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Journal of Operations Management 22 (2004) 575–587
JOURNAL OF OPERATIONS MANAGEMENT
www.elsevier.com/locate/dsw

Quality management and organizational context in selected service industries of China

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Received 24 February 2003; received in revised form 31 March 2004; accepted 31 August 2004

Abstract

By developing an empirical taxonomy of quality management systems (QMS) in selected service industries in China, we compare the taxonomy of QMS developed in the service industries to that found in previous studies in manufacturing industries. We further investigate contingency relationships between the development of a QMS and its organizational contexts. Based on cluster analyses of quality management practices measured by the Malcolm Baldrige National Quality Award (MBNQA) criteria, we found four patterns of service quality management practices: undeveloped, accommodating, strategic, and soft quality systems. Our research indicates that the type of quality system adopted by an organization is highly associated with organizational contextual factors. Our results indicate that environmental uncertainty shapes the development of a QMS in the early stage, while the perceived importance of quality induces the further development of a QMS to a strategic quality system. The results also show that small service firms that compete locally can achieve very good performance results using a soft quality system, a QMS with no formal process management systems. This research provides empirical evidence on contingent relationships among quality management practices, organizational context, and business performance, thus contributing to contingency theory in quality management.

Keywords: Empirical taxonomy; Quality management; Organizational context; Business results

1. Introduction

Quality management (QM) has become one of the most widely accepted philosophies in business enterprises, and one of the most popular research areas in recent years. Recently, Sousa and Voss (2002) conducted a thorough review and analysis of the existing QM literature. Many studies have investigated

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doi:10.1016/j.jom.2004.08.003

the effects of various QM practices on quality performance (Anderson et al., 1995; Dow et al., 1999), operational performance (Choi and Eboch, 1998; Samson and Terziovski, 1999), and business performance (Adam et al., 1997; Hendricks and Singhal, 1997). Overall, these studies have shown that QM practices have a strong effect on quality and operational performance, but a weak or insignificant effect on business performance. Similarly, quality performance has a strong effect on operational performance, but often a weak or insignificant effect on business performance. One of the major reasons for the weak effect of QM practices on business performance might be that it is contingent on other factors, such as the market environment or organizational context.

Flynn et al. (1995) classified QM practices into two broad categories: infrastructure and core practices. Infrastructure practices are the non-mechanistic/socio-behavioral aspects of quality management, such as senior management support/commitment, customer focus, workforce management, training, and so on. Core practices are the mechanical/process/technical aspects of quality management, such as process management, statistical process control, product design process, and benchmarking. While Flynn et al. (1995) and Anderson et al. (1995) showed that infrastructure practices created the environment to support the use of core practices, they may affect performance only when core aspects have been established. Others suggested that infrastructure practices produce performance without the core practices (Dow et al., 1999; Powell, 1995; Samson and Terziovski, 1999). Further research is needed to clarify the relative importance and interplay between core and infrastructure practices in determining performance under various organizational contexts (Sousa and Voss, 2002).

Recently, studies on the implementation of QM focus on the QM implementation content, or the extent to which different QM practices should be used. Although researchers have traditionally advocated that QM practices are universally applicable to organizations, some studies have revealed that not all QM practices are effective in all organizations (Benson et al., 1991; Sousa and Voss, 2002). However, the existing literature on QM contingencies is very sparse. Hence, more research is needed to identify important contingency variables and to provide guidelines as to which practices should be emphasized under different sets of contextual variables. There is a need to identify the relevant contextual factors that affect the implementation approaches. Sousa and Voss (2002) further point out that the majority of QM studies had been conducted in the manufacturing sector, and that some practices might not work equally well in the service sector. Hence, there is a need for more studies of the service sector.

This research focuses on the contingency theory in quality management. First, by developing an empirical taxonomy of the service sector, we compare the patterns of a QMS in the service sector to those that originated from the manufacturing industry. Second, by identifying the differences of the organizational contexts among various categories of QMS, we explore the contingency factors behind the development of a QMS, and how such contingency relationships could lead to business results. The paradox to be solved here is fundamental and significant in the field of quality management. Is the development of a QMS universal and context-dependent? If QM is context-dependent, then does the development of a QMS differ between the manufacturing industry and the service sector? How would such a development be contingent on the organizational contexts in which a service organization is operating?

2. Theoretical background

Existing research into the taxonomy of quality systems is confined to the manufacturing sector (Yeung et al., 2003). These investigations are also largely restricted to the organizational level of analysis and do not look at the organizational context. At the organizational level of analysis, configuration theories typically posit higher effectiveness for organizations that use one of the ideal patterns or types of management systems (Doty et al., 1993). In contrast, the contextual view of contingency theory prescribes that an organization must be aligned with its operating environment to achieve optimal performance. The congruence or the match of a management system, rather than the level of advancement of the key factors, determines successful outcomes (Das et al., 2000).