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Corporate social responsibility, benchmarking, and organizational performance in the petroleum industry: A quality management perspective

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ABSTRACT

The purpose of this paper is to investigate the effect of corporate social responsibility and benchmarking on organizational performance in the petroleum industry. We find that top management support for quality is the main driver of practices associated with corporate social responsibility. Corporate social responsibility appears to have a significant impact on internal quality results (operational performance) but it does not have a significant effect on external quality results (firm performance). We did not find a very strong relationship between benchmarking and internal/external quality results. Our findings suggest that the implementation of corporate social responsibility in the petroleum industry is economically driven. Recommendations for managers and future research have been outlined.

1. Introduction

Quality management (QM) has emerged as a management paradigm for enhancing organizational effectiveness and competitiveness (Grandzol and Greshon, 1997; Dow et al., 1999; Sanchez-Rodriguez and Martinez-Lorente, 2004; Sila, 2007). Several empirical studies suggest that firms achieve higher levels of profitability and organizational performance through successful implementation of practices associated with quality management (Powell, 1995; Easton and Jarrell, 1998; Das et al., 2000, Douglas and Judge, 2001; Kaynak, 2003; Yeung et al., 2006; Mesut, 2009; Kull and Narasimhan, 2010).

Historically, the concept of quality has evolved from quality control and using statistical methods to address practices such as employee involvement and a culture for change and innovation (Dean and Bowen, 1994; Powell, 1995; Perdomo-Ortiz et al., 2009). More recently, the concept of quality has broadened its scope to the supply chain, addressing quality issues dealing with activities and processes between the firm, its suppliers, and customers (Foster, 2008; Kaynak and Hartley, 2008). Nevertheless, the level of an organization's interaction and engagement with its environment – which is referred to as social responsibility or corporate social responsibility – has received little attention, especially within operations management. Socially responsible organizations tend to address issues such as public health, public safety, and environmental concerns and integrate them into their quality plans (Rao et al., 1999). Organizations have realized the strategic importance of corporate social responsibility where more than 90% of Fortune 500 firms have invested in corporate social responsibility (Kotler and Lee 2004; Lichtenstein et al., 2004). However, the effect of socially responsible practices on firm performance is still a debatable issue (Russo and Fouts, 1997; McWilliams and Siegel, 2001). We aim to address these gaps in the literature.

This study seeks to determine the effect of corporate social responsibility and benchmarking on internal and external quality results in the petroleum industry. To do so, we conceptualize corporate social responsibility within the quality management framework (Punter and Gangneux, 1998; Kok et al., 2001; Barrett, 2009). Accordingly, the study contributes to theory validation and development in quality management by investigating the effect of corporate social responsibility on operational and firm performance. We find that top management support for quality is the main driver for corporate social responsibility practices. In addition, our findings provide empirical evidence on the indirect link between corporate social responsibility and firm performance. Corporate social responsibility has a direct effect on improving internal quality results (operational performance) while it has an indirect effect on external quality results (firm performance). Furthermore, the study contributes to the body of knowledge in the management of quality in process industries, such as the petroleum industry. Some argue that there needs to be more research on the application of quality management in process industries (Dennis and Meredith, 2000). Specifically, Sousa and

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Voss (2002) indicated there is a need to test existing instruments to measure quality management practices in large companies in well-developed industries, such as process industries. Our study also aims to fill these gaps in the literature.

The remainder of the paper is structured as follows: First we address the theoretical perspectives on the diffusion of management theories across nations. Later, we explain the concept of corporate social responsibility and benchmarking and their relationship to organizational performance. Based on the review of the literature, we present our hypotheses. We later provide some background on the petroleum industry in order to provide more insight on the significance of this study. We discuss our methodology including the sample, the analysis and the results. Finally, we discuss our findings, provide the managerial implications, and address the limitations/future research.

2. Quality management: a theoretical background

We provide two theoretical perspectives for the applicability of quality management practices across nations and industries. These theoretical perspectives enable us to extend the concept of quality across nations and/or industries. In addition, they could help us explain the similarity and/or differences in management practices, and how management practices evolve over time.

