successful implementation of TQM. Furthermore, Scarnati and Scarnati (2002) state that the essence of every quality organisation is its human resources and the company culture. A workforce that is not quality oriented will resist changing to a quality conscious culture and therefore it is important to have a culture that is focused on producing quality goods and services to ensure the successful implementation of a TQM program. Thus, TQM requires a culture that is flexible and ready to change whilst working to continuously improve its products and services (Kanji & Wallace, 2000).

Proponents of this approach state that this kind of cultural change is achieved by changing people's mindset and by shifting responsibility of quality from a functional department towards that of individuals (Yong & Wilkinson, 2001). Employees have to be taught new ways of working in an environment focused on quality and any deviations should not be supported. Once a quality conscious culture is established it generally becomes pervasive and changes very slowly, if at all (Huq & Martin, 2000).

TQM and organisational structure

Companies trying to gain competitive advantage in today's global marketplace have realised the importance of TQM. However some companies have not been very successful in implementing TQM. The reason for the lack of success is not the failure of the TQM concept but a failure to pay attention to the cultural and structural variables that influence TQM (Tata & Prasad, 1998).

Organisational structure refers to how people interact with each other, how communication flows and how proper relationships are defined (Hall, 1987). Quinn (1988) states that the structure of the organisation reflects the value-based choices made by the company. Companies that follow a control-oriented system have centralised decision-making, whereby employees are given less authority and flexibility, which results in a highly mechanistic structure. On the other hand, companies with a flexible value system have a decentralised decision-making authority and employees are empowered not only to identify problems but also to implement solutions. This results in highly organic structures (Tata et al., 1999).

Total Quality Management is an integrative management concept for continuous improvement of quality through the participation of all functions and levels in the organisation (Tata et al., 1999). The TQM concept emphasises the role of empowerment and participation of the employees. Employees are encouraged to make decisions and they are given the authority and responsibility to solve their problems. Thus, these aspects of TQM suggest that flexible organic structures are more conducive to successful TQM implementation (Tata & Prasad, 1998).

TQM and the role of senior management

Introducing TQM in the organisation is a decision that will be taken at the senior management level and hence the involvement and confidence of senior managers is very important in the TQM process (Dale & Cooper, 1994). Soltani et al. (2005) point out that there is a close relationship between CEO commitment, employee commitment and effectiveness of TQM process. The senior managers should share the vision of introducing TQM with the employees and should ensure that the employees understand the benefits derived by implementing the process (Dale & Cooper, 1994; Taylor & Wright, 2003). A study conducted by Taylor and Wright (2003) on 113 TQM practising organisations showed that 81% of the companies that have been successful in implementing TQM programs had the managing director or a senior manager in charge of TQM. Thus, this suggests that TQM needs to be led from the top of the organisation.

Soltani et al. (2005) argue that due to low awareness of TQM philosophy sometimes managers may show less commitment towards the TQM implementation. In such circumstances, the managers should be given proper training to understand the philosophy of TQM and the benefits derived by the company through its implementation (Soltani et al., 2005).

When managers are aware of the TQM process and its profitability then they can communicate this to the employees and win their commitment towards the TQM program (Dale & Cooper, 1994).

Summary of the literature review

The literature review presented above has identified the following:

- Employees are critical to the success of any change program with TQM being no exception. Therefore, it is vital that employees are empowered and involved in improving quality and productivity.
- Organisations should maintain a culture of continuous improvement, with every employee being responsible for quality rather than relying on a quality department.
- Employee participation in decision making and delegating power to them to implement ideas at their relevant levels results in empowered employees.
- Teams in organisations practising TQM solve problems faster and more economically and thereby create a culture of teamwork and cooperation.
- Continuous education and training of all employees on quality principles, to enable them to achieve goals, is essential.
- Less-mechanistic organisation structures, where employees are encouraged to participate in decision making, are more suitable in organisations implementing TQM.

The next section describes the research methodology utilised in addressing the research questions presented earlier. The literature reviewed above will enable us to confirm the research findings presented in the subsequent section.

