



## AN ANALYTICAL FRAMEWORK OF SUSTAINABLE SUPPLY CHAIN MANAGEMENT

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### ABSTRACT

This paper presents the analytical framework to identify factors affecting adoption and implementation of sustainable supply chain management. The study combines insights from resource-based view of firm and institutional theory with the concept of supply chain relationships. The framework will be tested in order to understand and facilitate competitiveness and social responsibility in supply chain level.

**Keywords:** corporate social responsibility, sustainable development, supply chain management, analytical framework

### 1. INTRODUCTION

Sustainable supply chain management (SSCM) is among many initiatives for firm to contribute to triple bottom line of business. The basic concept of this practice is that a firm can enhance its corporate social responsibility (CSR) by collaborating with its trading partners in upstream and downstream supply chain. This, in turn, could provide the proactive firm a source of marketing, cost efficiency, and stakeholder relationships. The main issues found in literatures have been on process and activities as well as successful outcomes. Although there has been growing number of literatures on SSCM, it seems that little attention is given to how to underpin the propensity to adopt SSCM and to support implementation. Based on three theoretical streams, the paper presents an integral framework for better understanding in factors affecting the propensity, practice, and performance of SSCM.

As tourism has received limited academic attention regarding the SSCM compared to manufacturing sector, the framework will be tested in empirical parts of the research using tourism-related industry as the case study. The project also aims to extend the topic, which mainly focused on environmental aspect (e.g. greening the supply chain), to include social aspect of the sustainability. To pursue these objectives, the general research question is that *Under what*

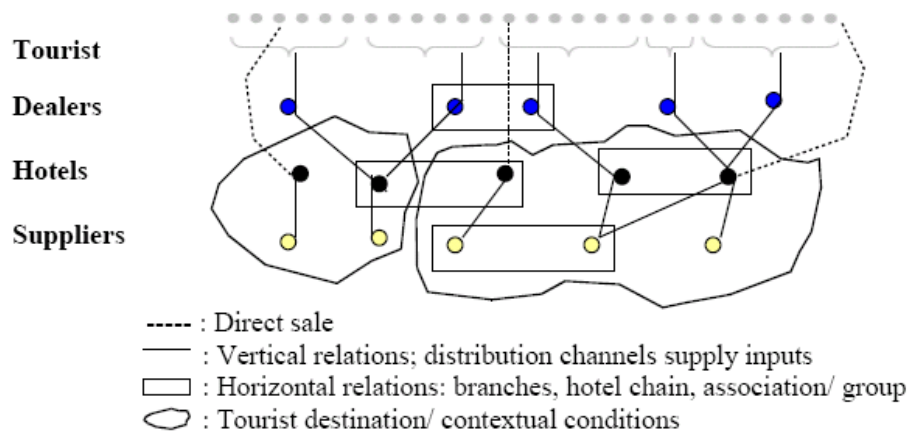


*circumstances can the concept of SSCM be utilized in hotel industry?* A basic assumption for this research is that there are various factors influencing the adoption and implementation of SSCM, ranging from organizational, supply chain, and institutional levels. Further, the research assumes that interactions among internal, supply chain and external stakeholders can facilitate broader adoption and effective implementation of SSCM.

Literatures pertaining to the central inputs that form the basis for these assumptions have been reviewed; natural resource-based view of firm (N-RBV), concept of buyer-supplier relationship, and institutional theory. In this paper, these theoretical backgrounds are investigated further, where an analytical framework is developed to guide the empirical part of the research. The first section introduces a general model that links institutional arrangements to firm's characteristics, and relationships in supply chain to explain the adoption and implementation of SSCM. We then described each aspect of these perspectives in more depth, and their relationships to the adoption and implementation of SSCM are examined. In order to avoid disregarding the existing literatures and limiting the scope of empirical findings, this research is positioned at the middle ground between purely exploratory and deductive research strategies. Instead of hypotheses, propositions are thus formulated to explain the expected relationships among variables. The last section ends with concluding remarks.

## **2. ANALYTICAL FRAMEWORK**

SSCM can be described as those activities through which a firm involves trading partners to enhance their contribution to sustainable development. Complementary to the economic focus of supply chain management, in SSCM firms also take into consideration social and environmental impacts along their supply chains. Similar to other industries, every firm in tourism sector is perceived to form a part of a supply chain. They need access to resources to operate their business. As those resources are partly controlled and produced by other participants in the chain, firms normally have to rely more or less on the cooperation with trading partners. In the case of a hotel, their operations involve a variety of products and services ranging from housing facilities, cleaning stuffs, handicrafts, transit/excursion, food supply and preparation, which utilize large quantities of materials. A hotel is therefore linked to a number of suppliers as well as marketing channels (contracted tour operator and agencies). In their role as a key actor in a tourism supply chain, hotels can promote sustainable production and consumption through its purchasing and marketing relations. Some examples are supporting suppliers to deliver reused-recycled products, assisting local communities to become involved in hotel's supply (pro-poor supply chain), and cooperation with tour operators to develop green packages or community-based tourism.



