

Adaptation of supply management toward a hybrid culture: The case of a Japanese automaker

Abstract

Purpose This paper aims to identify problems caused by cultural differences between Japan and China that face supply chain managers applying Japanese-style supply management practices within supply networks in China and presents solutions to this problem.

Design/methodology/approach We carry out a single, longitudinal case study conducting two waves of data collection (i.e., interviews and observation) plus the collection of much archival data. It goes beyond the dyad by examining supply management of a Japanese company's supply chain up to three tiers in China.

Findings We have revealed the four supply cultural differences between Japan and China, which caused the cultural clashes between JVCo and some of its suppliers and develop a model of adaptation of Japanese supply management to the Chinese business system. Adaptation involves creating new supply management practices out of selective adaptation, innovation and change of existing Japanese and Chinese supply management practices rooted in different Japanese, Chinese and Western cultures. A list of organisational factors affecting the adaptation has also been provided.

Research limitations/implications Due to the adoption of a single case study method, caution should be given to generalising the findings to all Japanese firms.

Practical implications We provide Japanese, Chinese and Western managers with insights on how to mitigate the problems caused by cultural differences within supply relationships in China and provide some innovative ideas on how managers from all three cultures could blend the elements of the three cultures to form a hybrid culture and reduce cultural clashes.

Originality/value This is one of the few attempts to study the transfer of Japanese supply management practice to China. Organizational theory (i.e., transfer of organizational practice and hybridization) is applied and provides a robust framework to explain the supply management practice. This study also answers the call for a global supplier relationship management paradigm.

Keywords: Supply relationships, cultural adaptation, hybrid, longitudinal case study, China, Japan.

1. Introduction

In the 1990s Japanese manufacturers faced difficulties caused by national economic recession (Lamming, 2000; Hayashi, 2004). The Japanese share of the global automobile industry dropped from 36% in 1991 to below 30% in 2000. In 2004, the Japanese Ministry of Economy, Trade, and Industry, encouraged its manufacturing industry to collaborate with

East Asia, taking advantage of the region's cheap labour and growing markets. Japan's automotive industry was a forerunner in this (Davies, 2010). Following the implementation of the international strategy this caused problems for Japanese automakers in dealing with Chinese suppliers, apparently borne of cultural differences. While Westerners are seldom able to differentiate between Japanese and Chinese cultures there are actually many cultural differences with significant implications for supply management.

Most research on transferring organisational practice concentrates on human resource management (HRM) practices (Beechler and Yang, 1994; Elger and Smith, 2005; Gamble, 2010; Oliver and Wilkinson, 1992). Some authors link supply chain localisation to quality management practice (Bayo-Moriones *et al.*, 2011); study factors affecting localisation of component sourcing (Eberhardt *et al.*, 2004) and localisation of sub-contracting practice (Liu and Brookfield, 2006). Little research specifically addresses the transfer of supply relationship management to new national contexts and localisation of supply, beyond that focusing on Japanese techniques in the West (Abo, 1988; 1994; 1995; Lamming, 1993; Morgen *et al.*, 2002). The two terms are related in a way that localisation is a natural result of transfer of production from a home country to a host country (Eberhardt *et al.*, 2004).

Supply chain researchers have realized the importance of national culture in the buyer-supplier relationship (Metters *et al.*, 2010; Flynn *et al.*, 2013). Zhao *et al.* (2006) call for research on the Guanxi's effects on buyer-supplier relationships in China. Zhao *et al.* (2008) propose more cross-cultural investigation of the moderating effects of culture on the impacts of power on relationship commitment and supply chain integration. Freeman and Browne (2004) explore different dissolution communication strategies influenced by national culture adopting Hofstede's five cultural dimensions. Davis *et al.* (2014) examine the effects of national cultural differences on e-business system performance. Salmi's (2006) stresses the importance of supplier relationship with the Chinese suppliers and point out that building guanxi or adapting to the Chinese business system is of utmost importance for western firms' sourcing success in China. Guanxi refers to a special type of relationship that bonds the exchange partners through reciprocal exchange of favours and mutual obligations (Luo, 1997). Prior research on cross cultural buyer-supplier relationship has seldom gone beyond Hofstede's (1991) five dimensions and even if some have, they are predominantly focused on Western-Chinese context (e.g., Salimi, 2006; Jia and Rutherford, 2010; Jia and Lamming, 2013). To the best of our knowledge, very little has been devoted to Japanese-Chinese buyer-supplier relationships.

In this paper, we focus on issues of supply management cultures, such as a sub-system culture (Powell and Butterfield, 1978) underpinned by national identity instead of organisational culture (see Cadden *et al.*, 2013), exploring key differences between Japanese and Chinese cultures that may be relevant to buyer-supplier relationships in the context that a Japanese automaker localises its supply chains in China. We reveal some of the problems that

face Japanese supply chain managers operating in China and explore how Japanese-style supply management practices may adapt to encompass different cultural contexts. While research suggests that Japanese companies prefer simply to extend *keiretsu* networks and associated supply management practice when expanding into other countries, there is also evidence of local adaptation (e.g. Mair, 1998). *Keiretsu* refers to a set of companies with interlocking business relationships and shareholdings, an approach that was common in Japan after WWII (Ahmadjian and Lincoln, 2001).

Adopting the hybridization concept in organisational theory and a culturalist perspective (Hofstede, 1991; Abo, 2007; Gamble, 2010), this research attempts to answer the following research questions:

1. How do Japanese companies adapt their supply relationship management practices within a Chinese cultural context, to address the problems caused by cultural differences between Japan and China?
2. What factors affect the adaptation of Japanese supply management in China?

The paper is structured as follows. First, we review literature on supply management in the West, Japan and China and adaptation of organizational practice; then we explain our single case study methodology; and thirdly, our findings are presented and a number of linked propositions are developed. We present our discussions and conclusions with recommendations for further research and for supply chain managers.

2. Literature review

2.1. Supply relationship management in a Western context

Cousins *et al.* (2006) observe that Supply Chain Management (SCM) began to receive attention in the 1980s. At this time, the rise of Japanese manufacturing techniques (see Schonberger, 1983) was changing the landscape of SCM in the west, attracting many researchers to the country, who observed the 'Toyota Production System' in Japan (see Monden, 1983; Ohno, 1988) and studied the implications globally.

In agreeing that supply chain philosophy has changed over the past two decades, Hoyt and Huq (2000) conclude that supply management philosophy in the 1980s generally relied on governance mechanisms based on 'arm's length' relationships, reflecting the principles of Williamson's Transaction Cost Economics (Williamson, 1985). It was not until the 1990s that there was an increasing awareness of the value of cooperation and collaboration in the supply chain (Lamming, 1993; Zacharia *et al.*, 2009) and so-called 'partnerships' (Ellram, 1991; Mohr and Spekman, 1994; Lambert *et al.*, 1996).

Jain and Dubey (2005) recommend a governance-based perspective for studying relationships in supply chains in the Western context. Related literature reveals three levels of relational governance (Williamson, 1985; Heide, 1994; Zaheer and Venkatraman, 1995; Claro

et al., 2003; Wathne and Heide, 2004; Jain and Dubey, 2005):

1. Firms are involved in a business relationship with the purpose of exploiting the economic gains of the transaction;
2. A transaction develops based upon the social bonds of trust;
3. Business relationships are determined by the economic and social environment in which firms are embedded.

While the first level is rooted in the western culture the influence of Japanese styles of supply management may be seen in the second and third.

2.2. Japanese *keiretsu* and Chinese *Guanxi*

The *keiretsu* system has many high level strategic features in Japanese corporate structure but at the operational level it may be used as a proxy for the Japanese-style supply management system (Dore, 1973; Tabeta and Rahman, 1999). Japanese companies setting up automotive assembly plants in other countries in the 1980s (e.g., USA, UK, Mexico, Australia) used aspects of this system in working with component suppliers (Abo, 1988; Lamming, 1993; Belderbos and Sleuwaegen, 1998; Mardas *et al.*, 1998; Head and Ries, 2001).

