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TQM implementation: a conceptual study of the impact of implementation on two companies

A comparative investigation about the understanding of and impact of
Total Quality Management programmes within Post Haste Couriers,
Palmerston North and Rayonier New Zealand, Wellington.

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Abstract.

Much has been written about the concepts associated with TQM, but little exists on the impact of TQM implementation in New Zealand companies.

This paper is a comparative study on the understandings and impact of TQM within two New Zealand companies, Post Haste Couriers Palmerston North and Rayonier New Zealand, Wellington. Semi structured interviews were carried out and the data compared with a variety of theoretical approaches.

The findings show that TQM means different things to different levels in a company's hierarchy and its successful implementation depends on the management style, company resourcing and the amount of control that can be exercised over the business environment.

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Section Overview.

The structure of this thesis adopts the following format:

Section One Introduction to the research. This section outlines the aim of the research and states the research questions. It describes the data sources and data gathering methods, the research methodology, selection of participants and, lastly, some of the limitations of the research.

Section Two Academic definition of Total Quality Management (TQM) based upon New Zealand and overseas literature. This section describes of the nature of quality, the need for an operational definition of quality, similarities between quality definitions, a description of the fundamentals of TQM, the science, theories and assumptions that TQM is based upon, arguments in defence of TQM and lastly arguments criticising TQM.

Section Three Case studies describing the operations of Post Haste Couriers, Palmerston North and Rayonier New Zealand, Wellington, including the key elements to their profit making.

Section Four The meaning of quality to the managers and operatives and the importance they attach to it. This section identifies the hierarchical nature of understandings of the importance of quality, and different meanings held by each of the affected parties within their company although individuals at the same hierarchical level in each company hold similar understandings.

Section Five Reasons for implementation of quality programmes. This section outlines the reasons for quality implementation and identifies high consistency between the companies for their actions.

Section Six The effect that the quality programmes have had on the managers and operatives of the companies.

Section Seven Commentary on the extent to which the research questions are met and summary of the major findings of this thesis.

Section Eight Presentation of further research questions. Questions for further research warranting investigation in the area of quality management within New Zealand companies that were developed through the process of this research.

Section 1: Introduction to the Research.

“Research without an actively selected point of view becomes a ditty bag of idiot, filled with bits of pebbles, straws, feathers, and other random hoardings.”¹

Lynd, 1959, pg183

¹ Lynd, R.S (1959) Knowledge for what? the place of social science in American culture Princeton, N.J Princeton, University Press.

1.1 Introduction.

Work place reform is rapidly gaining acceptance as the way forward for New Zealand industry. Increased exposure to international competition following the deregulation of the 1980's has put organisations under strain to develop more efficient methods to produce goods and services. A growing number of companies are initiating reforms through quality programmes. Total Quality Management (TQM) is the latest development in quality programmes which shifts organisational actions from being functionally organised to the flow of the product or service. This is supposed to bring about numerous advantages. Of these advantages three seem to dominate: worker participation, performance enhancement, and increased customer satisfaction.

However, the jury is still out concerning TQM's place as an effective quality management method. A myriad of arguments exist claiming TQM to be anything from a panacea of business ailments to a system, too bureaucratic to be feasible to a management style where management needs dominate over concern for workers. Consider the following statements:

*"Analysts have credited TQM with leading Japan to global economic prominence in the postwar years.... and more recently with restoring America's economic competitiveness."*²

*The total quality movement, one of the biggest fads in corporate management, is floundering,... Despite plenty of talk and much action many American companies are stumbling in their implementation of quality improvement efforts.... A key reason, the study concludes: Many quality management programmes are simply too amorphous to generate better products and services."*³

These statements represent the major arguments concerning the effectiveness of TQM in literature today. To add spice to the quality debate, some analysts and practitioners of quality argue that there is a delivery gap between the TQM model and its application to organisations where TQM in practice cannot imitate the expectations of the model.

It appears that TQM implementation in New Zealand organisations is still in its infancy and New Zealand literature suggests that implementation has occurred mostly in larger organisations and by those who export. To a large extent the effect of TQM on New Zealand organisations is unknown, as the majority of literature makes reference to Japanese or American companies.

It is the aim of this research to investigate New Zealand companies whose management beliefs support a TQM programme within their operations. Specifically, the interest was in understandings affected groups internal to the

² Powell, T.C (1995) Total Quality Management as a competitive advantage Strategic Management Journal Vol 16 Pg 15.

³ Fuchsburg, G Quality programme shows shoddy results NBR. (remaining details unknown)

company had about quality and the impact of quality efforts on their performance. Post Haste Couriers, Palmerston North and Rayonier New Zealand, Wellington offered to participate and these two companies therefore became the convenient sample from which data was drawn for this thesis.

1.2 Research questions.

This research has four main questions

- A) How do the branches of Post Haste Couriers, Palmerston North (Post Haste) and Rayonier New Zealand, Wellington (Rayonier) operate and what are the key elements in making profit at the branches?
- B) What does Total Quality Management (TQM) mean to the different categories of staff, contractors and customers at Post Haste and Rayonier and what importance do they attach to it?
- C) What motivated the introduction of TQM in Post Haste and Rayonier?
- D) What differences do the staff and contractors see in the operations of their companies as a result of TQM, and how does this show up in the performance of the business?