2.1. Convergence theory

It has been argued that globalization and outsourcing facilitate the transition of management practices (e.g. quality management) across nations (Mellat-Parast et al., 2006; Schniederjans et al., 2006). This phenomenon is well explained by the convergence theory of management. The convergence theory (e.g. Form, 1979) asserts that learning will lead managers from different cultures to adopt the same efficient management practices. Competitive market forces and intense competition will force firms to improve their processes and procedures so that they can stay competitive. From this perspective, while firms may adopt different management practices at the very early stage of competition those practices will change, improve, and finally converge overtime to resemble the best practices. In fact, the convergence theory incorporates both the culture-free (e.g. Rao et al., 1999) and culture-specific (e.g. Ralston et al., 1997) theories in the evolution of management practices. While there might be differences in management practices due to cultural differences, these differences disappear overtime because of market forces and competition. That is especially the case for organizations and industries which have a long history of competing in global markets (such as the petroleum industry).

2.2. Institutional theory

According to institutional theory, to be more adaptive and flexible to environmental uncertainty firms tend to imitate the structure, processes, norms, and practices of a dominant institution. The outcome of such adaptive processes will lead to organizational isomorphism—''the resemblance of a focal organization to other organizations in its environment''(Deephouse, 1996). From this perspective, firms that share common norms and practices will become similar over time. Within quality management, practices such as benchmarking and social responsibility are mechanisms through which organizations imitate the practices and norms of other institutions and could be regarded as facilitators of organizational isomorphism.

Overall, with respect to the convergence theory we could argue that practices associated with quality management are not influenced much by the national culture. This also enables us to generalize the findings of this study to other countries and nations. Alternatively, since organizations tend to imitate best practices across industries in order to improve their performance (institutional theory) we can argue that organizations competing in the same industry develop similar quality management practices over time.

3. Corporate social responsibility

The concept of corporate social responsibility has been evolved over time (Hay and Gray, 1974). While there are different definitions for corporate social responsibility, they all refer to the ability of the organization to embrace practices that address the well-being of their workforce as well the community and the society (Castkaand and Balzarova, 2008). Often being considered synonymous to business ethics, corporate social responsibility has a narrower scope (Barrett, 2009). Socially responsible organizations can maintain a sustainable quality advantage through addressing economic, social, and environmental issues. Leonard and McAdam (2003) indicated that corporate social responsibility encompasses issues such as human rights, workplace and employment issues (e.g. employee health and safety), unfair business practices, organizational governance, environmental aspects, marketplace and consumer issues, community involvement, and social development. The Commission of the European Communities (2001) defines corporate social responsibility as ''the voluntary integration, by companies, of social and environmental concerns in their commercial operations and in their relationships with interested parties.''

Empirical evidence provides a mixed and somewhat conflicting picture of the effect of corporate social responsibility on firm performance (Pava and Krausz, 1996; Orlitzky et al., 2003). In some studies corporate social responsibility has a positive effect on performance (e.g. Soloman and Hansen, 1985; Fombrun and Shanley, 1990) while some report a negative relationship (e.g. Aupperle et al., 1985; McGuire et al., 1988). Luo and Bhattacharya (2006) provide two explanations for these conflicting results: First, the majority of existing studies have related corporate social responsibility to backward-looking measures of profitability. Researchers should look at forward-looking measures (e.g. firm market value) in order to capture growth prospects and sustainability of the profits in the future. Second, they refer to the role of contingency variables in the relationship between corporate social responsibility and firm performance.

It is believed that firms, which implement quality management practices, are more likely to address public good and environmental issues (King and Lenox, 2001; Jo, 2003). Empirical studies suggest a link between corporate quality and corporate social responsibility (Bernes et al., 2007) indicating that firms which implement quality management practices are more likely to address corporate social responsibility practices. Corporate social responsibility practices have a positive effect on the preferences of the customers (Brown and Dacin, 1997; del Mar Garcia de los Salmones et al., 2005), reputation (Duhé, 2009), investors (Orlitzky et al., 2003), financial analysts (Jo, 2003), stakeholders (Bhattacharya et al., 2009) and job applicants (Greening and Turban, 2000; Backhaus et al.,2002).

The implementation of socially responsible practices can be viewed from two different perspectives (Neumayer and Perkins, 2005; Castka and Balzarova, 2008): the efficiency perspective (i.e. improving organizational performance) and the institutional perspective (i.e. influenced by social pressures). Within the efficiency perspective and similar to the above arguments in the diffusion of quality management practices, the implementation of