ARTICLE IN PRESS

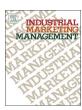
Industrial Marketing Management xxx (xxxx) xxx-xxx

FISEVIER

Contents lists available at ScienceDirect

Industrial Marketing Management

journal homepage: www.elsevier.com/locate/indmarman



Drivers of supplier-customer relationship profitability in China: Assessing International Joint Ventures versus State Owned Enterprises

Bonnie Dawson^{a,*}, Louise Young^{b,e}, John M. Murray^c, Ian Wilkinson^{d,e}

- ^a UNSW Sydney School of Business, Australia
- ^b Western Sydney University, Australia
- ^c School of Mathematics and Statistics, UNSW Sydney, Australia
- ^d University of Sydney, Australia
- ^e University of Southern Denmark, Denmark

ARTICLE INFO

Keywords: China International Joint Ventures State Owned Enterprises Business marketing relationships Supplier-customer relationship profitability

ABSTRACT

Business relationship performance depends on the context(s) in which the relationship is being conducted, including the cultural context and the nature of the organizations participating in them. Here, we examine the drivers of performance in Chinese supplier-customer relationships for two types of Chinese suppliers - International Joint Ventures (IJVs) and State Owned Enterprises (SOEs). The results indicate there are marked differences in the links between relationship drivers and perceived relationship profitability for these different types of suppliers. The profitability of SOEs' customer relations is associated with ongoing personal and hierarchical linkages, whereas for IJVs, it is associated with interactive product adaptation and production planning. Drivers with significant associations for both types of suppliers include relational quality and financial exchange factors. This research has implications for the ongoing management of international supplier-customer relationships, Chinese government policy with regard to SOEs as well as the inclusion of organization types as a consideration for business marketing relationship and value creation theory.

1. Introduction

A firm's performance and behaviour depends both on its own efforts, resources and skills and on those of other connected firms and networks (Anderson, Hakansson, & Johanson, 1994; Hakansson & Snehota, 1995). Managing business relationships effectively to improve performance is of increasing concern to executives (Gummesson, 2004; Richards & Jones, 2008; Sullivan, Peterson, & Krishnan, 2012; Wilkinson, 2010).

There is, however, some dissatisfaction with relationship management approaches and their associated measures of performance. These can confuse rather than facilitate practitioners managing relationships profitably. The results of a McKinsey Quarterly survey, for example, showed that < 10% of companies using a Customer Relationship Management (CRM) approach were satisfied with the results (Richards & Jones, 2008).

It is suggested here that some of the difficulties experienced by practitioners can be attributed to the inappropriate use of performance management tools. There is an expectation that one approach will 'fit all' business relationships regardless of the importance global and organization context plays in determining performance outcomes. The

research to date has exacerbated this. For example, investigations into the drivers of supplier-customer relational performance, in the main, have been carried out in Western countries and/or with Western informants and generally do not consider organizational structure and other characteristics that are likely to influence managerial culture and expectations.

The over-arching purpose of this research is to show that psychosocial drivers of supplier-customer relationship profit may vary depending on the nature (in this case the nature of the supplier's owners, managers and associated contextual focus) of the organization itself. This paper addresses the research question: do the drivers of relational profit associated with supplying a customer differ systematically for different kinds of supplier business organizations and in what ways? This question is addressed by first identifying the key drivers of profitability according to different relational management approaches. We focus on CRM, account portfolio analysis and value creation theory. The Industrial Marketing and Purchasing (IMP) model is used to compare and reconcile the drivers emerging from the three approaches. The associations between profitability and these relationship drivers' characteristics are then compared for Chinese International Joint Ventures' (IJV) and State Owned Enterprises' (SOE) customer relationships.

http://dx.doi.org/10.1016/j.indmarman.2017.06.009

Received 26 March 2013; Received in revised form 12 August 2016; Accepted 5 June 2017 0019-8501/ © 2017 Published by Elsevier Inc.

^{*} Corresponding author at: School of Business, UNSW Australia, Sydney, NSW 2052, Australia. E-mail address: b.dawson@unsw.edu.au (B. Dawson).

This multi-tiered comparative approach highlights reasons for the possible oversights of previous work. The past examination of relationship performance and profit management often over-emphasized the application of drivers focused on a particular approach rather than focusing on relational context. A focus on multiple perspectives, however, exposes the need for the rationalization of different approaches and their drivers because there are considerable differences in drivers, their conceptualized roles and assumptions about relationship context by perspective.

An examination of the association between the perceived profitability of IJV and SOE supplier-customer relationships in China and their characteristics is an important research area for several reasons. China is now the world's largest trading nation with imports and exports in 2012 in excess of US\$3.87 trillion (White, 2013). The continuing need for knowledge about relationship practices within China is reflected in a growing collection of related research; for a review see Zolkiewski, Khan, and Wilson (2013). And, profit continues to be a significant indicator and component of high performing supplier-customer relationships as it results from the effective exchange of products or services which underpins a supplier's income stream.

IJVs and SOEs are pervasive within the strictly regulated business environment of China. 'IJVs in China are a "growing and significant phenomenon that are of timely concern for managers" (Yao, Yang, Fisher, Ma, & Fang, 2013 p. 2) and account for up to 36% of China's foreign direct investment (Folta, 2005). SOEs dominate strategic industries (Economist, 2012). Moreover, as these are contrasting business organization types (with varied ownership, structural and cultural profiles), each is likely to manifest differing relational interaction characteristics. Therefore, comparison of these provides potential for considerable insights to emerge as to the way relationships function in different contexts and the way this functioning impacts on performance. This is consistent with institutional theory which suggests that organizational behaviour patterns are influenced by contextual factors which include the national regulatory environment as well as sociocultural norms and values (Du & Boateng, 2015).

This research uses a substantial international database of business relations collected as part of the Industrial Marketing and Purchasing IMP2 project. Within it are many different types of global business relations including some with Chinese IJVs and SOEs as relationship partners. To our knowledge, this is the only available data which both identifies Chinese IJV and SOE supplier organization types and includes their perceptions of customer relationship characteristics and relational performance in terms of profit. The IMP2 questionnaire used to collect this data is comprehensive and includes multiple items that represent the relationship drivers of interest as well as profit outcomes (Wiley, Wilkinson, & Young, 2006). More details of this database are given below.

This research establishes new insights into which relational drivers are and are not associated with the perceived profitability of particular types of relationships. The review of three approaches to optimizing relational performance shows that each contains only a limited set of relational drivers. A richer and more meaningful profile of relational differences is revealed if a more extended set of drivers is examined, particularly if there is also greater consideration of the organization characteristics and cultural context which can drive relational performance and interaction.

The remainder of the paper is organized as follows. In Section 2, existing theories of business marketing relationship management are presented with particular emphasis given to the IMP perspective. The focus then turns to theories that are particularly related to relationship performance. On the basis of their commonalities, a framework is proposed that integrates these various theoretical perspectives. Emerging from this, in Section 3, a number of hypotheses are presented about how the different types of drivers of relationships are associated with their profitability. In Sections 4 and 5, the methodology used to gather the data is described, followed by the research findings. The

paper concludes with a discussion of the research findings, their implications and directions for further research.

2. Drivers of supplier-customer relationship performance

Managers want to know that the investment required to sustain productive business relationships does not exceed returns (Ford et al., 1996 in Iacobucci, 1996), i.e. does 'relationship marketing pay?' (Gummesson, 2004 p. 136). Many factors associated with successful and profitable supplier-customer business relationships have been identified through practice-based approaches, including customer relationship management (CRM), account portfolio analysis and value cocreation (Gök, 2009; Gummesson, 2004; Prahalad & Ramaswamy, 2004; Richards & Jones, 2008; Sullivan et al., 2012; Wilkinson & Yeoh, 2005; Zolkiewski & Turnbull, 2000). These approaches identify different drivers that are difficult to directly compare as they are informed by different theoretical perspectives. However they can be somewhat reconciled through the common framework of the Industrial Marketing and Purchasing (IMP) model, thus enabling a systematic analysis of relational management.

A central premise of industrial relationship management is that the effective functioning of relationships is critical to success in ongoing business ventures (Ford, 1980; Hakansson, 1982; Moller & David, 1995). Benefits result from relationship partners exchanging and creating information and resources to improve market offerings and to reduce costs (Hakansson, 1982; Walter, Ritter, & Gemunden, 2001; Wilkinson, 2010). For example, the exchange of technology and skills related to production processes can improve supplier offerings, boost innovation and increase customer sales and profits (Chesbrough, 2006; Wilkinson, 2010); the joint use of facilities and linked administrative systems can reduce transaction costs (Hakansson, 1982); through relationship partners, firms gain access to information and ideas they would not otherwise get (Walter et al., 2001; Wilkinson, 2010); and benefits accrue from synergies that evolve over time, transcending what either firm can achieve alone (Snehota & Hakansson, 1995).

