

# Emergence and transformation of e-supply relationships in the network context: A study of a newly formed Chinese enterprise

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## Abstract

*This study investigates the dynamics of the formation and transformations of electronic supply relationships (e-supply relationships) in a newly formed large Chinese enterprise in the telecom industry by employing an interpretive case study approach. It aims to provide better insights into customer-supplier relationships enabled by the application of emerging electronic technologies (e-technologies) in different network contexts. This study focuses on the adaptation and use of a customer service system (CSS) and illustrates the importance of Chinese national and emerging corporate cultures in shaping customer-supplier relationships enabled by the application of CSS. It conceptualises the transformation process as interactions between managerial actions and social structures. Understanding the transformations in e-supply relationships in these contexts contribute to a wider e-technology enabled organisational change process.*

**Keywords:** supply relationships, e-technology, Chinese culture

## Introduction

It has been seen that more and more global telecom companies form relationships with Chinese suppliers and customers in this changing world of rapid globalising markets to improve international business engagement and competitiveness. These relationships enable companies to grow and develop and at the same time constraining development and their activities (Ford et al., 2002). Thus, the networked supply chains are increasingly important. However, the establishment of organisational relationships in the Chinese-based businesses vary from Western countries (Pang et al, 1998). The Chinese cultural context is not well represented in the literature. This is a limitation for Western organisations who wish to establish and maintain business relationships with Chinese enterprises. Moreover, emerging e-technologies such as ERP (enterprise resource planning) and e-Collaboration enable these networked supply chains and provide access to a wide range of geographically distanced suppliers (Ford et al., 2002). This rapid technological evolution is changing the nature of marketing products and

services as well. These e-technology enabled services require providers to have a good knowledge of certain technology and to make the effort to understand the specific customers' needs (Burgers et al., 2000). The speed of customer service and communication styles are seen as important factors in relationships between buyers and sellers (Wilson, 1995). There are only a few large scale in-depth case studies of the management of e-technology enabled business relationships (Kim et al., 2002; Yao et al., 2002). From the Information Systems' (IS) perspective, despite the recognition of the importance of the wider organisational and cultural issues associated with the organisational relationships many of these studies ignore aspects beyond the technological issues. These studies attempt to identify factors leading to system implementation success or failure, or propose new models to confirm e-technology as one solution for organisational formation and transformation (Al-Mashari, 2000; Boudreau & Robey, 1999). Furthermore, different conceptual models are developed and suggested as different ways for the management of organisational relationships in the area of supply chain management

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(Lamming et al., 1996; Cousins, 2001). However, Cousins (2001) argues that a relationship is not an entity. It should be viewed as an intra- and inter-organisational process which is referred to as a 'quasi firm' (Blois, 1972) sitting between the two organisations (see Ford et al., 2002; Lamming, 1993a). A review of current literature suggests that a multi-perspective study focusing on the dynamics of the formation and transformation of e-technology enabled organisational relationships, is an appropriate approach to develop a conceptual framework (Boudreau and Robey, 1999).

## Theoretical Foundation

Boudreau & Robey (1999) argue the benefits of a multi-perspective study of enterprise systems to develop a conceptual framework. This study adopts a similar approach by drawing on mixed theoretical perspectives: *relationship, cultural, technological and structural perspectives*. From a relationship perspective, the literature on Industrial Marketing and Purchasing (IMP) group offers a useful understanding of the nature of mutually beneficial relationships by providing the Interaction Model (Hakansson, 1982) that characterised the short-term exchange episodes and long-term aspects of a relationship between buying and selling companies. Recently, there has been an increasing recognition that culture plays a crucial role in the management of business relationships. It is claimed that different national cultures make different demands on organisations and offer them different opportunities (Gabriel, 1999). Walsham (2002) focuses on the link between structural contradiction and conflict, cultural heterogeneity, and the dynamic and emergent nature of culture. A deeper examination of cross-cultural working and IS context is provided in his study. The context of technology is another important perspective to consider when studying e-technology enabled organisational relationships. There is a growing body of work which considers information technology as a social construction, designed and used by humans (e.g. Walsham, 1993). Orlikowski

(2000) views technology in use as an emergent technological structure. These studies imply that it is very important to study the technological context in which the business relationships take place. Structuration theory (Giddens, 1976, 1982, 1984) provides a meta theoretical perspective to integrate the above views. Structuration theory can be viewed as a process-oriented theory that treats structures as both a product of and a medium of human action. As Giddens (1982) emphasises, "man actively shapes the world he lives in at the same time as it shapes him".

