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Formal Control, Social Control and Guanxi in IT Outsourcing: A Study in Chinese Enterprises

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Abstract

IT outsourcing becomes popular and grows fast in Chinese enterprises (i.e. Chinese state-owned enterprises and Chinese private enterprises) since it has been considered an important tool for enabling organizations to reduce the IT cost, improve the service quality and access scarce resources. Control plays an important role in IT outsourcing by integrating the complementary capabilities of the participants. However, most of the extant literatures focus on the study of control modes in western enterprises or studying IT outsourcing in China with the perspective of western control modes without considering the impact of Chinese culture. Hence this research explores control modes and the role of guanxi in IT outsourcing projects in Chinese enterprises.

The approach of case study was utilized in the research. Four IT outsourcing projects from four Chinese enterprises are considered as unit of analysis. Data was gathered through one-on-one, semi-structured interviews with key figures of project team involving the clients and the vendors. Data analysis of in-case and cross-case is utilized. The findings accept the propositions that formal control exist in the west also prevails in Chinese enterprises but reject the proposition that social control is adopted in Chinese enterprises. The findings also accept the proposition that guanxi plays a role in contact and control stage but doesn't impact in contract stage of IT outsourcing project in Chinese enterprises. Do-favor caused by guanxi is considered as the complementary of formal control to solve the conflict in IT outsourcing project.

The research contributes to the academic and the practice of control mode in IT outsourcing in China and contributes to understand guanxi in the context of IT outsourcing. But the research focuses on the positive impact of guanxi and the negative impact of guanxi should be further studied in future.

Keywords- formal control, social control, guanxi, do-favor, Chinese enterprise, state-owned enterprise, private enterprise, case study

Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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List of Abbreviations

ASP: Application Service Delivery

BPO: Business Process Outsourcing

CTO: Chief Technology Official

GDP: Gross Domestic Product

ITO: Information Technology Outsourcing

PMP: Project Management Professional

PMI: Project Management Institute

SASAC: State-owned Assets Supervision and Administration Commission

TCE: Transaction Cost Economics

Chapter 1.Introduction

IT outsourcing (ITO) usually refers to outsourcing all or part of IT functions to an external party and it has been considered an important tool for enabling organizations to reduce the IT cost, improve the service quality and access scarce resources (Seddon et al. 2007).It has become popular and grown fast in the world. According to Gartner Inc. (2020), the worldwide IT outsourcing market reaches $1080 billion in 2019, a 4 percent increase in U.S. dollars compared to 2018. Asia-Pacific region is one of the growth leaders compared to other regions. Gartner Inc. (2020) estimated that ITO markets in emerging Asia/Pacific, Latin America and Greater China would all grow more than 10 percent in 2020 and 2021. Among all the Asia-Pacific countries, China is recognized as an emerging leader in recent years with an approximately 13 percent growth rate in 2018 and 2019 (Gartner, 2020). With the increasing availability of talent, the quality of infrastructure and ongoing government commitment to ITO industry, ITO industry is expected to reach USD113 billion in 2021 (Gartner, 2020), estimating this as more than 10% of global value of ITO industry. Comparing with India, which relies heavily on offshore outsourcing, China has its unique growth path. That means China targets its vast domestic market to build and industrialize its domestic ITO sector. Furthermore, according to KMPG's report (2018), Chinese enterprises start to outsource high-end services instead of original low skill, high-volume services with little added value. China has aggressively positioned itself as a top ITO destination and has created a strong, domestically focused industry as well as an increasingly viable global and regional hub. As to the offshore IT outsourcing, with the strong support and investment from the Chinese Government (Lacity et al., 2010), China has become the world's second most attractive destination (after India) for global IT outsourcing. Chinese IT outsourcing market is increasing much faster than the worldwide IT outsourcing market; this makes the study on IT outsourcing issues in China more meaningful and interesting than ever before (Qu and Brocklehurst, 2003; Lacity et al., 2010).

Control plays an important role in IT outsourcing by integrating the complementary capabilities of the participants (Kirsch 1997). Western scholars have done a lot of research on the control modes in IT outsourcing projects. At first, according to the TCE (Transaction Cost Economics) theory, Western scholars (Ellram et al., 2007; Zelong et al., 2021) proposed that client companies use contract to control vendors. On this basis, Western scholars have further studied the role of formal control in IT outsourcing project (Krafft, 1999; Harmancioglu, 2009; Qi et al., 2012; Santanu, 2017). In recent years, Western scholars (Huber et al., 2014; Johann, 2021) have realized the limitations of formal control in IT outsourcing projects, suggesting that client companies should make more use of social control as a supplement or substitute for formal control to control vendors. Western scholars assume control modes exist in the west also prevail in IT outsourcing projects in China.

There are four types of enterprises in Chinese market: wholly foreign-owned enterprises, Sino-foreign joint ventures, Chinese state-owned enterprises and Chinese private enterprises. In light of the advanced management of Western multinational companies, the first two types of enterprises (wholly foreign-owned enterprises and Sino-foreign joint ventures) basically follow the management practices and processes of Western enterprises, also including the control modes (i.e. formal control and social control) of IT outsourcing projects. The latter two types of enterprises (Chinese state-owned enterprises and Chinese private enterprises) are collectively referred to as Chinese enterprises in this study. Chinese enterprises have different cultural backgrounds, so their management practices and processes are different from those of Western enterprises. Meanwhile, there are differences between state-owned enterprises and private enterprises in China. State-owned enterprises are managed by Chinese government authorities and their management practices and processes are restricted and influenced by the government. As Chinese private enterprise is influenced by Chinese hierarchical culture, their management practices and processes are restricted and influenced by the owner. Hence both state-owned enterprises and private enterprise attach great importance to formal control to manage internal employees. When IT

service is outsourced, control is extended beyond the boundary of the customer. Thus formal control is utilized to manage the relationship between the customer and the vendor too. Despite the differences in management practices and processes between Chinese enterprises and Western enterprises, few literatures focus on the control modes used by Chinese enterprises in IT outsourcing projects.

Some Western scholars (Yuan et al., 2009) believe that Chinese enterprises rely more on social control in IT outsourcing projects than on formal control because of imperfect laws and regulations in China and the fact that Chinese society is based on relationships, unlike Western enterprises, which rely more on formal control. The dissertation criticizes this viewpoint. Firstly, with the development of Chinese economy, the perfection of laws and regulations, and the improvement of Chinese enterprises' own management level, more and more Chinese enterprises attach importance to contract and other formal control methods. Cong et al. (2015) conduct a questionnaire survey to 150 Chinese enterprises about IT outsourcing projects. The results show that an elaborately designed contract and effective contract management are vital for managing IT outsourcing relationship. As for the complexity of contract, this research is consistent with the previous theory in that a detailed and complex contract is more effective in IT outsourcing projects. Regarding contract management, this study has strengthened the role of contract management in the implementation stage of IT outsourcing projects. That is to say, all behaviors implementing the terms of a contract after contrast signing are also very important, because they can ensure the implementation of the existing contract and future contracts, and enhance suppliers' responsibility after contract signing. Secondly, the relationship that Chinese enterprises are concerned with is different from that of Western enterprises. The relationships that Chinese enterprises care about are individual relationships (i.e. guanxi), while Western enterprises pay more attention to organizational relationships. Therefore, social control based on organizational relationship is not necessarily suitable for Chinese enterprises. Accordingly, the dissertation puts forward the first research question of this study:：

1)Are control modes (i.e., formal control and social control) which exist in the

west also prevalent in IT outsourcing in china?