The IMP interaction model of business relations provides a useful theoretical framework for rationalizing relationship performance approaches because it captures important paradigmatic dynamics rather than the minutiae of organizational interplay (Hakansson, 1982). Interactions take place over time among the actors involved in a business relation, which result in the formation of actor bonds and a relationship atmosphere, as well as activity links, resource ties and schema couplings (Snehota & Hakansson, 1995; Welch & Wilkinson, 2002). These episodes of interaction take place in the context of other connected relations, the history of past interactions, as well as a social-cultural, market and economic environments. Over time these processes and the context in which they occur evolve based on the experience and outcomes of the interactions taking place, affecting relational performance. A particular focus is on the nature of the relationship atmosphere that develops, which refers to the various types of perceptions and attitudes the actors develop toward each other, including power/dependence, trust, satisfaction, understanding, commitment and conflict. The IMP framework is consistent with other, more focused models of buyer seller relations proposed in the literature, which emphasize some of the same dimensions, especially power, conflict, trust and commitment (Anderson & Narus, 1990; Morgan & Hunt, 1994; Wilson, 1995) and their development over time (Dwyer, Schurr, & Oh, 1987).

Measuring the costs and benefits of business relationships is not easy because of complex interdependencies among different types of costs, the different time scales involved and the intangible nature of many cost drivers (Snehota & Hakansson, 1995). Costs and benefits emerge at different times making them difficult to track (Gummesson, 2004; Snehota & Hakansson, 1995). This is so even when objective measures are used, such as the number of individuals involved, the tasks performed, levels of hierarchy and the time involved (Turnbull, Ford, & Cunningham, 1996 p. 54). There are also difficulties in

measuring "soft" drivers, including a seller's intangible and creative contributions to the development of marketable technical solutions (Ford, Gadde, Hakansson, & Snehota, 2011) and the role played by psychosocial dimensions of actor bonds such as commitment, trust and cooperativeness (Styles & Hersch, 2005). Lastly, the financial benefits of enhanced relationship development efforts, such as more cooperative behaviour, trust cultivation, the foregoing of opportunism and, more generally, improved atmosphere may not emerge in the short run but rather accrue through longer term payoffs.

Previous research has suggested some of the drivers and inhibitors of relationship performance vary in different cultural contexts. For example, the cultural and psychic distances between relationship partners and the people involved is likely to affect the degree of uncertainty and kinds of activities required, which in turn can impact on internal relationship costs and benefits such as communication expenses and problems resulting from differences in the perceptions of each other's products and services (Hallen & Wiedersheim-Paul, 1979; Hofstede & Hofstede, 2005; Shenkar, 2001).

Despite the difficulties in assessing relational performance, attempts have been made to address practical managerial concerns with identifying the impact of supplier-customer relationship inputs on performance outcomes. These commonly-used approaches to assessing supplier-customer relationship performance are summarized in the Appendix Table A.1. Research based on a CRM perspective suggests that it is the supplier's management of the marketing mix in business markets that can improve relational performance including: customized products and services, improved pricing and individual marketing messages (Richards & Jones, 2008) as well as more interaction-related factors such as mutual learning (Gummesson, 2004). The number and scope of factors included in the practical application of CRM can be overwhelming, with one company reporting a list of 111 primary and 55 secondary relational indicators. As Gummesson (2004) observes, '[this] should scare off any executive as being too complicated and too costly to report let alone act on' (p. 142).

The portfolio approach suggests that success is derived from the supplier's strategic management of clearly defined segments of customers (Gök, 2009). Multiple factors are again used to categorize customer segments including supplier value chain inputs such as production, distribution, sales and service (Turnbull & Zolkiewski, 1997), customer market share variables and 'soft' relational characteristics such as friendship and trust (Gök, 2009). However, it is difficult to assess how the various factors relate to each other and are associated with performance outcomes for particular supplier-customer relationships.

Value creation theory emphasizes the management of individual-level interaction between both supplier and customer to solve problems and co-create value (Sullivan et al., 2012; Walter et al., 2001) 'The value is created by frequent interaction between people on various levels in the alliance partner firms' (Hakansson & Sharma, 1996 p. 122). Value creation drivers include: trust, commitment, innovation, and marketing-related functions (Walter et al., 2001), as well as cooperative strategic objectives and production planning (Sullivan et al., 2012). Both direct and indirect effects of interactions on value creation have been identified. Direct effects include revenue, reduced costs and reliable supply, while indirect or network effects include market information and technology (Walter, Muller, Helfert, & Ritter, 2003; Walter et al., 2001).

Various dimensions of relationship performance are included in these approaches such as management satisfaction, achievement of objectives, duration, market share as well as financial indicators such as sales, profit and turnover (Sullivan et al., 2012; Turnbull et al., 1996; Wilkinson & Yeoh, 2005). In the research reported here we focus on relationship profitability as an outcome. Profit can provide a means of encapsulating a broad range of costs and revenues (e.g. costs to serve) involved in managing a relationship over time and thus is a relational performance outcome which enables an objective means of comparison

(Wilkinson & Yeoh, 2005).

These three approaches to relationship performance assessment are not directly comparable because their underlying assumptions differ and as a result they identify different dimensions of performance outcomes and relational inputs as key. Nor has the impact of cross-cultural factors been considered to any great degree in this work. However, considering these multiple approaches together highlights a (larger) range of likely performance drivers; these can be theoretically grouped to guide analysis and meaningful presentation of results for a particular research context. Here, this is the highlighting the role and importance of different types of drivers of relationship profitability for two types of Chinese suppliers (IJVs and SOEs) and their international business customers.

Comparison of approach enables the primacy of some drivers to be emphasized. These common factors suggest central priorities for supplier-customer relationship performance success. These include: criteria for selecting and ending relationships, joint planning and production processes as well as product quality, innovation/adaptation based on need and resources. Also consistently presented as important are expert staff (e.g. managers, sales people) able to negotiate/communicate mutually beneficial exchange propositions which create revenue streams in an atmosphere of trust, commitment and friendship. Customer-related drivers of success important to supplier selection consistently include: the quantity and growth rate of goods/services purchased, export links (market access), information sharing (the scout function) and cost to serve.

The IMP model enables the commonalities in different approaches to be conceptualized within a robust theoretical paradigm. At the center of each approach are common processes and interconnections. Each of our focal approaches highlights the centrality of the linking of activities, connections between relational participants (actor bonds and relations atmosphere), and resource ties (Hakansson, 1982; Hakansson & Snehota, 1995) with interconnected ideas (schema couplings) (Welch & Wilkinson, 2002) infused throughout. Also included in each are contextual and historical elements such as the competitive situation in which the relationship is operating and continuing norms of commitment and trust (Walter et al., 2001, 2003).

As already noted, the broader social-cultural environment of China and the more specific local environment, including the types of firms involved, are likely to influence business relationship dynamics and outcomes. This is consistent with institutional theory which suggests that organizational behaviour patterns are influenced by contextual factors including the national regulatory environment as well as sociocultural norms and values (Du & Boateng, 2015). The major types of business organizations sanctioned in China include: State owned enterprises (SOEs), local government owned semi-privatized collective owned enterprises and privately owned firms (Park, Li, & Tse, 2006) that operate alongside foreign firms and IJVs. Previous work has considered performance outcomes for particular types of firms in China (Park et al., 2006) but has not compared the patterns of supplier-customer relationship performance drivers for different types of organizations.

As already noted, our focus is on IJVs and SOEs, which have different ownership, cultural and management characteristics that are likely to have a strong impact on business relationship interaction. IJVs refer to new firms established by existing firms from different countries. Chinese IJVs are characterized by: cross-cultural strategic management (Robson, Leonidou, & Katsikeas, 2002), advanced technology (Child & Yan, 2003; Li, Lam, & Qian, 2001; Osland & Cavusgil, 1996; Yang & Lee, 2002) and international business relationship skills and links (Child & Yan, 2003; Robson et al., 2002). SOEs dominate in protected industries in China and are owned by the Chinese government. They have relatively homogeneous Chinese cultural values which have been characterized as having a lack of: market orientation (Park et al., 2006), innovativeness (Park & Luo, 2001) and advanced technology (Economist, 2012). In the next section we develop hypotheses regarding

the effect of different types of drivers of relationship profitability for two types of Chinese suppliers, SOEs and IJVs.

3. Drivers of supplier-customer-relationship profit

The following section joins together the theories of business relationship management, drivers of profitability and the cultural and organization theories that consider Chinese relationships and the focal organization types. Areas of commonality identified in the previous section are considered in turn.

Common to the three relationship management approaches is acceptance that joint coordination and planning enables effective exploitation of shared resources which in turn contribute to profits (Ford et al. in Iacobucci, 1996). This requires cooperative relationship-oriented management and planning with common goals, coordinated production planning and joint product development to achieve success (Axelsson, 1995; Hakansson, 1982; Wilson, 1995). IJVs and SOEs are likely to have different orientations toward the joint coordination of strategic planning and product development with customers as means to achieving greater profits. This is because Chinese SOEs are constrained by government control of planning and operations which can reduce incentives for new product or market development as well as profits (Park et al., 2006). This will reduce the opportunity for customers to engage in shared planning, impacting negatively on relational profit and performance. In contrast, the sharing of power within LJVs can help enhance cooperative management and planning (Robson et al., 2002), which can be transferred to the management of long term customer relationships and improved relationship profitability. IJVs are likely to make a range of connected relationships available to the business partnership with resulting enhanced relationship management skills such as shared decision making (Child & Yan, 2003). We therefore expect IJVs are more likely to be actively engaged in shared planning activities which enable improved relational performance. This results in the following hypothesis.

