CROSS-CULTURE INTEGRATION AND GLOBAL NEW PRODUCT DEVELOPMENT

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ABSTRACT

The increasing globalization of businesses presents many challenges including the challenges of cultural integration and cross-cultural conflicts. Utilizing the seminal work of Nakata and Sivakuimar (1996) linking national culture and new product development, this paper further explores the challenges of cross-cultural integration and new product development offering an extension of their model integrating additional aspects of culture structure and their influences on new product development in the international arena.

JEL: F69, M11, M14

KEYWORDS: Culture, New Product Development

INTRODUCTION

There exist many challenges to firms as a result of the globalization of business and cross-border trading and investment: emerging markets, changing markets, technological obsolescence, government regulations, legal systems, mode of entry, currency exchanges, international accounting concerns, and many others. One overarching concern is new product development (NPD) and marketing across borders; developing new products for different types of markets can keep the firm competitive and aid long term survival. NPD is a complex process within a domestic business. The process at its simplest level requires the integration of many functional divisions within the company especially its R&D, marketing, and manufacturing divisions. Different divisions may have different perspectives on what they think is important to their survival and that of the company as a whole. The R&D division may want to design the most technically advanced product, manufacturing is interested in cost reduction and facility utilization, marketing wants a product that matches the markets as closely as possible. At its most basic level, NPD requires successful cross-functional integration within overall corporate structure. However, business activity in any aspect across borders includes whole new set managerial challenges. To maximize efficiency and react to the market in real time many multinational company's (MNC) locate various divisions in different countries. For example, Sony may set up a manufacturing plant in china, keep its R&D while focus its marketing basses in America.

Not only is cross-functional integration an important part of success, the added element of operating in a different culture is added to the process. The results of these managerial actions are mixed. On the one hand, such operations may allow Sony to focus on value to customers, reduce costs, improve quality and remain competitive; on the other hand, cross-border business and management activity is complex: the conditions mentioned above come in to play as well as the cultural and sub-cultural divides across countries; businesses; managerial philosophies; domestic cultural tastes and preferences; employee orientations, values, and motivations that influence cross-border business activity. With cross-border business activity, there exists the real potential for both cross-functional and cross-cultural conflicts that may mitigate success. The upshot of these concerns: NPD for the MNC is a process that demands both cross-functional and cross-cultural integration at many levels. With ever increasing globalization of business, these processes are becoming ever more complex.

Nakata and Sivakumar (1996) documented the importance of new product development to MNC's, reviewed the literature on the nature of national culture and dimensions of national culture, and proposed a model relating these dimensions to certain procedural steps in NPD. This article is an extension of their work where we expand on their model and include the influence of national culture on both NPD task-team subculture and corporate culture.

LITERATURE REVIEW

National Culture

Culture is defined in many ways. Edgar Schein (1992) defined culture as "a set of basic assumptions: shared solutions of universal problems of external adaptation and internal integration which have evolved over time and are handed down from one generation to the next". Hofstede (1994) defined culture as the collective programming of the mind in one group that varies from group to group. Parsons (1972) perceived culture as a common system of meaning in a society. Jan (2001) proposed that national culture refers to profound beliefs, values and practices that are shared by the vast majority of people belonging to a certain nation.

Organizational/Corporate: Culture Organizational culture (OC) or corporate culture has many and varied interpretations. Some suggest that OC is the result of the collective influence of the history of the organization, organizational values, leadership styles, and management practices as they become disseminated, shared, and inculcated throughout the organization. OC Influences such behaviors as superior/subordinate relationships, orientation of employees to their corporation, and general views of employees and management about their destiny, goals, and purpose and their place in it (Trompenaars,and Hampden-Turner, 1997).

New Product Development

NPD is defined as the process of conceiving and creating a new product and the outcome of that process (Urban and Hauser, 1993). Johne (1984) suggests that the NPD process may be simplified into two major stages/phases: (1) initiation stage covering idea generation, screening, concept testing, and (2) implementation, embracing product development, test marketing, and product launch.

Task-Team Subculture

It is common for many organizations to develop teams to explore the development of new products; they may be viewed as temporary/permanent teams that are given the tasks to assess new products ideas and implement them as described above. It is common for a MNC to have members from different functional divisions within corporate as well as members from different divisions of subsidiaries in different countries. Dealing with such a project team is a complex task: languages differences may intrude, work philosophies may diverge. For example, a Chinese engineer may be very analytical and wants to complete all documents before starting to work; an American engineer may be more action-oriented and wants to start work immediately. Differences in empowerment across nationalities may complicate things as well: American workers may be more personally empowered as compared to workers from Asian countries. A task-team subculture must develop that will allow the different task-team members to communicate, become oriented to common goals, contribute collectively to the NPD process. The literature on group behavior and dynamics, leader styles, group norms and values comes into play here.