Research methodology

The authors selected the case study that provided multiple sources of evidence from a single organisation as the research strategy to answer the research questions and to gain a balanced view of the situation (Yin, 1994). The organisation selected, referred to in this paper as XYZ to ensure confidentiality, is a mature TQM organisation and was considered an ideal organisation to investigate the research questions. It is a large Australian manufacturing organisation, having formally introduced a TQM program in the early 1980s. Interviews (targeted and insightful), documentation and records, direct observations during visits to the organisation and accessing the company's website were methods used to gather data and evidence. The interviewees were selected on the basis of those having had as much information as possible on TQM within the organisation.

Focused interviews of approximately 45 minutes duration were tape-recorded and subsequently transcribed. The interviews were conversational and open-ended but followed questions derived from the case study protocol (Yin, 1994). A preliminary open-ended interview was held with the Quality Engineering Manager on the topic of the history of the company, organisational structure and basic background information about XYZ. One targeted interview (focused directly on the case study topic) was held with the Quality Director who was with the organisation at the time TQM was implemented. Documentation was received from him on the history of implementation of TQM. Targeted interviews were also held with three other managers and two shop-floor team leaders. Table 1 shows the types of questions addressed to the

Table 1. Questions asked during interviews.

Questions	Quality director	Managers	Team leaders
Why was TQM implemented?	√		
Was there a culture of continuous improvement before, and if not how was it introduced and what obstacles were there, if any, and how were they overcome or not?	√		
Were there any changes to the organisation structure?	√		
What are your views on employee training and development?	√	√	√
How has the culture of continuous improvement been sustained in the organisation?	√	√	
How crucial has employee involvement been in maintaining a quality conscious culture?	√	√	√
What is your specific role in the organisation? How long have you worked at XYZ? What has your career path been?	√	√	√
In what ways have you been motivated by the organisation?	√	√	√

interviewees and Table 2 provides details of the interviewees. The interviews were conducted with the following managers within the organisation: quality director, quality engineering manager, supplier development manager, quality engineering officer, shop floor team leader A and shop floor team leader B.

A copy of the case study prepared was sent to the quality engineering manager and the quality director, which resulted in a final insightful interview of approximately 90 minutes to discuss and analyse the report. The interviews were an essential source of case study evidence due to human affairs being discussed and interpreted through the eyes of the specific interviewees. The proposition that employee involvement was crucial to the sustainability of TQM guided the analysis of the case study and helped focus attention on some data and ignore other data (Yin, 1994).

Case study

The company

XYZ is part of a diversified manufacturing group and is a world leader in the design, manufacture and distribution of sub-systems supplied to the automotive industry locally and internationally. The company employs around 1000 people at its head office, four manufacturing plants and distribution centre. In terms of annual sales revenue, original equipment accounted for a 60% share and the replacement market accounted for a 40% share. About 25% of sales are from export markets.

The company is vertically integrated with respect to the manufacturing processes required to complete many of the parts and sub-systems. A significant number of components are sourced from vendors. The company manufactures approximately 8000 part numbers with volumes in excess of 128 million components and assemblies per annum. The result of all this is a somewhat complex manufacturing operation.

Table 2. Individuals interviewed.

Name	Management level	Progress	Type of interview	Duration	Years at XYZ	No of interviews
Quality director	Senior	Had many challenging roles when the company introduced TQM.	Targeted and insightful	45 minutes and 90 minutes	17	Two
Quality engineering manager	Senior	Joined XYZ as a quality auditor and progressed to the position of quality engineering manager.	Open-ended, targeted and insightful	45 minutes, 45 minutes and 90 minutes	13	Three
Supplier development manager	Senior	Joined as site quality engineer and later appointed as supplier development manager.	Targeted	45 minutes	11	One
Quality engineering officer	Middle	Joined XYZ as a technical officer and has progressed to the position of quality engineering officer.	Targeted	45 minutes	27	One
Shop floor team leader	Supervisor	Joined the organisation as an operator and progressed to his current position.	Targeted	45 minutes	24	One
Shop floor team leader	Supervisor	Joined XYZ as an operator and had been a team leader for the last 2 years.	Targeted	45 minutes	8	One

Company vision

The challenge for the company is to ensure their customers desire products only from XYZ. The company logo intends to describe their products and reinforces their claim of expertise. It further supports the company's claim that XYZ are behind the best and safest products. This has led the company to develop the vision that it will be the most trusted brand for delivering innovative solutions. XYZ sets out to achieve this vision by continually reinventing XYZ technology, targetting international growth opportunities, developing and integrating XYZ's international supplier's technologies into XYZ's new product development program, achieving zero accidents, zero rejects and zero unplanned stoppages and producing only the best quality work for customers by achieving customer expectations of quality for all products and services. The managing director emphasised that 'XYZ will remain committed to building long term relationships with our customers by providing innovative solutions and excellent service'.