The Japanese-style supply management system emphasises long-term buyer-supplier relationships, collaborative product development, continuous improvement, internal and external training, and long-term employment (Abo, 1994; Child *et al.*, 2000; Elger and Smith, 1994; Fukuyama, 1995; Lamming, 1993; 2000; Morris and Wilkinson, 1996). This collaborative working, however, is typically operated within a power structure whereby the customer (not necessarily the parent company) holds sway over the supplier, albeit apparently in a benevolent manner. Put simply, supplier relationships within a *keiretsu* are based on trust, consensus decision making (*nemawashi*), loyalty and obedience: an approach to preserving harmony and cultural context sharing, in a single cultural context (Ulijn *et al.*, 2005).

The equivalent Chinese terms for *keiretsu* is *Guanxi*, which generally refers to relationships or social connections based on mutual benefits (Yang, 1994); specifically it refers to a special type of relationship that bonds the exchange partners through reciprocal exchange of favours and mutual obligations (Luo, 1997).

Despite their common roots, there are differences between Japanese and Chinese trading cultures. *Firstly*, although both attempt to preserve harmony, their approaches differ. The Japanese achieve harmony through consensus. The process of achieving consensus in the Japanese supply chain is called *nemawashi* (decision making process) and demands constant discussion and compromised before a decision is finalised; however, these discussions take place within an atmosphere of friendliness and cooperation (Alston, 1989; Fujimoto, 2004).

Nemawashi (根回し) in Japanese means an informal process of quietly laying the foundation

for some proposed change or project, by talking to the people concerned, gathering support and feedback, and so forth (Alston, 1989). Chinese enterprises preserve harmony by obeying orders from their supervisors rooted in the first of the five Chinese relationship principles, Confucian Li principle, which favours organizational hierarchy and centralized decision making (Child, 1994; Gabrenya and Hwang, 1996). This *first* difference is related to higher ‘power distances’ in Chinese culture (Hofstede, 1991).

The *second* difference concerns the type of collectivism and employee relations: family, company and nation. While family is important in Japan, employees put their company above everything else; employment is a mutual, long-term obligation. Japanese exhibit high trust and close relationships with their colleagues and suppliers (Fukuyama, 1995; Dore, 1973) and employees typically work in unity with managers, who then strive to maintain employment. Long-term employment is enabled by trust between labour unions and employers, long-term employment practices, and the seniority-based salary and promotion systems. Such an employment culture prohibits employees from changing jobs and encourages loyalty. This is a form of ‘group orientation’ (Gao *et al.*, 2007).

The family is the fundamental integrating force in Chinese society, upon which successful business activity depends, especially when extended through *guanxi*. The Chinese find it more difficult to have close relationships and trust with those outside the family. Jia and Rutherford (2010) label this ‘family orientation’. Liang (1949) argues that Chinese society is based on membership and relations in extended families and that family is the only meaningful structure of Chinese society. Through pseudo-families, relations can be extended beyond the immediate family and ‘outsiders’ can be transformed into members of a family-like structure based on the parties’ relations (Lin, 2001).

The *third* difference concerns ‘sentimental orientation’ for Japanese and ‘pragmatic orientation’ for Chinese. Japanese sentiment or *Kanjou* refers to depending upon and presuming another’s benevolence (Doi, 1963), this relates to co-existence or co-prosperity in relationships - an acceptable norm for managers in Japanese firms i.e., mutual agreement between Japanese automakers and their suppliers is not usually made explicit in written contracts; rather, it is intentionally kept ambiguous and mutuality is secured by *kanjou*.

The Chinese pragmatism, characterised by displaying deliberately managed emotions, contrasts with this Japanese sentiment or *kanjou*. The Japanese can quickly be drawn into sentiment, due to their love of nature (Wong and Maher, 1998). The Chinese value pragmatism and consider sentiment a waste of time compared to practical benefits. It is argued that Chinese tend to be motivated by the strong will or volition of their practical goals, and can restrain their emotional needs compared to the Japanese and Westerners (Alston, 1989; Cui, 2004; Wen, 2009). In the process of achieving practical goals, Chinese tend to have the characteristics of proclivity, careful planning and persistency (Cui, 2004).

Depending on the cultural context, any of these influences can play a dominant role in a

particular situation. Conation is a key part of Chinese psychological structure and may limit the roles of cognition and affect; the Chinese are motivated by the strong will of their practical goals, and can restrain their emotional needs (Cui, 2004). Wen (2009) calls this, 'pragmatic Confucianism'. The element of affection is the leading influence in the Japanese psychological structure, dominating cognition and conation. This leads to the Japanese 'sentimental orientation.' The role of affection in Japanese culture is explained as *qing* by the Chinese.

This difference influences the use of emotion during tough negotiations (Ulijn *et al.*, 2005). Most Westerners prefer formal, written business contracts and direct confrontation in negotiations. The Chinese prefer harmony in interpersonal relationships and a suppression of emotion (Chang and Holt, 1991). Human feelings for the Chinese is managed instrumentally to ensure smooth interaction, to maintain face with in-group members, and to assist in achieving personal goals. The Japanese avoid aggressive negotiations, preferring informal business contracts with a level of ambiguity: sentiment plays an important role in the negotiation. Tacit behaviour and ambiguity in Japanese business contracts allow for flexible responses through negotiation, requiring both parties to work together toward long-term mutuality (Chang and Holt, 1991).

Within closely interdependent relationships in *keiretsu* networks, contracts are often intentionally ambiguous and tacit, leaving flexibility and room for dealing with the unexpected. These tacitness in a contract sometimes motivates parties to avoid conflict (which may need costly re-negotiation), thus maintaining cooperative relationships while avoiding opportunistic behaviours (Chang and Holt, 1991).

The logic of using tacitness and ambiguity is most effectively applied where parties share cultural norms, as in Japan. Fukuyama (1996) observes that Japanese society is built on high levels of trust because an organic solidarity provides the basis of trust to members. Within a historically shared context, mutual obligation and responsibility are understood without the need for contracts. Table 1 below shows the differences and similarity between Japanese and Chinese cultures.

INSERT TABLE 1 ABOUT HERE

2.3. *Adaptation of organisational practice and hybrid concepts*

Companies setting up subsidiaries in foreign countries face issues of adaptation. Brennan *et al* (2003) conclude that competitive success in B2B markets depends upon the firm's ability to adapt to the needs of a single customer organization. They define *dyadic adaptations* as '*behavioural or organizational modifications at the individual, group or corporate level, carried out by one organization, which are designed to meet the specific needs of one other organization* (p1639).'

Although Japanese companies have sought to extend their supply management systems

while expanding internationally there is evidence of local adaptation (e.g. Mair, 1998). Case studies in the automotive industry by Abo (1988; 1994; 1995) reveal variations in levels of application and adaptation of Japanese-style production and management systems in different countries. His 'application-adaptation' model supports the application of production systems aimed at high product quality and efficient production over a range of operations. By sensing employee feelings, the production system can be adapted to local environments to achieve flexibility in the workplace (ibid).