Individual relationship mentioned as above is named guanxi. The Chinese concept of guanxi, broadly defined as a close and pervasive interpersonal relationship, is based on high quality social interactions and the reciprocal exchange of mutual benefits; it is a key component of buyer–seller transactions in China (Arias 1998; Lee et al. 2001; Xin and Pearce 1996). Due to the social embeddedness of business relations in China, guanxi has been advocated as a pervasive relationship lubricant that helps to increase the efficiency and effectiveness of daily business operations. It is also an essential informal governance mechanism that helps create social and economic value for Chinese enterprises (Fock & Woo, 1998; Gu, Hung, & Tse, 2008; Xin & Pearce, 1996). Accordingly, the advice typically given to Western managers has been to learn guanxi cultivation and practices when doing business in China.

The past two decades have witnessed an escalating interest among researchers in exploring the impacts of guanxi on business relations and performance – from earlier interpretative, qualitative theorizing explorations (e.g., Yang, 1994; Yeung & Tung, 1996) to more recent systematic, quantitative empirical testing (Gu et al., 2008; Peng & Luo, 2000; Xin & Pearce, 1996). The importance of guanxi in Chinese business has been repeatedly researched by numerous scholars (Brunner et al., 1989; Wong, 1998). However, guanxi has never been studied in the context of IT outsourcing especially how guanxi influences control mode in IT outsourcing has not been researched. This leads the dissertation to propose a further, two-part research question:

2a) What role (if any) does Guanxi play in the life-cycle of IT outsourcing (i.e., contact, contract and control phase) in China?

2b) In which situations might formal control, social control, and Guanxi (in the form of doing a favor) complement or substitute each other?

Chapter 3 reports on a qualitative research approach to be utilized to investigate the four IT outsourcing projects in Chinese enterprises. Semi-structured interviews have

been leveraged as the major approach to collect qualitative data from the interviewees (key figures in project teams involving the clients and the vendors). In-case and cross-case data analysis is utilized to explore the propositions.

Chapter 4 started from a comprehensive comparison among the four IT outsourcing projects to ensure that the four cases are comparable with similarities in company nature, business nature and project nature and governance mechanism adopted in the project. All the four enterprises are the representations of Chinese enterprises, covering different industries in the economy. In order to maintain or enhance core competitive advantage (i.e. innovation or efficiency) in the market, these four enterprises implement strategically important IT outsourcing projects. The practices and challenges of IT outsourcing projects in these four enterprises were examined. The data shows the outcome of these IT outsourcing projects meet their expectations and the users' satisfaction is acceptable. Hence successful experience of control modes is studied to apply to other Chinese enterprises.

Chapter 5 is divided into three main sections to explore the control modes in IT outsourcing projects in Chinese enterprises. First, the dissertation considers the driving factors of formal control derived from the extant literature (Chapter 2). Here the dissertation also considers how formal control is adopted in IT outsourcing projects. Formal control is the preferred approach since its influence is obvious and is easily implemented. Second, the dissertation investigates the motivation factors of social control and how social control is adopted in IT outsourcing projects in Chinese enterprise. But it is surprised to find that social control is not adopted in these IT outsourcing projects. Then the dissertation endeavors to interpret i) that some state-owned companies don't allow the staffs to build up the relationship with the vendor; ii) that social control is not easy to implement since it is soft skill. Third, the dissertation investigates how guanxi is adopted in different stage in the life-cycle of IT outsourcing projects. The dissertation finds guanxi results in a hidden control mode named "do-favor" in IT outsourcing projects and do-favor is the complementary of formal control

and the substitute of social control under some conditions.

Chapter 6 concluded that a portfolio of controls (formal control and do-favor) adopted in IT outsourcing projects in Chinese enterprises enhances the success of IT outsourcing projects in China. This concluding section also enriches and modifies control model in the context of Chinese culture (guanxi). This section also suggests the negative impact of guanxi should be further studied in future.

Chapter 2. Literature Review

2.1 Introduction

The dissertation aims to explore control modes and the role of guanxi in IT outsourcing projects in Chinese enterprises. Two research questions are raised in Chapter 1. Therefore, it is necessary for the researcher to review the extant literature in: IT outsourcing, control and Chinese culture (guanxi). Figure 2.1 demonstrates the area of the literature.

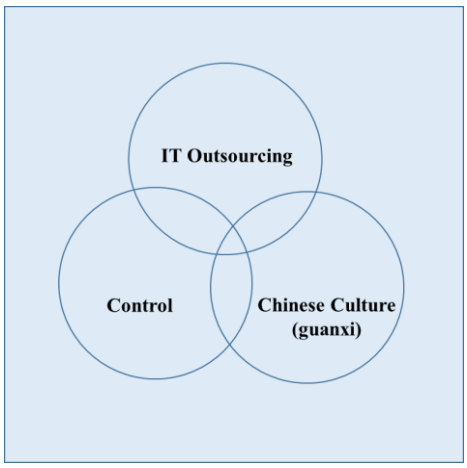


Figure 2.1 Area of literature review

The structure of Chapter 2 is as follows. In Section 2 the researcher defines IT outsourcing and clarify the scope of IT outsourcing. In addition, researcher also introduces new types of IT outsourcing such as offshoring, application service delivery (ASP), business process outsourcing (BPO) and cloud computing. Section 3 provides an overview of the previous IT outsourcing literature to determine what has been studied, what is being studied, and what will be studied. The researcher finds that less research was done in China than in India, despite the rapid growth of the Chinese IT outsourcing market while the global IT outsourcing market is shrinking. This makes the study on IT outsourcing issues in China more worthwhile and thought-provoking than ever before. Therefore, in Section 4, the researcher studies China's IT outsourcing from the perspective of practice and academic fields. The researcher recognizes that it is very important for customers and suppliers to implement appropriate control patterns in IT outsourcing projects of Chinese enterprises. So in Section 5 the researcher criticizes the

western control theory literature such as transaction cost economics, formal control and social control first of all. Since China is a society related to guanxi, guanxi will affect the control mode of IT outsourcing of Chinese enterprises. Secondly, researchers have sorted out the literature on guanxi, but there are few studies on it in the area of IT outsourcing. In Section 6 the researcher presents a propositional and conceptual framework. Finally, the researcher summarizes the additional contribution (if any) of guanxi to the development of IT outsourcing in China. Figure2.2 illustrates the progress of narrowing down the literature review.

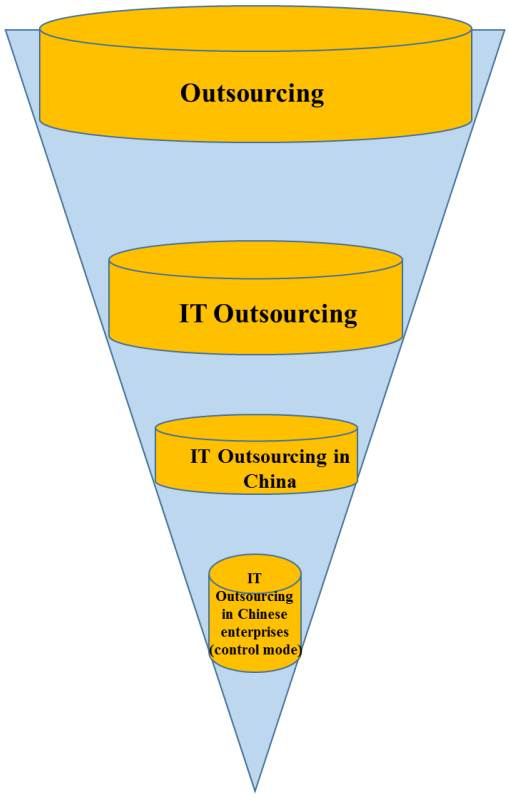


Figure 2.2 Research Focused Disciplines

2.2 IT Outsourcing: Conception and Evolution

The conception of outsourcing - "the handing over of assets, resources, activities and /or people to third party management to achieve agreed performance outcomes" (Lacity et al., 2006, p.2) – has been around for over than 200 years (McCarthy et al., 2004). However, it was not until the late 1980s, especially after Prahalad and Hamel(1990) put forward the theory of core competitiveness, that outsourcing developed into a popular strategic management initiative. Prahalad and Hamel (1990) pointed out that only goods

or services that are considered as core competencies should be manufactured in-house. The core competitiveness theory answers the questions of why enterprises should outsource and which transactions should be outsourced. Arnold (2000) points out that the core competencies include the following three elements.