RESEARCH MODEL

Nagata and Sivakumar (1996) showed that national culture may variably influence the NPD process stages. We extend their work by postulating that corporate/organizational cultures and task-team subcultures intermediate the direct relationship between national culture and NPD process stages as suggested by Nagata and Sivakumar (1996) We also postulate that national culture has a direct relationship to task-team subculture as well (see figure 1). We suggest that NPD becomes a cross-culture integration process involving task-team members from different countries with different cultures; the national culture of task-team members directly influences the development of the task-team subculture and the NPD process (see Figure 1).   We also postulate that national culture influences OC; OC is shown to intervene between national culture and task-team subculture as well.

In this research, we postulate that Hofstede's (2001) four dimensions of culture may be a useful tool to study the effects of national culture on both task-team subcultures and organizational/corporate cultures. We also suggest that Hofstede's cultural dimensions are useful to study organizational/corporate cultures as they may influence task-team subcultures and NPD stages. Hofestede's (2001) conclusions are primarily based on a sample of IBM employees from 53 countries. In 2001, Jan did an empirical study in ten countries and validated the measures as reflecting the corresponding national cultures as described by Hofstede's (2001).

Hofstede's Dimensions of Culture

Power distance: With low power distance, society believes in equality of people, and superiors and subordinates regard one another as equal. In high power distance situation, society accepts different amounts of power held by people, and hierarchical boss-subordinate relationships. In Hofstede's study, USA (40) and Japan (54) have similar medium range scores on the power distance dimension. Japan is slightly more tolerant of unequally distributed power.Low power distance may encourage the participation in decisions and delegation of authority, which may stimulate the idea proliferation regardless of a person's position in organizational hierarchy. Thus, low power distance may facilitate the initiation stage of new product development. However, at the implementation stage, when control is needed to ensure the multiple and complex efforts unite to generate a new product on timely and cost-effective basis, high power distance is perhaps more helpful.

Uncertainty avoidance: For this dimension, society in low index countries feels comfortable with ambiguous situations. They're tolerant for risks; eccentric behaviors and activities are allowed. In high index countries, society feels threatened by ambiguous situation, and tries to avoid risks in decisions; the laws and procedures are strict. On the uncertainty avoidance dimension, Japan has very high scores (92), and USA falls little below mid-range (42). This implicates that US employees are more tolerate of uncertainty than Japanese employees. Low uncertainty avoidance may manifest itself with risk taking. Some research revealed that technological breakthroughs are stimulated by systems that encourage risk taking and even reward failure. At the initiation stage, risk taking is required for generating ideas and supporting a few of them for the costly proceeding steps. Nevertheless, high uncertainty avoidance may express itself as the control and planning such as doing many jobs on market research, market forecasting, and predicting customer demand to minimize market uncertainty, which may facilitate implementation through close scrutiny of decisions and execution.

Individualism-Collectivism: In collectivistic society, groups are paramount in social relationships; the will and welfare of the group is dominant over those of individual. In individualistic society, people tend to look after themselves and immediate family; individual initiative and achievement are considered important. On this dimension, USA falls in top-range of all countries (91), with Japan in middle (46) in the study. The USA is a very individualist country while Japan tends to be more of a collectivist society.

In the initiation stage, many different perspectives are treasured so as to produce more value to the innovation. Therefore, individualism may be an asset at this stage. In contrast, during implementation, new product participants must work cooperatively and closely with one another to ensure that budgets, schedules, and objectives are met. Thus, collectivism may contribute more.

Masculinity-Femininity: In a feminine country, concern and care for others are emphasized; interpersonal relationships are important; quality of life is important. In a masculine country, people tend to be assertive, and achievement & material accumulation are oriented. Here, Japan score is very high (95), USA is bit above mid-range (62). USA tends to be more masculine. Low masculinity, with its focus on people and establishing a warm, supporting environment, may be optimal for initiation. High levels of masculinity-as expressed by goal orientation and formalization-positively contribute to implementation.

