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Quality Initiatives in Australia

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Quality management within an organisation has an increasing presence when it comes to measuring economic performance and maintaining a competitive edge. With organisational change becoming a dominant force in most if not all organisations and to varying degrees for implementation and desired outcomes, the need to adopt a quality control system to assist in managing the change has become the benchmark for organisations in order to gauge success and commit to succession planning. This research reports on the incidence of innovative approaches to Quality and the reasons behind their implementation. One hundred and twenty-nine Australian companies reported on why they did, or did not, introduce a new Quality initiative within the past five years.

Field of Research: Management, Operations Management (Quality Management)

1. Introduction

This study has been undertaken following a series of researches on careers in technical occupations in Britain and Australia. One of the groups of technical occupations studied was quality managers. This study indicated that this group of quality managers appear to be less at the cutting edge of their field than managers involved in production, operations and logistics, In particular they displayed a limited knowledge of more recent approaches to quality management, such as Six Sigma. Although at its initial stage, this study sets out to examine the new quality initiatives being undertaken in various Australian manufacturing and service companies; what is the impetus for change and how they are implemented and evaluated.

2. Literature Review

As Goetsch and Davis (2006) argue, the ability of organisations to succeed in a globalised market will depend to a significant extent on the capabilities of the quality managers in terms of knowledge, skills, problem solving and teamwork. In such a dynamic business environment, “the challenge for the quality professional … is to become a ‘change master’ rather than just being a quality manager” (Maguad, 2006, pp.200-201).

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implement solutions (Conti *et al*, 2003; Adamson, 2005). The abilities now required of the quality manager go far beyond those of chief inspector, reflecting the need to provide advice to managers who are themselves responsible for much broader roles than in previous times (Addey, 2004, p.880). Indeed, Addey identifies no less than fourteen aspects to the role of the contemporary quality manager, from researcher to strategist to teacher (2006). According to the US quality managers surveyed by Sebastianelli and Tamimi (2003), the key responsibilities of the quality manager include human resource developer, strategic planner, leader and market researcher. In a study of the roles of Knowledge Managers, perhaps the latest incarnation of quality manager, Adamson identified aspects including those of entrepreneur, consultant and technologist (2005, p.996).

So pervasive is quality management throughout the modern organisation – being the responsibility of all staff – and so broad the role of the quality manager that it has been suggested that, “quality as an entity will be subsumed” and quality managers are likely to metamorphisise into project managers or executive positions, if they are prepared to do so (Westcott, 2004, p.23). These developments mean that the role of the quality manager will not only remain central to organisational success (Goetsch and Davis, 2006), but also, as discussed below, increasingly challenging for those who practise it. Twelve years ago, Juran (1995, pp.652-653) predicted growth in the professionalism of quality specialists, and a corresponding rise in the number of higher education institutions offering courses with a focus on quality. However, according to Westcott (2004, p.23), knowledge through formal education is only one facet of competency for the quality manager, alongside experience (applied knowledge), skills (technical competence, for example), aptitude and attitude.

3. Methodology

This survey is the first stage of a collaborative initiative with British researchers to compare and contrast quality issues in their respective countries. This was a pilot study of 1000 companies in Australia and 129 were received and entered into an SPSS database. These organisations were randomly selected from the JAS-ANZ list of ISO9000 companies. Sixty-five percent of the surveys received were in the service industry and 88% of the total respondents have introduced a new quality initiative in the last five years. This is a work in progress and further in depth analysis will result once the British Database is added.