A similar concept of adaptation is 'hybridization' in the context of Multinational Corporations (MNCs) internationalising their operations. Morgen (2002: 114) sees this as, *'the creation of new management practices out of selective adaptation, innovation and change [which] provides a useful metaphor to describe the processes that take place when a firm nurtured in one national context establishes a subsidiary in a host country and is thereby insinuated in an unfamiliar cultural, political and institutional milieu.'*

Aligning with Morgen (2002), Elger and Smith (2005: 362) observe that hybridization has been used most fruitfully to describe not simply juxtaposition of 'home and host country' effects but 'the emergence of distinctive configurations that may depart from both home-based templates and local practices'. Several authors (Boyer *et al.*, 1998; Whitley *et al.*, 2003; Elger and Smith, 2005) adopt an institutional perspective to analyse how localising in new institutional contexts leads firms to adapt and hybridize (Morgen, 2002). Tolliday *et al.* (1998) propose that hybridization is not simply a process of compromise and retreat but also an important dynamic of innovation and learning. Boyer *et al.* (1998) review research on the transfer of production systems, including Fordism and the setting up of overseas plants by Japanese firms, and conclude that hybridization is a learning process, concerning success or failure in blending new elements to achieve a coherent system.

Oliver and Wilkinson (1992) propose a term Japanization indicating a period when Japanese firms succeeded in global market and Western firms attempted to imitate them and advocates a holistic approach in that management must find ways of living in a world of high-dependency relations with employees (and presumably unions), suppliers and customers. Based on 8 case studies (5 western; 3 Japanese) operating in each other country, they found British companies didn't significantly adapt their practice but the Japanese firms adapted to the British way in terms of employee relationship.

In the context of international joint venture, Graen *et al.* (2004) propose a "third culture bonds" model, defining the third culture as a culture in which the different cultural backgrounds of the organization or group members are synthesized into a new culture that is acceptable to members. The third culture is a mix of the business partner's cultures whereby the partners become cultural "insiders"; however, when two cross-cultural business partners remain "strangers" to each other, the third culture does not develop. The 'third culture' concept is not much dissimilar to the hybridization concept discussed by Morgen (2002) and

Elger and Smith (2005).

Finally, in a supply management context, Giannakis *et al.* (2012) state that the majority of current supplier relationship management models are either developed in the context of western or Japanese business cultures, or without sufficiently addressing cross-cultural issues. They call for that there is a need for a global supplier relationship management paradigm, including cultural elements from Western, Japanese and Chinese cultures implying the formation of a hybrid culture but don't provide any empirical evidence.

However there are few studies, on the hybrid of supply management (e.g., Jia and Lamming, 2013) and even fewer have studied adaptation of supply management in the Chinese-Japanese context. The aim of the paper is therefore to fill this gap in the literature.

3. Research Methodology

3.1. Single, longitudinal case study method

We collected data from a single longitudinal case study, focusing on a joint venture (JVCo) between a Japanese automotive producer (AutoCo) and a Chinese automotive group in China, during a three-year period (2007-2010). In this study, we attempt to answer questions of how Japanese companies adapt to the Chinese business environment and what the factors affecting the adaptation are. Due to the lack of research on adaptation of Japanese supply management practices to a Chinese context and the fact that the unit of analysis is a process, we adopted a single longitudinal case study approach (following Eisenhardt; 1989; Voss *et al.*, 2002).

This method was chosen for four reasons (see Yin, 2008). First, the research is driven by a question of 'How do Japanese companies adapt their supply relationship management practices within a Chinese cultural context?' Furthermore, this is a complex topic, rarely explored before especially in a Japan-China context. Barzeley (1993) and Yin (2008) advise that a single case study can be extremely valuable in explaining a previously unexplored phenomenon. Thirdly, AutoCo is one of the top three Japanese automakers and one of the first to enter China; JVCo can therefore be seen as a 'critical case' (Yin, 2008). Lastly, since AutoCo is now one of a number of Japanese automakers operating in China, JVCo may be a 'representative or typical case' of such JVs of similar scale (Yin, 2008).

Voss *et al.* (2002) advise that single case studies are often used in longitudinal research and can obtain great in-depth insights, albeit limited in generalisability. Problems associated with using a single case include the risk of misjudging an event and exaggerating easily available data. Longitudinal case studies can address these problems as the longer the period in which the phenomena are studied, the greater the opportunity is to observe the sequential relationships of events; this is ideal for theorizing.

A common difficulty for a longitudinal study is the problem of access. We were fortunate in having access to the case companies over the duration of the research. Access to the

suppliers was facilitated by our connection with AutoCo in Japan. A cross cultural research team (e.g., British, Japanese and Chinese) was utilised to significantly reduce the bias induced by the single cultural team and increases the validity of the research. The research team allows us to read Chinese and Japanese language literatures in addition to the English language literature.

China's automotive market underwent a significant change during this period. A longitudinal study was appropriate for capturing the dynamics of the industry and thus the factors affecting the adaptation. Our unit of analysis for the case study was the adaptation process of supply management between the JV and its suppliers in China. Focusing on a process required more sustained (i.e., longitudinal) attention than would be needed for a static unit of analysis.

3.2. Data collection in JVCo's supply network

The Chinese auto industry has grown rapidly since the 1990s: 1.6 million vehicles were produced in 1998, including 0.5 million passenger cars; 5 million in 2004 (1.8 million cars); 23 million in 2014 (19.7 million cars) (China Association of Automotive Manufacturing, 2005 and 2015). Competition for market share among automakers is fierce - especially after major Japanese, Korean, American and European automakers began investing in China. To remain competitive, foreign automakers needed to learn how to transfer best practices, including supply management, to the Chinese context.

In the 'first tier' of JVCo's supply network (Figure 1), it has grown to c.130 suppliers since 2004. We selected suppliers with different ownership structures, and equity relationships with AutoCo, to explore how JVCo adapted its supply management practices to different blends of supplier culture. Of the eleven suppliers, four were Japanese-Chinese JVs, five were wholly Japanese-owned, and two were Japanese-Taiwanese¹ JVs.

Semi-structured interview data were collected from the top Japanese and Chinese managers in JVCo and suppliers in which a scoping study was carried out between 2004 and 2006 allowing us to develop a understanding of the industry and a focused interview protocol (Table 2; Appendix 1 interview protocol), supplemented by company documentation and minutes of meetings. Informants were selected for their knowledge about component procurement and experience in supplier-buyer relationships.

Interviews were conducted with the Managing Director (Japanese), Deputy Managing Director (Chinese), Human Resource Director (Chinese), and Procurement Director (Japanese) of JVCo. We interviewed 18 directors of the eleven Japanese suppliers in China

¹ The cultures of Taiwan are a hybrid blend of various sources, incorporating elements of traditional Chinese culture, attributable to the historical and ancestry origin of the majority of its current residents, Japanese culture, traditional Confucianist beliefs, and increasingly Western values. Taiwan culture could be considered a branch of Chinese culture.

and six directors of their headquarters in Japan. Some individuals were interviewed twice or more. Interviews lasted between 1 and 3 hours: all were recorded and transcribed. The research was strengthened by the inclusion of interviews with senior managers from headquarters organisations. Having overseen the whole process of transfer of Japanese practice to the Chinese subsidiary, these individuals had a comprehensive and rich understanding.

The reason for only senior managers being interviewed is that they were the people who participated in negotiations with each other and have better understanding on how both parties of a buyer-supplier relationship adapted. The HR directors are the best people to answer the employee relationship related questions.

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Based on interviews for the scoping study between 2004 and 2006, we observed that the level of adaptation to the Chinese environment was more obvious and dynamic for relationships between JVCo and independent suppliers than those with subsidiary and affiliated suppliers. This appeared to be because the independent suppliers were not members of *keiretsu* and less certain of gaining orders from AutoCo. Accordingly they sought business from Western and other Chinese automakers and were consequently more *au fait* with the Chinese environment. As such relationships have been less studied than those with subsidiaries, we decided after 2007 to focus on JVCo's relationships with four large-scale independent suppliers: two first-tier (S5, S6) and two second-tier (S8 and S10) (See Table 3).

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3.3. Data analysis

We adopted a semi-grounded approach for case data analysis in which we deducted the cultural differences between Japan and China from literature and reviewed the construct of hybridization, both of which together form a conceptual framework guiding our data collection and analysis. In the data analysis, we attempted to identify how JVCo and its suppliers adapted to each other to form a hybrid culture.