- "*In the eyes of the customers their characteristics must be relevant. They differentiate between the company and its competitors.*
- *To gain competitive advantage, resources and knowhow for the product must be unique over time. It must be possible to protect it against imitation by competitors over time. So a competitive advantage must be sustainable.*
- *Only if these resources are usable for multiple purpose, they are core competencies and should remain within a company and should not be outsourced.*" (p. 26)

Since the 1980s, outsourcing functions have grown in economic value, strategic importance and complexity. For example, the outsourced functions evolved from routine and non-value-adding functions, such as security, cleaning and catering, to key support and value-adding functions, such as information technology, logistics and accounting, and then to core manufacturing-related functions, such as design and certain production processes (Erica et al., 2019). The industry of outsourcing is expected to bring in $1.65 billion in revenues by 2020 (Gartner, 2018). ITO research can use literature from external fields. Nicholson et al. (2006) explore transaction cost and control in accounting outsourcing in the context of India. The researchers divided accounting outsourcing project into contact, contract and control phase. At each stage, outsourcing practice is studied independently. This dissertation uses the same distinction to study the contact, contract and control phases of each IT outsourcing case. Gukseong et al. (2016) discussed how to resolve the conflict of tasks between manufacturing firm management and Chinese suppliers' manufacturing outsourcing projects. It is found that in manufacturing outsourcing projects, Chinese guanxi moderates the effect of formal control on task conflict. This dissertation makes a further study of this finding.

2.2.1 Original IT Outsourcing

It has been 30 years since outsourcing was applied to information technology (IT) services. Kodak is the first company who outsourced its IT service in 1989. At the beginning, customers tended to outsource low-skilled, high-volume IT activities with little added value to external vendors. Some researchers discussed what IT activities could be outsourced. Adeleye et al. (2004) classified outsourced IT activities as training and education, software development, software maintenance, data communication networks, support operations, disaster recovery, telephone client support, development of a fully integrated system, and data center operation. In contrast, Jurison (1995), in his main theoretical work, refers to the following activities as IT outsourcing: "data processing operations; telecommunications; application development; and hardware maintenance " (p. 239).Generally, selected from the domestic market, a supplier provides all the IT services to its customers at that time (Hirschheim, 2009). With the development of new technologies, IT outsourcing has become more and more complicated, sometimes involving multiple suppliers and multiple customers in one arrangement (i.e., multiple outsourcing).

2.2.2 Offshore Outsourcing

Over the past 20 years, global connectivity has provided customers with access to offshore IT service providers due to "sharp price declines and increased international telecom computing capacity" (Nicholson, Jones and Espenlaub, 2006, p. 240).One of the main drivers of offshoring is continued cost reduction and pressure to maintain and improve processes (Nicholson & Sahay, 2001). Due to time difference between the client and the vendor, the working day can be extended to improve IT productivity. In addition, customers are more inclined to offshore IT services to India, China and other countries where service prices are lower than those in the West. Secondly, due to the lack of domestic IT resources, customers are more inclined to offshore outsourcing. Therefore, customers must look for IT resources in foreign markets. Hence, the client has to look for IT resource in foreign markets. Finally, the bandwagon effect (Lacity et

al., 1995) also plays a part in offshore outsourcing. When some clients take the advantage of offshore outsourcing, other clients just follow the examples to consider offshore outsourcing too. With these drivers, offshoring is growing even faster than domestic and foreign outsourcing. For example, IDC (2019) pointed out that the growth rate of offshore outsourcing is higher than 14%, while the annual growth rate of domestic and foreign outsourcing in the United States is 5-10%.

2.2.3 Crowdsourcing

Crowdsourcing can be seen as an online, distributed problem-solving approach that exploits the potential of large crowdsourced groups to turn problems and tasks into solutions via the network rather than traditional employees or suppliers (Doan et al., 2011; Zuchowski et al., 2016). Through online collaboration technologies and the rise of Web2.0, it has become relatively easy to reach large numbers of people. As a result, the concept of crowdsourcing is gaining popularity (Zuchowski et al., 2016). An increasing number of startups are adopting a crowdsourced based business model (Brabham, 2010), and many companies have begun to invest in both internal and external crowdsourcing (Zuchowski et al., 2016). Crowdsourcing is considered a particularly useful way to coordinate work for tasks that can benefit from collective intelligence (Leimeister et al., 2009) or tasks that are difficult to be processed by computers and therefore outsourced to people (David, 2009).

According to the conceptual work of Geiger and Schader (2014), a crowdsourcing system can be classified into four types according to the characteristics of crowd-sourcing work. First, *crowdprocessing* approaches rely on the crowd to perform large quantities of homogeneous tasks. The same contribution is a quality attribute of work effectiveness. Value comes directly from each individual contribution (e.g. Mechanical Turk or Galaxy Zoo) (Lintott et al., 2008). Second, *crowdsolving* approaches leverage the diversity of a population to find a large number of heterogeneous solutions to a given problem. The value of this approach derives directly from each individual contribution. *Crowds*olving is often used for very complex problems (e.g. Foldit, a

game-based approach to optimize protein folding) (Cooper et al., 2010) or if no pre-definable solution exists (e.g. ideation contests). Third, *crowdrating* systems often seek to leverage what is known as the wisdom of crowds (Surowiecki, 2005) to perform collective assessments or forecasts. In this case, the emergent value arises from a huge number of homogeneous “votes” (e.g. NASA Clickworkers, in which the clicks/votes of a crowd were used to identify craters on asteroids) (Kanefsky et al., 2001). Fourth, *crowdcreating* solutions seek to create comprehensive artifacts based on a variety of heterogeneous contributions. Typical examples include various user-generated content such as YouTube or knowledge from collaborative aggregations such as Wikipedia.

2.2.4 ASP and Netsourcing

ASP (Application Service Provision) is a way of information technology outsourcing with the development of Internet. Originally, ASP is a business model where vendors host and rent standard applications to customers over the Internet. ASP is also a way for small client companies to access expensive software -- such as enterprise resource planning software from SAP or Oracle -- while avoiding high infrastructure costs, support costs, or high software licensing fees. The ASP model flourished during the dot.com era since 2000, but while the value proposition to customers was solid, suppliers struggled to generate revenue. Many ASP vendors failed because customer contracts are too small, their duration is too short, the marketing costs of educating customers about ASP are too high, the profits from reselling proprietary software are too thin, and the transaction costs of serving so many customers in need are too high (Kern et al., 2002).