## Research Methods

An interpretive case study approach (Orlikowski & Baroudi, 1991; Klein & Myers, 1999; Walsham, 1993) was employed to study the e-supply relationships in a Chinese telecom enterprise - TelcoX (pseudonym). It focused in main on the Customer Service Department (CSD) and also pursued some practices of national and TelcoX's corporate cultures that emerged under these particular circumstances. Data collection involved semi-structured interviews of key players and observations of main suppliers and customers forming a supply network<sup>1</sup> of TelcoX (see Appendix 1). Thus far, thirty-nine interviews of sixty to ninety minutes in length have been conducted in seven organisations with managers representing various processes including customer service management, information system management, fulfillment and procurement management. The research commenced in the summer of 2002, most of the interviews were tape-recorded, transcribed and then translated into English for analysis. The functions represented by those interviewed included customer service, service operation, network management, accounting, product development and project procurement. These key members were involved in the adaptation of new system and related business operation processes. Informal conversations and discussions with the interviewees and other staff of the companies were held during each visit. The daily work and activities in

<sup>1</sup> Harland (1996) defines supply network as a set of supply chains, embodying the flow of goods and services from original sources to end customers.

the office were observed before, during and/or after each interview. Field notes, documents and related materials were used to verify the collected data and gain more detail and 'behind the scenes' information in these organisations and in the context of wider network.

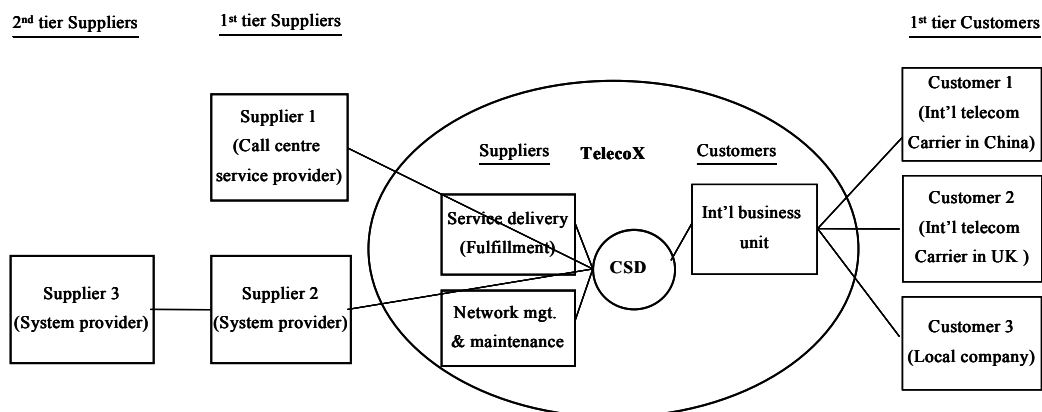
## Case Overview

TelcoX, one of the largest telecom carriers in China, was founded in 1999. It was providing a spectrum of services and solutions to meet the telecom needs of both business and individuals. TelcoX merged with another large Chinese state owned telecom company in 2002. A subsidiary of TelcoX providing comprehensive telecom services to international carriers and enterprises outside of China, was established in late 2003. This entity executed TelcoX's national strategy of 'global expansion' and formed joint ventures and partnerships with foreign companies. The CSD provided all of TelcoX's product users with pre- and post-sale customer services. Adhering to the service idea of 'at the speed of light', the director of CSD initiated the idea of a 'distributed call centre' with the support of TelcoX's vice president in early 2001. The proposed system, then called customer service system (CSS), was developed for tracking customer calls and providing better services to all TelcoX's product users. The new CSS supported in total more

than 30 call centres and sub-centres in main cities and branch offices all over China including the headquarters in Beijing.

The implementation of CSS and the choice of suppliers were determined by the needs of TelcoX's customers. With the increasing demands for services from customers, TelcoX came to realise that the existing customer service model should be replaced by a new one based on the idea of Customer Relationship Management (CRM). CSD must build its system to meet the technical requirements of CRM. Thus, supplier 2 and 3 (see Figure 1), two American enterprises, were selected as the new system providers. Besides system support, the customer service representatives (CSRs) who communicate with customers directly played a very important role in the call centre. These CSRs had been trained with the idea of CRM and the knowledge of advanced systems. Therefore, supplier 1, an American joint venture company, was chosen to provide a call centre outsourcing service. With the CSS support, TelcoX could provide better services to their customers. Those enterprises with nation-wide businesses in China such as banking, finance, stock market and insurance sectors and some international telecom carriers (e.g. Customer 1, see Figure 1) expanding their businesses in China also treated TelcoX as an important business partner, rather than simply a service provider.