The analysis contains three main iterations: 1) allow the national cultural differences that impede JVCo's supply management to emerge and to be compared with the literature; 2) identify the behavioural adaptation of JVCo and its suppliers and come up with a model of adaptation; 3) rank the level of adaptation of suppliers, based on which the factors affecting the adaptation are weighed and ranked. Coding for 1) was based on a combination of

elements of two cultures identified from the literature and data. We borrowed the terms used in the literature and integrated them with the supply management practice context. For 2), we identified how JVCo adapted in terms of the supply management practice underpinned by the four dimensions of cultural differences identified in the first iteration. For 3), we ordered the 11 suppliers based on the level of adaptation and identified seven factors affecting their adaptation.

For example, we asked the interviewees to provide examples of relationship difficulties which caused cultural differences between Japan and China. One of the interviewee told us: *“Chinese employees generally build personal relationships with individuals at suppliers and customers. When they leave our company, they take away the relationships with all the customers and suppliers with them. This never happens to Japanese employees”*. We then coded this difficulty as family orientation vs. group orientation. Then we asked the interviewee how they addressed this and were told by several interviewees that JVCo responded to this problem by advising the Japanese managers and trusted Chinese senior managers of their first-tier suppliers to build personal relationships with their suppliers. This showed that JVCo managers had adapted to the Chinese family orientation (building pseudo-family like personal relationships with Chinese suppliers) in order to mitigate the risk of supply disruption caused by the departure of Chinese buyers.

Following Miles & Huberman (1994), we carried out the single case analysis separately and then compared notes, allowing the constructs to emerge from data. Confusion and misunderstanding were gradually removed by the iterative process of data analysis in the cross-cultural research team, improving validity of the findings.

4. Findings

4.1. Creation of a supply base in China

JVCo was formed in 1997 with 50% funding (cash) from AutoCo and 50% from the Chinese automobile group (including S1) in the form of experienced workforce and plants. Simultaneously, a JV for an engine plant (‘Engine’ in Figure 1) was established with another Chinese automobile group. Output of JVCo was initially set at 30,000 - 50,000 units by the Chinese automotive industry policy.

JVCo’s production capacity grew after 1997, reflecting surging demand, reaching 240,000 cars p.a. in 2004, 360,000 in 2006 and 480,000 in 2011. The main challenge faced by automobile JVs in China was component procurement. The Chinese government required foreign automakers to source 40% of components locally in the first year by value, 60% in the second year, and 80% in the third. Before 2004, local components suppliers were still relatively weak in technology, quality, and management capabilities and only foreign assemblers reached these targets. Most bought in components from their home countries, carrying out final assembly locally (standard practice in the global automotive industry for

many years). JVCo imported most components from Japan, incurring higher transportation and inventory costs. After 2004, due to competition from Western and Korean competitors, JVCo started localising its supply base in China in order to reduce cost.

By 2005, JVCo was procuring components from c.130 first-tier suppliers: 70% Japanese (including JVs with local components makers), 10% western-owned, and 20% local. 90% of supplies, by value, came from Japanese suppliers, 5% from local suppliers and the rest from Western suppliers. This supply base structure was the same in 2010, in terms of quantity and value.

JVCo had attempted to establish a Japanese-style *keiretsu* network in China before 2004. After this, as competition from Japanese, Korean and Western automakers increased (Toyota: 1st JV set up in 1998; Hyundai: 1st JV in China in 2004; 1st JV for another top Japanese automaker in China in 2003), JVCo recognised the need to increase cost efficiency, asked its Japanese supplier to produce in China and started sourcing from more Chinese suppliers in its first and second tiers. This supply base localisation increased the number of Chinese employees and their seniority within JVCo and first-tier suppliers. Most first-tier Japanese suppliers in China now had Chinese directors. Competition for attracting good suppliers intensified due to the scarceness of qualified Chinese suppliers. As a result, the economic bargaining power of these suppliers increased.

4.2. Adaptation of Japanese supply management

Before 2004, JVCo did not perceive much competition in the Chinese market. After this, Japanese managers in JVCo perceived increasing cultural clashes with its suppliers and with its Chinese employees. They found the Japanese *keiretsu* supply culture no longer worked well and realised they had to change or adapt to a Chinese supply culture. We found four dimensions causing cultural clashes for JVCo in China, aligned with the literature. Sentiment vs. pragmatism and ambiguity of tacitness (are related and therefore discussed together. In addressing these cultural clashes, JVCo gradually changed its supply management practices to fit the Chinese context.

JVCo's Adaptation to sentiment and ambiguity and tacitness

JVCo believed 'charity (to suppliers) is a good investment' - a common view in Japanese automotive industry and consistently provided technical support to suppliers. In turn, some specialist suppliers provided technical support to JVCo. When changes in product design affected production lead-times and complexity for JVCo, S4 (wholly Japanese owned) having superior technical know-how worked closely with JVCo to cut lead-times and costs. This is an example of *kanjou* or *sentiment* (compassion, considerateness and kindness to others (Cui, 1996). Some Japanese interviewees of the Japanese suppliers reported that when they tried very hard and still couldn't reach the level of cost reduction required by JVCo, they would

plead with JVCo to reduce the requirements. JVCo would normally agree considering the long term relationship. Some JVCo interviewees considered the Chinese more pragmatic and ‘instrumental’, and sometimes suspected cheating. This shows that applying *kanjou* in JVCo’s supply relationships in China is problematic.

The logic of tacitness and ambiguity is most effectively applied where parties share cultural norms between JVCo and its Japanese suppliers in China. Chinese culture is similar to Japanese culture on this regards (Cui, 1996), however it appeared difficult for the Chinese to anticipate how the Japanese felt, because of their different cultural contexts and language barriers. For example, the GM of S10 (a Chinese national) stated in 2010 that:

“We found it sometimes difficult to understand the real meaning what the Japanese are trying to convey even if I travel to Japan and interact with Japanese frequently. When AutoCo first entered China’s automotive market, we were told ‘try as much as you can to invest in China’ hinting that they expect us to invest in China.”

After carefully assessing the market scale and potential, S10 finally did decide to invest in China. Meanwhile the ambiguity caused confusion and hesitation for the firm and it took some time before they made up their mind.

In all supplier relationships, JVCo’s initial negotiations were carried out between their Chinese procurement managers and Chinese managers in the suppliers, while final negotiations were conducted between the Japanese procurement directors in JVCo and Japanese senior directors in its suppliers after 2004. Assigning Chinese procurement staff to the initial negotiations shows how JVCo adapted its supplier management practices to the Chinese supply culture. JVCo reasoned that negotiation between ‘*kanjou*’ Japanese procurement executives might not be as effective as amongst the Chinese with their strong ‘conation’ (*yi*) or pragmatism, restraining emotions. Since Chinese procurement employees followed orders from their supervisors, by engaging Chinese staff, it was easier to make tough demands on price or volume adjustment. This adaptation addressed the shortcomings of the Japanese ‘emotion-conscious’ or *kanjou* culture, within a Chinese context.

Chinese procurement executives were able to negotiate the more detailed, explicit contracts better than the Japanese executives, who would employ the approach of *tacitness and ambiguity*. Detailed negotiation was more appropriate for managing local suppliers with a lack of strong industrial norms and regulations, unlike the situation in Japan. It was easier for the Japanese procurement directors to build up a rapport with Japanese suppliers than with the Chinese.

