TQM implementation in New Zealand service organizations

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Abstract

Studies various approaches used in total quality management (TQM) implementation in four mid to large service organizations in New Zealand. The research was conducted through a qualitative field study, using in-depth interviews of in-house trainers and internal and external quality consultants, as well as structured questionnaire responses from employees within the service organizations. Finds the existence of certain unique New Zealand workplace variables that influence the effectiveness of TQM implementation when foreign-based implementation literature is followed. The extent to which Deming's philosophies and principles are practised in New Zealand is decreasing as more prescriptive and contemporary approaches to TQM implementation have become available. In practice, the role of training is not the main tool for implementation in the organizations studied, however, it does have a key role to play. Finds that experiential applied learning methods are predominant in New Zealand TQM implementations, as opposed to the traditional classroom-style training.

Total quality management (TQM) has been at the forefront of literature on corporate change for decades. Like other areas of management literature, much of what appears has been characterized as "North American hegemony"[1]. Little has been done to substantiate applicability in diverse cultural settings, or to track emerging differences in implementation in the global environment. The economic and business reform in Australasia presents an urgent need for research in the area of appropriate implementation methods in a multi-cultural environment. The pace of change in New Zealand, and the regional initiatives to reform organizational structures (e.g. Workplace New Zealand) have made the need even more acute. At the same time, there is a dearth of both New Zealand case studies on TQM implementation, as well as empirical literature, and globally a lack of effective comparative research into the effect of organizational size and industry sector on implementation efforts. Additionally there is a lack of documentation comparing the different approaches and external benchmarking occurring beyond ISO 9000 in the New Zealand environment. Thus new research efforts advance the general knowledge of these important areas, and guide practitioners and academics in the pursuit of successful change efforts.

Trends in TQM implementation

TQM has developed as a discipline to encompass approaches to managing an organization's processes, people and procedures. TQM's non-prescriptive philosophical approach, has led to multiple interpretations and differing practices. This, of course has also made it difficult to generalize.

> Vested interests of competing consultant groups, the incorporation of service industries into TQM programmemes, the long-term nature of transformational change strategies, and the growth and application of TQM to include cultural and attitude changes, as well as the more conventional application to strategic process control techniques to the shopfloor operations; – all render it difficult to construct a single definition of TQM[2, p.117].

The concept of managing quality has existed for thousands of years[3], however the use of quality management has evolved more rapidly since the industrial revolution which first considered process and product standards over 100 years ago with the work of Frederick

Taylor[4]. The first major large-scale application of modern statistical quality control concepts was fully utilized in post-Second World War Japan. From 1954 onwards, two American statisticians, J.M. Juran and Dr E. Deming, became increasingly involved in the improvement of Japanese quality product standards[5].

Deming's philosophy was founded on three basic precepts; customer orientation, continuous improvement, and that quality is determined by the system[6]. Deming saw TQM as an all-encompassing approach to organizational change, involving changes to many entrenched organizational policies and practices, and the overriding current organization culture[5]. "Deming" organizations share common principles of continuous improvement and top management commitment to the quality transformation. Employees understand the importance of the customer, and recognize the need to base decisions on data[7].

By the late 1970s the rapid progression of Japanese products onto world markets led to the pronouncement of Deming as the "guru" of modern quality management. According to Deming's philosophy, quality is achieved through the never-ending improvement of the extended process for which management is responsible[5].

By the mid-1980s, there was increasing interest in the West in "quality", as quality circles and quality concepts (e.g. pareto analysis, just in time, Ishikawa fishbone diagrams) were imported from Japan into western manufacturing, particularly the declining large-scale industrial section of North America. Originally quality management was used to improve manufacturing processes through quality circles[7]. Quality circles utilized teams of staff who met to solve workplace quality problems. Many early quality initiatives failed because they required wider organizational support but did not receive it. There was no unifying quest for quality or other system or structure to support broader change initiatives, even when ideas generated by staff were compelling. American executives had overlooked that in Japan, quality circles were integrated into a very different way of managing and organizing, and consequently early American attempts at implementation often failed. "In America quality circles became just another management 'programme', so poorly planned and executed

that today their name has a negative connotation"[7, p.16].