Figure 1 Emergence of supply relationships of TelcoX



The use of CSS and the needs of TelcoX's customers also determined the internal work processes. The Service Delivery Department, through

the cooperation with CSD, fulfilled a business requirement from the International Business Unit which took care of large accounts and telecom

carriers. The Network Management and Maintenance Department was responsible for information networks support and any technical problem. People who had clear job allocations and responsibilities built up good communications in a process of cooperation. Thus a good base was created for both internal and external customer services in TelcoX as illustrated in Figure 1.

## Analysis and Discussion

Drawing on the four theoretical perspectives discussed above, analysis of the data involved a critical examination of large amounts of qualitative data through reading and re-reading of the interview transcripts, filed notes and documents whilst simultaneously allowing the concepts to emerge from the empirical data.

### *Relationship perspective – emerging interactions*

According to Interaction Model (Hakansson, 1982), the short-term exchange episodes in a relationship and the long-term aspects of that relationship, which both affects and may be affected by each episode, are critical to an understanding of the interaction process between the participants. These include both the characteristics of the organisations and the individuals who represent them. This analysis involved three levels of individuals, inter-departmental and inter-organisational interactions.

**Individual interactions** To design a new call centre, CSD people were involved in customer surveys and knowledge search about how to set up a call centre. The CSD director expressed: *“We cannot copy the Western countries’ designs directly. We have our own special national conditions. China is broad and there are many different dialects and customs. The development of economy is imbalanced from place to place...”* The managers and team leaders overcame their frustration by exploring their understandings of their technical ability, service pattern and the characteristics of their resources. They worked hard on call centre design and accumulated knowledge and experiences by developing these issues. At the same time, they fully considered the future company developments in

terms of system plan and product selection. This was critical for meeting increasing customer demands. Finally, they boldly proposed the establishment of a call centre with a national integration distributional customer service system in TelcoX. Through this system, not only can various local customer service demands be handled, but it also has a unified workload and standardized data management functions. Individual interactions and learning experiences can radically influence the interaction process which was held over a long period of time both within and between TelcoX and its business partners.

**Inter-departmental interactions** To implement the new system, job re-allocation to a new call centre was needed. The CSD director explained: *“For the call centre, business units didn’t know this system very much at first, they thought customer inquiries should come to sales people directly [not business units]. But, we know it’s impossible for individuals to work 24 hours a day, 7 days a week, we must set up a system. Through a system, we can meet such requirements.”* At the same time, managers were concerned about the impact CSS might have on re-allocating jobs and work processes in TelcoX. To manage the impact, CSD people did a ‘concrete’ analysis of the current situation. They collected detailed cases from other companies and kept discussing these cases. Everyone matured and gained experience during this process of discussion. Several months later, they found things were getting better. They worked closer with business units than before. The manager said: *“At first they [business units] doubted what the call center would be like? How can we set it up with nothing? ...From ‘sitting and watching’, through to ‘understanding’ and ‘supporting’, we have now recognized and have high expectations of our call center.”* In the past, sometimes, CSD lost customer inquiries or problems during their handling due to non-systematic follow-ups, which was called the ‘casual way’ within TelcoX. In contrast, CSS with the functions of customer call handling, including customer inquiries, checking, fault reporting and customer complaints, and data recording, dispatching and reporting, which was called ‘manageable co-handling’, helped CSD make good progresses with monitoring and coordinating

customer requirements. It was faster than before, from a day long cycle to merely few hours; it was a more controlled way to handle customer issues, a more managed way for data reporting, and gave a better company image. Consequently, customers found it more convenient to reach TelcoX than before. They got higher customer satisfaction and their business ability improved a lot as a result of the changes to internal process that were based on customer satisfaction. Finally, they got to know what they should do and why as well as what they would like to do instead of what they had to do. The CSD manager recalled: *"It was a nice memory. We worked very hard and blindly at first. Just like kids who try to write words nicely, but they put extra energy and great efforts into silly words. Like the beginners who play Shaolin Gongfu [a Chinese Kongfu, a form of boxing]... very hard, extra energy, great efforts..."* These experiences in demonstrating effective communication and inter-departmental interactions at an organisational level resulted from many similar experiences at an individual level and equipped TelcoX with knowledge about the management of these kinds of inter-organisational interactions.