XYZ's vision focuses on providing employees (also referred to as 'associates') with a safe work environment, encouraging associates to develop their full potential, valuing their participation, anticipating and responding to their needs and accomplishing greater victories as a team rather than as individuals.

History of TQM (documented by the quality director)

XYZ had to beat world-class competition in cost, quality and supplier performance owing to its ever-increasing export market. To match competitor performance from the USA, Japan, Korea, Europe and South America, it was decided that an aggressive TQM program, which would achieve positive results, was needed. During the period 1984–1987, XYZ underwent major restructuring and rationalisation in the quest for international competitiveness. The main motivation for quality improvement was a combination of the incentive for cost benefits and the need for world-class quality to achieve growth targets through exports. Six companies were consolidated into one, 13 manufacturing plants at nine locations were reduced to four on one site, manpower reduced from 2354 to below 1800 and the product range severely rationalised and focused.

The first stage was to expose some 500 employees to a new way of thinking through a seminar entitled 'New Age Thinking'. This was used as a catalyst to induce an atmosphere where attitudes could be varied and change more readily and quickly introduced. The next step was to commence a Total Quality Commitment program in which about 300 employees from directors to operators spent in excess of 10,000 hours of formal training in problem solving techniques and process control with a heavy emphasis on statistics. At the same time, about 100 manufacturing personnel were exposed to Just-In-Time (JIT) manufacturing with training based on Eli Goldratt's 'The Goal'.

Following this formal training, a series of action teams were formed to tackle known quality problems. The action teams were multi-disciplined and vertically selected with all manufacturing management participating to ensure that they fully understood how to put their training into practice. In all, 52 teams were formed. There were some outstanding successes with one team reducing defects from 8–10% to less than 1%. Another team re-engineered a production line using JIT principles. The team implemented a flow layout and quick dye change enabling the line to be changed in 3 hours down from 60 hours – reducing operators from 17 to 10 and stock in process from 10,800 pieces to less than 300, hence resulting in a $300,000 per annum saving.

Unfortunately, the overall program was a little disappointing with less than half the teams achieving worthwhile results and the impetus was lost due to other priorities, mainly increased demand. The lesson learnt was that too many people were trained and too many teams formed, with the end result being that the process was difficult to manage, resources were not adequately given to the teams and the momentum could not be maintained.

During this time, a 'New Product Introduction' procedure was designed to ensure that future products that were launched onto the shop-floor achieved the quality requirements from Job 1. The aim was prevention rather than detection. This procedure, which was adopted from Japanese examples, required detailed step-by-step planning in all areas of the organisation during product and process design. The workload was transferred from the launch period to the pre-production design and planning phase. There were 69 separate elements for multifunctional communication and disciplined use of tools such as FMEA (Failure Mode and Effect Analysis), PCP (Process Control Plans), capability studies and fool-proofing. This procedure was introduced for a new product in 1985 and for the first time ever the company was able to manufacture with quality conformance from Job 1. The reject rate compared to the previous model was reduced from 0.97% to 0.05%.

In early 1987, the company decided that the quality improvement process required revitalising and a new program called QUIP (Quality Improvement Program) was developed. This was

based on four elements, namely management commitment and direction, process control, a new product introduction (NPI) procedure and a formal quality system. The program was formally structured at the top and had a quality steering committee consisting of all directors and plant managers. The role of the committee was to:

● establish and direct company-wide quality programs and priorities
● agree quality action plans for each plant
● monitor quality performance and progress.

The QUIP training programs were run in-house and were based on the industry sector model for manufacturing process control. The key elements of this program were process control planning and statistical control, but were broadened to include NPI, FMEA training for both product and process, Supplier Quality Assurance (SQA), fool-proofing and employee involvement programs. A narrow range of people from each plant were selected and these groups were asked to tackle specific quality issues. The focus was to ensure that principles were clearly understood, implementation was effective and suggested improvements could be implemented quickly with the available resources.