H1. Coordinated goals, and customer involvement in supplier production and product development are positively associated with profit in IJV supplier-customer relationships but not those of SOEs.

Communication with customers about their requirements, especially with regard to technologically sophisticated quality control processes and product adaptation is also common to the three approaches. All consider this as playing an important role in driving relationship performance and satisfaction. Effective communication channels are also required for successful cooperation, joint planning and organizational learning. IJVs tend to have higher levels of technological expertise which will be reflected in the sophistication of their quality control processes and their ability to adapt high technology products to address business customers' requirements. Furthermore, access to technological product and process expertise has been shown to be a major incentive for Chinese partners to form IJVs (Child & Yan, 2003; Hout & Ghemawat, 2010; Yang & Lee, 2002). SOEs tend be at a technological disadvantage relative to IJVs (Economist, 2012) which impacts on customer relationship success. In addition, cultural distance impacts on the effectiveness of communication processes. IJVs can draw on the communication skills and experience of their foreign partners to develop more effective communication with international customers, whereas this is more problematic for purely Chinese operated SOEs. This leads to the following hypothesis:

H2. Compared to SOEs, IJV supplier-customer relationships have a stronger positive association between relationship profitability and (a) technological sophistication, including quality control, adaptation and (b) effective communication processes.

Boundary personnel and others involved in inter-firm interactions are generally seen as playing a key role in the development of inter-firm relations and their profitability (Hakansson, 1982). It costs time and

resources to visit customers, answer their questions, learn about and keep up to date with their problems (Ford et al., 2011). The nature of these interactions (e.g. the social or personal dimensions within supplier-customer relationships) also impacts on relational quality and performance (Hakansson, 1982). The costs and effectiveness of these interactions and ultimately the profitability of the relation depend on the ease of communication among the parties involved. This in turn is affected by the characteristics of the personnel involved including the cultural distance between them, mutual understanding and communication skills. Schema couplings (Welch & Wilkinson, 2002) are reflected in the common understandings of relations partners and so we have chosen to discuss these in this subsection. However, they also play a more general role as this is a cognitive dimension that underlies the actions of the actors and how they perceive and respond to each other. This can reflect a common understanding, complementary schema or incompatible schema that leads to conflict.

IJVs are likely to have more internationalized staff who are able to identify and work effectively with a greater diversity of cross-cultural customer relationships. SOE staff are more likely to be culturally homogenous and reflect Chinese values. In particular, the importance of power-distance in Chinese culture, (Hofstede & Hofstede, 2005) will tend to result in staff from high level positions being involved in supplier-customer interactions, which can result in additional costs. Chinese business culture places more emphasis on personal relations, such that the distinction between business and friendship relationships is likely to become blurred in SOEs compared to IJVs (Pye, 1992). This greater personalization of business relationships can affect relationship performance and profitability because of its effects on partner selection, such as contracts being awarded based more upon friendship ties than purely economic criteria (Millington, Eberhardt, & Wilkinson, 2005). This leads to the following hypothesis:

H3a. The development of personal relations between supplier and customers will play a more important role for SOEs than IJVs in driving relationship profitability.

In addition, the technical qualifications of staff involved in the relationship are likely to be higher in IJVs because they have greater access to high level training and shared staff resources. Furthermore, status (hierarchical) based appointments are more likely in SOEs than IJVs because of cultural values (Westwood & Posner, 1997). This leads to the following hypotheses:

H3b. Senior staff involvement in relations is likely to be more strongly associated with profitability in SOE than IJV relations.

H3c. The association between the technical capability of contact staff and profitability will be stronger in IJV than SOE relationships.

The dimensions of relationship atmosphere that develop between firms over time, including power-dependence, trust, commitment, understanding, cooperation, have been linked to relationship profitability in previous research and play a central in the IMP interaction model et al., 2011; Holm, Eriksson, & Johanson, (Ford Wilkinson & Yeoh, 2005; Wilson, 1995). While a different vocabulary is used by the proponents of the three relationship management approaches we consider here, the development of a strong, cooperative supplier-customer relationship atmosphere, embodying high levels of trust and commitment, is likely to be influenced by the cultural and psychic distance between the personnel and firms involved. Greater distance can lead to more conflict, miscommunication and costs in a relationship, thereby reducing performance and profitability (Johanson & Vahlne, 1990; O'Grady & Lane, 1996). The multi-cultural nature of IJVs can serve to reduce cultural and psychic distance because, as previously argued, of their greater experience in managing diversity in relationships and their greater affinity and understanding of international customers. These arguments lead to the following hypotheses:

H4a. Commitment, trust and cooperation are positively associated with profitability for both SOEs and IJVs.

H4b. Conflict will be negatively associated with the performance of SOEs but will not impact on IJV performance.

The last type of drivers considered relate to the environment in which supplier-customer relations operate. The different relationship management approaches we are considering recognize that there are fewer conflicts and it is easier to communicate and coordinate actions in a profitable way when things are going well, i.e. sales and profits are growing and future prospects look good. On the other hand, if the relation is suffering due to downturns in demand and sales or because of changes in competition relationship management is much more difficult. The effect of these conditions is likely to be the same for IJVs and SOEs. Hence we hypothesize:

H5. The better the growth prospects for a relation the greater relationship profitability for both SOEs and IJVs.

4. Methodology

The data used here comes from the IMP2 international supplier-customer database (www.impgroup.org). The IMP2 data, including the Chinese component, has been collected over an extended period of time, commencing over 25 years ago. This data continues to provide value to business marketing scholars generally and in relation to this project for a number of reasons. First, the associated standardized questionnaire and methodology used for data collection have proven to be effective throughout extensive testing for this extended period (via interviews and analysis) in a number of different countries including Sweden, Germany, the Philippines, India and China (Sharma, Young, & Wilkinson, 2015; Wiley et al., 2006).

Second, the IMP2 questionnaire measures many different properties of supplier-customer relationships (Wolcott in Wilkinson & Young, 1994) including those relevant to our research question and is therefore very well suited to the needs of this study. Third, the Chinese supplier data is unique as it was collected for several different organization types including both IJVs and SOEs which are the focus of this study. This kind of data is very difficult and costly to collect. The Chinese component of the IMP2 data base is the best and indeed the only data currently available for this kind of analysis.

We would further argue that its age does not substantially diminish its value for the purposes of this research. As the primary aim of the paper is to both develop and apply/test theoretical propositions using relational data, the age of the data is largely irrelevant to the validity and generalizability of the research findings as the relationships between social and psychological drivers are largely invariant (Calder, Phillips, & Tybout, 1981, 1982, 1983). Ultimately, 'it is the theoretical explanation that is expected to be generalizable and not the particular effects obtained' (Calder et al., 1981 p. 1). Here, the explanations sought are theoretical.

The sample of Chinese suppliers, as noted, crucially includes both LJVs and SOEs chosen randomly in order to ensure reliability. First, a random sample of approximately 200 firms was selected by the Chinese Bureau of Statistics from the third industrial census and the first national basic business census data. The firms included Sino-foreign joint ventures, large-sized industrial enterprises, and import/export firms. A stratified sampling design was used in order to ensure the sample included different regions of China, i.e. Northern (Beijing as the center), Eastern (Shanghai as the center), Southern (Guangdong as the center) and Middle Western (Sichuan and Chongqing as centers). Officials from the Chinese Bureau of Statistics contacted firms by phone to determine their willingness to participate in the study. A target sample size of 100 firms was reached with a response rate of approximately 16%. The final sample comprises a range of ownership types including: IJVs (35%), SOEs (50%), private Chinese firms (4%), and foreign owned firms (3%),

with 8% of the organization types unknown. Suppliers were screened to ensure their business involved substantial industrial product exchange with a customer in another country.

The research reported here focuses on the 50 SOEs and 35 IJVs included in the sample. The respondents were asked to answer questions with reference to an important international business customer. The international customers were made up of Asian (49%), Western (37%), and South American (6%) companies. The regional locations of eight customers were not identified. The products involved were similar for IJVs and SOEs except for IJVs having a greater percentage of component suppliers. For IJVs the composition is raw material 23%, semi-finished 40%, component 34%, minor equipment 3%, heavy equipment 0%. For SOEs it is raw materials 30%, semi-finished 40%, component 14%, minor equipment 8% and heavy equipment 2%.

The IMP2 questionnaire used to collect the data was translated into Chinese and back-translated in order to ensure the quality of the translation. All informants and interviewers were Chinese speakers. A single item measure of relationship profitability was used which focused on the respondent's perception of the profitability of the relation over the last 5 years, considering all associated costs and revenues, on a scale of 1= very bad to 5= very good. Responses are clustered at the higher end of the scale, which is not surprising as one would expect important customer relationships that have survived for at least 5 years to be profitable. The distributions of profitability ratings are similar for IJVs and SOEs. For the 35 IJVs, 6% were rated very good, 71% as rather good, 20% as breaking even and 3% as rather bad. For the 50 SOEs, 6% were rated very good, 70% rather good, 18% breaking even, 4% rather bad and 2% very bad.