**Inter-organisational interactions** Using CSS within TelcoX, employees found that more effective communication between business partners was vital for achieving their business objectives. From the standpoint of TelcoX, Customer 1, an international telecom carrier, was a main customer in terms of revenue and other aspects. Whereas, as a main provider in resources in China TelcoX was regarded as a very important business partner for Customer 1. The cooperation between these two companies was viewed as 'a unique cooperation', which is different from traditional models. That is 'Customer 1 not only plays a role as the customer of TelcoX but is also a vital business partner'. As the senior project director of Customer 1 in Beijing office said: *"We always share with TelcoX all our solutions in the meetings...we regard TelcoX as a team member working together and transferring knowledge..."* The director of CSD in TelcoX was impressed with this type of cooperation: *"We know that our foreign business partners are more experienced and can provide much better services than us. We learn a lot from them in order to narrow the gap."* The learning experiences and the

interaction processes at lower levels of individuals and organisations aggregated these interactions in inter-organisational level, which also affected the levels of importance attached to any one interaction. In the longer term, the wider organisational and industrial contexts influenced and were influenced by these emerging interaction processes and long-term relationships.

### *Cultural perspective - emerging national and corporate culture*

TelcoX has a mix of traditional Chinese and Western cultures that made it different from the more typical Chinese state-owned-enterprises (SOEs). This unique cultural context seemed to have a positive influence on the evolution of e-supply relationships. TelcoX was founded by bodies that are affiliated with the Chinese government and its regional structure provided a degree of decentralisation for operating units that is not common in more typical Chinese businesses as described by Redding (1984) and Whitley (1992). With the use of CSS and other information systems within TelcoX, the process management and cross-functional business units began to show a degree of differentiation that was rare in traditional Chinese SOEs (Westwood & Kirkbride, 1998).

There were no non-Chinese staff working in this organisation, but senior managers came from various backgrounds. A few of them had experience of working in the West or in foreign enterprises. For those people, they emphasized 'ownership' and adopted Western-like professional working styles. The director of Supplier 3, an American company, expressed his view that: *"We work with TelcoX in a professional way which is called 'professional courtesy' ... It is easier to communicate with those managers who are from abroad"*. Those who had been working in Chinese SOEs for many years were used to working collectively and doing business in a relatively flexible way. For example, Chinese people are very familiar with doing business via 'guanxi' which means human relationships or personal connections (Pun et al., 2000). Ahmed and Li (1996) explain *guanxi* as fundamental in directing social and personal behaviors in China, it is characterised by implicit rules, both of obligation and reciprocity (Luo,

1997a). Usually people used to establish relationships simply through social activities, such as inviting people to a dinner. Therefore, the use of *guanxi* is the quickest and surest route to accomplishment in China. It also brings about some difficulties for Western enterprises to work with. "...We also had some negotiations with other local companies first but we found that their [some traditional companies'] old working styles are difficult to change. Finally we decided to cooperate with TelcoX. Although it is a newly formed enterprise... it is a promising company with a new working style..." the senior project director of Customer 1's Beijing office explained.

However, in the recent years, as business relationships developed, the new practices emerged through new experiences gained in business developments in some new Chinese enterprises such as TelcoX. Hence, there were some people who still used to build up relationships in the old way of *guanxi*. It could not work in China if it was abolished completely. It was also not suitable to apply the foreign experiences in China without considering the cultural context. Therefore, *guanxi*, an important factor in relationships in the Chinese culture, attached importance to personal and business relationships both in China and Western countries. Over time, different departmental cultures existed within TelcoX, which contributed to TelcoX's corporate culture that integrated subcultures into the mainstream in a harmonious way and also reproduced the new organisational structure.

**Emerging concept of 'guanxi-platform'** The main members involved in the processes of implementation and use of CSS who were interviewed indicated that the cultivation of *guanxi* at an individual or organisational level both within and between organisations was very important. As seen more and more frequently, Western enterprises and joint ventures who have expanded their businesses in China and some foreigners who could speak Chinese fluently, but could not understand Chinese culture very well, sometimes they made wrong decisions and judgments. The director of Supplier 3 told an interesting story about his American boss: "When my boss was in Singapore, he went to a Chinese school hoping to learn something about China. But, the teacher did not know what had happened in China in

recent years. My boss was told that to establish relationships with Chinese you must invite them to dinner. Therefore, my boss always asked me whether I had invited my customers for dinner. I felt very funny and told him that this was an old practice. That was so called *guanxi*. Now, it is different. We prefer providing customers with the best solutions, resources and services instead of wasting time at the dinner table. It is essential for us to establish and develop the relations with the customers' full support. Success achieved by customers will strengthen our relations with them. Customer satisfaction will help maintain the customer relationship."