**FIGURE 1: HOTEL SUPPLY CHAIN AND NETWORK**

The reviewed literatures suggest that the strong points from the three theoretical streams could be combined to supplement each other in explaining adoption and implementation of SSCM. Sharma and Vredenburg (1998), for example, suggested that the capability perspective, stakeholder integration, learning and innovation all can be related. An underlying goal of this research is thus to contribute to theory development by applying and integrating different viewpoints to understand the adoption and implementation of SSCM.

The position of SSCM relative to the framework is schematically depicted in figure 2. The figure illustrates the expected influences of independent variables on hotel's strategic decision regarding the adoption of SSCM, and on the nature of the implementation in operational level. Subsequently, as a result of the implementation, hotel achieves a certain level of performance regarding sustainability issues, which could lead to a competitive advantage and addressing the perceived stakeholder demands/ pressures. The outcomes of this process form an input into the decision-making process concerning SSCM, and create an iterative cycle.

The causal linkages existing among variables in the model will be discussed in similar format. Firstly, each element in the model is described in detail, then special attention is paid to refine the rationales for its relationship to the adoption and implementation of SSCM. The insights gained from this process will be used to guide the constructions of questionnaire and interview questions in the field works.

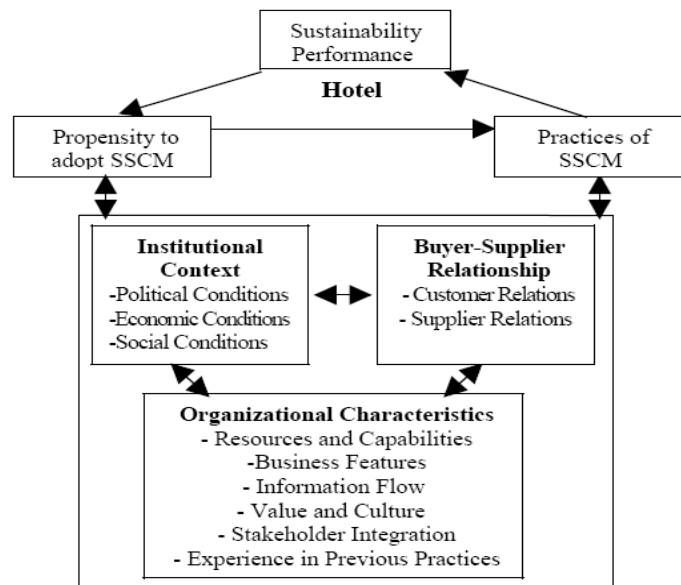


FIGURE 2: ANALYTICAL FRAMEWORK

According to the model, the adoption and implementation of SSCM is not only influenced by each of the variables, but also the complex interplays among the variables. Two firms, for example, may perceive the same business environment differently, and respond to them accordingly. It is because the existence of institutional conditions does not imply that firms accommodate to all of them. The level of influences is the result of the prevailing situations which are observed by organizational members (Pfeffer and Salancik, 1978). Morgan (1997) also supports those characteristics of the firm matters because it influences how institutional pressures are perceived. The firm that enjoys historical performance and reputation regarding sustainability may be more responsive to external demand than those without such experience (Prakash, 2000). Sharma and Vredenburg, (1998) also argues that institutional influences are the function of stakeholders' actions, managerial perception, and organizational capabilities. Similarly, the relationship in supply chain is also contingent on the external influences, and also inevitably moderated by individuals involved in a relationship as well as the organizational capabilities. In addition, Marcus and Geffen (1998) also longitudinally examined the interactions between regulatory-political and economic conditions to explain the development of pollution prevention approaches by electric utilities.

The reviewed literatures offers a view of how that firm vary in the degree of proactiveness, and a firm's strategic options can also be ranged from high to low (Oliver, 1991). Meanwhile, there are substantial differences with regards to firm's approaches in dealing with sustainability issues (Schaltegger *et al.*, 2002). These imply that likelihood to adopt SSCM, the approach and outcomes of its implementation, as well as the critical success factors diverse among firms. The general model illustrates that hotel's adoption and the implementation of SSCM are distinct from each other, depending on the three sets of variables described below.