These early failures encouraged management recalcitrance[8] as many of these early efforts were seen to be associated with quality initiatives and consequently contributed to the scepticism towards "TQM" as a modern management philosophy. Beyond this problem, successful implementations occasionally resulted in problem-solving staff being made redundant through the increased efficiencies created by their solutions. Unionists therefore began to protest at the involvement and motives of quality circle initiatives. This may explain, in part, the strong role that the New Zealand CTU has assumed in current workplace and quality reform in New Zealand.

Finally, the fact that TQM is an approach which relies on incremental improvement to obtain long-term organizational advantage has, in itself, resulted in what may be premature abandonment of efforts, as short-term pressures eclipse longer term issues, particularly when training and/or "non-productive" use of employees' time is a key element of implementation.

Owing to these shortfalls and the increasing pressures of market competition and customer demand for higher quality goods, management began to look for more alternative and comprehensive approaches to quality management for long-term survival. Thus the modern TQM philosophy grew out of a gradual shift and application of "Japanese quality management" practices from one of a technical, process focus towards a customer orientation.

The US military were the first to coin the phrase "TQM" and adopt a "TQM programme" which then became the prototype for organizations to follow[9]. As the western world came to understand the fundamental principles and concepts which supported TQM, many of the misleading myths associated with the Japanization of the TQC approach to quality management were dispelled.

> Gradually the term TQM has become the popular phraseology adopted in the West to describe this approach to quality which sees quality as a competitive strategy[4, p.8].

Increasingly TQM was seen as a strategic approach to enhance competitiveness through a formal systematic approach to continuous improvement and customer satisfaction[9]. TQM grew to be seen as all encompassing,

led by company-wide quality-focused management (see Figure 1)[10].

The main benefit of the new approach was its ability to depart from the traditional cycles of control and institutionalize participation on a permanent basis by meeting interests of employees while providing top management with an effective means of organization and management in the modern marketplace[8]. More recently, TQM is being linked with other change management programmes (such as business process re-engineering) and also recognized formally by the Malcolm Baldrige and other national and international quality award structures. External, often international, benchmarking in search of best practices, and other activities that go beyond ISO 9000 certification are the new sought-after icons of competitive advantage.

## New applications and new environments

Currently TQM is being applied to a diversity of public and private industry sectors, including the health, education, banking, transportation, hotels, and profit and non-profit, organizations in the service sector. Many manufacturing companies are realizing that TQM can be applied more broadly than the manufacturing environment within the organization. The fastest growing sector in the developed world since the mid-1980s has been services. "I am convinced that the winners of the '90s will be the companies that make quality and customer services an obsession in every single market in which they operate" (CEO statement, 3M, in[12, p. 23]). Managers are now beginning to recognize that competing on product quality does not provide a significant competitive edge to outpace competitors. The quality of service delivery as well as consistent product quality, are providing the competitive edge in the 1990s. Most New Zealand service organizations, however, have not realized the need to formalize processes to ensure that each service interface is consistent. Historically, most service industry leaders have declined to adopt existing quality initiatives drawn from manufacturing because service is different from manufacturing[13, p. 50]. This has resulted in new "re-inventions" of quality management in the service sectors.

Although the motivation for applying TQM in these various industries is similar, (for example to obtain greater efficiencies, lower costs, and obtain higher quality goods and services in order to meet their customers expectations), the application has varied according to the nature of the industry. This variance has also extended to national boundaries.

In New Zealand the market was protected from foreign competition through tariffs and quotas until 1986, when the government deregulated the macro-economy and the State Owned Enterprises Act was introduced. The radical deregulation of the macro and micro-economic environment of the last ten years has opened New Zealand industry to fierce competition from imported goods, bringing tremendous pressure to upgrade both goods