As part of QUIP, the human resources aspect of the quality program received considerable attention. To ensure that quality received top priority by all, the employee induction program was upgraded. The company started sessions covering specific product knowledge and quality issues relating to particular areas of employment. Migrant English lessons were introduced so that employees can understand the basic quality messages and simple aspects of product knowledge. The work environment was enhanced and usage of automatic unloading and fool-proofing was increased to aid operators. In broad terms the company had a very successful employee involvement program that achieved excellent results in industrial relations and safety.

During the restructuring phase, the organisation had a necessity to be more inward-focused and, as a result suppliers were neglected. Hence, as part of QUIP, SQA activities were upgraded and the company began to help its suppliers. The Customer Liaison Department was also strengthened to provide faster response time to queries and complaints.

In late 1989, the company adopted a modified version of Total Quality Management as presented by the American Supplier Institute, which placed an emphasis on the two fundamental principles of 'respect for people' and 'continuous improvement'. Quality assurance systems were added and a number of Japanese shop-floor practices were implemented. These practices were developed with the help of engineers from two Japanese companies who had periodically audited operations and aided the improvement process. Likewise, improvement teams were set up in sales, marketing and other non-production departments to work on process improvements. Typically, cross-functional teams achieved outstanding results with assembly line rejects being reduced by magnitudes of 95% over a 12 month period.

However, following a lean manufacturing study tour of USA organisations in late 1991, led by an association, and subsequent visits by cross-sectional groups of employees in 1992, the company adopted the term 'lean operations'. The main aim was to achieve world class quality and costs to support the export drive. The lean operations concept was spread throughout the supplier base. With the introduction of lean manufacturing and JIT, Total Quality Management appeared to have been neglected during the second half of the 1990s. With the introduction of lean manufacturing, the organisation structure at XYZ became more organic rather than mechanistic in order to be as flexible as possible to customer requirements. An organic structure

also supported cross-functional teams with XYZ being focused on a cross-functional approach in all areas.

Implementation of TQM principles at XYZ

Innovation and continuous improvements

The single most important factor in XYZ's success is its way of thinking. XYZ dares to be different and challenges conventional wisdom, seeking solutions in unexpected places. The active promotion and encouragement of innovative thinking is an integral part of the culture in every aspect of the business – from design and engineering to manufacturing processes, to packing and distribution. XYZ is committed to the belief that true innovation can only flourish in an environment that is encouraged to foster it.

XYZ is committed to adding value for its clients by finding solutions to complex manufacturing problems, often by using processes that are untried or unusual. In fact, it is the practical application of this attitude that has significantly contributed to XYZ's position as a recognised world leader in process technology. XYZ's systems are fast, flexible and efficient – producing the highest quality products in the shortest possible time with a minimum of waste.

There is a culture of continuous improvement throughout the organisation, which drives everything that is done with every process being considered as being part of a cycle. The first stage of the cycle involves setting up internal systems to continuously measure the quality of the processes and products and seek methods of improving them. The second stage involves obtaining feedback about the performance of all products across the whole customer spectrum, from manufacturing to end users, and incorporating this feedback into improving products and processes. The purpose of continuous improvement is to deliver greater value to customers.

Commitment to quality

XYZ's commitment to quality is not something that is just said but something that is believed in and is reflected in everything that is done. Quality does not only affect manufacturing, it is the driving force behind all processes – from design to final production with the target being zero defects. As evidence of the fierce commitment to quality, XYZ is certified to ISO 9001 and a No Fault Warranty is issued with every aftermarket component that is manufactured.

The shop floor team leader A stated that XYZ has come a long way and the concept of quality has changed considerably within the organisation. Previously, the quality inspectors were responsible but now everyone in the company is responsible for quality. Every employee is now aware of the importance of quality and continuous improvement. The team leader further stated that 'now we have become very conscientious for the simple fact that if we don't achieve ISO 9000, we don't become a supplier'.

The Supplier Development Manager has designed a comprehensive form for suppliers to ensure that advanced quality planning activities occur at the appropriate time and to also develop a common understanding between XYZ and its suppliers regarding the total requirements of the part/material. He stated that 'If this is rigorously implemented we can achieve 100% quality from suppliers'. To emphasise the importance of this, the department has been restructured with a full-time person handling the documentation.

