

# TOTAL QUALITY MANAGEMENT (TQM) AND THE IMPORTANCE OF THE POST-MODERNIST PARADIGM

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The paper draws upon a thorough literature review and empirical field research and is based upon an in-depth analysis and evaluation of the 'true requirements' for a successful TOM implementation process. For example the holistic nature of TOM and its dependence on a morphogenic cultural change process, more in tune with the 'Post-Modernist Paradigm' are identified for construction related enterprises.

Keywords: morphogenic change processes, morphostatic change processes, TQM - total quality management.

## INTRODUCTION

The fundamental rationale for implementing Total Quality Management (TQM) within a construction operational environment is the attainment of a sustainable competitive advantage. TOM has been advocated as a strategy for achieving an improvement in the effectiveness, flexibility and competitiveness of construction related enterprises. Oakland & Aldridge (1995) identified that the construction industry is associated with a patchy reputation for the quality of its products and services with most projects not being completed on time. In our previous work (Chileshe & Watson 1997) we showed that most organisations in the construction industry are quite satisfied with accreditation to BS EN ISO 9000 series rather than pursuing TOM programmes. Among the reasons offered for non-implementation of TOM was that firstly BS EN ISO 9000 series provided enough of a "culture shock for employees", and secondly due to the current industrial climate, particularly in the construction industry, most directors had more 'pressing' matters to consider such as survival. However, some organisations are beginning to see the positive aspects of TOM. One contracting organisation has equated the cost, inefficiency and waste in the contracting industry as being equal to giving away a house a day. (Morrison, 1996)

TOM aims to produce a superior performance from the whole project team. This results in improved quality products and services, delivery and administration, which ultimately satisfy the client's functional and aesthetic requirements within defined cost and completion parameters. Ghobadian and Gallea (1996) conducted research which established that the performance of companies who had implemented TOM exceeded their industry's median performance. However, the implementation process can be a most problematic activity encompassing many pitfalls for an unwary organisation. The following establishes the problematic issues associated with the implementation of TOM within a construction operational environment when the true nature of organisational structures are not fully understood. Barney (1991) suggested that firms obtain sustained competitive advantages by implementing strategies that exploit their internal strengths, through responding to environmental opportunities, while

neutralising external threats and avoiding internal weaknesses. TOM works by inspiring employees at every level to continuously improve what they do, thus rooting out unnecessary costs. The competitive advantage results from concentrating resources on controlling costs and improving customer service (both internal and external). Dean (1995) states the challenge to obtaining a competitive advantage as being able to holistically define the nature of quality and then rigorously implement a form of integrated product and process development (IPPD) which will attain the defined quality. TOM enables a construction company to fully identify the extent of its operational activities and focus them on customer satisfaction. Part of this service focus is the provision of a significant reduction in costs through the elimination of poor quality in the overall construction process. This empowers the host organisation in the attainment of a competitive advantage. TOM provides an holistic framework for the operational activities of construction enterprises.

We suggest that the high failure rate associated with the implementation process of Total Quality Management is due to the pursuit of a Post-Modernist concept within a modernist organisational environment. Therefore to achieve the successful implementation of TOM a host organisation must fully understand the basic requirement for its implementation.

## **A BRIEF COMPARISON OF MODERNIST AND POST-MODERNIST ASSUMPTIONS**

Modernist theory assumes that change is a linear process and, therefore, can be managed in an incremental way with distinctive points of conception and completion. In essence it is a belief in a simple cause-effect relationship, in such a world it is easy to achieve desired outcomes. However, a more realistic view of the operational environments of business organisations rejects the notions of linearity. Post-Modernist organisations realise that change can go in many directions and the world is best understood in terms of disorder and unpredictability. If one accepts the Post-Modernists view one must also recognise the need for versatility of approach and the emphasis must be on flexibility. This emphasis on flexibility should be focused on the complexity of boundary relationships and heterarchy as opposed to hierarchy. Another vital consideration is the acceptance of ambiguity by the host organisation. Within the following text a more detailed analysis of the differences has been undertaken and the advantages of Post-Modernism established.

## **MODERNISM VS POST-MODERNISM**

In times of static or limited dynamic environmental change the Modernist (Bureaucratic) organisational structure can cope with the change process reasonably well. When the operational environments become dynamic and complex, the Modernist structured organisation finds it difficult to cope with the implications of change management.

Passmore (1994:47) opines

Most of us are born with a good deal of flexibility; it's a helpful trait that allows our species to adapt to a wide range of habits and circumstances we encounter. However, the process of growing up in a hierarchical world teaches us to become inflexible.

Passmore is therefore advocating that people can inherently deal with change and it is the bureaucratic systems they work in that stifles their inherent flexibility.

Some of the early authors upon this subject, such as Weber, purported that Modern business enterprises are structured as "rational-legal" hierarchical and bureaucratic systems characterised by standardised operating procedures, regulations, performance standards and "rational" decision-making processes that are based upon technical and professional expertise.

The above is now being contested by various authors. Two such authors are Morris and Brandon who suggest that there has been a paradigm shift in the way that organisations view themselves and their operational environments. After all, when the business world undergoes change, only those companies that react quickly will prosper. This ability to react requires considerable flexibility and an openness to new ideas and approaches. In creating this foundation the basic assumptions of the business must be re-examined.

(Morris and Brandon 1993.49)

The above noted paradigm shift has manifested itself in the post-modern Organisation. Such a paradigm shift is required in most construction related companies if they are to be successful in adopting TOM.