The ASP bubble burst in 2001, but since then there's been a resurgence of what we call "netsourcing." Netsourcing uses the internet as the delivery mechanism, but the suppliers, clients, and services have changed. Netsourcing suppliers have new business models and are attracting larger-sized clients. Instead of reselling another vendor's software, the new netsourcing providers developed netnative applications (proprietary applications designed and delivered for Internet delivery) that could only be delivered

through Internet (for example, Salesforce.com).Traditional IT suppliers like IBM and EDS (now part of HP) also incorporated netsourcing into their service options, providing their customers with a portfolio of application delivery options. Providers received the message that clients want customized services, even if the products are standardized. The need for customized services actually increases the service providers' viability because they can generate profits by charging for value-added services. Companies like Xchanging and Hewitt have highly customized service contracts but provide many services in an ASP format (Willcocks and Lacity, 2006). Kern et al. (2002) provide a good overview of the difference between ASP and traditional IT outsourcing. They conclude that the risks of ASP are similar to traditional IT outsourcing, but that many of the risks of ASP are more likely to occur. Especially, the probabilities for risks increase with ASP due to immature suppliers, immature customers, and immature technologies. Loebbecke and Huyskens (2006) studied the determinants of netsourcing decisions in 88 German firms. The authors found that companies using netsourcing have significantly lower values on (1) competitive relevance of software applications, (2) strategic vulnerability of netsourcing, and (3) technological uncertainty. As a result, netsource applications are considered to be non-strategic and technically determined, and therefore secure netsourcing — much like traditional outsourcing. Susarla (2003) examine the determinants of ASP success in terms of ASP satisfaction and ASP vendor performance. Based on a sample of 256 client firms that netsource at least one software application, the authors found that the clients are most satisfied with ASP when they (1) rated ASP supplier performance higher, (2) had more prior systems integration experience, (3) had higher a priori expectations about the ASP's functional capability, and (4) had lower gaps between a priori expectations and a posteriori perceptions of ASP performance. As with traditional IT outsourcing research, customers are more successful with ASP when they have realistic expectations and have conquered the learning curve through previous experience.

2.2.5 Cloud Computing

Cloud computing is also a new type of IT outsourcing. But there is no universal

definition of cloud computing. Some authors try to define cloud computing in terms of related technologies. For instance, Leimeister et al. (2010) defined cloud computing as an IT deployment model based on virtualization, where resources, such as infrastructure, applications and data, are deployed via the internet as a distributed service by one or several service providers. In this model, IT services are scalable on demand and can be priced on a pay-per-use basis. Others try to define cloud computing from the perspective of the business. Marston et al., (2011) defined cloud computing as "delivered on-demand to customers over a network in a self-service fashion, independent of device and location". Furthermore, "users pay for the service as an operating expense without incurring any significant initial capital expenditure, with the cloud services employing a metering system". However, these definitions are not appropriate for outsourced components that support cloud computing. Yigitbasioglu et al. (2013) defined cloud computing as "an enabler of ITO whereby access to IT resources such as software, hardware, and platform are delivered over the Internet as a service and users are predominantly charged on a pay per-use basis". Therefore, cloud computing can be considered as one new type of IT outsourcing.

There are different opinions about the difference between ITO and cloud computing. Katzan and Dowling (2010) suggested that outsourcing means moving existing functions out of departmental, enterprise, or geographic jurisdiction, whereas in cloud computing, the home of the application originates in the cloud. Yigitbasioglu et al. (2013) argued that both ITO and cloud computing may require a transfer of resources from internal to external providers. The length of the contract is another major difference between ITO and cloud computing. Typically, cloud computing contracts are shorter than ITO contracts because cloud computing users pay per use. Cloud computing is more flexible because contracts are flexible and can include monthly, weekly, daily or even hourly service offerings. The third difference is that clients of cloud computing are more likely to request additional or reduced services or new services, because the resources of cloud computing are internet-based and managed through software (Marston et al., 2011).

2.2.6 Outsourcing Types Considered in This Research

In summary, this study aims to explore the control patterns (i.e. formal control, social control and do-favor) of IT outsourcing in Chinese enterprises. According to western literature, social control is usually used in strategically important IT outsourcing projects with high value. In order to study social control, IT outsourcing with low skill, high volume IT activities with little added value is not considered in the research. As mentioned in Chapter 1, Chinese companies tend to outsource IT projects to domestic suppliers due to language issues. In order to study the IT outsourcing of Chinese enterprises, offshore outsourcing was not considered. Except these two types of IT outsourcing, other types of IT outsourcing are considered in the research. (Table 2.1)

Type of ITO	Characteristic	Considered in the dissertation?
Original ITO	domestic, outsource low skill, high volume IT activities with little added value	No
Multisourcing	Outsource complex IT activities, involve multiple vendors and multiple clients in one arrangement	Yes
Offshore Outsourcing	Outsource IT to the vendor in other countries	No
Crowdsourcing	Online, distributed problem-solving approach that transforms problems and tasks into solutions by harnessing the potential of large groups of crowdsourcees via the Web	Yes
ASP (net-sourcing)	Netsourcing suppliers develop net-native applications that are only available through ASP delivery	Yes

Cloud Computing	An enabler of ITO whereby access to IT resources such as software, hardware, and platform are delivered over the Internet as a service and users are predominantly charged on a pay per-use basis	Yes

Table 2.1 Types of IT outsourcing

2.3 Trend of ITO Research

This section goes through the research themes in ITO and identifies the dissertation contributes to this research theme (i.e. client-vendor relationship) since it explores relational governance (i.e. social control from the west plus do-favor from guanxi in China) in ITO in Chinese enterprises.

The practice of IT outsourcing is earlier than this research, which promotes the development of IT outsourcing research. Since Kodak Company started IT outsourcing in 1989, scholars started to study IT outsourcing and published a large number of research books and papers. In the past 20 years, the theoretical and empirical work on information technology outsourcing (ITO) has accumulated rich and varied content. More than 20 theoretical perspectives are adopted to research ITO such as "economics (e.g., Transaction Cost Economics (TCE), Agency Theory), strategy (e.g., Resource Based View, Resource Dependency Theory), sociology (e.g., Relational Exchange Theory, Social Capital Theory, Innovation Diffusion), and natural sciences (e.g., Punctuated Equilibrium Theory)" (Lacity et al., 2010). On this basis, researchers have studied ITO from different perspectives. In this part, in order to better distinguish the contribution of this study, the author summarizes previous ITO literature reviews, and finally finds eight major ITO literature reviews, clarifying the gap between previous literatures.

Dibbern et al. (2004) covered the literature up until the year 2000. The researchers

organized ITO papers by whether the papers focused on the ITO decision (why, what, which) and/or implementation (how, outcome). Among their many findings was that 46 articles (55%) focused on why companies made outsourcing decisions. The researchers also analyzed the theories used in ITO research, and found that the most frequently used were TCE (19%), strategic management theories (17%), and Agency Theory (12%). Eighteen of the papers used more than one theory, and 13 of them supplemented TCE with another theory. The researchers also identified five gaps in knowledge.

Fjermestad and Saitta (2005) conducted a selective review of 29 articles on ITO and strategic decision-making. The purpose of their review was to form a key element framework. The resulting framework has eight components: alignment of business strategy, contracts, infrastructure and technology, culture, strategic partnership, management support, governance committees, and economics.

Mahnke et al. (2005) reviewed 19 ITO articles that used TCE, Resource-based View (also called the Competence Perspective), and the Relational View or some combination of the three theories. Based on the empirical results of these three test theories, this paper aims to propose a process model of ITO. The researchers concluded that the independent variables from existing theoretical explanations are too limited. The researchers also pointed out that dependent variables were highly dispersed, and that measures of outsourcing performance included degree of outsourcing, intensity of outsourcing, outsourcing expenditure, technology performance, partnership quality, exchange performance, and cost savings.

Gonzalez et al. (2006) reviewed 131 articles on ITO published between 1988 and 2005. Of these, 63.4% were empirical, most commonly field studies and case studies. The researchers also analyzed the perspectives of the articles and found that 82% assume a firm-level perspective. Specifically, 49% of the articles adopted the perspective of the client firm, 16% assumed the perspective of the supplier firm, and 17% considered both. The remaining articles assume larger units of analysis (such as countries or IT

industries), or smaller units of analysis (such as the impact of ITO on IS personnel). The researchers also identified 24 of the most prolific ITO researchers.