This chain of events reflects the idea of 'sensation investment' in building a relationship. From the long-term strategic view, Chinese enterprises build up solid foundation with potential customers in order to gain business opportunities which are likely to emerge in the future. Therefore, to achieve this goal it is necessary to have various social activities and functions, through which people can make each other's acquaintance, promote mutual understanding and strengthen friendly connections. The new concept was called '*guanxi-platform*' and it was explained as '*a scientific platform embodying value, equality and respect*'. *Guanxi-platform* is invisible on both individual and organisational levels. Differing from traditional practice of *guanxi*, the new practices are transparent of *guanxi-platform* and above board. These have ensured the cooperation and competition among parties had 'healthy' relationships with others, e.g. equal opportunities and fair competition. These healthy relationships enabled parties to grow and develop; at the same time constraining development and their activities. Although there were differences in the practices, there were also similarities. Trust is a good basis for *guanxi-platform* and this has been becoming more and more professional in this advancing society. It was an important factor affecting suppliers' selection in this study. The CSD director of TelcoX noted: "...we picked out Supplier 1 by two main ways. We list the suppliers concerned and give scores item by item then select the best ones with the highest scores. This is criteria selection. It is not the only method to do so. Another way is through personal relationship. That means we tried to find out whether Supplier 1 is trustworthy or not through

friends.” Trust was also essential in the nature of *guanxi-platform*. From a customer’s viewpoint, directors of Customer 1 said: “...*We trust TelcoX to manage their business well in the ever-changing environments with their capable people of senior management level without relying on the traditional guanxi...*” “*Trust is very important in handling the relations between teams within the company as well as those between the company and its customers... customers’ trust in your company is based on their trust in you...trust can promote your company’s business ...*” Thus, a good basis of trust helped to build up a good company image, which in turn, ensured employees’ professional behavior and enhanced individuals’ knowledge and capabilities. Those were key factors in establishing a *guanxi-platform*.

Instead of personal interests or favours that were the main concerns in building up *guanxi*, the directors of Customer 1 and 2 expressed their ideas in establishing *guanxi-platform*: “*now, good products are essential for building up relationships...*” “*Companies operate in a continuously perfect system which is a prerequisite for the establishment of relationships.*” However, the values of personal feelings in the traditional concept of *guanxi* are not completely denied in the new understanding of *guanxi-platform*. People of principles have flexibility within the restrictions of the laws and regulations.

Some employees interviewed were deeply impressed by the personal images, working styles and abilities of their business counterparts. Good communications built up in the process of cooperation and understanding by people who have a similar viewpoint, with clear job allocations and responsibilities. Thus a base was constituted for human relationships. That is to say personal feelings cannot be ignored in both traditional *guanxi* and new *guanxi-platform*. In this case, human relationships serve as a motivating force. But in a case of a dead lock, people have to explore all possibilities to find a solution. In this situation, human relationships act as icebreakers. Sometimes, there were heated arguments in meetings over problems that could not be resolved if one were to stick to his or her standpoint without considering others’ viewpoints. Then the problem may not be solved despite the

existence of a very good human relationship. In this case the relaxation of tension was needed. If colleagues could sit and chat together in an easy atmosphere, such as in a coffee break, then somebody may be willing to consider the ideas of others. Possibilities for solving problems may appear. Here, human relationships act as lubricating oil in the mechanisms of business relationship.

To sum up, *guanxi-platform* could meet the requirements of people. With the platform numerous companies could be united together. Not only did they create opportunities for companies to communicate horizontally by classification, but also provided scope for intercommunications between individuals. The platform would be kept in perfect order by increasingly interesting topics and issues, as well as searching for new requirements and the promotion of new products.

### *Technological perspective – e-Technology-in-use*

Use of CSS and other information systems in TelcoX helped establish new forms of business relationships, which were enabled by the application of e-technologies and were regarded as e-relationships. Trust was a good basis for both traditional and new forms of e-relationships. Only in a trusting relationship can participants interact effectively. In the Chinese culture much emphasis had been placed on the teaching of Confucius. Under the teachings of Confucius, traditional Chinese SOEs were influenced by Chinese cultural values on organisational and managerial practices, such as people management. It is said that Chinese management is more relationship or people-oriented as opposed to performance-oriented (Lockett, 1988). One of the key characteristics was that all the management rules were made by people not by systems.