Single item measures using 5 point scales from 1 = strongly disagree to 5 = strongly agree are used to measure most of the explanatory variables in the hypotheses. Where other response scales are used they are indicated. Single item measures are used throughout. While multi-item measures are more commonly used in contemporary research in marketing, they have been criticized as potentially adding spurious accuracy because they may merely reflect different ways of wording the same basic item, which in turn leads to sets of highly intercorrelated items and high alpha measures (Bergkvist & Rossiter, 2007).

5. Results

Table 1 shows correlations between relationship profitability and measures of customer involvement, adaptation and communication. Significant correlations exist for all measures of customer involvement and adaptation for IJVs but not SOEs, which provides support for H1. In addition, for IJVs only, relationship profitability is significantly associated with two measures of the nature of communication in the relation - 'ease of communication of technical and commercial information' and 'learning about customer product use'. This provides support for H2. The third measure of communication, 'customers providing detailed specifications', is significantly correlated with relation profitability for both SOEs and IJVs, which indicates that understanding the customer's requirements is fundamental to any customer relation. Combined, these results show how ongoing involvement and communication with customers results in productive adaptations of products and processes. But this only applies to IJVs, probably because of the constraints placed on SOEs by government influence and rules.

Table 2 shows the correlations between relationship profitability and measures of the degree of personalization of the relation and the involvement of top management. This shows that (only) for SOEs the creation of personal and friendly relations is significantly correlated with profitability, as is the involvement of top management. These results support H3a and H3b. The involvement of higher level technical people is significantly related to profitability for IJVs but not for SOEs, which underscores the greater role of technology in IJVs and is consistent with other results. The result supports H3c.

Table 3 shows the correlations between relationship profitability

 Table 1

 Customer involvement, adaptation, communication and profitability.

Item	IJVs r (n; m)	SOEs r (n; m)
Customer involvement		
Customer suggests coordinated production plans	0.38* (33; 3.36)	0.14 (48; 2.85)
Customer interested in joint product development	0.59** (34; 3.71)	0.09 (49; 3.39)
Adaptation		
a) Changes [already] made by supplier re: quality control	0.49** (21; 2.19)	- 0.06 (37; 2.03)
b) Supplier [ready] to make changes to quality control to meet customer requirements	0.44** (34; 4.32)	0.11 (45; 3.69)
c) Supplier changes satisfy supplier or customer requirements	0.37* (34; 3.50)	- 0.17 (50; 3.64)
Communication		
a) Customer provides detailed product specs	0.37* (35; 3.66)	0.40** (48; 3.65)
b) Technical & commercial information easy to get from customer	0.41* (34; 3.32)	- 0.02 (50; 3.26)
c) Supplier interest in learning about customer product use	0.41* (33; 3.58)	- 0.04 (49; 3.76)

n = number of respondents; m = mean.

 Table 2

 Personalization, top management involvement and profitability.

Item	IJV r (n; m)	SOE r (n; m)
Personalization of relation		
Supplier establish personal relationships with buyer	0.14 (35; 3.51)	0.29* (49; 3.51)
b) Making friends with purchasers and	- 0.22 (34;	- 0.35° (47;
technicians is difficult	2.38)	2.23)
Top management involvement		
a) Most important (re: hierarchical position)	0.14 (33;	0.35* (49; 4.15)
supplier staff involvement	4.28)	
b) Highest technical supplier staff	0.42* (30;	- 0.09 (47;
involvement	3.87)	3.74)

n = number; m = mean.

Table 3Relationship atmosphere and profitability.

Item	IJV r (n; m)	SOE r (n; m)
Conflict		_
a) Culture differences cause crisis	- 0.01 (33;	0.31* (48; 2.5)
	2.09)	
b) Supplier/customer goal compatibility	0.25 (45;	0.44** (49; 3.8)
N	3.8)	0.000 (50.05)
c) Ease of handling relationship issues	0.50** (34; 3.8)	0.29* (50; 3.7)
d) Supplier has difficulty understanding	- 0.01 (35;	- 0.31* (49;
customer behaviour & thinking	2.51)	2.29)
Cooperation		
a) Customer cooperates before short term profit	0.40* (35;	0.11 (48; 3.98)
a) customer cooperates serore short term pront	3.97)	0.11 (10, 0.50)
b) Supplier cooperates closely with customer	0.43* (35;	0.30* (50;
	3.97)	3.84)
Trust		
Supplier trusts customer completely	0.47** (35;	0.30* (49;
11 ,	3.34)	3.49)
Commitment		
Supplier is committed to customer	0.41* (34;	0.11 (49; 2.98)
T. E. E. C.	4.26)	(, =,
Unlikely customer will stop purchases in near	0.18 (34;	- 0.37* (50;
future	4.0)	3.84)

n = number; m = mean.

and various measures of relationship atmosphere. The pattern of results suggest, as hypothesized, that the better the quality of the relationship atmosphere, including lower conflict and more cooperation, trust and commitment, the greater is relationship profitability. This applies to both IJVs and SOEs, which is consistent with H4a. However there are some differences and exceptions that require comment. The measures of conflict are not correlated with profitability in the case of IJVs, which is consistent with H4b, except for ease of handling the relationship. The strong correlation of this with relationship profitability in the case of IJVs suggests they are more effective in managing conflict and this may explain why the other measures of conflict for IJVs are not significantly correlated with relationship profitability.

For SOEs the results are quite different. Conflict is associated with lower profitability, perhaps because SOEs are less skilled in conflict management with foreign counterparts. The exception is the measure of culture-based conflict, which is greater in more profitable relations - the opposite of H4b. This could be due to the potentially constructive role conflict can play, i.e. "productive friction" (Hagel & Brown, 2005). Cultural conflict resulting from SOE interactions with foreign customers can help them to learn more about and adapt to foreign business cultures, even though this may cause the occasional crisis. Complementary cultural differences, such as those associated with management and R & D experience, can positively affect customer-related new product development and innovation (Morosini, Shane, & Singh, 1998), which are integral to supplier-customer relationship performance. The result is also in line with the literature of conflict resolution, which indicates that the process of resolution can have powerful and positive effects on relationships (Deutch, 1994).

With regard to other dimensions of relationship atmosphere, cooperation is associated with greater profitability, except for customer cooperation in SOEs. This could reflect the kinds of customers SOEs tend to attract, for whom the focus is more on short term cost savings, leaving little room for effective cooperation. Or, it could reflect the constraints imposed on SOEs by government and bureaucracy which affects their responses to customers. Trust, as expected, is directly linked to relationship profitability. Supplier commitment is associated with higher profitability for IJVs but not with the likelihood of the customer repurchasing. This item may reflect the existence of "locked in" relations, or forced commitment, where there are no suitable alternatives, rather than a potential relationship profitability driver. For SOEs the significant negative correlation between profitability and likelihood of repurchase suggests the burden of some customer relations (Hakansson & Snehota, 1998) that the SOE may be required to supply by the government and who are not attractive partners for other suppliers.

Table 4 shows the correlations between various measures of relationship context, including the historical context, dynamics, volume and expected future relations. The greater the sales volume the lower the profitability of customer relations for SOEs, which again suggests

^{*} Significant at .05.

^{**} Significant at .01.

^{**} Significant at .01.

^{*} Significant at .05.

^{*} Significant at .05.

^{**} Significant at .01.

Table 4Firm characteristics and relationship profitability.

Item	IJV r (n; m)	SOE r (n; m)
Sales to Customer in RMB Profitability for customer's firm over last 5 years	0.05 (23; ¥9m) 0.62** (33; 3.97)	- 0.41** (41; ¥5m) 0.57** (49; 4.04)
Sales trend last 5 years Sales expectation next 5 years Stable sales pattern	- 0.31 (35; 2.2) - 0.21 (35; 1.71) - 0.40° (33; 2.45)	- 0.35* (50; 2.2) - 0.37* (48; 1.96) - 0.17 (50; 2.52)

n = number; m = mean.

the type of customers these firms are required to deal with and that they may compete more on price, reducing profitability. As expected, customer profitability in the relation is strongly correlated with supplier profitability for both SOEs and IJVs. Increasing sales levels is linked to greater profit, as are future growth expectations for SOEs. Sales volatility is significantly linked to lack of profitability for IJVs, which may reflect their greater technological focus and commitment and the associated vulnerability to sudden variations in sales.

Multiple regression was used to examine the degree to which the various drivers explain relationship profitability. Due to the large number of items compared to the sample size, we used stepwise regression where variables entered the model based on an F test, and including only the significant variables indicated in the correlation analysis. First, we estimated the best model for LJVs and SOEs separately. The results are shown in Table 5. For LJVs, "Profitability for customer's firm over last 5 years", "Customer interested in joint product development ", and "Supplier Trusts Customer Completely" were the variables in the best model, as might be expected from the high significance each of these components achieved in the bivariate analyses. For SOEs, "Making friends with purchasers and technicians is difficult", "Supplier Trusts Customer Completely", "Sales to Customer in

Table 5
Best predictors of profit for LJV, SOE and both organization types.