## 2.1. Organizational Characteristics

Central to the argument of the N-RBV is the idea that differences between firms' environmental performances are the result of their different resource endowment. Firms with demonstrated capability to deploy organizational resources will be able to accumulate the resources necessary for product stewardship more quickly and effectively than firms without such prior capability (Hart, 1995). As noted in Chapter 1 regarding the SSCM, although the strategy called Product Stewardship is usually regarded as taking a broader outlook into health and safety issues, it is comparable to the strategy of SSCM. The engagement in SSCM could thus be seen as a process that requires specific resources and capabilities from the firm. In addition, SSCM may not yet be institutionalized, they are not required by law and there is a lack of consensus on their actual implementation and effectiveness in terms of environmental and social performances. Goddrick and Salancik (1996) suggest that internal influences on innovation process are greatest during the period of uncertainty before it become institutionalized. These arguments lead to the basic assumption that the adoption and implementation of SSCM is a result of individual hotel's acquisition and ability to utilize its resources. The roles of the tangible/ intangible resources and the capabilities are discussed in the following subsections.

### 2.1.1 Value and Culture

According to Crane and Harris (2002), a firm's behavior is not only a manifestation of observable organizational structures, but also the culture and network of individual members. An important aspect of a firm is personal values and organizational culture. Leonard-Barton (1992) argues that the initiatives that going to be adopted and the moment in which they will be implemented are strongly determined by organizational leader. Many authors support that successful innovations require the concurrence of the top management (Ahire and O'Shaughnessy, 1998; Argote, 1999; Harris and Crane, 2002; Mintzberg, 1983; Stoelhorst, 1997; Shrivastava and Mitroff, 1982). A number of literatures suggest that firms with transformational leadership can recognize new information and practice, as well as accumulate the resources faster than firms lacking such characteristics (Ashford, 1993; Hart, 1995; Mintzberg, 1983; Sharma, 2000). Fineman and Clarke (1996) also view managers as crucial mediators between organizational and stakeholder interests. Managers who consider the social and environmental activities as a source of marketing and social legitimacy are more likely to assign new duties into staff's routine. Contrary, managers may regard the activities as to increase excessive tasks and costs. These managers are typically unwilling to adjust the job description (Fernández et al. 2006). Decision to take a proactive stance would thus be guided by the managers' perception and attitude toward sustainability issues. Such an approach in which SSCM may be brought into practice. Therefore, the research proposes that the manager's personal value can exert a decisive influence on hotel's adoption and implementation of SSCM.



The resource-based perspective also highlights the importance of other organizational stakeholders who are involved in operational level. As a firm is not a single entity, internal actors also have their own interest and role to play in firm's environmental strategy (Minzberg, 1983; Pfeffer, 1992; Schein, 1996; Wehrmeyer and Parker, 1996). Indigenous staffs, for example, can emanate an initiative, and convince manager to commit to sustainable development of the local community. On the other hand, if organization's members do not share value of social/ environmental responsibilities, organizational responses are half-hearted, and managerial decisions may fail to be implemented effectively (Argote, 1999; Pfeffer, 1992). The research thus proposes that the higher degree to which the staffs pay attention to sustainability issues, the higher likelihood to adopt SSCM, and the more effectiveness of the implementation.

### *2.1.2 Resource and Capabilities*

According to N-RBV, proactive environmental strategy would lead to competitive advantage via firm's resources and capabilities (Hart, 1995). A number of empirical studies confirmed that capabilities are antecedents for the generation of proactive environmental strategy, and also moderate the environmental-economic linkage (Aragón-Correa, 1998; Aragón-Correa and Sharma, 2003; Russo and Fouts, 1997; Sharma and Vredenburg, 1998). Christmann (2000), for example, stresses that organizational capabilities associated with technologies can lead to cost advantage only if a firm possessed the complementary capabilities. N-RBV literatures commonly highlight the ability to generate and deploy human, financial, and technical resources for environmental tasks. The implication is that the SSCM adoption and implementation would be influenced by the organizational resources and capabilities.

Another main capability is the cross-functional management. According to Hart (1995), the cross-division cooperations can enable firm to accumulate the resources necessary for product stewardship more quickly than firms without such prior capability. Russo and Fouts (1997) found that the proactive strategy is the innovation triggered by cross-functional integration. Similarly, Collis (1994) stresses on the role of 'dynamic capability' which denote a firm's ability to involve the whole staffs to change their current practices. In addition, Klassen and Whybark (1999) also suggest that a capability of developing continuous improvement (e.g. total quality management) can help firms to improve environmental performance simultaneously. The extant researches (e.g. Li and Atuahene-Gima, 2001; and Sharma and Vredenburg, 1998) also indicate that firm with experience in the continual improvement program are more ready to advance their strategy, as their employees work in an existing system that rewards maintaining continual learning and innovation.

These arguments and empirical findings provide the basis for the proposition that hotels with greater availability of resources and capabilities for environmental management would be more likely to adopt SSCM. Also, the nature of SSCM activities and the outcomes gained from the practice is determined by the resources and capabilities.