Differing from the traditional ones, e-relationships focused on the digital economy, because the emerging e-technologies enabled parties in a long-term business relationship to maintain constant communications and effective interactions. In other words, Chinese enterprises are gradually transforming to systematic management from people management. Moreover, e-technologies-in-use

caused a shock to the previous management model and business process. As the director of Management of Information Systems at TelcoX said: *“Because the more scientific (information system) management model is being adopted in our company, the more people power is to be divested. Therefore, our main concern should be on how to improve our management. The improvement in management is to shake up the whole previous management system...For example, to select a supplier and place a purchasing order was decided by people in the previous system. Whereas, we have to follow the new system procedure including vendor evaluation□price history, payment term, quality, etc [in our new system]. We have to accept the selected supplier by going through the whole process... This is a big difference from the previous one. Another difference is all approvals are by system, not by people and not by personal relationships...”*

However, as discussed earlier, the emotional components were still important elements for an individual as well as an organisation in developing relationships in the Chinese-based business environment. Humanity had been identified as an important value of a good-natured person. The emerging communication patterns enabled new forms of e-relationships, shaping the new technological structure within and around TelcoX. Communication and information flows took a variety of forms, which had different effects around TelcoX. Employees influenced and were influenced by these emerging organisational structures. People who tried to avoid misunderstandings or emphasized humanity relied on traditional ways like face-to-face contacts and memos. However, those people who preferred the advantages of the technologies frequently used email, Intranet and Internet systems. Also, an ERP system was used as the core of the IS in TelcoX. The interplay between e-technology-in-use and organisational structures provided insights into the understanding of the transformation of organisational interactions. Concerning the use of e-technologies, the director of CSD said: *“Both of us [suppliers and customers] share the same view that e-technologies will be very much helpful for both sides in cooperations in the near future...”* This view can be seen clearly in the chain cooperation among Supplier

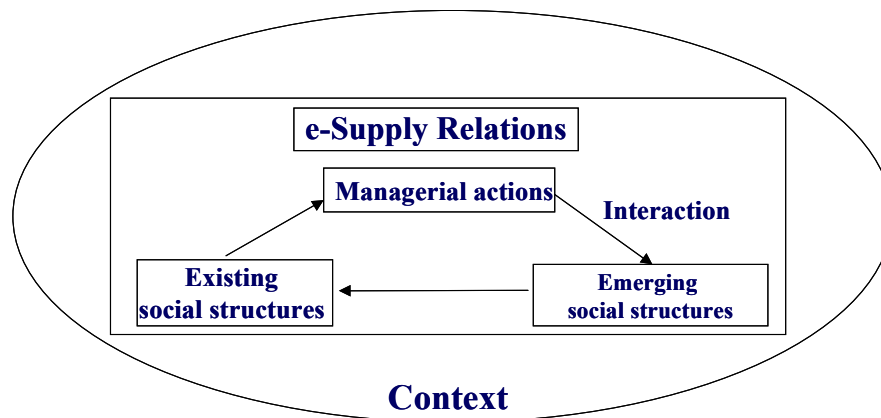
3-- Supplier 2-- TelcoX. Each party could find out where the value comes from, which was the key factor in maintaining the cooperation in this chain relation. Therefore, the business needs and the value of each party were vital links in the chain members promoting the development of the cooperation. In the meantime, this organisational cooperation became the driving force for using e-technologies in maintaining these e-relationships.

### *Structurational perspective – emerging e-supply relationships*

The analysis of the data indicates that changes in the CSD's job flow and TelcoX's work process and the consequences were triggered by CSS implementation. Use of CSS and other information systems in TelcoX provide a new set of features, which both enable and constrain managers' actions for forming e-supply relationships. Two interacting elements that were shaping the transformation of these e-relationships of TelcoX had been identified: social structures and managerial actions. Social structures included both technology in use, such as CSS that enabled and constrained interactions and social, cultural and industrial contexts that were reinforced and transformed by such interactions. Managerial actions were perceived as planned and unplanned actions taken by managers involved in decision-making, leadership behaviors, intra- and inter- organisational interactions.

These relationships were enacted in the emerging technological and cultural contexts by managerial actions, at the same time, these actions and interactions were shaped by these constitutions. By drawing on Giddens (1984) and Orlikowski (2000) the process (see Figure 2) can be seen as circuits of interactions between social structures and managerial actions.