Independent variables	Standardized beta coefficients	Significance
Best IJV model of profit $(R^2 = 0.81)$		
Constant		0.159
Customer interested in joint product development	0.438	0.002
Profitability for customer's firm over last 5 years	0.601	< 0.001
Supplier trusts customer completely	0.323	0.018
Best SOE model of profit $(R^2 = 0.75)$		
Constant		< 0.001
Sales trend last 5 years (1 rapid increase to 5 rapid decrease	- 0.293	0.012
Making friends with purchasers and technicians is difficult	- 0.392	< 0.001
Supplier trusts customer completely	0.348	0.001
Sales to Customer in RMB	-0.361	0.002
Profitability for customer's firm over last 5 years	0.279	0.011
Best combined model including organization	type $(R^2 = 0.69)$	
Constant		< 0.001
Making friends with purchasers and technicians is difficult	- 0.405	< 0.001
Stable sales pattern (1 stable to 5 volatile)	- 0.271	0.013
Sales expectation next 5 years (1 rapid increase to 5 rapid decrease)	- 0.227	0.029
Profitability for customer's firm over last 5 years	0.285	0.003
Supplier trusts customer completely	0.271	0.010
Sales to Customer in RMB	- 0.238	0.018

RMB", "Profitability for customer's firm over last 5 years", and "Sales trend last 5 years" (ranked in terms of their significance), make up the best model.

Next we estimated a model for the total sample, which included a dichotomous variable for the type of supplier firm. In the best model, organization type was not significant, suggesting that any differences between SOEs and IJVs are associated with the characteristics of their relation drivers rather than the type of ownership/organization per se. The relationship drivers entering in the best model are: "Making friends with purchasers and technicians is difficult", "Profitability for customer's firm over last 5 years", "Supplier Trusts Customer Completely", "Stable sales pattern", "Sales to Customer in RMB", and "Sales expectation next 5 years".

6. Discussion

A summary of the results is shown in Appendix Table A.2. Virtually all elements of all of the hypotheses are supported. Specifically,

- As hypothesized, profitability and 'joint planning and coordination' are associated only for IJVs (H1)
- As hypothesized, the sharing of technical information and profitability are associated only for IJVs (H2) with the exception of providing detailed product specifications. This, contrary to expectations, is associated with profitability for both IJVs and SOEs
- As hypothesized, personal relationships and staff personal involvement are associated with profitability only for SOEs (H3a and H3b)
- As hypothesized, technical capability of contact staff is associated with profitability only for IJVs (H3c)
- As hypothesized, the psycho social elements of trust, cooperation
 with customer and dealing with relationship issues are associated
 with profitability for both SOEs and IJVs, however contrary to expectations the elements of continuity and commitment are associated with profitability only for IJVs (H4a)
- As hypothesized, the presence of conflict was negatively associated with profitability only for SOEs (with the exception of culture based conflict) (H4b); there is no relationship for IJVs
- Relationship profitability and prospects for growth were associated for both LJVs and SOEs, as expected, but only when past profitability was used as an indicator; measures of sales were only associated with profitability for SOEs.

The regression analyses presented in Table 5 further highlight a clear-cut pattern of differences between these two organization types. The nature of these emerges from examination of Appendix Table A.2 and the tables in the previous section. These illustrate that the activity and capability components of relationships are linked to profitability only for IJVs (H1, H2, H3c). Actor bond relationship components are linked to profitability only for SOEs. This pattern in the findings indicates the value of comparative analysis, where possible, to understand the factors associated with relationship profitability. If the analysis had combined IJVs and SOEs and other organization types many of these different associations would have been obscured.

We interpret these results to reflect the nature of the customers served by IJVs versus SOEs, the greater technological sophistication of IJVs products and management's broader experience and skills. This may also be reflected in the links between IJV profit and particular dimensions of relationship atmosphere, i.e. customer cooperation (as distinct from supplier cooperation) and supplier commitment as well as the presence of a stable sales pattern. The greater level of interaction with regard to planning and production processes for IJVs (which is consistent with expected high levels of relational skills) would require closer customer cooperation. The significance of supplier commitment could also reflect the greater interaction and cooperation taking place in the relation which requires the commitment of time and resources.

Interpretation of the associations of SOE drivers and perceived profitability follows a similar line of reasoning. The process at work is

^{*} Significant at .05.

^{**} Significant at .01.

reversed. SOEs produce different kinds of products, management structures and capabilities than do LJVs. These can be less sophisticated and more subject to government influence, impacting on supplier-customer relational interaction. Research continues to document ongoing SOE lack of efficiency in China (e.g. due to government pursuit of employment related goals) which thwart profit maximization efforts despite attempts at market reform initiatives (O'Connor, Deng, & Luo, 2006). Chinese industrial state owned enterprises have been found to be 'less efficient than private firms and pay less attention to costs, inventories, accounts receivable, investment, employee welfare, financing and administration', adversely affecting their performance (S. Li, Lin, & Selover, 2014 p. 1).

These dynamics could help explain the lack of association between profitability and SOE quality communication or profitability with high level, sophisticated co-planning with customers. We suggest that for SOEs internal company realities may impact on external relationships. Instead, profitability is associated with development of personal relationships where there are compatible goals. However, this does not necessarily engender continuity and commitment, but instead personalization may foster only short term connectedness as discussed below. While our research focuses on government owned organizations in China, these dynamics may translate to supplier–customer relational interaction in other global contexts.

In general, the greater importance of customer relations for LJVs conforms to characteristics others have described as typical of "internationalized" business players (Albaum & Duerr, 2008; Child & Yan, 2003; Robson et al., 2002). SOE relationships are more akin to those described in the literature considering Chinese business relationships (Liu & Russ, 2000; Styles & Ambler, 2003; Yang & Lee, 2002). This work highlights the relevance of guanxi-type relations, which can help reduce transaction costs and improve relationship performance (Standifird & Marshall, 2000; Wilkinson & Yeoh, 2005). This is similar to the process depicted in our findings, at the center of relationships with good quality functioning, i.e. perceived good performance and profitability, are personal relations. However this may not build the same kind of links, ties and bonds as those that engender commitment and continuity (Havila & Wilkinson, 2002) and may reduce profit where personal relationships adversely impact on the efficacy of economic decision making (Millington et al., 2005).

Appendix Table A.2 and the tables in the previous section also highlight that differences in associations for the two organization types do not always exist. Many aspects of relationship atmosphere such as degree of communication with customers, the cooperativeness and level of trust in the relationship atmosphere are associated profitability for both organization types. And history matters; past profitability, not surprisingly, is associated with perceived profit for both IJVs and SOEs.

We speculate that these may represent "relationship universals", i.e. those things that are critical to relationship performance irrespective of context. Such universals are further indicated by the findings in other research. For example, the positive associations of profit with trust and cooperation, have been shown throughout the business marketing literature as key factors in relationships' survival and development (Hausman, 2001; Moorman, Zaltman, & Deshpande, 1992; Morgan & Hunt, 1994; Walter et al., 2003; Young & Wilkinson, 1998).

7. Conclusions, future research, limitations and implications

Our results provide useful insights into the nature and drivers of relationship performance for Chinese firms and how they differ between IJVs and SOEs, which can inform theories of business relations and the effects of different kinds of cultural and contextual factors. The contribution of this research lies in an approach which suggests that effective supplier management of customer relationships needs to take into consideration drivers which vary depending on organization characteristics and context. Chinese SOEs and IJVs were a vehicle to enable this approach to be explored. While the specific results of this research reflect one stage in the evolution of

Chinese businesses which are likely to have evolved somewhat since the data was collected, these changes do not negate the theoretical value of the research. Differences in drivers of perceived profitability are marked for these organization types and there is a theoretically coherent explanation for the pattern of results observed that has potential for generalization. Therefore, these findings have major implications for business relationship management strategy and resource allocation.

Future research is needed to provide additional evidence that organization type and context influence relational drivers and outcomes. The influence of the customer organization type, for example, on relational drivers and outcomes adds an additional level of complexity and interest to potential research in this area. Further research is also needed to track the effects of relationship drivers over time and to examine more directly the causal mechanisms and processes involved, i.e. how and why they affect performance. This requires longitudinal research and narrative event and mechanisms-based case studies, such as those associated with analytical sociology (Buttriss & Wilkinson, 2006; Hedström & Bearman, 2009; Van de Ven & Engleman, 2004). This research assumes that SOEs and IJVs are entirely discrete organizational forms when in reality, foreign firms may partner with government owned organizations to form LJVs (Mohr, Wang, & Fastoso, 2016). While this level of discrimination is not available in the IMP Data Base, future research should explore the impact of the characteristics in more detail of IJV partner firms (as well as customers) on relational performance outcomes from a unique network perspective.

Our research is cross sectional but nevertheless the results are of value to managers and policymakers in guiding how they can and should participate in and regulate relations. While the results cannot show firms how to control relations, they can guide managers in designing differentiated ways of managing in and/or interacting with particular relationship partners. Managers can use findings that show differences in performance drivers by firm type to consider, in a more focused way, which properties of their relationships will enhance and be enhanced by better performance. Managers may be able to intervene in this process – designing differentiated strategies as they do business with suppliers and customers of different types such that resources are more strategically directed (Bairstow & Young, 2012).