The Model and its Interactions

In 1996, Nakata and Sivakumar developed a model that directly linked national culture to stages in the NPD process of a MNC with different divisions in different countries. For this study, we postulate that this linkage between national culture and NPD is confounded by the mediating variables of corporate culture and NPD task-team subcultures. First, we propose that corporate culture is influenced by the national culture of corporate. Second, we propose that corporate culture mediates between national culture of corporate and the task-ream subculture involved in the NPD process. Third, we propose a direct and independent effect of national culture on the task-team subculture involved with the NPD process. We suggest that national culture of the NPD task-team members, organizational/corporate culture, and national culture of corporate collectively influence task-team subculture; task team subculture then influence the variable dimensions of the NPD process stages. At every juncture in the model, cross-cultural integration is a must. Moreover, particularly at the task-team stage, cross-cultural integration should be purposefully managed to facilitate the NPD process.

Figure 1: Research Framework
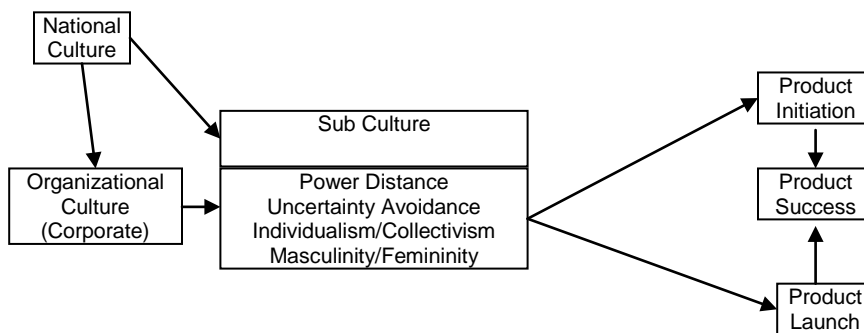
IMPLICATIONS AND DISCUSSION

Using Hofstedes (2001) four dimensions of culture, the independent effects of any sequence of independence and dependence can be studied for their contributions. For example, national culture of corporate headquarters can be assessed at to its societal/cultural influence on corporate/organizational cultures of domestic businesses in the same industry or across different industries. What is the relative influence of national culture on corporate cultures of different business that might vary by age, size, technology, product lines, innovation history, etc.? Corporate culture of the same MNC can be studied as to its overall strength to influence task-team subcultures in different countries. Corporate cultures of

different business/industry can be studied as to their influence on NPD task-team subcultures in a common country or across countries. Moreover, corporate culture of an MNC can be studied to show its impacts on task-team subcultures within different functional divisions of the same company/industry.

National culture can be assessed as to its independent influence on task-team members and the emergence of the task-team subculture. Moreover, the relative effects of both national culture and corporate culture on NPD task-team members and subcultures can be studied as well. As Nakata and Sivakumar (1996) have shown, some nationalities may be more adept than others in one phase of the NPD process and thus a more effective choice for that phase. It may be possible for management to select task-team members, team leaders, and carefully bring out the best of the multi-cultural group at different stages in the NPD process. There is much work that can be done assessing the impacts of task-team subculture variations on different stages of the NPD process, emerging group leadership and management dynamics, and overall success of developing new product ideas.

Summary

A corporate culture is constrained by its national culture/societal context. No organizational culture can exist without the base of its national or societal culture. For instance, a national culture in which the persons in power, such as parents or managers, are highly respected and deferred to, will lead to a form of organizational communication in which subordinates hesitate to express disagreement with their bosses. Such things happen most in Japanese companies. We also suggest that corporate culture, influenced by national cultures, may be a very powerful influence on NPD task-team subcultures. For instance, the hierarchy of Sony Company in the USA is different from that of General Electric in the USA. In the Sony-America subsidiary, managers may have more authority, and the rules are clear and must be followed. Strictly speaking, we postulate that Hofstede's national culture dimensions as they influence NPD task-team machinations are a function of national culture of corporate country, corporate/organizational culture, national culture of task-team members, and task-team subculture.

Nakata and Sivakumar's (1996) study revealed that some culture may be more adept than others in one phase of the new products development process and thus more effective choice for that phase. So it's probable for management to select team members, team leaders, and carefully handle and bring out the best in a multi-culture group at different stages of new product development. For instance, individualism may be beneficial in the initiation stage of new product development. But if some team members are from Japan – the society of collectivism, they may not question those in authority. Then poor suggestions will likely be implemented without question. Thus, in practice, American managers should insure that Japanese employees fully understand the difference in suggestion and directions.

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