Focus on employees, training and development

At XYZ, employees are recognised as being the life-blood of the company with management being aware that it is the people who make change happen. The skill, dedication and commitment to working as a part of a team is what sets XYZ apart from its competitors. Safety is a vital part of the XYZ culture, which is the reason for the implementation of the 'XYZ Safety System', which involves minimising and controlling risks by developing showpiece workplaces, safety systems and procedures and involving every associate in every part of company in the improvement of safety.

XYZ is committed to a process of ongoing training and development throughout the company. Associates are actively encouraged and assisted to develop their full potential and maintain their skills at the highest levels. However, according to the shop floor team leader B, 'training has had a bit of a lull' and 'moving from one classification to a higher classification has absolutely stopped'. The response to this from a senior manager was that training has been reduced due to downsizing and employees reaching saturation point in their training. This was evidenced when walking through the factory where skills matrix charts were prominently displayed showing the areas where employees needed training – most of the longer-standing employees could work in all areas of the line.

There were still opportunities for shop-floor personnel to undergo training according to another senior manager, with the problem being that the staff wanted training to be done in company time as opposed to managers who were willing to undertake training in their own time. The senior managers interviewed had undergone extensive training and development at XYZ and had been supported by the company in terms of reimbursement of fees, books etc. It was further stated that no employee has been known to have been denied support in training and development in their own time or within reasonable limits. However, more training can lead to frustration with no opportunity to rise to a higher position. For example, one plant has two team leaders with three to five employees on each line, providing little opportunity for promotion.

Promotion from within

One senior manager stated that, 'promotion from within is the preferred method, with every position being advertised internally'. There is an agreement with the union on giving current employees an edge over outsiders. They also stated that XYZ generally employ people who have the skills and knowledge for the role. However, shop floor team leader A refuted the claim of promotion from within being the preferred method: 'I have applied for many jobs and not got them'. 'There is no opportunity at the shop-floor level and that is a fact.' In response to this, a senior manager pointed out the reason: 'He did not make it past level 2 in training'. It was pointed out that with a new contract there would be more opportunities soon but this was denied by shop floor team leader A, who stated that it would be nothing drastically different – it would be doing the same thing in a different location.

Motivation and respect for people

XYZ was described by one senior manager as a 'pretty fair employer that attempts to create the safest work environment, has an anti-harassment policy and no racial discrimination'. These points are communicated to all employees on a regular basis. XYZ also creates an environment

where there is room for career progress, which was shown by the employees interviewed who have been with the company for over ten years and progressed with the company.

XYZ on the whole is perceived to be a good employer but it was highlighted that people issues needed to be addressed. The morale of the employees at the shop-floor level was not very good for many reasons, on which the team leaders did not want to elaborate, but they said 'If you send a questionnaire to people on the shop-floor, you will find many reasons for their dissatisfaction'. 'XYZ don't practise what they preach'. In terms of wages they had nothing to complain about – XYZ and the union have a good relationship and workers are being paid above the award rates. On the relationship between management and the shop floor, the team leader highlighted that 'there is no equality in this place and I am prepared to discuss this with anyone in management'.

The senior managers agreed with the fact that the respect for people was nowhere near where it should be. Some senior managers still practised 'management by fear' and unfortunately junior managers have modelled themselves on those lines. As the team leaders and the senior managers stated, 'People need to be respected', and this seems to be neglected at XYZ at the present time. 'XYZ are a pretty good employer but all employees have to be convinced that they are playing an important part.' This has been discussed recently at a meeting by senior management and ways are being sought to create an environment where every single worker at all levels is respected.

Employee involvement

Since the implementation of TQM, employee involvement has not been sustained by the organisation. One explanation by a senior manager was that the motive for implementing TQM was to win orders, which the company did very successfully. 'People were psyched up with the goal being to win the competition and once that was over it has been difficult to motivate them.' XYZ should be a team-based organisation with self-managing teams, but the teams at XYZ are still management directed. The size and complexity of the organisation may have been one of the reasons for low employee involvement. As one senior manager said, 'the inward drive should have been maintained'. XYZ did benefit from the implementation of TQM in terms of technological advances, layout, skill levels of employees and in cost savings. Management is aware that it should have maintained the momentum and is working towards creating it.

According to the senior managers, 'the level of involvement at the shop level is not what it should be.' Management is struggling to create a culture of ownership for quality. The attitude at the shop floor is that 'I do my eight hour and that is it'.