### *2.1.3 Stakeholder Integration*

The capability perspective posits that the ability to manage demands from stakeholders is a key indicator of organizational performance (Hosmer, 1994; Pfeffer and Salancik, 1978). The organizational response can also be seen as a result of motivation created by internal and external stakeholders (Bacharach and Lawler, 1998; Oliver 1991; Pfeffer, 1992). Likewise, De Bakker and Nijhof (2002) suggest that if an organization attempts to reconcile the points of view of stakeholders in society, they would be likely to be able to respond better. Marcus and Geffen (1998) also found that electric companies that proactively sought to acquire capabilities from their stakeholders were more able to develop pollution prevention strategies. Firms that view a wide range of their stakeholders as sources of information and capabilities are more likely to adopt proactive environmental strategy than those that focus on narrower sets (Buysse and Verbeke, 2003; Henriques and Sadosky, 1999). Some empirical studies, which analyze the determinant factors of hotel's environmental management, identifies that stakeholders play a significant role in influencing managers to adopt more proactive environmental strategy (e.g. Alvarez Gil et. al, 2001; Cheyne and Barnett, 2001). These arguments support the proposition that the adoption is positively associated with hotel's ability to integrate stakeholders' demands, both from outside and inside the organization. Also, hotels can be able to more implement SSCM effectively, as a result of motivation, information, and capabilities gained from stakeholders.

### *2.1.4 Prior Experiences*

The N-RBV argues that the environmental practices implemented earlier provide knowledge and capabilities for environmental management, and encourage firm to adopt further initiative. This is because the capabilities developed for previous practices, and the satisfied outcomes, make firms more confident that the initiative would outweigh cost of adoption. Further, as firms prefer to avoid uncertainty which involves a status quo bias, the firm's preference is given to the initiative that can be easily acknowledged and assimilated (Cohen and Levinthal, 1990). For example, firms with familiarity with environmental management system will have fewer barriers in pursuing advanced environmental strategies (Hart, 1995; Russo and Fouts, 1997). This implies that the prior experience in previous practices could induce firms to develop further engagement in sustainability issues, including the SSCM. The research thus postulates that the differences in the firm's in experiences in environmental practices can explain heterogeneous propensity to adopt SSCM. The approaches to implement the SSCM also depend upon the extent to which the firms have experienced in environmental activities.

### *2.1.5 Information Flow*

Literatures related to dynamic capability and organizational learning suggest that managing societal expectations require firm's ability to seize information and generate response (Zahra and



George, 2002). Sharma and Vredenburg (1998) highlight the capability of continuous learning which refers to firm's ability to open up to new idea sparked by external constituencies. Nonaka (1996), Senge (1999), and Tushman and Nadler (1996) also underline the critical role of communication in organizational learning, change, and innovation, respectively. Similar to Collis (1994), 'integrative capability' enables a firm to recognize new valuable information and convert it into action. Dougherty (1992) also found that firms with the capabilities of information assimilation are likely to acquire new knowledge to improve environmental performance. Marcus and Geffen (1998) confirm that the absorption and application of external information is important in developing a proactive environmental strategy. Further, the literatures also provide a strong support for the importance of information dissemination throughout the organization. March (1991) highlights the role of coordinator in applying the imitable knowledge, and initiating the adaption process. Kirkland and Thompson (1999) conducted an examination of the barriers to adopt environmental measures, and notes that the barriers can be overcome by effective internal communication in order to motivate staff to commit to the environmental strategy. These arguments lead to the proposition that the adoption/ implementation is determined by hotel's capability of communication, including outside-in, within organization, and inside-out information flows.

#### *2.1.6 Business Features*

Literatures suggest that firm's general characteristics are internal factors that moderate the deployment of the organizational capabilities. Larger firms, for example, have been considered as a proxy of formal organizational structure and slack resources which are positively associated with organizational innovation (Cohen and Steven, 1996; Cramer, 1998; Fritsch and Meschede, 2001; Kimberly and Evanisko, 199; Noci and Verganti, 1999). In contrary, smaller firms are more challenged by the limited resource and capabilities, as most of them are small investments. As such, firm's size would also affect the adoption and implementation of SSCM. Another main feature of hotel is the price. According to Rivera (2002), price reflects target market which is recognized as an essential to be taken into account in strategic decisions. The target market is usually the indicative of range and characteristics of the products and service available for prospective customer. High-end hotel, for example, tend to have higher ratio of staff per room compared to budget-hotel. Also, their customer would be more likely to appreciate, and able to pay higher price for value-added services, including the environmental activities. Following the arguments, the research proposes that the willingness to adopt SSCM, and the effectiveness of implementation are determined by the hotel's rental rate.