Lacity et al. (2009) provide a review of practice-related findings in the ITO literature. They organized 191 ITO articles published between 1990 and 2008, covering six practitioner concerns:

(1) the types of firms most likely to outsource ITO

(2) the strategic intent and effects of ITO decisions

(3) the risks of ITO and risk mitigation strategies

(4) practices associated with successful ITO deals

(5) client and supplier capabilities

(6) the extent to which ITO practices must be adapted for other forms of outsourcing such as business process outsourcing (BPO) and ASP.

Alsudairi and Dwivedi (2010) examined outsourcing research across 38 disciplines. The authors classified 315 outsourcing papers published from 1992 to 2008 by subject area, journal, author, institution and citation frequency. Among their findings, management had the most articles on outsourcing (136 articles), followed by information systems (128 articles). The Journal of Information Technology was the most frequent outlet for outsourcing articles with 23, followed by Information & Management with 18 articles. Articles by American authors accounted for 52 per cent and articles by British authors accounted for 15 per cent. The most cited papers appear in the Management Information Systems Quarterly and the Sloan Management Review. The authors did not summarize the academic findings.

Lacity et al. (2010) examined 164 empirical ITO articles published between 1992 and 2010 in 50 journals to answer two research questions: What has the empirical academic literature found about decisions and outcomes in information technology outsourcing (ITO)? What are the knowledge gaps to be considered in future ITO studies? Using the approach used by Jeyaraj et al. (2006), the researchers summarized the extensive

empirical literature on ITO in a concise, meaningful, and research helpful manner. The researchers coded 36 dependent variables, 138 independent variables, and 741 relationships between independent and dependent variables. By extracting the best evidence, the researchers developed two models of outsourcing: one that deals with ITO decisions and another that deals with ITO outcomes. The ITO decision model includes independent variables related to outsourcing motivation, transaction attributes, client firm characteristics and source of influence. The ITO outcome model includes independent variables related to customer and supplier capabilities, relationship characteristics, contract governance, decision characteristics, and transaction attributes. The researchers also examined the interactions among broad categories of variables and the learning curve effects resulting from feedback loops.

Liang et al. (2015) adopted main path analysis to investigate the IT outsourcing (ITO) field by identifying a group of papers that played a central role in the development of the field and the main research themes that emerged from citation patterns. The researchers selected the top 120,000 main paths out of 6.45 million main paths in 798 ITO papers, and obtained a dataset of 280 data sets representing the most important nodes of ITO knowledge flow. On the basis of analyzing the multiple main paths, twelve major research themes emerged: ITO motivations, ITO decisions, ITO risks, debate around transaction cost theory, client–vendor relationship, the vendor's perspective, psychological and formal contracts, ASP, BPO, opensourcing and crowdsourcing, offshore outsourcing, and multisourcing. This study is one of the few studies that use bibliometric analysis to analyze and visually characterize the citation network of the rich subject of ITO literature. Master Path Analysis accurately identifies and visualizes the major knowledge streams and major ITO research streams in the evolution of ITO research, thus providing an in-depth understanding of ITO research in the last 20 years.

Michael et al. (2019) extend the empirical results analysis of ITO decisions, outcomes, and determinants of governance. The researchers confirm the growing research maturity, analyze the impact of 38 new independent variables, highlight conflicting findings, and

observe a growing interest in emerging topics such as ITO innovation and multi-sources. After review previous ITO researches, the trend of ITO research is identified (Table 2.2).

Each of ITO's major research themes can be thought of as fads -- they emerge at a particular point in time and disappear as knowledge in a particular field becomes relatively complete. ITO motivation and ITO decision-making were the most popular topics in the 1990s, but fell out of fashion in the early 2000s. These topics gained some momentum after 2006, most likely because the emergence of new types of outsourcing prompted researchers to question whether the previous knowledge can be applied to the new environments. In the late 1990s, the relationship between customers and suppliers began to attract research attention, and has become a hot topic that continues to this day. They have become particularly popular since 2008, possibly because new outsourcing types such as offshoring and multisourcing create new challenges for relationship management. ITO researchers have conducted extensive studies on client-supplier relationships and have accumulated a great deal of knowledge in this area. Relational governance (i.e. social control in the west) is supposed to continue to attract academic attention, particularly for outsourcing contracts involving vendors from emerging economies and thus risking cultural clashes. With the increasing complexity of the ITO relationship, formal control alone cannot guarantee the success of ITO. Relationship governance will provide a useful perspective for studying how to effectively manage complex customer-supplier relationships. This study explores relationship governance (i.e. social control from the west plus do-favor from guanxi in China) in Chinese firms' ITOs, which contributes to the theme of this study (i.e., customer-supplier relationships).

Authors	Published time	Study period	Sample size	Summary
Dibbern et al.	2004	1992–2000	84	The authors categorized and analyzed the literature by outsourcing stage, research approach, reference theory used, and unit of analysis.
Fjermestad and Saitta	2005	1981–2004	29	The authors did a selective review of 29 articles for the purposes of developing a critical factors framework.
Mahnke et al.	2005	1995–2002	19	The authors propose a process model of ITO based on empirical findings from Transaction Cost Economics, Competence Perspective, and the Relational View.
Gonzalez et al.	2006	1988–2005	131	The authors categorized and analyzed the literature by research approach, research perspective (i.e., client, supplier, or both), and author.
Lacity et al.	2009	1990–2008	191	The authors organized the literature that answered six practitioner questions about ITO, such as 'What is the strategic intent behind outsourcing decisions?' and 'What are the risks of ITO and how are they mitigated?'
Alsudairi and Dwivedi	2010	1992–2008	128	The authors categorized the literature by the frequency of articles published by subject, journal, author, university affiliation, and citations.
Lacity et al.	2010	1992–2010	164	The authors summarized the empirical academic literature by coding the independent and dependent variables and their relationships. The paper also addresses gaps in knowledge.
Liang et al.	2015	1992–2013	798	The authors employed the main path analysis to map the entire field of ITO and identified 12 main research streams: motivations for ITO, ITO decisions, ITO risks, transaction cost economics, client–vendor relationship, vendor's perspective, psychological and formal contracts, ASP, BPO, offshore outsourcing, opensourcing, and multisourcing.
Michael et al.	2019	2015-2017	246	Recent literature indicates a continuously high level of research activity on the determinants of sourcing outcomes.69 independent variables from 14 meta categories as determinants for successful outsourcing, innovation effects, or its risks, and 22 of these variables across six fields were completely new. This indicates that the field is still evolving and new aspects are being investigated to further improve ITO success

Table 2.2 Summary of previous literature review of ITO

2.4 Previous research of ITO in China

There are two kinds of companies in China. One includes foreign companies and joint

ventures in China. The culture of these companies can be described as a Western management style. These enterprises adopt control patterns (i.e., formal control and social control) in ITO to conform to the standards of headquarters in western countries. The second category is Chinese state-owned and private enterprises, referred to in the study as "Chinese enterprises". Culture there is more Eastern in style and control mode in ITO in Chinese enterprises is also influence by Eastern culture.