Figure 1 the four levels of in the evolution of TQM

Source: [11]
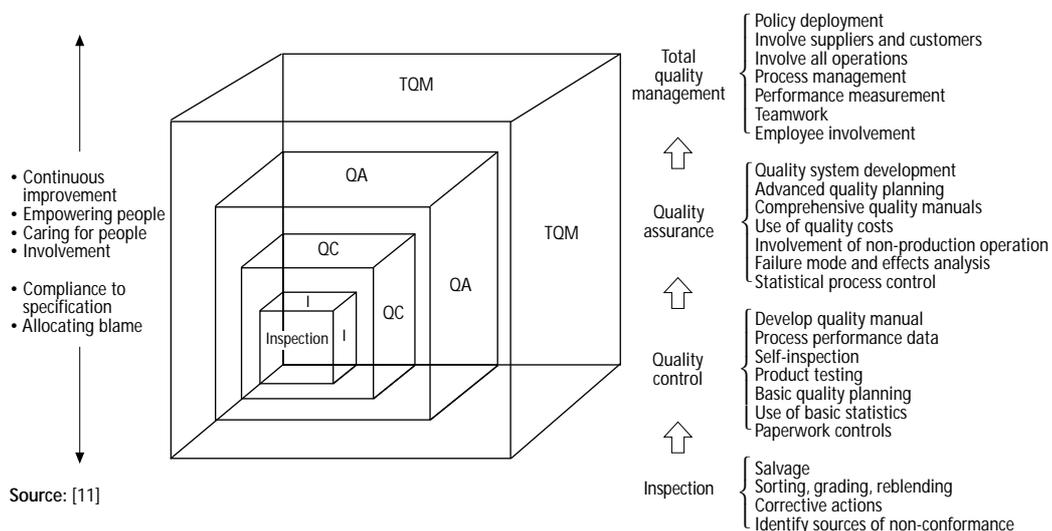
and services in the country. New Zealand has now begun (rather belated) widespread efforts to apply quality management to the services sector, as well as manufacturing.

TQM in the services sector

The application of TQM to services relies heavily on the literature generated by American programmes. This means that the programme often associated American jargon and hyperbole. The nature of the "American" style of TQM seems almost to require hype; banners, badges and team type rewards are celebrated publicly, however this approach does not typically motivate the New Zealand employee.

> You can't just tell people in New Zealand this is great, it's the best thing since sliced bread – you can't rah rah rah here. Noticeboards like MacDonald's would go down like a lead balloon here and be seen as "over the top".

The jargon itself needs to be adapted to the New Zealand context. An example of this is from the trainer at a company in the sample who had chosen a European style of training programme as he/she felt it related more to the way New Zealanders learn and speak, and had found resistance to things that were Japanese or American in the quality field, while Australian or UK programmes were more warmly received.

Additionally, the scale of the programmes drawn from the USA are typically too large for the New Zealand context; and is not just a simple case of "watering it down". Most US case studies focus on companies of at least 5,000 employees. However in New Zealand the average size of most businesses is 12-50 employees. Consequently the required scale of a TQM programme is considerably less formal and the scale of organizational change less. The New Zealand approach to implementing TQM in this unique environment has yet to be fully researched and developed.

> In a country with very little history of managing organization change of any kind; with therefore no local companies to look to and learn from, very little professional help is available. No wonder it's proving difficult[14, p. 56].

The majority of the TQM activity in New Zealand has occurred in the manufacturing sector. This has been motivated by the growing need for ISO 9000 registration for the export market. The literature that does document New Zealand implementation

efforts focuses on the manufacturing environment.

The paradox of implementing TQM in the services sector is the perception that implementing service quality is easier than product quality in manufacturing. Since the moments of truth between employee and customer are more frequent and visible, it is assumed that the ability to control these areas is easier. Conversely, implementing TQM in the service sector is seen to be more difficult, due to the fact that the nature of service quality is intangible, measurement perceptual, and the frequency of interfaces leaves the organization open to a higher risk of inconsistencies and more difficulties in control[13]. This paradox leads many organizations to initially not realizing the need for, and role of, documentation and measurement of service quality procedures and processes necessary for consistent service quality. Deming[15] identified the key differences between manufacturing and service organizations and the impact of directly interfacing with customers:

> A production worker in manufacturing not only has a job, he is aware that he is doing his part to make something that somebody will see, feel and use in some way. In contrast in many service organizations the people that work there only have a job and are not aware that they have a product and that product is service[16, p. 245].