The third aspect of the general business feature is the firm's business arrangement. In this regards, the arrangements can be divided into two categories; independent hotels and franchised/ chain affiliated hotels. These arrangements result in different patterns of decision making process. Typically, the decision making within franchised or a chain-affiliated hotels is based in their parent company





which can strongly influence the strategic choice, as the company can exert their brand standards on its hotels. These brand standards on quality and image can either encourage or impede the adoption of certain initiatives. For example, the visibility of international hotel chain often subjects them to higher expectation because of their market leadership position and concern on their global reputation (Rowley and Berman, 2000). The hotels are also widely recognized as key agents in the diffusion of new standards of practice across countries by transmitting pressure from its local context into the firm in the host country (Arias and Guillen, 1998). Zyglidopoulos (2002) found that the hotel which run under franchising or chain contract (such Hyatt, Accor, and Best Western) seem to practice quality and environmental management more than the local-own hotel. On the other hand, due to the restrictions under the franchiseship or membership of a chain, the adoption of an initiative may be denied despite the benefit that would be acquired. These arguments support the expected influence of business arrangement on the decision and organization regarding the SSCM.

The last business feature is financial situation of the firm. Many empirical studies generally argue for mutual relationship between a firm's economic performance and its proactive environmental strategy. Rudma (2001) provides evidence on the link between sale growth and innovation, where the firms who experience increasing levels of profitability are more likely to initiate a new practice. In contrary, the priority and ability to response to external demands can also be limited by business recession. Russo and Fouts (1997), in their cross-industry study, found that profitability growth are positively correlated to environmental performance. Low profitability, for example, may undermine firm's motivation, and set higher priority for end-of-pipe measures of pollution control required by law. The arguments lead to a proposition that the increased financial performance has an impact on hotel's decision regarding SSCM, as well as the capabilities to implement it.

In sum, the adoption and implementation of SSCM varies among hotels, not only due to differences in the business relationship and external pressures, but also because of their internal characteristics that influence managers' decision and hotel's capabilities to response. Besides, in order to isolate its potential influences from the proposed relationships, the research controls the geographical factor by conducting the study in the domains located in similar physical settings.

## 2.2 Buyer-Supplier Relationship

The foregoing discussion has been focused on particular aspects of a firm that may have impacts on the adoption and implementation of SSCM. A basic assumption of the research is that firm can be regarded as part of a supply chain, which cannot perform economic transactions without its primary stakeholders in supply chain (George, Ropke Jorgensen, 1992). This part considers influences of the relationship between the firm and its trading partners. In this research, the partners in upstream and downstream of supply chain are divided into two groups; customers and suppliers.

Anderson *et al.*, (1999) argues that the buyer-supplier relationship is the primary mechanism through which quality management standards have diffused. Several studies support that firms that



adopted environmental management practices were motivated by concerns from buyer firm. A survey of the largest Canadian firms, for example, showed that pressure from buyer firm was the second most cited source of pressure to adopt an environmental management plan, after government pressure (Henriques and Sadorsky, 1996). A study by Florida, (1996) support that the adoption of environmentally-conscious measure was associated with cooperation between actors across production chain. This finding is in line with the research on the adoption of advanced production systems (Jenkins and Florida 1998). Other literatures identified that the firm's interactions with its suppliers and customers as key contributors to environmental performance improvements both in the firm and the partners (Bowen et al., 2001; Canning, L. and S. Hanmer-Lloyd, 2001; Carter, C.R. and J.R. Carter, 1998; Geffen and Rothenberg, 2000; Hall, 2000; Handfield et al., 1997)

The literatures on buyer-seller relationship are grounded in many frameworks, such as social exchange theory, network theory, transaction cost economics theory, and relational contracting theory. In their review of the relational paradigm, Wilson and Kristan Moller (1991) conclude that the different schools of thought complement each other in terms of the interaction aspects considered, and trust is the most important element of collaborative actions. Similarly, Champion and Fearne, (2001) support that trust is critical factor fostering commitment among supply chain partners, and improving the chance of supply chain performance. Morgan and Hunt (1994) argue that trust develops when interactions, such as information exchange, cooperation, and transaction specific investment, between partners have developed. Monckza et al. (1995) supports that these interactions reinforce each other, and consequently enhance the level of partnership. This is in line with the antecedent work of Forrester (1961) on supply chain coordination which posits that business performance depends on the flows of information, materials, money, man-power between firms in the chain. The central proposition in this part is that the adoption and implementation of SSCM depends on hotel's interactions with its customers and suppliers, as we now consider each aspect in more details.

### *2.2.1 Customer Relationship*

The business relationship literatures suggest that prior cooperation experienced by customer and supplier can create constructive relationship and willingness that pave the way toward joint effort in other area of cooperation (Anderson and Wietz, 1992; Morgan and Hunt, 1994; Ring and Van de Ven, 1994). Similarly, Bhatt and Trout (2005) found that the collaborative activity can also enable firm to know the prospective preference of the customers and meeting these expectations at the lowest possible cost and time (Bhatt and Trout, 2005). Griffith et al. (2001) underlines the role of firm's customer-focused activities, which align to customers before, during, and after the business transactions, in supply chain performance. Further, some studies found that customer-led activities of evaluation and marketing can encourage supplier's level of environmental investment and management (Hennig-Thurau, 2000; Vachon et al., 2001). These arguments and empirical findings guided the research to propose that the collaborative activities between hotel and



their customers (e.g. tour operators/ agencies) can motivate to adopt SSCM, and encourage the implement activities.