**Social structures** Since Confucius codified the societal rules, values, and hierarchical structures during the sixth century B.C., Chinese culture has always stressed the importance of social order in terms of harmony, hierarchy, and development of moral potential and kinship. The codified ties of individual, family, and society define a person's proper place and position in any given hierarchy and

**Figure 2 Interactions between human actions and social structures**

the responsibilities these imply. Members do not exist independently and normally conduct work activities together, although individual work tasks are differentiated (Pang et al., 1998). The idea of 'team work' does not exist in most Chinese SOEs. In a typical Chinese SOE that is called a work unit (*dan wei*), employees are provided with education, housing, medical welfare and other needs (Ding et al., 2000). One's social status is determined largely by the *dan wei* to which one belongs. Linstone and Zhu (2000) say that without a *dan wei*, a person's existence is barely recognised.

Walk into the TelcoX office, their receptionists would immediately welcome you. And then after registration, wearing a 'VISITOR' badge, TelcoX staff would accompany you all the time during your stay in this business environment. The office layout was similar to most Western companies, where open workspaces could be used by more people, except for the semi-closed offices of senior managers or executives. Employees could work and contact each other in a very small geographical area. In this open environment, all the jobs could be done with both intentional and unintentional supervision by each other. This design was quite different from traditional Chinese SOEs, where different functions or departments were located in different rooms. Leaders had their own offices. Doors of those offices implied the organisational hierarchy, which were seen as barriers or distances for communication between different working levels.

In terms of the dress code, SOEs' staff generally wear casual or business casual attire during their business hours. Whereas, in TelcoX, men wore

differently coloured shirts and ties and women were in formal dresses. All the employees were wearing badges, which is not required by most Chinese SOEs. Informal discussions and conversations were held among employees gathered around coffee tables located in corridors where posters with company slogans were displayed. Those posters and company slogans strongly represented Chinese cultural values in cooperation, harmony and relationships, such as their so-called 'sixteen words' (see Appendix 2). The 'sixteen words' in Chinese were briefly translated into English as: Trustworthiness & Communication; Progress & Enthusiasm; Low-key & Hard Working; Achievement & Commitment. The business language was Chinese and some English terms were mixed into it by almost everyone.

**Managerial actions** The emphasis on collectivism and harmony in Chinese culture projects a preference for cooperation, group decision-making and relationships. In a Chinese SOE, decision-making is top-down and nothing much is accomplished without support from the higher echelons. Individuals are uncomfortable expressing personal views and abhor self-centred conversations where the 'I' is prominently used (Linstone & Zhu, 2000). They always seek out the opinion and endorsement of the group. No one is willing to stick his or her neck out, and so new ground is seldom broken, except by those at the very top. Leadership seems to play a particularly important role. The work unit's chief (*ling dao*) often exercises authority over family matters such as approval of marriage, divorce, and birth control, which is reflected in employees' internal appraisal and promotion. The notion of 'privacy'

simply does not exist in most Chinese SOEs. In Hofstede's (1991) empirical work the Chinese economies ranked highly on 'power distance' that reflects the willingness of subordinates to depend on the decisions and instructions of their superiors.

With the CRM idea and CSS support, TelcoX, a newly growing enterprise was seen as well managed under the leadership of its senior management group. It was known as a reliable telecom carrier with an international reputation in China. Use of CSS and other information systems in TelcoX provided a new set of features, which both enable and constrain managers' planned and unplanned actions for forming of e-supply relationships. With the leaders' full support to continuously expand knowledge and improve skills, employees' recognised that they had more opportunities to be trained while progressing along with TelcoX's development. Although TelcoX employees accepted the different cultures, the traditional cultural values were not easily shed, and this influenced managers' perceptions and business orientations.

## Conclusion

China, a large developing country, is becoming one of the most attractive economic markets in the world. Its future is closely tied to development in key industries, such as telecom and information technology, which are also considered to be the forces to sustain future economic growth. By joining the World Trade Organisation (WTO), Internet related businesses are viewed as value-added ones, which allow more flexibility of foreign investments in China. These also create and foster China's advantages in global competition. The emergence and employment of e-commerce emphasize the necessity of developing and maintaining international business relationships in China.

This study focuses on the dynamics of e-supply relationships in a Chinese telecom enterprise by using an interpretive case study approach. The findings imply that effective interactions through learning occurred at different levels. Individuals focus on the knowledge and skills development through knowledge searching, self-education, training, and on-the-job development. Learning at department level

is more responsive and more effective to organisational change, such as group study, decision-making and team work development. Organisational learning is a process that influences and is influenced by organisational structures in terms of culture, systems and processes. It is important to note that the context in which we consider learning has expanded beyond organisational boundaries to the inter-organisational setting, but it is not simply the sum of the other levels.