This is further compounded in New Zealand where the "typical customer" rarely provides feedback, positive or negative, and the years of protection and minimal choice have provided few role models for quality in the local environment.

TQM in New Zealand service organizations

The objective of this study was to obtain a background on the development of the various TQM implementation programmes and models being used currently in New Zealand. The research question involved ascertaining (from HR and other senior managers) how the programmes and models were sourced, designed and influenced during the development phase of implementation. As well as how the implementation efforts were introduced, organizations were asked if, in hindsight, any would have taken a different approach. A sample of employees in each organization were also approached to assess directly the

effectiveness of the training methods chosen for the implementation of TQM. Additionally quality consultants were approached to ascertain market trends in this area of New Zealand management practice. Qualitative methodology was used to obtain descriptive and historical information in order to compare approaches between the four mid-sized New Zealand service organizations.

Theoretical framework and method

The structural frame of this research lies between the disciplines of organizational change and development and human resource management. Therefore TQM is seen as a planned organization-wide change philosophy which works on a similar cyclical process as organizational development (OD), and therefore can be useful as an OD consultant's tool. TQM can be effectively used as an organization-wide change technique in helping an organization improve its efficiency in production, create a change of culture, introduce teamwork, gain management commitment to quality and to achieve other business improvements. The philosophy of TQM and the discipline of OD overlap considerably. Both are focused on empowerment, reward, and contain an emphasis on human resources. Both change the culture of an organization, its structure and the attitudes of individuals, which is intimately related to Deming's[15] 14 points for management. Both represent a highly programmed step-by-step approach to organizational transformation. Both rely heavily on training as a key step in implementation.

Sample

Four large New Zealand organizations within the New Zealand service sector that had implemented TQM based on Deming's philosophy were approached for the study. All four organizations were at different stages of implementation and were structurally diverse as well. Each organization was from a different industry, representing hospitality, communications, tourism and local government. The number of employees in these organizations ranged from 250 to 500, some were locally and some foreign owned. Each has implemented its TQM initiative at different points of its organization's development, some at the start-up of a greenfields site, others at

much later stages of their organizational growth.

Method

A qualitative methodological approach was utilized, including in-depth interviews to gain descriptive and historical information from four trainers, two CEOs and four quality consultants. Questionnaires were also developed and used to evaluate 380 employees' perspectives on the effectiveness of the training methods used for each organization's TQM implementation effort.

Results

New Zealand customers and their needs

The New Zealand customer traditionally has not been very forthcoming when poor service quality has been experienced. Unlike the American customer who is far more vocal (and occasionally litigious) in providing feedback, the TQM programme's reliance on quality information requires a higher degree of proactive scrutiny in New Zealand. New Zealand organizations have not received regular feedback, formally or informally, from their customers in the past and there is a relative reluctance to be overcome on both sides to make such information credible, valid and regular. Further considerations need to be given to the fact that the New Zealand customer may have different service needs, preferring a certain style of service (e.g. less formal, or less "attentive'). This is also culture bound and would have implications for the type of training methods used and the TQM strategy developed. Initially we can recognize the need for the New Zealand TQM programmes to be adapted to obtain more frequent feedback, and decrease reliance on the American-developed TQM implementation models in this area.

Educational style

Educational systems are culturally bound. The basis of the American and New Zealand educational systems are different in orientation at all levels of education. New Zealand systems have tended to emphasize expository writing and down-play quick, impromptu verbal responses and classroom interaction, including group activities, which have been the hallmark of American training. Therefore the TQM programmes designed in America for an American audience need to be adapted

for the New Zealand psyche and the various cultures employed. The training methods used need to be based on the style of learning New Zealanders have been exposed to in their earlier education, emphasizing self-directed search, limited formal writing, minimal competitive or celebratory elements and an emphasis on kinaesthetic learning ("hands-on"). Consequently the training methods for quality implementation should more closely align with New Zealand education systems, enabling more effective transfer. It should be noted, however, that global patterns of declining literacy unite the programmes in the language that can be used successfully.