### 2.2.2 Supplier Relationship

Geffen and Rothenberg (2000) highlight the supplier involvement as a critical factor for new product development. More recently, Klassen and Vachon (2003) claims that greater scrutiny and early supplier involvement are the factors of environmental improvement. According to the antecedent work of Lamming and Hampson (1996), firm's involvement of suppliers' design and production is indicative of the environmental impacts of their supply chains. Direct involvement activities may include company visit, organizing workshop, monitoring, and evaluating supplier's performance (Sahay B.S., 2003). Further, Handfield and Nichols (1999) also found that assessment and incentives are the critical factors of supply chain management, and they can motivate suppliers to improve performance by sending a message that the better performance is rewarded. The assessment also allows buying firms to understand the supplier's limited capabilities. Having such interactions can enhance trust and a chance to introduce new initiative to its partners (Canning and Hanmer-Lloyd, 2001; Lamming and Hampson, 1996; Morgan and Hunt, 1994; Simpson and Power, 2005). The arguments support the proposition that the adoption and implementation of SSCM is determined by hotel's involvement of the suppliers.

Supports provided to supplier are also considered important mechanism for achieving closeness in a buyer-supplier relationship (Bensaou and Andersons, 1999; Heide and John, 1990; Klein, Frazier and Roth, 1990). According to the transaction cost economics theory, the constructive relationship is basically characterized by relationship-specific investments which are defined by Williamson (1985) as 'durable investments that are undertaken in support of particular transactions'. Similarly, Shelanski and Klein (1995) refer the relationship-specific investments as the investments in tangible and intangible assets that are dedicated to a particular business partner. Some suppliers may have less resources and capabilities available for upgrading higher standards (Lamming and Hampson, 1996; Ypatia Theodorakioglou et al., 2006). Firm needs to help their suppliers to develop their capabilities, as suppliers with poor practice can expose the manufacturers to risks of cost and lose of opportunity (Jeremy Hall, 2001). The supplier supports may include providing financial support, technical assistance, and training that are uniquely tailored to the relationship with an individual supplier (Krause et al, 2000; Scannell *et al*, 2000; Handfield and Nichols, 1999; Handfield *et al*, 2000). Knowledge should also be transferred to suppliers in order to helps its them to improve performance (Krause et al., 1998). These supports provided to suppliers can be regarded as 'supplier development'. Supplier development has been defined as any activity that a buyer would undertake to improve a supplier's capabilities to meet the buyer's needs (Hanfield et al, 2000; Krause et al., 2000). The impact of supplier development activities deployed by the customer firm to improve a supplier's environmental or social aspects has been shown to have positive impact on partners



involved (Dyer, 1997; Handfield and Bechtel, 2002; Klassen and Vachcon, 2003; Rao, 2002). These arguments imply that the relationship-specific investments can reduce the gap between hotel's expectation and the supplier's capabilities to improve performance regarding sustainability. The research thus proposes that hotel's supplier development activities have impacts on the likelihood of adoption, and the extent of the implementation of SSCM.

Apart from the interactions between firm and the partners in each side of supply chain, the firm's relationships with customer and the relationship with supplier also share some aspects in common. Firstly, according to Frazier and Rody (1991) the power relationship can affect the degree to which the partnership can be developed. The power refers to the extent to which the two parties are dependent on each other to achieve their desired goals (El-Ansary and Stern, 1992; Fearne et al., 2001). The interdependent nature of relationship determines willingness to exert effort to cooperate to each other (Mohr and Spekman, 1994). For example, a firm's decision to adjust its product/service can be influenced by its dependency on its customer. Incentives such as the increasing volume of purchasing can increase the customer's power, and decrease the supplier's resistance to the preference promoted by customer. The relational contracting theory supports that it is essential for any firm to meet expectations of prospective customer, as firm considers relationship with their buyers to be crucial (Qinghua Zhu and Raymond P. Cote, 2004). Tour operator/ agency, for example, is reported to use purchasing relationship to places suppliers in a dependency (Budeanu, 2005; Klemm and Parkinson, 2001; Medina-Munoz, Medina-Munoz, Garcia-Falcon, 2003). The arguments lead to a proposition that the preference made by customer firm can have impacts on hotel's decision regarding SSCM. Meanwhile, hotel has purchasing power to persuade supplier to implement SSCM activities.

