

CORPORATE CULTURE: A NEW CHALLENGE TO E-SUPPLY CHAIN MANAGEMENT SYSTEMS

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Abstract: The dynamic nature of today's marketplace makes the survival of individual organizations too difficult. Therefore, researchers are seeking new opportunities on forming collaborative networks like supply chains (SCs). Nonetheless, the transition from competitive to cooperative relationships has been difficult for many managers, as the necessary changes in corporate culture have proven quite difficult, thus organizations will have considerable difficulties in partnering with external entities if they cannot develop a partnering culture. Consequently, new research suggests traditional SCs with long-term relationships continue to exist, under a new name of alliances called "e-supply chains". One of the primary benefits of the e-SC is that it allows firms to realize many benefits that were associated with the electronic business, yet in a SC management context. The purpose of this research is to identify the aforementioned cultural challenge on e-SCs context. To achieve this we will investigate two case studies; where one represents an e-SC and another for a traditional SC. A comparison between the two cases, suggests that e-SCs are less effective by changes on corporate culture than traditional SCs when forming SCs.

1 INTRODUCTION

The globalization, uncertainty and dynamic nature of today's markets have influenced individual businesses to move from competitive to collaborative strategies like supply chains (SCs). SCs encompass all activities starting from acquiring raw materials process, throughout manufacturing and final products delivery to end users or customers. A supply chain management (SCM) system integrates and manages these activities through enhanced long-term relationships to achieve sustainable competitive advantage (Handfield and Nichols, 1999). Nonetheless, the use of long term relationships ignores gaining new opportunities because organizations are strictly engaged with long-term contracts that are often a costly decision to be terminated (William, Esper and Ozment, 2002). Furthermore, there is a need for an efficient mechanism to share real-time information (e.g. customer preferences, store capacity, orders data) between partners (Lee and Whang, 2000). Therefore, another form of SCM systems called electronic supply chain (e-supply chain) has emerged. This new form provides another variation in inter-organization relationship philosophies. However,

this new paradigm is facing a new challenge when linking independent organizations over the Internet. This challenge is the impact of organization's corporate culture differences in the SC's relationships. In this paper, we attempt to address this challenge by initially developing an e-SC structure. Then, Compare the impacts of corporate culture differences on traditional and e-SC systems.

2 E-SUPPLY CHAIN

Dramatic economic and strategic changes brought about by recent advances in technology, including the Internet, the World Wide Web, broadband, and wireless technologies, have expanded the scope of SCs. Consequently, e-SCM systems have emerged to use information and communication technology (ICT) to link organizations and outsourced functions together to enable low cost partnership and high flexibility. However, the e-SCM system (e-SCMS) needs a flexible structure to facilitate the organizations with new relationships form unlike the tied long-term relationships.

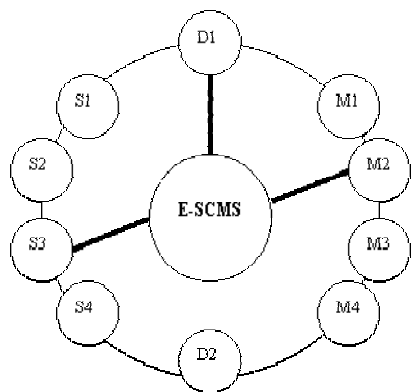


Figure 1: Basic e-SCMS structure. The large circle represents the rotation path for the e-SCMS while the small circles are participants within the supply chain network. There are 4 suppliers (S1-S4), 4 manufacturers (M1-M4), and 2 distributors (D1-D2). A short-term link has been made between S3, M2, and D1.