4. Results

Organisations Who Have Not Introduced A New Quality Initiative

Of the 15 companies whom have not, or not yet, introduced a new quality initiative in the last five years, the main reasons are:

. Most if not all are already certified to a the ISO9001:2000 system
. Their current system is more that adequate to meet their needs are a regularly audited
. Are currently using similar systems such as HACCP, WQS standards, ESOS, AQTF and CRICOS

Their main reasons for continuing with their current approach include:
. More than satisfied with their current quality system
. Their companies are operating successfully thus indicating no reason to implement new initiatives
. They are meeting industry standards and requirements
. Customer and client feedback has helped refined processes, not technology

As a result of the above reasons, none of the 15 companies have considered a different approach and the only reason for rejecting any new approaches has been satisfaction in existing processes *("No point implementing change for the sake of implementing change"*). This is not to say they won't be open to considering a new approach in the future but emphasis will be on modification and consolidation, not so much introducing a new system. Only one company is considering a move to Six Sigma which is a system for measuring and eliminating defects with the intention to ultimately improve quality processes.

The main incentives being that ISO systems have been around for a long time and in some ways appear stagnant. Others believe that modifying and consolidating systems will ultimately save costs in the future especially in regards to recruiting auditors on a regular basis. When it came to rating the success of their current quality approach, the following illustrates that no company is completely dissatisfied however, nor are they extremely pleased with their current system. This could mean several things, either there is more scope for change than a company cares to admit or there is sufficient doubt that their current system is perhaps not the most efficient system available and that there is little information available of alternatives in order for them to make such a costly investment.

Overall, the main reasons the 15 respondents have not implemented a new quality initiative can be summarised in the following points:

. Obtaining commitment from management to engage in new alternatives
. Time constraints – implementing new systems takes time which can have a dramatic impact on productivity
. Ensuring the right system is adopted for the company and that it meets company standards and regulations
. Engaging staff and implementing the required training which in turns requires some-one with expertise
. This assumes to recruitment of consultants to share their knowledge but also have a firm understanding of how the company operates to ensure this knowledge is disseminated effectively

. Difficulty in equating benefits of a new initiative especially from a financial perspective
. How these benefits equate to the old system used – is it worth the disruption to current processes and the existing knowledge bank
. Finally, why fix it if it ain't broke mentality (the change for the sake of change assumption).

Organisations Who Have Introduced A New Quality Initiative

Of the 115 companies that have introduced a new quality initiative in the last five years, the following breakdown illustrates the systems adopted: Zero defect campaign (10); Quality Control (SPC) (7); Total Quality Management (TQM)(12); Business Process Re-engineering(16); EFQM Business Excellence model (1); ISO 9000 (69); Six Sigma (7), and Other (23). From the data above, 23 companies introduced other quality management initiatives and they included: ISO4001:2004 & AS4801; Integrated Management System; Quality & Environment Management System; ISO 9001; Lean manufacturing tools; ISO 22000; MRP11 Classa, First Pass Quality; Australian Business Excellence Framework; SA 8000, OECD Corporate Gov, FMEA; AQTF; CMMI; Disability Support Certification & Service Standards; ISO/TS 16949:2002; Various systems using intranet; AS9120:2002; Product Certification; and IEC Product Certification. From this long list it indicates the variety available for companies to either update or customise a system that suits their needs. The source of introducing a new initiative has been far more diverse with the greatest level of influence coming from within the company. Of the 115 respondents to this question:

. 36% of companies introduced new qualitative initiatives from Head Office Policy
. 40% of companies introduced new qualitative initiatives from In-company Individual/s
. 24% of companies introduced new qualitative initiatives as a result of Customer demand and/or feedback.

Several decisions by companies were governed and regulated by company policy however, many policies are designed to support decisions made by company boards and management teams. The introduction of quality initiatives are no different, hence the majority of new initiatives were introduced by individual members of a company holding a level of influence or authority when it comes to decision-making. Whilst a significant portion of the 40% were Managing Directors or Chief Executive Officers, there was also influence by employees holding positions of expertise such as Design Managers, Operations Managers and role specific Quality Managers. For some of the smaller companies, the owner or proprietor was responsible for making the ultimate decision to introduce new quality initiatives. There are many reasons that prompt change and the most common reason identified in this survey was government regulation whereby

certification is required in order to be compliant with the relevant system. Other reasons include competition for contracts, supplier demand, consolidation, defects and/or errors with existing systems, standard upgrades, identified gaps, requirement for business proposals, company restructures, global presence, commercial sustainability, international trends and opportunity for moving into new markets.