The pattern of results suggests several fruitful research directions in addition to the use of different methodologies mentioned above. Additional research about how the relevance and importance of different drivers change over time in a relation will help advance our understanding of the dynamics of relations - an underdeveloped and researched area (Wilkinson & Young, 2013). In addition, research that involves more in-depth exploration of nature of and reasons for differences in profitability drivers observed is needed. For example, types of activity links and resource ties such as joint production development are significantly linked to performance only for LJVs. For SOEs it is only the customer that takes the lead in specifying technical requirements. In contrast, actor bonds and schema couplings are significant only for SOEs, which could reflect the greater role of guanxi-type relations there. Atmosphere and contextual elements are relevant to both IJVs and SOEs. Lastly, relationship size and the amount of business transacted, is only relevant in the case of SOEs, indicating the emphasis on price and cost. These results indicate that "one size does not fit all" in terms of what drives relations and how firms should act. Research that considers the underlying reasons for these differences will enable findings to be more effectively applied to other contexts, i.e. other business models, organizational structures, markets and cultures.

There is already some evidence that culture may be a partial explanation for some of the unexpected findings. A possible reason for the lack of association between supplier commitment and profitability for SOEs (H4a) is the absence of an equivalent for the word 'commitment' in the Chinese language; the closest translation is 'obligation' which means the question might mean very different things to respondents with English language rather than Chinese language skills (Dawson, Wilkinson, & Young, 1997). Continuing attention being given to such cultural nuances and their

possible effects is important in interpreting findings and analysing validity.

Some limitations of this research should be acknowledged. While the items comprising the IMP2 questionnaire were extensively tested, the measures used have relied on single item scales and continuing examination and further development of these measures is warranted. In particular, measurement of relationship performance was limited to perceived profitability. While this has value, particularly in that this helps to reduce ambiguity, continued work is needed to explore meaningful alternatives.

Some findings should be interpreted with particular caution. The economic scale of the relation in terms of sales to the customer is inversely related to profitability for SOEs, which could reflect the lower profit margins obtained from large volume trade in low technology products. In addition, differences in Western versus Chinese accounting practices can affect the accuracy of LJV profit reporting because of 'the treatment of bad debts, inventories, long term equity investments, plant and equipment, land, non-profit facilities, intangible assets and pensions' (Mina & Perkins, 1997 p. 25). Finally, SOEs may be evaluated on other types of performance criteria than the profitability of a relation, such as volume of business and meeting quotas.

As already noted our results are derived from a cross-sectional study so the causal direction of the correlations is not clear. Given the previously-noted difficulties inherent in collecting this kind of data generally and in China in particular, longitudinal survey research may be impossible but use of other methods such as in depth case studies is indicated as already noted. Cases might also prove useful in validating the findings reported here in a contemporary setting. Another issue to be taken into account is the degree of variance in the sample for each type of supplier. The size of any correlation is restricted by the level of variance and this may account for some of the differences observed. Selecting a representative sample of Chinese firms is not easy and was achieved only through cooperation with the Chinese National Bureau of Statistics. The sample size was also limited by the budget available to conduct the personal interviews required.

In interpreting our results, we have focused on the way the proposed drivers of profit are associated with profitability. But correlations do not indicate causal direction and it may be that some of our results can

be better interpreted as the effects of perceived profitability on the relation. This is impossible to determine because of the cross-sectional nature of the research (March & Sutton, 1997; Rong & Wilkinson, 2011). However, this does not negate the findings and interpretations that have been presented. As the IMP interaction model (Hakansson, 1982) indicates, as a relation develops, feedback effects exist between relationship performance and the nature and perceptions of the characteristics of a relationship partner (including potential relationship drivers). In other words, over time both causal paths are likely because the drivers of profit in one period have feedback effects on the firms and the relation that affect them in future periods. For example, the explanation that successful and profitable relations are likely to invite closer cooperation and planning, trust and commitment, reduced conflict and improved communication makes intuitive sense as does the explanation that these factors will enhance the possibilities for profit.

An important managerial implication emerges from this work. We move beyond the narrow conceptualizations and resulting operationalisations of performance drivers and consider relationships more deeply in an established theoretical framework (emerging from Hakansson, 1982). The pattern of results highlights that relational properties are associated with perceived profitability and thus with firm and relationship performance although the more specific patterns of associations varies for different kinds of supplier-customer relationships. These are not "managed" by either party acting alone, rather they are the property of parties to a relationship interacting through time. This makes for uncomfortable management implications – that no firm is in control – as noted by others who consider the complex nature of business relationships and networks Wilkinson & Young, 2002, 2013). However these findings provide a 'ray of hope'. Managers can consider in a more focused way what relational properties will enhance performance (and vice versa) and which will not by considering a relationship's context. This includes discernible contextual factors of which organization structure is one. Future investigation may well uncover others that will provide further value for those seeking to derive value from relationships with other organizations.

Appendix A

 $\label{eq:Appendix Table A.1} \begin{tabular}{ll} \textbf{Supplier-customer relationship performance theory and approaches.} \end{tabular}$

Customer relationship management (CRM) Account portfolio analysis

Purpose/ definition

- CRM is generally defined as the 'management of mutually beneficial relationship(s) from the seller's perspective' (LaPlaca, 2004 p. 463 in Richards & Jones, 2008 p. 121).
- Richards & Jones' (2008 p. 121)
 definition: 'CRM will be defined as a set
 of business activities supported by both
 technology and processes that is
 directed by strategy and is designed to
 improve business performance in an
 area of customer management'
- Definition: 'CRM is the values and strategies of relationship marketing – with particular emphasis on customer relationships – turned into practical application' (Gummeson p. 137)
- 'Account portfolio analysis deals with grouping customers and developing meaningful strategies for each group incorporated into resource allocation decisions to meet marketing objectives' (Gök, 2009 p. 433)
- 'Portfolios provide a mechanism for conceptualizing the customer, supplier and indirect sets of relationships which surround a firm'

(Turnbull & Zolkiewski, 1997 p. 305)

Value creation analysis

 Definition: 'A transaction is an exchange of values for mutual advantage and a relationship involves a pattern of transactions over time in which the values exchanged may be understood in terms of the function of the relationship for each party involved' (Wilkinson & Yeoh, 2005 p. 4)

Various themes which typify definitions of value creation competencies required to create value ns: (Sullivan et al., 2012 p. 167)

- 'Firm competence' (supplier and customer perceptions of [and ability to communicate] value in each other's offerings ('product, process or market competencies')
- 'A relational activity undertaken boundary spanners' (value is created through relational interaction rather than products/services)

Industrial Marketing Management xxx (xxxx) xxx-xxx

• 'Customer perception' (e.g. 'value lies in

the eye of the beholder')

Drivers

Core CRM benefits or value drivers (Richards & Jones, 2008 p. 123):

- '1) Improved ability to target profitable customers:
- 2) integrated offerings across channels;
- 3) improved sales force efficiency and effectiveness:
- 4) individualized marketing messages:
- 5) customized products and services:
- 6) improved customer service efficiency and effectiveness; and
- 7) improved pricing.'

What is needed to practice relationship marketing: (Gummeson, 2004)

- · 'Identify individual customers and establish how to reach them;
- Differentiate the customers with regard to values and needs;
- · Interact with customers efficiently and effectively;
- Customize your offerings;
- Build learning relationships with your customers through dialogue' (Gummeson p. 137)
- There is a need to consider the 'human aspects' of relationship marketing as well as 'strategic aspects' and 'operative systems' (Gummeson p. 137)
- B2B relationship marketing requires quality, 'defined as offering: products and services that fulfill the function needed and wanted by the individual customer; being reliable and doing it right the first time; Good relationships with customers and others in our network known as relationship quality'. (Gummesson, 2004 p. 144)

- Customer's business potential variables: Value creation competence re: 'competitors share of customer's purchases, dollar value of customer's purchases, growth rate of customer's purchases, customer capacity utilization, future capacity expansions, links with export markets, contribution margins, account prestige, sensitivity to price' (Gök, 2009 p. 436)
- Relationship strength variables: 'customer share, length of relationship, dollar value of purchase, management distance (frequency of contact), degree of cooperation, friendship, trust, information sharing' (Gök, 2009 p. 436)
- Cost for suppliers to serve: 'pre-sale, production, distribution and post-sale service costs' (Shapiro et al., 1987 p. 102)
- Relationship value [to the seller]: 'Criticality of goods purchased by the buyer'; 'Quantity of goods purchased by the buyer'; 'Quantity of the seller's output consumed by this buyer'; 'Replace-ability of this buyer'; Cost savings resulting from the buyer's practices and procedures (Krapfel, Salmond, & Spekman, 1991 p. 25)

• 'Value is co-created by the supplier and the customer' supplier:

- Formal, compelling 'value proposition';
- Sales people understanding of customer needs:
- Understand 'customer issues' before 'propose solution':
- 'Standard process to qualify opportunities';
- 'Expert' sales people in 'products and services'
- 'Established procedures to stop investment' (Sullivan et al., 2012 p.
- Strategic account management
- 'Review results of solution with strategic accounts';
- 'Jointly set long-term objectives';
- · 'Relationships and dialogue at highest executive level';
- 'Engage' our strategic accounts (including 'at highest executive level') in 'product/service planning process';
- Sales people effectiveness at producing 'revenue growth from existing customers'
- Supplier measures 'specific criteria' for strategic account
- Measure 'customer perception' of supplier relationship. (Sullivan et al., 2012 p. 172),
- · Relational value drivers (Wilkinson & Yeoh, 2005)
- 'Social bonds': personal relationships with customers and socially
- 'Trust': trust completely and with full confidence;
- 'Commitment': strongly committed to a long term relationship;
- 'Innovation function': technical development and product technology;
- 'Market function': enable geographic expansion;
- 'Scout function': image enhancement;
- Access function (Wilkinson & Yeoh, 2005 p. 25)

Relational value

- · 'Leads'
- · 'Close or conversion rate'
- 'Sales forecast, revenue'
- · 'Customer retention rate'
- 'Average account billing'. (Sullivan et al., 2012 p. 172)

Relational value

• Relationship value – 'measured in terms of profit...given the costs and revenues of the relationship over the last five years'...(Wilkinson & Yeoh, 2005 p. 11)

Outcomes

- 'Value, brand and relationship equity will be used to classify measurable CRM outputs and to carry the benefits of CRM through to CE [Customer Equity]' (Richards & Jones, 2008 p. 122)
- Quality [as defined by Gummeson above] can have a positive impact on 'revenue'..., 'cost'..., 'capital employed'... and 'profit'...(Gummeson p. 144)

Appendix Table A.2 Summary table for drivers associated with supplier-customer relationship profit.