Another common aspect of the supplier and customer relationships is information sharing. The information sharing/ exchange has been singled out as an important factor for successful supply chain management (Beamon and Chen, 2001; Cachon, and Fisher, 2000). Li (2002) also identifies the information sharing as a crucial feature of the inter-firm collaboration. Customer firm can also motivate their suppliers by providing adequate information in which enable supplier to anticipate coming issues (Thonemann, 2002). Min *et al.* (2005) found that the exchanged information provides better knowledge about their counterparts activities and resources, which increases the possibility of identifying other combinations of resources and activities that could further improve performance and competitiveness (Hertz 1992). The research thus stipulates that an increase in information sharing between hotel and its partners (both customers and suppliers) will facilitate information flows, and thereby increase motivation and knowledge for adoption and implementation of SSCM.

To summarize, a central tenant of the analytical model is that the relationships between firms and trading partners both in upstream and downstream the supply chain have impacts on heterogeneity in the extent of propensity to adopt SSCM, as well as the approach to implement the activities.



## 2.3 Institutional Conditions

One of the basic assumptions is that firms do not operate in isolation, and its behavior is a result of the contextual conditions under which the firms are embedded. In this research, SSCM is also considered as the process to response to influences exerted by stakeholders in society. Institutional theory studies the influences of the institutional conditions on organizations (Oliver, 1991; Scott, 2001; Tolbert and Zucker, 1996; Wicks, 2001). The theory provides a well-established perspective to understand the organizational behaviour which is context dependent. From institutional viewpoint, decisions about organizational practices that face uncertain tangible benefits (like SSCM) are especially sensitive to institutional pressures.

The research builds on Hoffman (2001) to argue that firm differ in their receptivity of institutional pressure. Firms do not act completely autonomously without the influence of external bounds, while do not simply react to the pressures dictated by the organizational field. The institutional and organizational dynamics are tightly linked (D'Aunno *et al.*, 2000; Levy and Rothenberg, 2002). Clearly, the institutional fields are complex interdependent, comprised of a broad array of public constituents (Scott, 2001). As noted in previous chapter, firms engage with constituents in their market environment, while contend to constituents in their non-market environment which are interested in social, political, and legal issues (Baron, 1995; Baron, 2000). Given equal importance to all stakeholders, this section specifically elaborates each subset of the institutional conditions; regulatory- political, economic, and social conditions. Hoffman (2001) argues that these contextual conditions stimulate organizational members to response by formulating a strategy according to their cognitive frame. An implication from this perspective is that the firm's specific characteristics matters because they can affect, not only the business relationship, but also the level of the institutional pressures sensed by the firm. Further, there are also interactions among these institutional pressures which could moderate or reinforce their individual influence on the firm. For example, the pressure from NGOs and community may encourage the formulation of more regulatory control. This, in turn, can induce industrial association to encourage firms to adopt measures to contribution to sustainability. The expected influences of the institutional conditions on the adoption and implementation of SSCM are described as follows.

### 2.3.1 Political Conditions

Several studies found that a firm's decisions regarding sustainability issues are influenced by the desire to maintain improve or relationship with stakeholders. Political conditions represent the extent to which non-market stakeholders, such as governmental agencies, interest groups, and community people, exert coercive power on firm. Henriques and Sadosky (1996) indicated that community demand is an important pressure that persuades firms to adopt an environmental strategy. Florida and Davison (2001) supports that the adoptions of environmental programs are positively associated with active community leaders. Maxwell et al. (2000) asserts that firms can be



forced to self-regulate if there are strong movements (e.g. protest) by local community, and interest group's role of lobbying for more stringent regulation. This is because the pressure will cause firms to initiate measure as a way to prevent the higher degree of threat (Maxwell and Decker, 1998).

Delmas (2002) found that regulating actors play an important role in firms' adoption of ISO 14001, and perhaps the government is the most powerful stakeholder that pushes firms to adopt the initiative. Rugman and Majumdar and Marcus (2001) highlight the influence of governmental authority to legislate, promulgate, and enforce regulations on firm's environmental management. Meanwhile, firms themselves can also influence the formation of regulation, as to manage their risks by lobbying lawmakers that particular regulations should be tighten for industry as a whole (Salop and Scheffman, 1983). On the other hand, Verbeke (1998) found that the insufficient supports from the governments, in terms of physical and legal infrastructures, cause opportunistic behavior among firms. Oliver (1991) confirms that low degrees of legal coercion, is conducive to the formulation of resistant organizational responses. Majumdar and Marcus (2001), however, argue that weak monitoring and low regulatory stringency may not necessarily have the negative effect, as it may induce firms to develop its capabilities for their own innovative processes, and create more favorable conditions by themselves.

These arguments guide the research to assume that the political conditions, combined with the moderating impact of organizational characteristics and business relationship, can influence the likelihood to adopt SSCM, as well as the effectiveness of the implementation.