## **STRUCTURE OF RELATIONSHIPS**

Within Modernist Organisations very simple structure or boundary relationships exist. Linkages are achieved through formal rules and procedures, also relationships between different groups are formalised. In comparison with this the Post-Modernist organisation possesses little distinctiveness of roles, boundaries are blurred. There is a great emphasis placed upon creating teams and positive productive relationships, all directed at increasing the organisation's ability to cope with a dynamic environment. This is necessary if the organisation is to be creative. Majaro (1992.79) points out that making this change to a Post-Modernist organisation "is easier said than done"...and that "One of the most difficult challenges to any organisation is the process of changing a climate or corporate attitudes".

However, the structure of relationships will affect the empowerment process of TOM and therefore must be fluid.

## **HIERARCHY**

The modern organisation has a very defined hierarchy of leadership roles. These roles are fixed by legitimacy and tradition. There are leaders and followers. Contrasted with the Modern Organisation is the post-modern Organisation where normal hierarchy does not exist and staff act according to agreed areas of expertise. The term for this approach is "heterarchy" in which very high levels of fluidity exist. This high level of fluidity is a basic necessity because "Too much is changing for anyone to be complacent" (Peters 1998.3). Within the Post-Modernist organisation each task may have its own mini-hierarchy depending on the needs of the situation. As construction organisations move to areas of increased complexity of service, there is a requirement to implement increasing heterarchic ways of working.

## **MECHANISTIC VS HOLOGRAPHIC**

In the Modern organisation the relationships between the tasks are of a mechanistic nature and, there exists a high degree of linear relationship between the organisational tasks.

Within the post-modern organisation high levels of group work exist, each with a correspondingly high level of autonomy. The overriding linking force binding these empowered groups together is the organisational culture. The post-modern organisation readily suits the reality of today's environment because organisations and markets are messy things and not linear. However, one must not forget that building a mutually beneficial culture and conception of the world takes a great deal of time and effort. It is the authors' view that culture is the 'DNA' of organisations and this must be genetically engineered to provide the required organisation. Culture is the fundamental building block. Traditionally in most organisations the existing culture is based upon mistrust and the utilisation of frequent sanctions by senior managers this approach is not conducive to TQM.

## **DETERMINACY VS INTER DETERMINACY**

The Modernist Organisation conducts all matters in a determinate manner. There exists a high degree of emphasis on imposed stability, control and discipline. The above assumes that one can exercise a high degree of control over the operational environment.

However "Many companies feel the 'hot breath of change' on their necks... They need to successfully change their organisations into more productive and innovative ones".

(Vander Erve 1993. 113)

In the post-modern Organisation matters are conducted in a way that emphasises indeterminacy. This is an acknowledgement that the environment is highly unpredictable and uncertain. This kind of organisation values different things from the Modernistic Organisation, for example flexibility and innovation are highly prized.

Flexible people are open minded, willing to take reasonable risks, self-confident, concerned and interested in learning. They are creative and willing to experiment with new behaviours in order to make better choices about what works for them and the organisation ... They possess basic skills that allow them to adapt readily to new circumstances, and they view themselves as able to make the best of opportunities that come their way.

(Passmore 1994.47)

This in essence is the Post-Modernistic Organisation which fully supports the implementation of TQM within construction related organisations.

## **CAUSALITY**

The major difference between Modern and post-modern Organisations upon this issue is that Modernistic Organisations view causality as having a linear relationship. They view every element of organisational life as having a cause and effect relationship and consequently they manage the organisation in this light. However, the Post-Modernistic Organisation, when considering causality, thinks of a 'circle'. This is to say, they are encouraged to look for complexity and the interconnectedness of cause and effect. This demands a high level of staff participation and this makes good

management sense. The rationale for participation has been stated by Sayles (1989, 196) as follows: "When subordinates are consulted about and contribute to the change process many benefits accrue".

## **MORPHOSTATIC VS MORPHOGENIC**

Morphostatic processes are defined as those that support or preserve the present mode of operation, these would include formal and informal control systems. The emphasis in this type of organisation is placed upon formal control systems and procedures. A more enlightened approach is adopted by the post-modern Organisation, here a morphogenic culture exists. Morphogenic processes are those that tend to allow for change and development. The exciting nature of change is always advocated. This type of organisation allows staff to be proactive and not reactive.

The post-modern paradigm with vastly reduced bureaucratic control, with a rich array of horizontal communication channels, and in which workers are given a substantial share of power to make choices and to develop new ideas, can survive under new market conditions and are ideally suited to the implementation of TOM and hence the attainment of a sustainable competitive advantage.

In post-modern organisations creative activity fed by a chaotic interaction of ideas, is controlled by market forces and supported, not suppressed by enlightened managers". (Jenner 1994. 17).

## **CONCLUSIONS**

This paper has set out to establish the links between the cultural characteristics of the post-modern paradigm and the requirements of TOM. The need for TOM is emphasised by the fact that construction companies must institute TOM or become non-competitive in the national and international construction and engineering markets. However, research in the field of construction management, and in particular appertaining to TOM is not utilised to its full potential. The manufacturing sector has identified the importance of adopting a post-modern paradigm when implementing TOM. This fact seems not to have been embraced by the construction industry and hence, the high failure rate in implementing TOM. Research has shown that 80% of quality initiatives fail within one to three years ( Stockdale, 1998 ). Construction related enterprises must fully appreciate that the old style morphostatic change processes are not capable of sustaining a TOM initiative.

Despite major advances in construction technology, there is every indication that defects occurring in the industry today are little different from those of 15 years ago (BRE 1982). In order to address some of the issues raised in this paper, within the construction industry the Latham Report which was published in 1994 advocated a 30% improvement in productivity levels and two of the important elements in obtaining this improvement are the application of TQM and Research. It is our view that the benefits of TQM for the construction industry are without doubt, and successful implementation will lead, eventually to a marked advantage over rival companies.

The future of TQM's success is dependent upon senior managers appreciating that TQM is a long term strategic developmental process and as with all structures requires a solid foundation

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