AutoCo’s supply management approach in the Chinese context had to be considered within its corporate global sourcing strategy and relationships with *keiretsu* suppliers (e.g., subsidiaries and affiliated suppliers) worldwide. This was a task for the Japanese directors of JVCo and its suppliers. In Japanese *keiretsu* networks, price negotiation in a particular geographic area for one supplier-buyer relationship has to reflect relationships with the same

supplier elsewhere in the world. This might make it expensive to procure components in China but simultaneously ensures the component quality i.e., if AutoCo gave a supplier time to adapt to the Chinese environment, proving cost effective in the long term. Taking a global view of dealing with suppliers ensured stability of *keiretsu* suppliers' network of AutoCo.

The combination of Japanese-style supplier management practices at the global and strategic level with Chinese-style supplier management at the local operational level in China worked effectively and shows that the contrasting Chinese pragmatism and Japanese sentimentality did not conflict but complemented one another well. The mixture of the two supply management styles proved to be beneficial and practical for JVCo's supply management in China.

JVCo's adaptation to group orientation

Japanese employees are typically loyal to their companies ('group orientation') while the Chinese tend to form small family-like clans within the company, putting these interests above those of the company itself ('family orientation'). The term 'group' here refers to the organisations for which the Japanese work.

JVCo was frustrated by the fact that Chinese employees were family orientated and showed less loyalty to JVCo than the Japanese colleagues displayed. This led to a distrust of Chinese employees' loyalty for Japanese companies in general. An example was provided by the Purchasing Director of JVCo in 2004:

"Chinese employees generally build personal relationships with individuals at suppliers and customers. When they leave our company, they take away the relationships with all the customers and suppliers with them. This never happens to Japanese employees. It seldom happened to Japanese but to Chinese often. There are incidents of disruption of supply after the resignation of a Chinese buyer who takes the Chinese suppliers that they manage to his new employer, normally a Japanese one. It takes us a lot of effort to develop a Chinese supplier into a qualified one, due to the high requirements from us and [the fact that] its capability is limited in [terms of supplying] two large clients."

It can be seen that the Chinese tended to build personal relationships with suppliers outside the inter-company relationships and this disrupted supply for JVCo in some occasions. JVCo responded to this problem by advising the Japanese managers and trusted Chinese senior managers of their first-tier suppliers to build personal relationships with their suppliers so that the Chinese buyers could not easily divert the Chinese suppliers to another buying company if they moved employment. This showed that the GM of S10 had adapted to the Chinese family orientation (building pseudo-family like personal relationships with Chinese suppliers) in order to mitigate the risk of supply disruption caused by the departure of Chinese buyers.

JVCo's adaptation to consensus

We found that *Nemawashi* demanding constant discussion and compromised before a decision is finalised was applied by JVCo in the relationships with Japanese suppliers. The Chinese, however, expect a top-down managerial approach, obeying orders from supervisors without challenge. In JVCo and its supply network in China, consensus culture was not present. In China, Gabrenya and Hwang (1996) observe that 'harmony within hierarchy' is probably the phrase most commonly used to characterize a wide range of social behaviour in Confucian societies. Senior Japanese managers employed the Chinese way of management, because most employees were Chinese nationals and unaccustomed to challenging their supervisors. For example, the Japanese HR director of S8 reported in 2010:

"We found it is quite hard for the Chinese employees to express themselves and they are very obedient. So it is difficult for us to do what we are doing in Japan: discuss with them to reach an agreement."

JVCo tended to adapt to the higher power distance of Chinese supply management culture. For example, the Chinese Deputy Managing Director of JVCo representing the Chinese JV partner said in 2004 that:

"It was decided at the beginning of the JV that the purchasing decisions were to be made by the Japanese side. All the components were either to be imported from Japan directly or purchased from the operations of suppliers that Japanese companies have equity. There are very few introduced by us (the Chinese partner of JVCo)."

This shows the adaptation of the consensus characteristic to that of Chinese order-obedience, since the Japanese did not make decisions based on constant discussion and making compromises with Chinese employees and suppliers but opted to give orders directly.

Adaptation of independent suppliers

As we have noted, JVCo's relationships with Japanese subsidiaries or affiliated suppliers differed from those with independent suppliers. For the former, at the strategic and global level, the Japanese supply culture played the dominant role; for the latter, at the same level, Japanese and Chinese supply cultures were both present; it appeared that adaptation was required at the strategic level for independent supply relationships. Based on interviews with senior managers of JVCo as well as the four selected independent suppliers (S5, S6, S8 and S10), we concluded that adaptation was required at the global level (between senior Japanese directors) for independent supply relationships. For example, the GM of S10 claimed in 2010 that:

"We attempted to expand our customer base to other Japanese automakers operating in China. We have provided samples to Toyota. This act (serving the existing customer's competitors) would be impossible in

Japan. Serving only one customer (JVCo) constrains our development in China. AutoCo acquiesced but doesn't encourage us to do so."

The S10 GM provided a good example of how both JVCo and S10 adapted. JVCo realised the importance of adaptation to Chinese culture and asked for expert advice from S10 on helping its Japanese suppliers. S10 responded proactively to JVCo's request, building a trusting relationship with them; for a pragmatic purpose. The GM continued, in 2010:

"Recently, we recommended JVCo using our products in their global plants. I personally visited their plants in Mexico and Turkey together with JVCo people last year and the plants in India and Pakistan this year. According to different situations, we would provide advice and justification that it is more cost effective to purchase some of the parts from Chinese suppliers supplying us. This could help rationalise the global supply network of JVCo. In China, we have specialised knowledge of Chinese supply base to serve JVCo."

This shows it was beneficial for both JVCo and S10 to adapt their Japanese practices to suit the Chinese environment in order to gain the advantages offered by the Chinese supply base at local operational level. The GM of S6 told us another story of local adaptation in 2007:

"We have established 13 companies in China and gained a much better understanding of Chinese consumers. Normally suppliers build their operations near JVCo but we intentionally keep a distance from them to prevent them intervening in us. We would like to keep our uniqueness and independence. We'll provide advice to JVCo according to our understanding of Chinese consumers e.g., shape and colour. We actively develop local Chinese suppliers and recommend the good ones to JVCo without affecting their quality requirements. Both JVCo and we are very happy with what we have been doing. Being close to AutoCo presents an obstacle to us in Japan in that our creativity and independent thinking can be influenced and constrained."

This shows S6 had adapted by keeping a distance from JVCo, the direct opposite of Japanese supply practice, whilst remaining close to Chinese consumers and suppliers. This practice also showed that JVCo and S6 had adapted in respect of two out of four cultural differences identified between Japanese and Chinese results: sentiment vs. pragmatism, and family orientation vs. group orientation. This sentiment characteristic is rooted in Japanese psychology, a state in which people ~~living~~ live in self-sustaining, whilst being in enclosed communities tending to interact frequently with, as well as depending on, each other and being loyal to the community or group in modern time companies. Keeping a distance from JVCo had a more of a pragmatic and individualistic purpose: understanding the Chinese consumers whilst gaining competitive advantage.

5. Discussion

5.1. Adaptation of Japanese supply management

At JVCo, the initial negotiation was carried out by Chinese staff between JVCo and all its suppliers i.e., no matter if it is a subsidiary, affiliated or independent supplier, meaning that JVCo had adapted to Chinese supply culture at local and operational level, which worked well. We can therefore propose that:

P1a. At an operational and national level, Chinese supply management practice (i.e., pragmatism, family orientation and Emphasis on social order) are enablers in Japanese supply relationships in China.

At the global and strategic levels, the Japanese director of JVCo took a global view on the relationships with its *keiretsu* suppliers' network (e.g., the subsidiary and affiliated suppliers), making decisions and finalising the deals. This shows that they had a shared context with first-tier suppliers and *keiretsu* supply practice remains at a global level. We can thus propose:

P1b. At a strategic and global level, Japanese supply management practice (i.e., sentiment, group orientation, consensus decision-making and Logic of tacitness and ambiguity) are enablers in Japanese subsidiary and affiliated supply relationships in China.