2.1 Structure of e-SCMS

Unlike traditional SCM systems, the e-SCMS is extremely dynamic. It uses the Internet to link organizations and match available resources with demands. Thus, the e-SCMS acts as a dynamic ring that keeps ‘rotating’ until it matches couples. This concept is similar to the National Semiconductor Company case where the company implemented a Web tool called “Portal” that operates through the Internet. This tool allows customers to search all distributors until they find the matched couple that meets their demands (see Figure 1). Furthermore, distributors search the Semiconductor stores to check available resources. These couples will then preserve the link as their needs are met. However, when costs exceed the threshold limit or the services quality declines, it will become inadequate in meeting customers’ satisfaction and the organizations concerned will decouple the linkages and the e-SCMS begins the rotation process all over again to find another beneficial partner. This structure of the e-SCMS provides greater adaptability and flexibility to form partnerships than traditional long-term systems (see Figure 2). In view of its dynamic nature, e-SCMS are also called short-term strategic alliances. Furthermore, the rotation and re-linking of processes are not expensive because the majority of the organizations are using the Internet as a communication channel, thus e-the SCMS offers cost reduction to setup new links. In addition, the opportunity to improve an organization’s services is more than that of traditional SC systems because breaking the links are less complicated and less costly. This set-up is

particularly useful for small to medium-sized organizations because the required technology expenditure is relatively low. However, long-term relationships can be developed as needed.

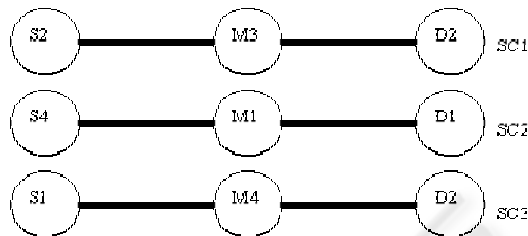


Figure 2: Basic structure for traditional supply chain systems. The participants are linked in sequence with long-term contracts where they cannot switch links until they terminate their own contracts.

2.2 A New Challenge for the e-SCMS

The above dynamic structure requires frequent changes to organizations’ *corporate culture* to meet the changing expectations of various stakeholders in a SC. Corporate Culture is defined as the philosophy that defines the relationships nature between the organization’s units internally and between the organization and its constituents externally. Discovering corporate culture involves finding out strategies for managing internal and external business affairs as the result of members’ individual personalities, beliefs, values and experiences that shape organizational meanings and experiences. Culture, defined by Schein (1990, p.111) as (a) a pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid and, therefore (e) is to be taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems. Corporate culture is what we generally call the “way we are working here”, how we co-operate and collaborate. Culture also comprises our human relations behaviour, our common levels of standards and procedures, and all the initiatives for how to make the organisation function well both professionally and socially.

Corporate culture and the management techniques of each firm in a SC should be compatible for successful SCM systems (Ellram and Cooper 1990; Lambert, Stock, and Ellram 1998; Novack, Langley, and Rinehart 1995; Tyndan et al. 1998) because it becomes alpha and omega for success or failure of many aspects within an

organization particularly embedded with the information systems. Organizational compatibility is defined as complementary goals and objectives, as well as similarity in operating philosophies and corporate cultures in order to achieve sustainable performance (Bucklin and Sengupta 1993). Bucklin and Sengupta (1993) demonstrated that organizational compatibility between the firms in an alliance has a strong positive impact on the effectiveness of the relationship (i.e., the perception that the relationship is productive and worthwhile). Cooper, Lambert, and Pugh (1997) also argue that the importance of corporate culture and its compatibility across SCs members cannot be underestimated.

3 CASE STUDIES

In this section we identify the impact of corporate culture differences in two different case studies. The first case represents an e-SCMS, while the second case represents a traditional SCMS.

3.1 PeCC Supply Chain

The Project e-Commerce and Communication (PeCC) for Healthcare was initiated in 1996 (More and McGrath, 2002). PeCC emerged from the Australian Federal Government's concern over burgeoning costs in Australia's \$40 billion health sector. PeCC was developed to introduce e-commerce practices into the health sector with almost 700 suppliers, automating pharmaceutical and other supplies to hospitals and retail pharmacies.

More and McGrath asserted that many challenges have emerged from the PeCC project, such as people's resistance to change, political issues relating to Australia's Commonwealth and State Governments, and data ownership. However, at a macro level an essential challenge is the corporate cultural differences between an industry private sector's approach and the government's approach, both in their management styles and process, and the presence or absence of commercial pressures (such as concerns with cost effectiveness, inefficiency, levels of bureaucracy, and monies).