### *2.3.2 Economic Conditions*

According to Miller (2001), decision making regarding business ethics is driven by economic rationality rather than intrinsic motivation. As profit is always the core motivator of any firm, pressures to achieve profit is thus higher than motivation to serve not-profit creation alone. Oliver (1991) states that stakeholder demands that entail (the expectation of) high economic gains are compatible with the organizational goal of profitability, and the firms are more likely to be embraced. Likewise, Rivera (2001) suggests that stakeholders should constitute opportunities to reduce cost, and increase volume and value of sales. These notions are supported by institutional perspective which argues that firms are subject to economic environment created by various actors. Hoffman and Ventresca (1999) indicate that non-market and market actors frame environmental management issues differently. The constituents of the market environment tend to view environmental issues primarily within the rubric of business performance, focusing on their cost and benefits implications.

Christmann and Taylor (2001) considered the consumerism as a pull mechanism for corporate environmental responsibility, and argue that business posture is a response to changes in customer value. From institutional perspective, consumers' perception of new product characteristics and their value judgements about the competing choices can be changed through socialization process. When this happens, firms have a better incentive to extend the activity since they can expect better return



from the costs associated with it. Further, in such conditions, the firm's contribution to sustainability underpins the customer's satisfaction, and while the differentiation advantage can yield price premiums. Rivera (2002) determined that hotel's guest usually stay in a hotel because of the location and amenity, but once they see what is going on in terms of social and environmental consciousness, they may memorize and want to come back.

Delmas (2002) highlights the importance of customer and industrial associations in enhancing the market opportunity for the adopters of ISO 14001. Accordingly, the market trend created by the association induces other firms to imitate practices of those successful pioneers who have adopted, and this leads to growing competition to adopt the ISO standards. Other researchers also found that stakeholders can also support the potential adopters by offering financial incentive and/or assistance to help them to meet requirements of quality and environmental initiatives. For example, if the initiative becomes a financially-sound investment in quite a short payback period, then managers will more positively perceive the cost impediment, thereby encourage the adoption and implementation of the initiative.

Following the arguments, the research thus proposes that the economic conditions created by stakeholders are an important factor that influences the willingness to adopt, and the extent to implement the SSCM.

### *2.3.3 Social Conditions*

The institutional theory suggests that the financial considerations are not the only factors that explain the rationale of firm's proactive strategy. Firm is also influenced by social construction process; social norms and values that provide a sense of social legitimacy can influence firm's behavior. Literature supports that firm's proactive postures involve anticipating future social trends and designing or altering business operation to prevent negative impacts (e.g., Aragon-Correa, 1998; Hart and Ahuja, 1996; Hunt and Auster, 1990; Post and Altman, 1992; Russo and Fouts, 1997; Sharma and Vredenburg, 1998).

The first aspect of social influences is the knowledge and capability building program conducted by stakeholders, especially research institutes, and industrial association. Nahapiet and Ghoshal (1998) states that firms are more likely to mimic the behavior of other firms that share similar backgrounds. Such peer network creates more mutual understanding and knowledge management (Weick and Roberts 1993). The shared experience could make firms more confident to follow, as they can learn by imitating the early movers (Argote, 1999).

Secondly, institutional perspective suggests that norms played an important role in adoption of voluntary initiative (Guler et al., 2002). Normative pressure exerted by various actors, such as community people, industrial association, and research institute, can make firm aware that social condemn and reward regarding sustainability issues exist. A study based on a survey of ISO 14001 certified companies across 15 countries found that one of the strongest motivating factors to pursue



certification was the desire to be a good neighbor (Raines, 2002). Likewise, the studies by Lawrence and Morell (1995), found that firms were motivated to improve their environmental performance by their concern over other firms that had publicized or criticized by press and media (Lawrence and Morell, 1995). Such social norms is deemed to be motivating for the firm to adopt and implement SSCM. Lastly, according to Greening and Gray (1994), stakeholders can heighten the public's awareness about firms' sustainability issues. As the civil society is strengthened, the social scrutiny become more powerful enough to trigger change in firm's perception (Cordano and Frieze, 2000).

These theoretical arguments lead to the proposition that the social conditions created by stakeholders can provide firms with the information, motivation, and capabilities required for the adoption and implementation of SSCM.

### 3. CONCLUDING REMARKS

In this paper, analytical framework is developed to explain the expected influences of variables on the adoption and implementation of SSCM. The analytical framework is conceptualized by drawing together insights from three theoretical viewpoints. It should be noted that this research is not aiming to produce a falsifiable theory, but rather a framework for analysis that indicates how firms could be facilitated to adopt and effectively implement SSCM. The elements in the framework serve as important inputs to construct the questionnaire and interview items prepared for the empirical part of the research, and to develop a framework for better facilitation of the adoption and implementation of SSCM.

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