AutoCo adapted its *keiretsu* supply culture i.e., allowing S10, an independent supplier, to supply another *keiretsu* network and supply to its plants in other countries at a strategic level. S6, an independent supplier, kept a reasonable geographical distance from AutoCo global plants in China and Europe (S6 plant located in Brussels serving AutoCo UK plant) seeing the constraints of being close to AutoCo in Japan. We conclude and can therefore propose that:

P1c. At a strategic and global level, adaptation in supply management practice (i.e., suppliers supplying other Japanese automaker *keiretsu*, suppliers keeping a distance from automaker customers & suppliers educating automaker customers) are enablers in independent supply relationships.

Previous research has shown attempts by Japanese multinationals to introduce supply management practices in Europe (Mardas *et al.*, 1998: Belderbos and Sleuwaegen, 1998: Head and Ries, 2001) and North America (Abo, 1994), including cases where there were established and capable Western suppliers as alternative sources. Asanuma (1997) noted that supplier networks involving Japanese companies typically enabled high levels of coordination.

According to the Purchasing Director of JVCo and the GMs of S6 & S10, all three companies had adapted by creating new supply management practices, which were selectively adapted from, and rooted in, Chinese and Japanese cultures, while the adaptation had a positive impact on their relationships. This enables us to develop the following proposition based on Morgen's (2002) and Elger and Smith's (2005) concept of

hybridization:

P1d. Adaptation in supply management practice is a selective process of creating new management practices, including changes in existing, differing supply management practices, rooted in the Japanese and Chinese cultures, which may have an overall positive impact on supply relationships.

The adaptation was a response to two pressures: 1) the pressure of Chinese regulation on foreign automotive companies of gradually reducing importing from overseas and localising their supply; 2) increased competition in China, driving cost reduction meant that JVCo had to localise its supply base, develop Chinese suppliers and move Chinese nationals into key positions.

Our research shows that effective coordination of component procurement by Japanese buyers and suppliers requires not just supplier quality and delivery reliability but also adaptation between the vehicle assembler and its subsidiary and affiliated suppliers, rooted in history, culture, and social context. Japanese supply management practice indicates sharing of the four characteristics of the Japanese supply culture (*kanjou/sentiment*, consensus, group orientation and logic of tacitness and ambiguity).

However since the Chinese and Japanese people do not share a cultural context, applying context sharing in JVCo's supply relationships clearly resulted in cultural clashes. Summarizing the findings in the adaptation of Japanese supply management, we developed a model of Adaptation of Japanese supply management to the Chinese business system including the adaptation to the Chinese institutional environment, industry sector and cultural differences between China and Japan (Table 4). The models shows that the hybrid supply culture is a combination of Japanese and Chinese supply cultures and new supply management practice akin to that of a Western one (e.g., keep an arm's length relationship wherever appropriate). This is apparently a hybrid supply management culture with cultural elements of Japanese, Chinese and Western cultures empirically addressing Giannakis *et al.*'s (2012) call for research of such a model.

INSERT TABLE 4 ABOUT HERE

These discussions show that advantages from relationships built on context sharing can be enjoyed and disadvantages mitigated, by selectively combining the respective logics of Japanese, Chinese and even Western cultures in a Japanese-Chinese Buyer-Supplier relationship.

5.2. Factors influencing adaptation

We identified a number of organisational level factors affecting the adaptation of Japanese supply practice as perceived by the interviewees. Reflecting upon our propositions and the

timing of their occurrence and ordered the suppliers based on their level of cultural adaptation (low level on the top, see Table 5).

We have noted that the level of context-sharing differs between independent, affiliated and subsidiary suppliers. For example, GM of S4 (an affiliated supplier) commented that 100% of their production was supplied to AutoCo's operations in China. JVCo had required them to reduce cost to a certain degree annually but they couldn't achieve the targets. S4 asked JVCo to lower their requirements and was granted a lower target. They felt this would only happen with *keiretsu* members (subsidiary and affiliated suppliers) indicating that Japanese supply practice prevailed. Corroborating what S4 GM said, the Purchasing Director of JVCo stated that they would treat subsidiary, affiliated and independent suppliers differently; they would not normally promise independent suppliers anything and not compromise the cost reduction target as they did to subsidiary and affiliated suppliers.

It was observed however that the higher the percentage of AutoCo's equity in its suppliers, the less necessary it was for JVCo to adapt its Japanese supply management to the Chinese environment. For example, GM of S6 (an independent supplier) claimed as early as 2004 that more than 50% of their major customers were European automakers and that they had started supplying Hyundai; therefore they had already to adapt to the business cultures of non-Japanese firms. Meanwhile, 'Engine' and S1, were subsidiary suppliers of AutoCo that mainly supplied JVCo; who therefore had a greater level of context sharing with them. It appears that the level of equity of AutoCo in its suppliers is negatively linked to the level of adaptation between AutoCo and its suppliers. We can therefore propose that:

P2a. The lower the level of equity of a Japanese customer is in a supplier in China, the greater is the need for adaptation.

'Engine' was effectively part of JVCo (a JV between AutoCo and another Chinese automaker) and showed strong context sharing with JVCo. Meanwhile, S1, a supplier to Engine, was established earlier than JVCo, as a JV between AutoCo and the same Chinese auto group as JVCo; it showed stronger context sharing with JVCo than with Engine. Both are subsidiary suppliers.

INSERT TABLE 5 ABOUT HERE

The purchasing Director of JVCo reported that whether or not the supplier was Japanese wholly-owned was one of the most important factors, next to the equity relationship, in determining whether they applied Japanese supply management practices. We also observed that JVCo considered the Japanese wholly-owned suppliers as 'insiders' and felt more comfortable and worked more intimately with them.

The next three suppliers in Table 5 are all affiliated suppliers. S4 is shown as lower than the other two in its degree of adaptation as it is a Japanese ~~wholly~~-owned operation and had

less need to adapt internally. Also, while it had Chinese sales and procurement managers, they were not involved in the decision-making process. S2 and S3 are both JVs and had Chinese deputy directors (considered a member of the senior management team) in sales and procurement and started operations in China in 1995. S3 supplied 100% of production to JVCo. S2 supplied 70-80% to JVCo. However, S2 built a new plant in Shanghai in 2002 supplying Western automakers and AutoCo's Japanese competitor, which was not allowed in Japan. Hence, S2 seemed to deviate more from the Japanese supply practice than S3 i.e., the level of context sharing is higher for JVCo and S3 relationship. It appears that whether the supplier is a JV or Japanese ~~wholly~~-owned is a factor influencing adaptation; for subsidiary and affiliated suppliers, the more interdependent they are with JVCo, the more likely they share context. Hence, we propose that:

P2b: there is a greater need for adaptation for a Japanese JV than a Japanese ~~wholly~~-owned supply relationship; and

P2c: the more independent a subsidiary or affiliated supplier is on JVCo, the greater there is a need for adaptation.

Suppliers 5-10 are independent suppliers for JVCo. S5, a Japanese ~~wholly~~ owned supplier, supplied 100% to JVCo and was one of top three brands in brake systems in Japan. It was the most conservative among the six independent suppliers in terms of adapting to the Chinese environment shown in the fact that it had 10 Japanese directors or managers occupying all the key positions (e.g., sales, finance, HRM and procurement).

70% of S7's production was supplied to JVCo; S2, Engine and JVCo all bought 100% of their springs from S7. For S9, 80% of production was supplied to JVCo while JVCo bought all its crankshafts from S9. They are similar in terms of the diversity of customers they are supplying and power relationships. Since S9 is Japanese wholly-owned it is shown lower in adaptation than S7 in the table.

S6 and S8 are two suppliers with global reach and strong technology capabilities. S6 has 13 operations in China, many supplying Western automakers. S8 only supplied 20% of its production to JVCo, the lowest among the 11. JVCo and S8 were not dependent on each other and so the level of adaptation is lower than S6, despite being a wholly-owned Japanese supplier.