Funding

Of the 120 respondents only 43% had a dedicated budget for their initiative. There could be several reasons for this – quality control and/or management is a relatively new concept to the organisation and there is no precedent for budgetary consideration prior to this survey or they could be a small organisation that does not break down their costs into specific categories. Either way, this result can provide the necessary information for understanding organisation's reluctance to engage in quality initiatives or perhaps a contributor to unsuccessful attempts to implement in the past. This line of thinking is further supported by the percentage of organisations that did not undertake a cost benefit analysis prior to implementing a quality initiative. A staggering 64% said they did not, another five organisations neglected to answer this question. Unless budgeted and planned, introducing new ideas be that processes or software are doomed to failure as the results (financially and socially) far out way the expectations and can often overshadow the long term benefits of the original initiative. Costs can blow out as a result of training requirements, loss of productivity and teething technological problems. Organisations must factor this in prior to introducing any new initiative.

Implementation

The successful implementation of a quality initiative appears to have been considered clearly with 64% of respondents confirming that an implementation team had been formed prior to a quality initiative being introduced. How a quality initiative affected each organisation varied across the survey respondents. In some cases, not all departments or all staff was involved. This would not be considered uncommon in a large organisation. It would be more difficult however, not to involve all parties in an organisation will less than 50 staff. It is also less common in service dominant organisations whereby consistency and brand is defined by the level of service provided. A drop in that high level of expectation can have a negative effect on the organisation as a whole. This is not to say that manufacturing organisations do not have the same level of responsibility to their customer however, their technological component means that certain quality initiatives relate to systems and software and a different quality initiative would apply to the sales department.

The results for how long it took to implement a quality initiative also varied across the organisation. Only 92 organisations responded to this question of which three organisations claimed their implementation is ongoing and that they constantly

re-evaluate and upgrade regularly. This would be common in a large organisation that is consistently changing; however two of these organisations have less than 300 employees which introduces new considerations. Possible reasons could be continually responding to customer feedback or an organisation that is relatively young and still discovering the most suitable initiatives to meet their needs.

Post Implementation Evaluation

Was there a post implementation evaluation? One hundred and sixteen organisations responded to this question. From the 82 organisations who stated ‘yes’, some of the other reasons for conducting an evaluation include:

. External Audits & Client Satisfaction & Safety, Environmental Performance
. As part of ISO9001-2000 "Management Review"
. External Accreditation
. Internal Efficiency
. Audits of Quality Management System
. Staff Satisfaction
. Management Oversight
. Effectiveness of quality system

The success of the quality initiative for each organisation varied slightly however most were more than satisfied with the implementation and subsequent roll out of the initiative. Most rating the success 8 out of a possible 10.Of those organisations that responded a resounding 75% based it on company wide measures. The specific list of measures included, but not limited to:

. Credits for customers. Meant that errors have occurred commercially
. We have negative & positive performance measures
. Quantify feedback & Quantify orders shipped complete within requisite time
. Integral part of ISO9001 "Non Conformances & Corrective Action" and KPI as a quality objective/continuous improvement
. Data Reports, Audits
. Customer Complaint, job performed to standard, new clients attracted
. Underdevelopment of performance and risk management KPI's, Standardised audits
. Statistical Analysis
. Internal & external audits, corrective actions, customer comments
. Management & staff meeting as a part of the regular reviews
. Lead time, productivity, no. of rework, minimum written stock, accuracy of delivery and on-line delivery
. Ration of credit notes to invoices, ratio of warranty claims to units sold, defects per unit and on-time delivery
. First pass quality (first sample to lab), final quality, rework level, yield, discard

. Service response time, employee performance reviews completed, spare parts availability, repairs cycle time, revenue, customer acceptance
. Checklists, internal audits
. Survey completed with all stakeholders annually. Monthly report completed by Quality Management Coordinator
. Balanced scorecard - customer satisfaction, issue logs, attrition
. Operator involvement through visual & hourly inspection - set parameters