In its cultural context, the findings indicate that new Chinese telecom enterprises seem to have a higher tolerance for cultural differences and a willingness to accept alternative viewpoints, but when different national and industrial factors are taken into account, wide variations exist in developing and maintaining business relationships. In particular, the key variation with respect to e-supply relationships is rooted in the Chinese cultural norms of *guanxi-platform* that have important impacts on the success of the telecom enterprises in the ever-changing Chinese environment. This paper also compares the practices of Chinese traditional *guanxi* and the emerging concept of *guanxi-platform*. A better understanding of Chinese culture in doing business will not only help many Western companies enter the fast emerging Chinese market, but also enable China's telecom industry and companies to make significant changes in the near future. From a cultural perspective, cross-cultural working and other relationships that were enabled by the use of e-technologies in TelcoX present a view of the dynamic and emergent nature of culture. These e-relationships existed in TelcoX as well as within the context of the wider network, influenced and were influenced by the organisational transformation.

Changes in the work process of TelcoX and the establishment of intra- and inter- organisational interactions were triggered by the new CSS system design and implementation. The extent and effectiveness of the use of e-technologies in this study depends on several issues, which can have both direct and indirect influences on managing e-supply relationships. In addition, international business is one of the main driving forces for e-technologies use in China.

In this research, the conceptualization of the emergence of e-supply relationships in TelcoX represents circuits of interactions between managerial actions and social structures, and the particular cultural and technological context within which the interactions take place. The reciprocal interaction offers insights into the role of national and corporate cultures both inside and between organizations in shaping e-supply relationship in this specific context. This study at TelcoX so far offers the first step toward a comprehensive conceptualisation of the formation and transformation of e-supply relationships in diverse cultural settings and its wider network context. Although the study generated preliminary empirical understanding of the key cultural issues and the complexity of this enactment process of e-supply relationships highlights, the need for further studies at TelcoX, is required to develop this understanding further.

These findings may not apply identically to all organisations and industries but do offer four empirically supported perspectives for understanding the formation of e-supply relationships. Understanding the differences in doing business between China and the West can help gain a perspective of the importance of Chinese cultural norms, such as *guanxi-platform* in its cultural context. The role of *guanxi-platform* in the formation and transformation of e-relationships will help Westerners adapt to and accommodate the differences in handling Chinese-based businesses. Having recognised the vast market opportunities created by China's recent receptivity to foreign corporate investors, Western companies must cultivate the Chinese *guanxi-platform*, which is critical for the success in this dynamic business environment.

The empirical understanding generated in this context has implications for managing the organisational inter-dependency of e-technology enabled business relations, and for assessing the effects of managing such relationships. For managers, these insights not only open up cultural aspects of customer-supplier relations but also suggest that the emergence of different cultural norms may accompany the enactment of e-supply relationships. The insights would be particularly valuable for Western organisations forming alliances with Chinese enterprises.

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**Appendix 1: Details of data collection**

<b>Semi-structured Interviews</b>			
Firms	Positions of Interviewees	Number of Interviews	
TelcoX	Directors	10	
	Senior Managers	9	
	Managers	6	
	GMs, Regional Office, CSSD	3	
	Senior Manager, Regional Office, CSSD	1	
Suppliers	Directors	2	
	Senior Managers	3	
Customers	In China	Directors	2
	In UK	Director	1
		Senior managers	2
Total		39	
<b>Field Notes</b>	<b>Documents</b>	<b>Other Materials</b>	
Interview notes	Emails	Posters	
Observation notes	Internal training materials	Brochures	
Conversation summaries	Internal operation documents	News from Websites	

**Appendix 2: TelcoX's Corporate Culture**

*Trustworthiness & Communication:* All TelcoX people should trust each other, trust our mission, trust the social value of our products, trust the colleagues and team members working together and be confident of everybody who can fulfil one's tasks successfully. An excellent environment provides good working conditions. We believe that communication is a good way to solve all the problems and to promote trust that creates pleasant working environments.

*Progress & Enthusiasm:* Challenge ourselves continuously without satisfaction with achievements we have obtained. Be happy to help others. Work with enthusiasm and courage to discover problems and solve them with creativities. Be brave in front of

difficulties and challenges without complaint. Aiming high and strive for taking the lead in field of our industry, products and services.

*Low-key & Hard Working:* To work honestly without exaggerations. Strive for practical results in a thoroughgoing manner. Regard the company as one's own home. Be industrious and thrifty in management without wasting.

*Achievement & Commitment:* Strive for greater achievements. Let figures speak for themselves. Keep promises among staff and departments, between upper authorities and subordinates, company and stockholders as well as company and customers.