It seems that the level of inter-dependence has different effects on subsidiary and affiliated suppliers and independent suppliers. We propose:

P2d: the more interdependent an independent supplier is on JVCo, the greater the need is for adaptation.

The reason for S6 and S8 being placed higher than S7 and S9 in terms of adaptation is that S6 and S8 are suppliers with a global reach and both had integrated Western supply management practices into their own activities, departing from the Japanese way. There was less context sharing and thus a greater need for them to adapt to JVCo's supply culture and vice versa.

Therefore, we propose that:

P2e: the more globalised the supplier is, the greater the need is for adaptation.

S10 is an extreme case of adaptation. Japanese personnel were replaced by Chinese nationals completely in 2003. S10 supplied 90% of its production to S1. AutoCo offered to add their investment in S10 in Japan up to 40% (upper limit for independent suppliers) still treating it as an independent supplier but S10 declined because they did not want to be further leveraged by AutoCo without guaranteed demands (only suppliers with over 70% invested had such guarantees.) S10 started supplying Toyota and Nissan China in 2009 and planned to increase the proportion of production supplied to them. In this case, therefore, we propose:

P2f: the more senior the Chinese employees are in the management team and the more decision-making power they have, the greater the need is for adaptation.

Independent suppliers 5-9 were established in 2003 or 2004 with the exception of S6, built in 1999. S10, which has adapted to the greatest extent, was built earlier than all these suppliers, in 1995, suggesting that the length of time operating in China is a factor affecting adaptation. Therefore, we propose that:

P2g: the longer a supplier has been operating in China, the greater the level of its adaptation.

6. Conclusion and implications

We have identified from literature the four supply cultural differences between Japan and China, which caused the cultural clashes between JVCo and some of its suppliers. They are *Consensus vs. order obedience*, *Sentiment vs. pragmatism*, *Group orientation vs. family orientation* and *Logic of tacitness and ambiguity* (Table 1). We then examined how JVCo and suppliers adapted to each other against the four dimensions and factors affecting the adaptation. Our research questions were:

1. How do Japanese companies adapt their supply management practices within a Chinese cultural context to address these problems?

We developed a model of adaptation of Japanese supply management to the Chinese business system (Table 4) in the discussion section. Adaptation involves creating new supply management practices out of selective adaptation, innovation and change of existing Japanese and Chinese supply management practices rooted in different Japanese, Chinese and Western cultures. It can have an overall positive impact on Japanese supply relationships in China.

2. What determines the adaptation of Japanese supply management in China?

We have identified a number of organisational level factors affecting the degree of adaptation of Japanese supply management in a Chinese context shown in the set of

propositions (2a-2g). In answering the research questions we have explored the ways in which JVCo (as a critical and representative case of Japanese automakers in a Chinese cultural context) entered into China's automotive market and established its supply base in China as demand grew. We have elucidated the extent to which Japanese supply culture is implemented, studying the supply practice of JVCo.

We observed that JVCo set out to replicate its Japanese supply culture in China and how the application of Japanese supply culture, without adaptation, caused problems for the firm. These problems increased when competition from other Japanese and Western automakers became fiercer after 2004.

In an industry where supplier relationships play a pivotal part in corporate management of individual companies these problems may be crucial in the context of developing competitive advantage. It is widely recognised that competitive advantages associated with long-term inter-organisational relationships have enabled Japanese companies to display their strengths abroad, including sharing the context of their supply culture for many years. This research illustrates the importance of a variation of context sharing – linked to adaptation - in order for this to work in China, where the national cultures, while historically linked, exhibit some significant differences.

6.1. Implications for research

First, this paper answers the call for cross-cultural research in OM/SCM (e.g., Zhao *et al.*, 2006; 2008). However together with Jia and Rutherford (2010) and Jia and Lamming (2013), we argue that a superficial adoption of the Hofstede universal model doesn't suffice and call for research on national culture's influence on buyer-supplier relationship going beyond Hofstede's cultural index and taking consideration of detailed cultural differences in specific country contexts. For example, Hofstede's cultural index doesn't capture the detailed differences for collectivism/individualism and power distance between the Japan and China although both are considered collective cultures and having a high power distance. Both countries score similarly in long term orientation dimension.

Secondly, this paper addresses the adaptation of the buyer-supplier relationship in a Japanese-Chinese context, seldom researched albeit importantly in the English language literature. More specifically, the conceptual model (table 4) presented builds on and develops further Abo's (1988; 1994; 1995) and Brannen's (2004) by providing a detailed adaptation mechanism from a National Business System perspective. Our findings suggest that adaptation in supply management practice is a selective process of creating new supply management practices, including changes in existing, differing supply management practices, rooted in different national cultures, which may have an overall positive impact on supply relationships. Drawing from empirical data, we also made an initial attempt to identify the organisational factors affecting the level of adaptation, which could be tested in future

research using a different method e.g., survey.

This study may be the first to adopt a national business system perspective to investigating the transfer of Japanese supply management practice to China from both buyer's and supplier's perspectives. Furthermore, the hybrid supply management culture is a combination of elements of Japanese, Chinese and Western supply management cultures. The model answers the call for such a model by Giannakis *et al.* (2012) and for empirical research on Western firms' supplier relationship strategy in China by Salmi (2006). This contributes to the buyer-supplier relationship literature and specifically the adaptation and hybridisation theory by extending it to a Japanese-Chinese context and significantly enriching hybridisation theory with a detailed mechanism of blending elements of the three cultures (e.g., Japanese, Chinese and Western).

Third, methodologically, this single, longitudinal case provides rich information and interesting findings/stories on this topic and more importantly the dynamic process of adaptation was captured through long-term observation. The cross cultural research team (e.g., British, Japanese and Chinese) significantly reduced the bias induced by the single cultural team and increases the validity of the research result and removes the language barriers of learning from Chinese and Japanese literature on cultural studies. This is one of the strengths of this study.

6.2. Implications for practice

Practically, there are a number of managerial implications. Firstly, the important cultural differences between Japanese and Chinese cultures identified, which are implicit, less visible and now explicit, help Japanese, Chinese and Western managers to understand each other better, which is the very first step to adapt culturally. Since automotive supply chains are global, it is not uncommon to see western companies supply Japanese automakers and vice versa. Hence, there is a need for Western managers to understand the cultural differences while dealing with Japanese and Chinese firms and their JVs.

Secondly, the findings and the model of adaptation are specifically useful to Japanese and Chinese managers on how to mitigate the problems caused by cultural differences within supply relationships in China and provided some innovative ideas on how to blend the elements of three cultures (e.g., Japan, China and West) (Table 4). This is of course useful to Western managers working with Japanese and Chinese companies. For example, a Western company supplies to a Japanese company in China, it is helpful for them to understand the new hybrid culture and how they could proactively adapt and influence the Japanese company with Western supply culture where appropriate i.e., selectively and innovatively combining elements of Japanese, Chinese and Western supply cultures.

Thirdly, a number of organisational factors affecting the level of adaptation identified can help managers from Japanese automakers to better select and manage their supplier

relationships by choosing and developing those more likely to adapt. Japanese and Chinese managers can use these to accelerate or decelerate their adaptation accordingly. For example, it is recognized that appointing Chinese nationals to assume senior managers accelerate adaptation.

Fourthly, this can help Western managers understand how Japanese managers address the cultural problems and they could potentially learn from the Japanese experiences on how to adapt their supply management catering to the Chinese environment. In addition, this research also shows that in order to have the most effective supplier relationship management, it doesn't mean that one culture overwrites another but it is a proactive selection of the most effective elements from each culture developed by all the managers from members of supply chain involved, to whom this is a sense-making process to co-create the new hybrid culture. Sense-making refers to the ongoing retrospective development of plausible images that rationalize what people are doing (Weick *et al.*, 2005, 409).