Topic	Hypothesis	Item	IJV significance	SOE significance
links and resource ties likely to be positively associated with performance in IJV supplier-customer relationships than those of SOEs. H2: Compared to SOEs, IJV supplier-customer relationships are more likely to have a stronger positive association between relationship profitability and (a) technological sophistication, including quality control, adaptation and (b) effective communication processes.	<u> </u>	Customer suggests coordinated production plans	1	
	Customer interested in joint product development	* *		
	Supplier changes satisfy supplier or customer requirements	✓		
	Changes [already] made by supplier re: quality control	* *	•	
	Supplier [ready] to make changes to quality control to meet customer requirements	/ /	•	
	Customer provides detailed product specs (mixed item)	✓	* *	
	Technical & commercial information easy to get from customer	✓		
	Supplier interest in learning about customer product use	✓	•	
Actor bonds, schema	H3a: The development of personal relations between supplier and customers will play a more important role	Supplier establishes personal relationships with buyer	•	✓
couplings	for SOEs than IJVs in driving relationship profitability	Making friends with purchasers and technicians is difficult†	•	✓
	 H3b: Personal and senior staff involvement in relations is likely to be more strongly associated with profitability in SOE than IJV relations. H3c: The association between the technical capability of contact staff and profitability will be stronger in IJV than SOE relationships. 		•	✓
			1	•
Relationship	H4a: Commitment, trust and cooperation are positively	Ease of handling relationship issues	* *	✓
atmosphere	associated with profitability for both SOEs and IJVs.	Customer cooperates before short term profit	✓	•
		Supplier cooperates closely with customer	✓	✓
		Supplier trusts customer completely Supplier is committed to customer	* * *	
	Unlikely customer will stop purchases in near future	•	X	
	H4b: Conflict will be negatively associated with the	Culture differences cause crisis	•	X
performance of SOEs but will not impact on IJV performance.	Supplier/customer goal compatibility Supplier has difficulty understanding	•	1	
Relation context	H5: The better the growth prospects for a relation the	customer behavior & thinking Sales to Customer in RMB		11
and relationship	greater will relationship profitability be for both SOEs and IJVs.	Profitability for customer's firm over last 5 years (1 very bad to 5 very good)	**	* * *
profitability	Sales trend last 5 years (1 rapid increase to 5 rapid decrease)	•	✓	
		Sales expect next 5 years (1 rapid increase to 5 rapid decrease)	•	✓
		Stable sales pattern (1 stable to 5 volatile)	✓	•

[✓] agrees with the hypothesis at the p < 0.05 level; ✓ ✓ agrees with the hypothesis at the p < 0.01 level. '.' not significant.

References

Albaum, G., & Duerr, E. (2008). *International marketing and export management*. Pearson Education.

Anderson, J. C., Hakansson, H., & Johanson, J. (1994). Dyadic business relationships within a business network context. *The Journal of Marketing*, 1–15.

Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *The Journal of Marketing*, 42–58.

Axelsson, B. (1995). The development of network research - A question of mobilization and perseverance. In K. A. Moller, & W. David (Eds.), *Business marketing: An interaction and network perspective*. Dordrecht: Kluwer Academic Publishers.

Bairstow, N., & Young, L. (2012). How channels evolve: A historical explanation. Industrial Marketing Management, 41(3), 385–393. http://dx.doi.org/10.1016/j.indmarman.2011.06.012.

Bergkvist, L., & Rossiter, J. R. (2007). The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of Marketing Research*, 44(2), 175–184.

 $^{{\}it X}$ disagrees with the hypothesis at the p < 0.05 level; ${\it XX}$ disagrees with the hypothesis at the p < 0.01 level.

- Buttriss, G. J., & Wilkinson, I. (2006). Using narrative sequence methods to advance international entrepreneurship theory. *Journal of International Entrepreneurship*, 4(4), 157–174.
- Calder, B. J., Phillips, L. W., & Tybout, A. M. (1981). Designing research for application. Journal of Consumer Research, 8(2), 197–207.
- Calder, B. J., Phillips, L. W., & Tybout, A. M. (1982). The concept of external validity. Journal of Consumer Research, 9(3), 240–244.
- Calder, B. J., Phillips, L. W., & Tybout, A. M. (1983). Beyond external validity. *Journal of Consumer Research*, 10(1), 112–114.
- Chesbrough, H. W. (2006). Open innovation: The new imperative for creating and profiting from technology. Harvard Business Press.
- Child, J., & Yan, Y. (2003). Predicting the performance of international joint ventures: An investigation in China. *Journal of Management Studies*, 40(2), 283–320. http://dx.doi.org/10.1111/1467-6486.00341.
- Dawson, B., Wilkinson, I., & Young, L. (1997). Conceptual and methodological issues in translation of a business questionnaire into Chinese. Paper presented at the Proceedings of Sixth Symposium on Cross Cultural Consumer and Business Studies, Hawaii Dec.
- Deutch, M. (1994). Constructive conflict resolution: Principles, training, and research. Journal of Social Issues, 50(1), 13–32.
- Du, M., & Boateng, A. (2015). State ownership, institutional effects and value creation in cross-border mergers & acquisitions by Chinese firms. *International Business Review*, 24(3), 430–442.
- Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *The Journal of Marketing*, 11–27.
- Economist (2012). Still in second gear; Chinese carmakers. *The Economist*, 403, 62–63. Folta, P. H. (2005). Cooperative joint ventures. *The China Business Review*, 32(1), 18–22.
- Ford, D. (1980). The development of buyer-seller relationships in industrial markets. *European Journal of Marketing*, 14(5,6), 339–353.
- Ford, D., Gadde, L.-E., Hakansson, H., & Snehota, I. (2011). Managing business relationships. Chichester: Wiley.
- Gök, O. (2009). Linking account portfolio management to customer information: Using customer satisfaction metrics for portfolio analysis. *Industrial Marketing Management*, 38(4), 433–439. http://dx.doi.org/10.1016/j.indmarman.2008.02.010.
- Gummesson, E. (2004). Return on relationships (ROR): The value of relationship marketing and CRM in business-to-business contexts. The Journal of Business and Industrial Marketing. 19(2), 136–148.
- Hagel, J., & Brown, J. S. (2005). Productive friction How difficult business partnerships can accelerate innovation. Harvard Business Review, 83(2), 82–91.
- Hakansson, H. (1982). An interaction approach. IMP Group. In H. Hakansson (Ed.), International marketing and purchasing of industrial goods. New York: Wiley.
- Hakansson, H., & Sharma, D. (1996). Strategic alliances in a network perspective. In D. Iacobucci (Ed.), Networks in marketing. London: SAGE.
- Hakansson, H., & Snehota, I. (Eds.), (1995). Developing relationships in business networks. London and New York: Routledge.
- Hakansson, H., & Snehota, I. (1998). The burden of relationships or who's next. Network Dynamics in International Marketing, 16–25.
- Hallen, L., & Wiedersheim-Paul, F. (1979). Psychic distance and buyer-seller interaction. Organisasjon Marked og Samfund. 16(5), 308–325.
- Hausman, A. (2001). Variations in relationship strength and its impact on performance and satisfaction in business relationships. *Journal of Business & Industrial Marketing*, 16(7), 600–616.
- Havila, V., & Wilkinson, I. F. (2002). The principle of the conservation of business relationship energy: Or many kinds of new beginnings. *Industrial Marketing Management*, 31(3), 191–203.
- Hedström, P., & Bearman, P. (2009). What is analytical sociology all about? An introductory essay. The Oxford handbook of analytical sociology (pp. 3–24).
- Hofstede, G., & Hofstede, G. J. (2005). Cultures and organizations: Software of the mind (Third Millennium Edition). McGraw-Hill.
- Holm, D. B., Eriksson, K., & Johanson, J. (1996). Business networks and cooperation in international business relationships. *Journal of International Business Studies*, 27(5), 1033–1053.
- Hout, T. M., & Ghemawat, P. (2010). China vs the world. Harvard Business Review, 88, 94-103.
- Iacobucci, D. (Ed.), (1996). Networks in marketing. London: Sage Publications Ltd.
- Johanson, J., & Vahlne, J. E. (1990). The mechanism of internationalisation. International Marketing Review, 7(4), 11-24.
- Krapfel, R. E., Salmond, D., & Spekman, R. (1991). A strategic approach to managing buyer-seller relationships. European Journal of Marketing, 25(9), 22–37.
- Li, J., Lam, K., & Qian, G. (2001). Does culture affect behavior and performance of firms? The case of joint ventures in China. *Journal of International Business Studies*, 32(1), 115–131.
- Li, S., Lin, Y. C., & Selover, D. D. (2014). Chinese state-owned enterprises: Are they inefficient? *The Chinese Economy*, 47(5–6), 81–115.
- Liu, S., & Russ, V. (2000). Solving a Chinese puzzle. Strategic Direction, 16(8), 24–26.
 March, J. G., & Sutton, R. I. (1997). Crossroads-Organizational performance as a dependent variable. Organization Science, 8(6), 698–706.
- Millington, A., Eberhardt, M., & Wilkinson, B. (2005). Gift giving, guanxi and illicit payments in buyer–supplier relations in China: Analysing the experience of UK companies. *Journal of Business Ethics*, 57(3), 255–268.
- Mina, G., & Perkins, F. (1997). China's transitional economy Between Plan and Market. Australian Department of Foreign Affairs and Trade (ADFAT) - East Asia Analytical Unit.
- Mohr, A., Wang, C., & Fastoso, F. (2016). The contingent effect of state participation on the dissolution of international joint ventures: A resource dependence approach. *Journal of International Business Studies*, 47(4), 408–426.
- Moller, K. W., & David (Eds.), (1995). Business marketing: An interaction and network