A recent survey conducted by the Site Quality Department revealed why health and safety were faring better than quality in the organisation. The reasons were that there were immediate visible ramifications when there were any variations in the health and safety systems – people saw someone injured etc. There was also legal ramification in terms of court cases. Variations in quality were not very visible: the result of a defective part would be an irate customer, which could have long-term consequences if the situation continued, with the organisation losing the customer – but there were no immediate and visible ramifications. Therefore, the Site Quality Department has the task of making variations in quality visible to all employees, and passes the ownership of quality to everyone. Employees should not see quality as the responsibility of the quality department. They should be made aware that 'you make the part, you influence the quality'. Continuous training in quality is essential to create a quality conscious culture.

Discussion

The main purpose of this case study was to examine how employee involvement has influenced the TQM process. When TQM was first introduced at XYZ it was inward driven and focused on employees. Employees were empowered and motivated towards creating a culture of continuous improvement. Thus, empowered employees result in satisfied customers and employees (Cheng & Tummala, 1998; Wilkinson, 1998). XYZ encouraged employees at all levels to come up with new ideas and rewarded them with incentives (winning competitions), which motivated employees to participate more (Sun et al., 2000). XYZ also formed teams working towards quality improvement for which they were mutually accountable (Katzenbach & Smith, 1993).

Despite the success of the TQM program at XYZ Company in the initial stages, it could not be sustained over time. The main reason for this was that human resources were not given the necessary attention. The increased demand made the company more outward focused and it neglected the human element of the organisation. Lack of employee involvement at the shop floor level has been a major reason for the non-sustainability of TQM in the organisation. Oakland and Waterworth (1995) argue that TQM is more than installing systems and procedures, it includes cultural change that emphasises teamwork, employee involvement and empowerment and appropriate leadership. Employees at XYZ were involved in the TQM program at the beginning and they were motivated to achieve the goals. During this stage, XYZ was very successful and it attained the goals through the involvement of its employees. However, once the necessary targets were met, people were not motivated further and the momentum could not be maintained. Venkateswarlu and Nilakant (2005) explain that TQM is a change management program that requires patience and persistence and produces results only in the long term. Employees at XYZ were motivated only for the attainment of short term goals, but for the overall success of the TQM program they should have been motivated and empowered on a continuous basis. The success of TQM requires a major organisational change and a long-term paradigm shift, rather than considering it as a quick fix (Brah et al., 2002).

Another issue that has come up in the research findings is that 'management by fear' was practised at XYZ. Scarnati and Scarnati (2002) state that effective management requires a high level of trust and also discarding 'fear' as a management tool, because employees will not participate in a fearful environment. Although XYZ claims that employees were empowered, some of the shop-floor employees complained that XYZ did not practise what it preached. Hence, managers should be very careful that their speed and actions match, because if this is not practised then employees may not offer suggestions due to fear of punishment (Velury, 2005). Yeh (2003) indicated that a supportive work environment, whereby the fear of the organisation is expelled and employees are provided with a trustful environment is consistent with TQM principles.

Soltani et al. (2005) indicated that the success of a TQM organisation depends on the full commitment and support from top management and participation of all employees. Every organisation is different in terms of its people, culture, customs and structure. Hence, senior executives need to demonstrate long term commitment and leadership towards the TQM program. Senior managers should be aware of TQM's benefits and this, in turn, should lead them to be more committed to the implementation process (Soltani et al., 2005).

From our findings in XYZ organisation it is evident that the employees at shop-floor level had low morale and they were not treated equally. The team leaders and senior managers agreed that the respect for people had been neglected at XYZ and the level of involvement at the shop level has not been satisfactory. According to Verma and McKersie (1987) employees will be willing

to participate in TQM if they are convinced that TQM is beneficial. Hence, managers should be responsible for winning the commitment of the employees (Edwards & Sohal, 2003). The senior executives need to create a culture of quality and they should communicate to their employees the benefits of TQM to the organisation. If they lead and teach by example, then every individual in the company will share the same value system and develop a sense of loyalty (Dale & Cooper, 1994). Hence, with regards to future research implications, it is imperative to examine the role of senior managers in implementing and sustaining the TQM process in the organisation. Additional work should be conducted on how the senior manager's role can contribute to the successful implementation of the TQM process.

Acknowledgement

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