6.3. Limitation and future research

The main limitation of the research is the use of a single case study, which arguably provided very rich data but suffers from the risk of misjudging an event and exaggerating easily available data (Voss *et al.*, 2002). However it does provide useful insights for Japanese, Chinese and Western professionals on how to manage supplier relationship effectively and reduce cultural clashes. This however naturally leads us to further research. Secondly, we only interviewed senior managers of JVCo and its supplier, subject to the 'elite bias' (Miles and Huberman, 1994). For future research, the adaptation model developed and the ranking of factors affecting adaptation can be tested in multiple cases and/or survey data. There are only organisational level factors affecting adaptation identified. Future research could discover institutional level factors. The adaptation model (tables 4) should not be considered the only way of hybridisation. Future studies could identify alternative ways of blending cultural elements of the three cultures with implications for supply management.

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Appendix 1: interview questions

1. Could you describe how AutoCo entered Chinese market and developed in China (evolution process)?
2. How has your supply base formed/evolved in China? (AutoCo & JVCo)
3. What's your supply policy and strategy here in China and how has it changed over time? (JVCo)
4. How do you work with your suppliers in China? (JVCo)
5. Have you faced with any cultural difficulties while dealing with the suppliers/customers in China? What are they? Can you provide some stories/examples?
6. What did you do to solve the problems caused by the cultural differences by making changes internally and externally? Can you provide some examples?

T3



	Chinese supply management culture	Japanese supply management culture
Power distance	Higher; Obey orders from supervisors or authorities; Emphasis on social order	Lower; company-wide consensus required.
Collectivism	Family orientation: families and pseudo-families only meaningful structure of Chinese society.	Group orientation: Group identity is more important than a family role.
Sentiment	Confucian pragmatism: prefer harmony in interpersonal relationships, and a suppression of emotion or instrumentally managed emotion	Sentiment or <i>kanjou</i> could overcome rational decisions.
	<i>Logic of tacitness and ambiguity</i>	

Table 1: Supply management cultural differences between Japan and China

	2004	2005	2006	2007	2008	2009	2010
Engine	√						
S1	√						
S2	√	√					
S3	√						
S4	√						
S5	√	√		√	√		√
S6	√	√		√	√	√	√
S7	√						
S8	√	√		√	√		√
S9	√						
S10	√				√	√	√
JVCo	√	√		√	√	√	√

Table 2. Companies interviewed between 2004 and 2010

	2007	2008	2009	2010
S5	Overseas business Director at HQ, Chief Finance Officer	Planning Director at HQ, CFO (Was GM China before 2007)	n/a	Board director at HQ
S6	GM China, Planning Director, Procurement Director	GM China Production Director Procurement Director	GM China Planning Director Procurement Director	Deputy GM China Planning Director HR Director Marketing Director
S8	GM China Planning Director, Procurement Director Branch GM and Production Director	GM China, Planning Director, Procurement Director	n/a	HR Director (responsible for both Japan and China)
S10	n/a	GM China	GM China Procurement Director	GM China, Deputy GM China Marketing Director

Table 3. List of interviews with S5, S6, S8 and S10 between 2007 and 2010

Adaptation to Chinese institution	Adaptation to industry sector	Adaptation to the cultural differences		
Under the pressure of Chinese regulation, JVCo had gradually reduced importing from Japan, invited its Japanese suppliers to build plants in China and increased sourcing from these suppliers operating in China.	Competition increased in China. JVCo started localising its supply base, developing Chinese suppliers and having Chinese nationals occupying key positions.	Operational and local level	Strategic and global level between Japanese directors	
		P1a: Chinese supply culture (e.g., Confucian pragmatism, family orientation & emphasis on social order) prevails	P1b: Japanese supply culture: (e.g., sentiment, group orientation, consensus & logic of tacitness) prevails in Subsidiary and affiliated supply relationships.	P1c: Behavioural adaptations (new supply practice) prevails in Independent supply relationships

Table 4. Adaptation of Japanese supply management to the Chinese business system

Developments between 1998 and 2010		
JVCo		First Chinese Marketing Director was appointed in 2005. GM was Japanese. Deputy GM was Chinese. Total 5 Japanese in JVCo. Middle managers were all Chinese. Procurement and production directors were Japanese.
Degree of cultural adaptation ↓	S1 (S/95/JV)	First Chinese sales and procurement managers appointed in 2002. Number of Chinese procurement staff increased significantly in 1999. Sales and procurement directors were Japanese. 90% of production was supplied to Engine. Showed strong context sharing with Engine.
	Engine (S/98/JV)	First Chinese deputy procurement director in 2003. First Chinese deputy sales director in 2006. Sales and procurement directors were Japanese. 95% of production supplied to JVCo; therefore showed strong context sharing with JVCo.
	S4 (A/95/ Japanese)	First Chinese deputy sales manager in 2004. First Chinese deputy procurement manager in 2006. First Chinese sales manager in 2007. First Chinese procurement manager in 2009 - but had no decision-making power. 85% of production was supplied to JVCo, the rest to AutoCo's other JVs with Chinese auto groups.
	S3 (A/95/JV)	Number of Chinese procurement personnel increased in 2003. First Chinese procurement manager and deputy sales director were appointed in 1998 but had no decision making power. 100% of production was supplied to S1.
	S2 (A/95/JV)	First Chinese deputy procurement manager appointed in 2002. First Chinese deputy sales manager and procurement manager in 2005. First Chinese deputy procurement and deputy sales directors appointed in 2007. Sales and procurement directors were Japanese. 70-80% production supplied to JVCo and rest to AutoCo's other JVs in China. S2 set up a new plant in Shanghai in 2002 supplying Western automakers and Nissan; entered China as early as 1995.
	Above: affiliated and subsidiary suppliers; below: independent suppliers	
	S5 (I/03/ Japanese)	First Chinese deputy procurement manager appointed in 2007. First Chinese sales manager in 2009. Procurement manager and directors were Japanese. 10 Japanese directing key positions. S5 is one of top three brake brands in Japan; strong in terms of its technology. 100% of production was supplied to JVCo.
	S9 (I/04/ Japanese)	First Chinese deputy managers appointed in 2008. Managers and directors were Japanese. 80% of production was supplied to S1; rest to VW, Suzuki in China and Toyota in Thailand. 100% of JVCo's crankshafts came from S9, who is strong in terms of its technology.
	S7 (I/03/JV)	First Chinese deputy sales manager appointed in 2006; first Chinese sales manager in 2008; first Chinese deputy sales director in 2010; first Chinese deputy procurement manager in 2010. Number of Chinese procurement personnel increased gradually. 70% of production was supplied to Engine; rest to Toyota, Nissan and Ford China and China 1 st automotive. JVCo procured 100% spring parts from S7.
	S8 (I/03/JV)	First Chinese middle manager appointed in 2008. 20% of production supplied to Engine; rest to Mercedes and Hyundai in China and local automakers. S8 is strong in terms of its technology; one of top three brands in the world supplying Western as well as Japanese automakers globally.
	S6 (I/99/ Japanese)	Middle managers have been Chinese since 2008. All directors have been Japanese. 70% of production supplied to JVCo: JVCo procured 100% air conditioners from S6. S6 has 13 operations in China and many globally supplying not only Japanese but Western automakers. Strong in terms of its technology.
	S10 (I/95/ Japanese)	Japanese GM and Procurement directors were replaced by Chinese in 2003. 90% of production was supplied to Engine. S10 showed the strongest re-contextualising. Started supplying Toyota and Nissan China in 2009 and planned to increase this as a proportion of sales.

Table 5. Degrees of cultural adaptation for JVCo's 11 suppliers