1.3 Research Strategy.

To achieve an answer to the research questions, a case study approach was taken. According to Yin (1984), a case study is an empirical inquiry that:

- “- Investigates a contemporary phenomenon within its real life context; when
- The boundaries between phenomenon and context are not clearly evident, and in which
- Multiple sources of evidence are used”⁴

The basis of selection was pragmatic being determined by the willingness of the companies to participate.

The case study presentation methods of Gilbertson and Knight (1992)⁵ were used as it was felt that their methods allow the views and perceptions of participants to be expressed. In line with their methods sections of interviews are used in the text of the thesis, as this facilitated the transcription of participants understandings of quality into the research.

⁴ Yin, R.K (1984) Case study research: design and methods. Sage Publications, London, Pg 83

⁵ Gilbertson, D & Knight, R.M (1992) Innovation and management in New Zealand, a casebook. Dunmore Press, New Zealand.

This research is about the concept of quality. This concept cannot be defined in absolute terms. Because of the difficulties of definition the research is largely concerned with recording and describing the perceptions of participants. It was important to have a certain amount of flexibility built into the methodology to allow the researcher to explore the responses of respondents.

Following Yin's example, interviews were based on semistructured questions of an open ended nature:

An investigator can ask key respondents for the facts of the matter as well as for the respondent's options about events. In some situations, the investigator may even ask the respondent to propose his or her own insights into certain occurrences and may use such propositions as the basis for further inquiry. ⁶

The data was analysed by using content analysis.

"Content analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of communication. This technique measures the extent of emphasis or the omission of emphasis, on any analytical category. Content analysis deals with the study of the message itself. It involves systematic analysis as well as observation, to identify the specific information content and characteristics of the messages". ⁷

From this analysis themes arise and comparisons are made between Post Haste Couriers and Rayonier New Zealand, Wellington about the operative's understandings of quality programmes and their impact on performance.

The objective of the literature search is to provide an overview of TQM. The literature is referenced in question two to determine quality meanings and approaches to quality by the companies. The workings of Deming and Crosby are particularly referenced to highlight the different approaches to quality by the companies. To answer question four, the quality definitions of Deming, Juran, Crosby, Feigenbaum, Ishikawa, and Taguchi are used to identify the desired outcomes of TQM. To determine elements the efforts of Powell (1995), who developed 12 variables of quality that companies and literature have in common, are used.

1.4 Sources of data.

The following data sources were made available to the researcher, confidentiality issues and commercial sensitivity prevented full referencing of these sources.

⁶ Yin, R.K (1984) Ibid. Pg 83

⁷ Zikmund, W. G (1991) Business research methods (third edition) Dryden Press, Orlando

Post Haste Couriers.

- The Regional and Branch Manager of Palmerston North Depot
- Customer Services Manager
- Three office personnel
- A sample of five couriers
- The Depot supervisor.

Rayonier New Zealand.

- The Area Manager of Rayonier
- The Quality Control Supervisor
- The Procurement Supervisor
- The Log Production Coordinator
- Both Administration Secretaries
- A forestry gang that contracts to Rayonier.

Other participants.

- The manager of the warehouse and distribution section of Toyota, New Zealand, Palmerston North, which is the largest client for Post Haste.
- Access to an interview with Ross Henderson, author of a thesis titled 'TQM, myth or messiah? A practical guide to TQM implementation.
- A communications consultant who has developed a programme which incorporates quality implementation titled 'communications link'.

Documentation.

- Information pamphlets and marketing documentation for both organisations
- Job descriptions from both organisations
- ISO Quality Manual from Rayonier
- Q Base Quality Manual from a forestry contractor
- Annual reports from Rayonier
- Selected documentation released from Post Haste Couriers head office including courier contracts and weekly trend reports of key performance indicators
- Graphs and charts of operative and courier performance from Post Haste Couriers, Palmerston North.

1.5 Selection of participants

Essentially I was concerned with the individuals who could provide the most information. Hence, the selection of participants was not random. They were selected by recommendations, nature of work, position, accessibility, and willingness to participate.

The initial interview with each organisation was with the branch manager. These interviews were used as an opportunity to break the ice with the managers, explain

the thesis and to accumulate a general understanding about relevant issues. A proportion of this time was allocated to discussing the selection of participants. Chosen individuals were then approached and asked to participate as appropriate.

No restrictions were made on the number of times people were interviewed. Post Haste averaged three to five interviews per person and Rayonier averaged one to three interviews per person, a total of 35 interviews.

Each participant was offered the opportunity to review a transcription of their interview to edit any text that they didn't think suitable to be included in the research and to ensure the validity of the transcript.

1.6 Research constraints

Because quality is not a concrete concept, it cannot have a universal definition. TQM has prominent aspects that create a theme but which differ in importance from situation to situation. It would be wrong to consider the definitions in this thesis to be the absolute.

When using case studies the available information is limited by the participant's ability to pass it on. Because of this some issues could not be investigated to the extent hoped for.

Since this study involved a two organisation sample with known similarities in their operations, conclusions cannot be generalised to other companies or industries.