Work ethic

The New Zealand work ethic has been one of "she'll be right" and "fix it with a bit of number 8 wire", stemming from the remoteness of New Zealand in the early colonial period, and from market protection provided by the government until the mid-1980s. While the former is a potential springbed for innovation, problem solving and resourcefulness, the reliance on "just good enough" solutions, even when ingenious and/or amusing, falls short of TQM needs. The physical remoteness of New Zealand has led many to "make do" with the resources that they have; the same mentality applies in small New Zealand businesses. This is intensified by the extended period of market protection which reinforced an attitude of "she'll be right", often accompanied by "mate", a wink, nod and smile. Some in the study believe that this shows a lack of discipline, resulting in half-way solutions, or wrong outcomes being achieved, and resulting in criticism of TQM as a "failure".

The quality philosophy is seen as requiring alignment to controls and fixed processes and procedures; this is an approach quite foreign to New Zealand, where human networks, exceptions and accommodations have been standard operational procedures for generations. To adapt the quality programmes to a New Zealand environment, study respondents felt that certain characteristics need to be considered.

> New Zealanders have a very different work ethic from the Japanese or the Asians. New Zealanders work to live, where Asians live to work. In the Hong Kong branch, people value their jobs so much and are driven by the boss. Whereas New Zealanders are a challenge, if you ask the staff to do it and they don't agree with that, it doesn't seem to matter too much to the Kiwi

worker if, say, there's a huge dispute and they were fired or something. It wouldn't happen in Japan where you work for a company for life.

Size and geographic dispersion

The commonly identified New Zealand factors recognized were the regionalization and geographical dispersion of New Zealand, requiring training packages to be adapted for each location, utilizing relevant examples for each site and adapting the method of presentation, working within the reporting structures, and adapting training packages for working with smaller teams.

Multi-cultural mix

New Zealand is unique in its multi-cultural mix. The Maori extended family concept is conducive to team work. Many consultants and trainers were found to acknowledge that the Maori culture is synonymous with various quality principles and the team concept. Consequently the quality concepts were easier to apply in the New Zealand work settings that capitalized on this insight. New Zealand (particularly Auckland) also hosts several thousand Pacific Island families, many employed at the "coalface" of service and manufacturing industries, and these kinship groups have been found to be successful in leading TQM programmes internally.

Quality consultants generally tailored generic material for each organization. Certain internal employees were used as the "entry point" to multi-cultural and diverse workforces in enabling management change, and bringing diverse groups "on board" in a variety of ways. Interpreters and bilingual systems were also used by the consultants interviewed in New Zealand. One of the consultants interviewed claimed to take cultural differences into account and alters the quality programme accordingly.

> A lot of ideas talked about in quality management are the basis of the Maori culture, some of the things that they think about and the way they do things are totally supportive and if you think about the Japanese company as being the family, the Maori are very much family oriented.

However, neither the Maori people nor their culture dominate most New Zealand organizations, but bi-cultural awareness is a key aspect of many companies policies at present, and bi-cultural relationships are at a turning point in New Zealand culture and business. At a minimum the Maori culture should be

considered when implementing TQM into New Zealand organizations, but increasingly the diversity of the multicultural mix, especially the range of Polynesian and Asian cultures that now constitute up to 30 per cent of different New Zealand workforces, must be accommodated as well. A key issue that is gaining importance is differentiation within what have been generic groupings, e.g. Pacific Islanders, Asians, rather than noting the national and ethnic differences within each of these larger groupings.

TQM in New Zealand service organizations

Context

Consultants used

Depending on when the TQM initiative was implemented, the approach taken differed. In the early 1980s the key "gurus" of these initiatives were Juran, Deming, Crosby, Joiner, Morganson and others. However, towards the late 1980s a more Pacific-based TQM programme was developed in Australia by NIES (National Industry Extension Service; managed by the Australian Industry Board). This approach was far more prescriptive in approach and therefore less open to interpretation. Consequently the findings suggest that the use of the Deming approach is starting to wane as it is seen as non-prescriptive, foreign and outdated.

Rationale for implementation

Different organizations in the study had implemented TQM for different reasons. Some organizations had used it as the last effort to try to improve their industrial relations climate. Others had implemented TQM for competitive advantage. While other companies saw TQM as a natural progression from the initiatives and change programmes previously initiated. For example if ISO 9000 certification had just been obtained then TQM was seen to be the next logical step in the development of the organization towards being truly customer responsive.