When we asked for the respondents to identify three main difficulties for their organisation when implementing quality initiatives, they produced some common responses. These are not too dissimilar to the responses posed to organisations who have not introduced a quality initiative in the last five years. They include:

. Communication
. Organisational inertia - why change?
. Cooperation
. Employee Compliance
. Old culture in the company
. Training - demonstrating and gaining high priority to conduct at training
. Be careful what independent company you choose to help set you up
. Across the board involvement of all staff
. Commitment
. Resources
. Conflict with quickest resolute
. Motivation
. Lack of support from senior management
. Combining many systems
. Staff know where they stand in relation to how things are done
. Cost of Implementation

Discussion

For a select few, more than one system was implemented in the five year period. Initially it can be assumed that to implement more than one quality system in such a short period could indicate fundamental flaws in business operations however, that is not necessarily the case. For example, in the service industry, consumer standards change constantly primarily for competitive reasons or a change in consumer demand and/or expectation. It is crucial for organisations to stay abreast of these standards as reputation, and a good one at that, is the key to that organisations success. Likewise with manufacturing but the distinct difference is that competition can be the deciding factor determining which organisation can sustain the constant pressure to perform and deliver a product in the knowledge that should they loose such momentum, there is rarely an opportunity to bounce back as there are several other organisations waiting for the opportunity to shine.

When it came to the difficulties organisations came across when implementing quality initiatives, a consensus was apparent when it came to engaging staff. Finding a balance between systems implementation and organisational change is the most challenging aspect to an organisations ability to remain competitive and its ultimate success. Change associated with systems implementation is quantifiable as is the indicators used for quality assessment and the identification of a quality system that is suitable for an organisation. However, measuring change within an organisation that involves the key asset being its people, is far less predictable yet the responses to this question were in fact the least surprising and in line with the challenges faced by all organisations regardless of the degree of change they are trying to implement.

Resources were deemed one of the most popular concerns faced by organisations albeit perhaps for different reasons. Few will concede to the lack of resources being the problem but rather the level of expertise amongst the resources they have. When implementing new software, new or varied skills are required for integrating into current systems, deviations are made from existing skill sets and the most important component of that change becomes the ability to share knowledge effectively. To engage a team in the belief that they are learning new skills for the benefit of themselves as much as for the organisation is the challenge. It is imperative to engage them early to avoid alienation them, one of the first signs of resistance.

Time was closely aligned with resources as a major challenge to technical managers. For instance, implementing new software is often very time consuming yet many organisations expect their staff to carry out this task in addition to existing workloads and schedules. To demand more as well as successfully engaging employees, an organisation will need to ‘sell’ the idea to their teams in order to implement change effectively and efficiently with minimal disruption. Prioritisation on all fronts from all parties is required to ensure

maximum efficiency. This could mean putting on hold current projects and redistributing resources to accommodate changed priorities, thereby preventing gaps and resentment in other areas of the business.

5. Conclusion

Despite the concerns and the obvious challenges facing organisations when they implement change at any level, only .05% of the organisations surveyed considered the introduction of new quality initiatives within their company can be deemed unsuccessful. The underlying understanding is that these obstacles can be either averted or accommodated if the change is planned effectively, if staff are engaged at all times and a substantial component of feedback given to senior management post change revolves around how the implementation took place and not whether or not it was required. Passionate employees far out weigh their more negative counterparts and thus many understand the importance of

remaining competitive in a challenging environment. Even the less inspired of the group are fearful of their long term security and thus have the potential to engage in change given the right circumstances, albeit perhaps less enthusiastically. It becomes the goal of the company to successfully engage their staff in a collaborative way and harness thought processes, ideas, previously unidentified skills or talent and maximise the benefits change has to offer. The above is no easy task when there are so many variations to and/or compromises required, but as Charles Darwin (1859) said, “It is not the strongest of the species that survives, nor the most intelligent, but the most responsive to change.”

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