However, in contrast to the large amount of research work in the West, there is little literature on outsourcing in China, although the practice of IT outsourcing has flourished in the past decade. In China, there are even fewer quantifiable measures of the success of IT outsourcing. So far, most of the research has focused on analyzing the motivation of IT outsourcing or the concept of offshoring to China. For example, Lau and Zhang (2006) discuss the driving factors and obstacles of outsourcing in China's logistics industry; Qin et al. (2012) identified the risks of IT outsourcing in Chinese financial institutions; Ma et al. (2008) studied the communication and coordination between Chinese software suppliers and their global outsourcers. Another group of researchers delved into relationship and governance issues and explored their impact on the performance of various IT outsourcing. For relationship-related issues, Chu and Wang (2012) have specifically studied the influence of relationship quality on firm’s financial performance; Lai et al. (2012) empirically tested the causal relationship between trust/relational norms and vendor’s opportunistic behavior; And Wong et al. (2010) argue that the goal of cooperation rather than competition or independence is the basis for sharing the business practices of both parties in domestic IT outsourcing. On the perspective of governance, two studies (Li et al., 2008; Mao et al. 2008) simultaneously examined the mediating effect of formal and informal control mechanisms. However, these two studies do not delve into the relationship dimension and contract dimension, and the results are mainly applicable to offshore outsourcing alliances between Chinese and overseas business partners.

The extant literatures as above mainly investigate IT outsourcing in China from the

perspective of the west. The influence of Chinese culture is not studied in these researches. Chow et al. (1997) proposed that people from different cultural backgrounds have different attitudes toward the same management system. A management system that works in one culture may not work in another because it may fail when the environment changes. The IT outsourcing model originated in western countries is deeply rooted in western culture. Therefore, this model is not easy to be adopted by Chinese enterprises. Hofstede (1994) believes that in business relationships, culture has a fundamental influence on individuals' thinking and behavior, so it is crucial to understand the cultural background of business partners.

Firstly, Confucianism is considered as the culture of Chinese market. The Chinese way of doing business, or the Chinese business culture, is often seen as interpersonal-oriented, reciprocal, tactical and network embedded (Fang, 2006). These characteristics could be attributed to the traditional philosophies and strategic war theories – "Confucianism", "Taoism", and "War Stratagem" – which constitute the philosophical foundation of Chinese commercial culture. A "Confucian" Chinese businessman associates business with "win–win" and cooperation, while a Sun Tzu-like strategist favors "zero-sum" and competition. Westwood et al., (2003) considers that Confucianism is "the traditional Chinese culture and emphasizes conflict avoidance, indirect expression, face saving, relationships, harmony, a long-term perspective, and so on". For example, when there is a conflict between the client and the supplier, the client does not prefer formal control such as direct objection and assertive negotiation since "they have been told their entire lives to be non-assertive and indirect and to care about others' face (Mianzi) when handling conflicts" (Zeng et al., 2013). There are also differences in contract negotiations between Chinese companies and foreign companies. Foreign companies focus on goals and ensure performance through control, while Chinese companies focus on "value maintaining relationships and harmony——place emphasis on long term relationships. Moreover, influenced by such Confucian values as harmony, face saving, and long-term perspective, local employees tend to prefer comity"(Zeng et al., 2013).

Guanxi is considered as the unique influence factor in Chinese market. Trust is the decisive factor that affects the choice of business style of Chinese businessmen (Fang, 2006). In China, inter-personal trust (individual trust) is closely related to “guanxi”. Guanxi is a central feature of Chinese society, where the exchange of long-term interests between people is facilitated through a series of interpersonal relationships(Park & Luo, 2000). Luo (2001) contends that the Chinese often have genuine satisfaction in doing things the ‘guanxi’ way. Guanxi plays the role of “gate-keeper”, “door-opener”, and “peace-maker” in business practices in China. It can be seen as a Confucian heritage, and can also be regarded as a pragmatic choice with the expectation of economic benefits. It provides a moral and ethical framework (Millington et al., 2006) within which transactions could take place appropriately in a weakly regulated society, where inadequacies in both laws and enforcement have weakened professional morality and social responsibility (Griffith, Harvey, & Lusch, 2006). Ultimately, guanxi is established via common attributes, e.g. clanships, friendships, schoolmates and cultivated and maintained through social activities.From these cultural characteristics, one of the fundamental features of the Chinese business environment is the importance of the structure of business relations and community interactions. In most western countries, business culture is characterized by personal freedom, personal rights, independence, privacy and individualism.

2.5 Theoretical Background

After overviewing the extant literature of ITO, the section focuses on specific theories (TCE, Control and Guanxi) from which the dissertation derives the variables to establish its research framework.

In the past 20 years, the theoretical and empirical work on information technology outsourcing (ITO) has accumulated rich and varied content. More than 20 theoretical perspectives are adopted to research ITO such as “economics (e.g., Transaction Cost Economics (TCE), Agency Theory), strategy (e.g., Resource Based View, Resource

Dependency Theory), sociology (e.g., Relational Exchange Theory, Social Capital Theory, Innovation Diffusion), and natural sciences (e.g., Punctuated Equilibrium Theory)" (Lacity et al., 2010). Since the purpose of the study is to explore the governance mechanism of IT outsourcing in Chinese enterprises, the researcher will review the transaction cost theory and control theory existing in the West and the relatively unique Guanxi theory in the Chinese economy.

2.5.1 Transaction Cost Economics: Contractual Governance

Transaction cost theory is proposed by Coase (1937) and is developed by Williamson (1989). It is the fundamental theoretical framework to analyze IT outsourcing. TCE (Transaction Cost Economics) originated from traditional economic theory. In the scenario of IT outsourcing, TCE can help address why contracts are important and what kind of contracts should be used in a specific relationship. To answer this question, we need to first introduce five typical attributes in the TCE theory. Williamson (1985) has classified transaction attributes into behavioral and transactional. The behavioral attributes are asset specificity, uncertainty and frequency; whereas the transactional attributes or assumptions are rationality and opportunism. Asset specificity will appear, when the supply relationship needs to make physical or human resources investment in a specific relationship. Generally, the investment in a specific relationship cannot be redeployed to other users. As it is specific to a certain relationship, once this relationship is not continued, this investment will lose its value (Anderson and Weitz, 1992). With the increase of asset specificity, the contract needs to become accountable to eliminate the possible speculative behaviors of suppliers (Barthélemy and Quélin, 2006; Poppo and Zenger, 2002). Similarly, uncertainty and infrequent transaction will also raise the possibility of speculation, and thus a specific and detailed contract would also be required. To sum up, TCE regards an IT outsourcing decision as a rational decision, which has evaluated in detail the privacy (e.g. asset specificity, uncertainty, frequency) related to transaction. When the transaction cost is high, the outsourcing contract needs to be designed in detail to ensure the elimination of the risk of speculation. Next the dissertation will introduce the content of the theory and

summarize how it is applied to study IT outsourcing.

2.5.1.1 Conception of theory

Transaction cost theory has two assumptions. One is bounded rationality, the other is opportunism. Bounded rationality means the human being has the inability to find all the information of a transaction. As a result, a deal could lead to a degree of uncertainty. Opportunism is defined as “self-interest seeking with guile” by Williamson (1989), meaning that the parties tend to provide false or incomplete information to complete the transaction in order to gain benefits from the transaction. Bounded rationality and opportunism integrate and result in information asymmetry. When each party has different information they do not want to share that information with each other because they want to use the only information for their benefit. For example, the sellers hide negative characteristic of the product to get a better price whereas the buyers don’t reveal the negative characteristic and pay a higher price. Since each party realizes the other maybe is opportunistic he or she has to seek more information. For example, the buyer must test the product or request a warranty before purchasing to prevent quality problems. All of these activities incur transaction costs.

In transaction cost theory there are key dimensions: asset specificity, uncertainty and frequency. The dissertation will explain each of the dimensions as below.

Williamson (1996) once defined asset specificity as the “degree to which the assets used to conduct an activity can be redeployed to alternative uses and by alternative users without sacrifice of productive value”. There are no specific assets that can easily be reused in other transactions. Williamson (1981) proposed that the term "specificity" refers to three types of assets: site specificity, physical asset specificity and human asset specificity. Suppliers with asset specificity, including unique locations, know-how, and specific labor knowledge and skills, have an advantage over other competitors. Williamson (1985) pointed out that opportunism leads to lock-in problems.