Organizational status

Other differences in implementation approaches depended on the status of the organization at the time of initiating TQM. This is quite typical according to the literature[17-20]. Some organizations in the study had started up their organization with a clear

TQM vision while other organizations had attempted to implement TQM as part of a change management strategy, and faced the associated resistance any new programme meets. The year of the implementation varied and consequently so did the consultant, model and programme used. Therefore the outcome and progress of the initiatives of the four companies studied varied. Additionally, the stage of growth which the organization was at when it was implemented, affected the ultimate "TQM" nature of the initiative.

Process variables

Training

The role of training in TQM implementation is crucial to any change effort according to the literature[17-22]. However in practice the scale, role and reason training is used varies considerably between companies. This involves learning how to use the quality techniques in organizational contexts. The findings suggest that the role of training varies depending on the different TQM programmes used. In some cases training is used to educate and communicate and in others it is to build skills and teams, or to create and support change.

The scale of training also changes according to the size of the organization and the logistical implications. Some companies ensure different audiences have different levels of knowledge regarding the change effort. Half the companies in the sample focused on training blue and white collar workers with different training programmes, while the other half focused on developing training programmes for all staff. Some companies let their staff design their own training based on local requirements. Training is also pitched at different levels, either at the communication of vision or the mastering of skills level. The type of training used ranges from classroom to experiential, or a combination of both. The findings indicated that the best method for ensuring employees can understand and apply the TQM principles has been the experiential methods. "Gradually through training from the top down through layers of people, change can be brought out through experience and experiential training."

HR support

HR support is essential for any successful TQM implementation efforts according to the companies in the case studies. Human

Resource policies need to be adapted to support the TQM effort[23-25]. Rewards and recognition systems need to help emphasize the customer responsive behaviour required. Training programmes need to provide staff with the vision and skills to participate in the new environment. The training budget should not be compromised by market changes and remain an organization-wide commitment.

Recruitment practices need to ensure that suitable customer-focused staff who fit into the new culture are selected. Additionally HR should rally the visible support and commitment from the CEO for the change effort. Those organizations that ensured their HR policies and procedures reinforced the TQM approach and were adapted to the New Zealand psyche were more likely to be successful in their change efforts. One of the companies in the sample is an example of the success of this adaptive approach.

TQM efforts are not a passing fad in New Zealand

By the end of the study, the four companies were further developing their TQM programmes and planning future initiatives related to their TQM efforts. Each company was planning on entering service sector-related quality awards for external benchmarking and recognition purposes which indicated their long-term vision for their quality journey.

> TQM is part of the normal management arrangement – based on where we think we can go and how we can do it better – I don't know of any buzzword lined up to come along afterwards (CEO).

In hindsight…

In retrospect, most companies would have adopted a process closer to the traditional change management model advocated by Kanter and others, especially with regard to building middle management support prior to implementation, sometimes through pilot projects that provided key points of leverage in the organization. The majority of the comments focussed, however, on changes to the training approach, with longer "time out" to attend sessions, build understanding and commitment and adapt learning approaches to constituencies. The other dominant theme was a longer term, more gradual approach to the implementation of the process, avoiding "rah rah" to sustain momentum.

In conclusion

TQM can be implemented successfully in the New Zealand context, as long as unique New Zealand workplace variables have been considered, such as education, work ethic, size and diversity, multi-cultural mix and the nature of the New Zealand customer and his/her needs. For organizations in New Zealand to be able to deliver a consistent level of service quality, the nature of the TQM effort needs to be seen to be a "New Zealand" version. The concept of quality needs to be integrated and articulated at the level of strategy, and HR policies and procedures need to be supportive of the change programme and reinforce the appropriate behaviours, along with experiential training to build skills and understanding.

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Commentary

As well as probably the most beautiful spot on earth, New Zealand has to be one of the most fascinating economies, and its story of near-disaster and turnaround is one many other governments could usefully benchmark against. And a good update by the authors on the state of play in TQM down there.