- perspective. Dordrecht: Kluwer Academic Publishers Group.
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust. *Journal of Marketing Research*, 29, 314–328
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. The Journal of Marketing. 20–38.
- Morosini, P., Shane, S., & Singh, H. (1998). National cultural distance and cross-border acquisition performance. *Journal of International Business Studies*, 29(1), 137–158.
- O'Connor, N. G., Deng, J., & Luo, Y. (2006). Political constraints, organization design and performance measurement in China's state-owned enterprises. Accounting, Organizations and Society, 31(2), 157–177.
- O'Grady, S., & Lane, H. W. (1996). The psychic distance paradox. *Journal of International Business Studies*, 27(2), 309–333.
- Osland, G. E., & Cavusgil, S. T. (1996). Performance issues in U.S.-China joint ventures. California Management Review, 38(2), 106.
- Park, S. H., Li, S., & Tse, D. K. (2006). Market liberalization and firm performance during China's economic transition. *Journal of International Business Studies*, 37(1), 127–147.
- Park, S. H., & Luo, Y. (2001). Guanxi and organizational dynamics: Organizational networking in Chinese firms. Strategic Management Journal, 22, 455–477.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14.
- Pye, L. W. (1992). Chinese negotiating style Commercial approaches and cultural principles (2nd Edition). Westport, Connecticut: Quorum Books.
- Richards, K. A., & Jones, E. (2008). Customer relationship management: Finding value drivers. *Industrial Marketing Management*, 37(2), 120–130.
- Robson, M. J., Leonidou, L. C., & Katsikeas, C. S. (2002). Factors influencing international joint venture performance: Theoretical perspectives, assessment, and future directions. *Management International Review*, 42(4), 385–418.
- Rong, B., & Wilkinson, I. F. (2011). What do managers' survey responses mean and what affects them? The case of market orientation and firm performance. *Australasian Marketing Journal*, 19(3), 137–147.
- Shapiro, B. P., Rangan, V. K., Moriarty, R. T., & Ross, E. B. (1987). Manage customers for profits (not just sales). Harvard Business Review, 65(5), 101–108.
- Sharma, N., Young, L. C., & Wilkinson, I. (2015). The nature and role of different types of commitment in inter-firm relationship cooperation. *Journal of Business & Industrial Marketing*, 30(1), 45–59.
- Shenkar, O. (2001). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, 32(3), 519–535.
- Snehota, I., & Hakansson, H. (1995). Developing relationships in business networks. London:
 Routledge.
- Standifird, S. S., & Marshall, R. S. (2000). The transaction cost advantage of guanxi-based business practices. *Journal of World Business*, 35(1), 21–42.
- Styles, C., & Ambler, T. (2003). The coexistence of transaction and relational marketing: Insights from the Chinese business context. *Industrial Marketing Management*, 32(8), 623-642
- Styles, C., & Hersch, L. (2005). Executive insights: Relationship formation in international joint ventures: Insights from Australian-Malaysian international joint ventures. *Journal of International Marketing*, 13(3), 105–134.
- Sullivan, U. Y., Peterson, R. M., & Krishnan, V. (2012). Value creation and firm sales performance: The mediating roles of strategic account management and relationship perception. *Industrial Marketing Management*, 41(1), 166–173.
- Turnbull, P., Ford, D., & Cunningham, M. (1996). Interaction, relationships and networks in business markets: An evolving perspective. *Journal of Business & Industrial Marketing*, 11(3/4), 44–62.
- Turnbull, P., & Zolkiewski, J. (1997). Profitability in customer portfolio planning. In D. Ford (Ed.), *Understanding business markets*(2nd Edition). London: Dryden Press.
- Van de Ven, A. H., & Engleman, R. M. (2004). Event- and outcome-driven explanations of entrepreneurship. *Journal of Business Venturing*, 19(3), 343–358.
- Walter, A., Muller, T. A., Helfert, G., & Ritter, T. (2003). Functions of industrial supplier relationships and their impact on relationship quality. *Industrial Marketing Management*, 32(2), 159–169.
- Walter, A., Ritter, T., & Gemunden, H. G. (2001). Value creation in buyer-seller relationships: Theoretical considerations and empirical results from a supplier's perspective. *Industrial Marketing Management*, 30(4), 365–377.
- Welch, C., & Wilkinson, I. (2002). Idea logics and network theory in business marketing. Journal of Business-to-Business Marketing, 9(3), 27–48.
- Westwood, R. I., & Posner, B. Z. (1997). Managerial values across cultures: Australia, Hong Kong and the United States. Asia Pacific Journal of Management, 14(1), 31–66.
- White, G. (2013, February 13). China powers on to snatch trade mantle from US. Sydney Morning Herald.
- Wiley, J., Wilkinson, I., & Young, L. (2006). The nature, role and impact of connected relations: A comparison of European and Chinese suppliers' perspectives. *Journal of Business & Industrial Marketing*, 21(1), 3–13.
- Wilkinson, I. (2010). Business relating business: Managing organisational relations and networks. Edward Elgar Publishing.
- Wilkinson, I., & Yeoh, K. (2005). Value creation in Chinese and European business relationships. In D. H. Brown, & A. MacBean (Eds.), Challenges for China's development, an enterprise perspective. New York: Routledge.
- Wilkinson, I., & Young, L. (1994, March). The development and management of interfirm relations in international trade with Asia A cross-cultural comparative study.
- Wilkinson, I. F., & Young, L. (2002). On Cooperating: firms, relationships and networks. Journal of Business Research, 55(2), 123–132.
- Wilkinson, I., & Young, L. (2013). The past and the future of business marketing theory. Industrial Marketing Management, 42(3), 394–404.
- Wilson, D. T. (1995). An integrated model of buyer-seller relationships. (00920703).

(Retrieved from University Park PA).

- Yang, J., & Lee, H. (2002). Identifying key factors for successful joint venture in China. Industrial Management & Data Systems, 102(2), 98–109.
- Yao, Z., Yang, Z., Fisher, G. J., Ma, C., & Fang, E. E. (2013). Knowledge complementarity, knowledge absorption effectiveness, and new product performance: The exploration of international joint ventures in China. *International Business Review*, 22(1), 216–227.
- Young, L. C., & Wilkinson, I. F. (1998). The space between: Towards a typology of interfirm relations. *Journal of Business-to-Business Marketing*, 4(2), 53–97.
- Zolkiewski, J., Khan, A., & Wilson, J. (2013). Interacting in China. Paper presented at the 29th Industrial Marketing and Purchasing Group (IMP) Conference, Atlanta Georgia (http://www.impgroup.org/paper_view.php?viewPaper=8124).
- Zolkiewski, J., & Turnbull, P. (2000). Relationship portfolios Past, present and future. Paper presented at the 16th IMP Conference, Bath UK.

Dr. Bonnie Dawson works at the University of New South Wales Business School and has published in the areas of international joint ventures, business relationship marketing, online shopping and business education.

Louise Young is Professor of Marketing at Western Sydney University (Emeritus) and University of Southern Denmark. She has published her research primarily in the industrial marketing context but also has addressed social, consumer and services, marketing, international business, social policy, management, human resources information technology and complexity. Her research focuses on the evolution and management of relationships and networks and in particular on the psychology of the individuals participating in them.

John Murray is a Professor of Applied Mathematics at UNSW Sydney. Although he has interests in the wider application of mathematics, his main areas of research are mathematical biology and the epidemiology of infectious diseases.

Ian Wilkinson is an Honorary Professor of Marketing at the University of Sydney and a Visiting Professor at the University of Southern Denmark. His current work focuses on the development, modelling and management of business relations and networks as complex adaptive systems.