Williamson (1985) pointed out there are two types of uncertainty. One is behavioral uncertainty and the other is environmental uncertainty and the former is paramount. Williamson (1985) used to define behavioral uncertainty as “strategic non-disclosure, disguise or distortion of information” and it is resulted from opportunism. Williamson (1985) also defined that environmental uncertainty was "environment is characterized by uncertainty in technology, demand, local factor supply conditions, inflation and other aspects" (p. 370), which is related to bounded rationality.

Williamson (1979) defined frequency as the buyer’s activity in the market. That means the number of times the company trades. Transactions can only occur once, occasionally, or periodically.

2.5.1.2 Application of theory

Since its development, transaction cost theory has been successfully applied in many academic fields. For example, Hennart (1988) applied the theory to study vertical integration in the aluminum and tin industry, Masten et al. (1989) applied the theory in the automobile components industry. Anderson (1988) applied the theory in the sales force of electronic parts and Joskow et al. (1987) applied the theory in the coal industry. Since IT outsourcing is applied in practical area many researchers, such as Alpar and Saharia (1995), Clark, Zmud and McCray (1996), Cronk and Sharp (1995), di Loof (1995), Jurison (1995), Klepper (1993, 1995), Lacity and Hirschheim (1993a), Beath (1987), used transaction cost theory to study ITO. Aubert at el. (1996) reviewed many articles and points out transaction cost theory is applied to study ITO at two levels. At the first level, the researchers apply the concepts of asset specificity and frequency to study ITO decisions. At the second level, transaction cost theory is applied to study IT governance to ensure ITO performance.

Transaction cost theory is most widely applied in the first level. There are two types of decision making in this area. One is called make-or-buy decision and the other is the decision of IT outsourcing strategy. Aubert et al. (2003) examined the characteristics of

IT outsourcing, including how technical skills, business skills, asset specificity and uncertainty affect ITO determinants. They figured out that "uncertainty is the major deterrent to outsourcing, while the level of technical skills is the most important reason to outsource. Business skills do not seem to play a significant role. Finally, asset specificity, which is always presented as a constraint to outsourcing, showed inconsistent effects" (Aubert et al., 2003). Ngwenyama et al.(1999) recognized the complexity of the IT outsourcing environment and pointed out that senior managers should not only make home-made or purchase decisions, but also decide the IT outsourcing strategy: "single and multi-vendor outsourcing strategies" (Ngwenyama et al., 1999). There is a new trend in this area. The researchers realized the limitation of transaction cost theory in explaining IT outsourcing decision and proposed to combine transaction cost theory with other theories to study IT outsourcing decisions. Watjatrakul (2005) compared ITO decisions based on transaction cost theory and resource-based theory and tried to find which theory is applied better for ITO decisions. The findings show that "a high-specificity asset is a major driver of sourcing decisions. It overpowers the effects of uncertainty on sourcing decisions; while a nonstrategic resource has no impact on sourcing decisions" (Watjatrakul, 2005). Arnold (2000) combined transaction cost theory with the concept of core competencies and designed a new IT outsourcing model. The empirical study shows that the new model is compatible. Mazen and Nicholas (2019) applied TCE to interpret how different types of asset specificity interact to influence lock-in in software development vendor relationship. Payam and Ahad (2018) applied TCE to identify 23 factors influencing factors on e-banking channels' outsourcing strategy.

The second level is the less area in which transaction cost theory is applied to study governance. Typically, researchers apply specific IT governance theories to this area. Ellram et al. (2007) applied transaction cost theory to understand how the company manage the risk and the cost of offshore outsourcing. They pointed out that "fixed costs of establishing the relationship dominate the variable costs of day-to-day transactions, and that organizations will not offshore outsource areas where there is high perceived

degree of unmanageable risk" (Ellram et al., 2007). Zelong et al. (2021) applied TCE to study clients' control mechanisms, vendors' contract schemas and ITO project performance in the context of cross-culture from the perspective of the vendor. The results show that the supplier's transaction contract model reduces the trust-based control effect, while the supplier's relational contract model enhances the outsourcer's contract-based control effect on relationship conflict. In turn, relationship conflict has a negative impact on project performance. Bestman and Dagogo (2021) use TCE to study the relationship between IT outsourcing and manufacturing firms' productivity in the context of Nigeria. Marsha (2018) applied TCE to explore the governance mechanism of IT outsourcing in a financial service organization located in USA. Three themes emerged: vendor governance and oversight, collaborative strategic partnership, and risk management strategies enabled effective management of ITO. Carlos et al. (2017) applied TCE to propose a governance and management model for IT outsourcing services from the perspective of clients of an institution in the Ecuadorian financial sector. Cornelia and Karlheinz (2021) applied TCE to analyze contract-type selection for short-term software development outsourcing. Based on TCE and control theory, the results infer that for short-term software development outsourcing, the high human asset specificity of the supplier and the resulting behavior-based outcome control, as well as developer monitoring determine the contract-type decision.

With the development of practice and academic research, some researchers have noticed the inconsistency between the theoretical framework of transaction cost and the practice, thus they begin to criticize the limitations of transaction cost theory and try to find a supplement to make up for the theoretical defects. Next, the dissertation will illustrate these criticisms in the same two levels as above.

Karimi-Alaghehband et al. (2011) criticize the idea of applying transaction cost theory to research to better explicate and predict IT outsourcing decisions and outcomes. They argue that such explanations and predictions are not always correct, but they do not blame the transaction cost theory itself, but the existing models, which do not seize all

the key contents of the theory. (1) Existing models fail to consider some core structures of transaction cost theory. (2) The connection between the existing model variables is inconsistent with the theory. (3) Existing models do not always seize the normative nature of transaction cost theory. Lacity et al.(2011) further developed Karimi-Alaghehband's research and agree with the view that explanations and predictions based on transaction cost theory are not always correct, but questioned their interpretation .They found that researchers made too many demands on the transaction cost theory because the phenomenon of IT outsourcing was too complex for the theory to accommodate. They suggest that researchers should develop their own endogenous theory of IT outsourcing. First of all, they criticize the hypothesis of transaction cost theory and put forward the alternative hypothesis. Then they proposed a new theoretical framework for further study.

Lacity et al. (1996) conducted interviews with 145 participants to study effective governance structures in IT outsourcing. In the end, they found anomalies in 87.5% of the cases. Then they tried to explain the anomalies from the perspective of both the theory proponents and the theory opponents. The proponents argue that “transaction cost theory does explain the data by dismissing, explaining, or re-interpreting the "apparent" anomalies” (Lacity et al., 1995, p.236). Opponents pointed out that the main reason why the theory cannot explain the data is that it violates the assumption of transaction cost theory when applied in the context of IT outsourcing. Lacity et al. (1996) also proposed that when using theories that are applied to other disciplines, they must be validated in the current field. Schneider et al. (2011) tried to “evaluate the alignment of transactions and governance structures with respect to performance”. Using a quantitative approach to the data, they found significant differences in consistency among companies with different performance. The companies with low performance are very close to a suitable match and the companies with high performance display over-integrated alignments. These findings don’t support the fundamental claim of transaction cost theory “that predicts superior performance when adhering to TCE principles” (Schneider et al., 2011). Schneider et al. explained the differences in results

caused by different deals rather than by governance structures. The meaning of this finding is that it “complements results of previous critiques of TCE, which suggest that– unless the classical model is expanded to account for other influencing variables of performance –it should not be used as the leading normative concept to guide decision making” (Schneider et al.,2011).