At the micro level, the issue of corporate cultures can also be problematic. For example, supply managers regard nurses' involvement in SCM as opposition. Others criticise the IT professionals, pressing for them to become more client focussed and take the issue more seriously. Some urged that hospitals are more client and patient-oriented rather

than continuing to persistently market proprietary systems. The mismatched corporate culture, between a hospital such as those of administrators, healthcare professionals, and with supply managers, also impinges on the efficiency of the SC. SCM always come a poor second or third in importance compared to medical service procedures and ward dispensary activities, because healthcare professionals give a higher priority to delivery of urgent drugs/equipment and other patient's cares activities.

Despite the cultural differences between the PeCC's organization there is still a continuous electronic communication channel that moderate the negotiation and strength the links between partners, because SC's communication is facilitated by an Internet-based platform, allowing more efficient interaction between the pharmaceutical and healthcare products industry's outlets (retail and hospital pharmacies), wholesalers, suppliers and manufacturers. Therefore, PeCC's SC continues operating with some cultural differences that might affect the SC's performance, but a complete compatibility is not crucial.

3.2 Japanese Logistics

Manufacturing practices popularized by the Japanese, such as total quality management and just-in-time procurement, have become the worldwide gold standard for producing high-quality products. Many authors attributed this golden reputation on supply chain management to its timely delivery which in Japan means 100% of deliveries precisely on time, and high quality means zero defects manufacturing. One might expect the same results can be obtained when Japanese methods of logistics management (planning and arranging the transport and storage of goods and materials) are applied internationally. However, research shows that Japanese-owned logistics companies in Europe struggle to meet those expectations. A study has been performed to investigate the corporate culture clash that outcome from the recent extension of Japanese firms' supply chains to Western Europe supply chains.

The report (Smagalla, 2004) survey 65 manufacturers' European distribution centres with Japanese logistics management. The Japanese logistics subsidiaries failed to deliver superior logistics support. In follow-up interviews, the Japanese managers described a clash of cultures underlying their operations. Non-Japanese staff was frustrated that, among other things, proposals moved slowly through multiple channels before decisions

could be made. In Japanese corporate culture a new proposal must go through multiple levels before making any decision. Therefore, decision making process is a slow process. However, once a formal decision has been made the action are taken very quickly and collectively without any delay, objections or hesitations, because all management levels from bottom to up have been involved from the beginning. On the other hand, in Western Europe corporate culture oral discussion is allowed, and decision-making process does not follow a bottom-up structure, thus it is made faster.

Moreover, in Japanese culture more commitment is given for operational excellence where making mistakes is extremely not acceptable action. Therefore high-ranking Japanese managers spent too much time apologizing for service failures and focused less on planning. On the other hand, in European corporate culture accept that humans can make mistakes, thus allowed to argue with customers. The interviews also revealed that European managers did not fully understand the ultimate payoff of the Japanese service strategy.

Hence, applying the Japanese logistics within Western firms is a difficult task with continues exit of cultural differences, and absence of compatibility. In this case corporate culture is mediating the SC's performance, thus cultural differences has more impact than the PeCC case.

4 CONCLUSION

In summary, this research article contends that the value and relative importance of corporate culture and strategic alliances have changed, as we migrate from the traditional SCM approach to the e-SCM perspective. Hence, this research suggests that corporate culture is less effective when managing cultural differences on e-SC environment. The rationale behind this proposition is that the Internet and electronic commerce, combined with supply chain-related opportunities, have given way to an environment where the benefits of both the dynamic e-SC structure to form inter-organizational relations and the traditional SCM philosophy can be jointly realized. The focus on corporate culture also provides management with a guideline for assessing potential cultural changes necessary to reap fully the benefits of operating in the e-SCM environment. The proposed structure of e-SC partnerships and alliances provides a framework for further research into SC relationships, and ultimately the ever-changing and dynamic e-SC environment. The next step in the process of researching partnerships and

alliances, as well as corporate culture, in e-supply chains is empirically to test the propositions developed in this article. Such tests will allow for increased academic knowledge on the impact of the corporate culture on the management of SC organizations with a better understanding of the cultural changes necessary to manage the e-SC organization effective. Overall, this research contributes to the understanding of the dynamic and volatile electronic commerce marketplace by focusing on the corporate culture differences' management necessary in this environment

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