Transaction Cost Economics (TCE) addresses the contractual, structural and governance aspects of inter-organizational transactions. TCE originates from the field of Economics, emphasizing the importance of contracts. According to TCE, economic efficiency can be achieved through comparative analysis of production costs and transaction costs. Transaction costs depend on a combination of certain characteristics of the transaction taking place (i.e. asset specificity, uncertainty and frequency) and certain characteristics of human nature (i.e. bounded rationality and opportunism). When the buyer chooses the outsourcing provider, the relationship between the buyer and the provider is considered as the special asset and there is almost no substitute. Therefore, the appropriation problem is prominent. Buyers try to ensure that the investment is not appropriated for potential opportunism. When the buyer sees the future as uncertain, he is concerned about the problem of adaptation, because unexpected accidents may occur. Therefore, TCE puts forward the importance of contracts to solve the adaptation problem, and what kind of contract should be used in a certain relationship. As asset specificity increases, contracts need to become more complex to reduce the opportunistic behavior of suppliers. Uncertainty requires all parties to adapt to the problems caused by unforeseen changes, which challenge the exchange. It affects people's rational decisions, and increases opportunism. At this point, the contract needs to be as specific and detailed as possible to protect possible and inevitable changes in the exchange. By reducing the threat of retaliation, infrequent trading also increases the possibility of opportunistic behavior. To sum up, TCE sees the IT outsourcing decision as a rational decision made by a careful evaluation of transaction related factors, when transaction costs are high, outsourcing contracts need to be highly specific and complex to offset the risk of opportunism.

However, due to bounded rationality, it is not easy for the buyer to draft a detailed contract covering all possible issues in the future. As a result, they must enforce incomplete contracts and face the risk of adaptation problems and opportunistic behavior. These incomplete contracts need to be managed by alternative governance mechanisms, which are considered to be particularly effective by coordinating incentives, providing supervision, and achieving control through laws. Williamson proposes three mechanisms (i.e. market, hierarchy or hybrid) to explain the governance over the transaction. As the buyer works to select a governance mechanism, they assess the transaction costs associated with initiating, monitoring, modifying, and enforcing the outsourcing contract. Finally choose the mechanism with the lowest transaction cost. According to TCE, the hybrid mechanism is considered as an intermediate form since it involves all alternative mechanisms between the extreme market and hierarchy mechanism. Obviously, both market and hierarchical governance are mixed in the hybrid mechanism, "as it sacrifices some of the high powered incentives of the market in favor of superior coordination and some cooperativeness of the hierarchy in favor of superior market incentives". The level of focus on allocation will result in a hybrid model that resembles a market mechanism or a hierarchical mechanism. The more attention paid to appropriations, the more stratified governance becomes.

TCE is widely used as its basic paradigm in the literature. The main reason is that the production or purchase decision is the main problem that TCE pays attention to, and plays a crucial role in the relationship between suppliers and buyers. As a result, Poppo and Zenger (2002) point out that buyers are trying to adopt different governance mechanisms in the exchange to minimize transaction costs. Therefore, some transaction cost factors are identified as the antecedents of the governance mechanism, including asset specificity, environmental uncertainty and behavior uncertainty.

Williamson claimed that a hybrid organizational form is considered as a homogeneous category between 'market' and 'hierarchies'. However, Osborn and Baughn (1990)

argued the inter-organization relationship actually consists of a heterogeneous phenomenon. They point out that relationships between organizations can take many forms and serve many functions, and that saving transaction costs may be just one part of it. Because of this heterogeneous property of hybrids, it is proposed that they should be considered a unique and separate entity. While Williamson recognizes that minimizing transaction costs is not the only function of the governance mechanism, he believes it is still the primary function. However, Osborn and Hagedoorn (1997) also supported this view and argued that "some alliances may be designed to reduce transaction costs, but this is not their only function " (p.274). Furthermore, "focusing exclusively on transaction costs [. . .] may hide more than it reveals" (p. 274). Therefore, research shows that TCE alone is not enough to study the governance mechanisms supporting outsourcing.

2.5.2 Control Theory: Formal vs. Social Control

TCE has also been criticized for its lack of awareness of social control. As a result, a growing body of research points out that transactions are therefore seen as being out of context, as some form of independent event, and that TCE itself ignores the effects of previous and repeated transactions. The very nature of the 'inter-organization relationship' can be impacted by repeated transactions embedded in a wider social context. Such social contexts "which can result in informal coordination and monitoring and high trust between partners, touches upon some of the key assumptions of TCE". For example, as asset specificity in relationships increases, partners prefer to adopt less hierarchical mechanisms to control their relationships. Many alternative control mechanisms exist, such as "reciprocity norms, reputations, trust, personal relationships and the embeddedness of relationships in a social network of current and prior ties". These social control mechanisms differ from control by prices in the market and the administrative authority in the hierarchy. The perspective of social control provides the opportunity to expand awareness of control mechanisms in outsourcing relations. Hence control theory is considered as the complementary of TCE.

2.5.2.1 Conception of theory

Anderson et al. (1985) defined control as a behavior “attempting to ensure individuals or teams act in a manner that is consistent with achieving desired goals”. Jaworski et al. (1988) divided control into two types: formal control versus social control whose theory has been widely accepted now. Formal control relies on written contracts to influence behavior through performance evaluation and the reward. Informal control (" e.g., social norms, peer pressure, shared beliefs, and experiences "(Harmancioglu, 2009)) uses social strategies to narrow the goal gap between the principal and the agent. Jaworski et al. (1993) further divided formal control and informal control into subcategories with different characteristics on the basis of previous classifications.

There are two kinds of formal control: outcome control and behavior control according to “the degree of supervision, the objectivity of the evaluation procedures, and the time window” (Krafft, 1999). When the principal utilizes outcome control it means he is only concerned with the outcome of the agency. Goals are set by the principal and the principal evaluates the agent's results and rewards the agent for reaching those goals. When the principal utilizes behavior control, it means the principal is more inclined to supervise and influence the process of goal achievement. The principal sets clear rules, detailed procedures and objectives. When the agent strictly follows the pre-set rules and procedures, the principal supervises and rewards the agent’s behavior (Jaworski et al., 1989). The principal utilizing behavior control has to employ “greater supervision and contact, more subjective evaluation methods, and tend to have a longer time perspective” (Harmancioglu, 2009).

There are two types of social control: clan control and self-control, depending on whether the social group or the individual is exercising control. The principal employs clan control to “minimize the differences between preferences by transmitting common values, beliefs, and philosophy within the clan” (Harmancioglu, 2009). For example, the principal tries to build relationships by holding regular joint meetings with the agent. The agent prefers self-control in order to protect his own reputation and maintain long

term relationship with the principal. The agent must set its own goals and then plan the procedures it should follow to achieve them. For example, an offshore software development company might design the launch date of the software development process or new software delivery, and then monitor the whole process to follow the rules and complete the development on time.

From the description as above, control can be divided into subgroups which can be divided again according to their distinguishing characteristics. But the principals prefer a pair of control mechanisms instead of single control mechanism. In previous literature, most of the researchers have investigated each control mechanism respectively. Jaworski et al. (1993) and other researchers focus synchronously on the study on the pair of controls. Harmancioglu (2009) argued that "controls may combine synergistically to influence the achievement of a given objective and may be most effective when formal and informal techniques are bundled".

2.5.2.2 Application of theory

There are two trends in the research of control. One is that researchers tend to subdivide control into subcategories and study the influence of control subcategories on IT outsourcing. The other is to view control as a whole, trying to study the influence of control, trust, power and other factors on IT outsourcing.

Qi et al. (2012) selected two key factors of formal control and informal control as the object of the research: contract versus relationship. In previous research the researchers study each factor related to IT outsourcing performance separately. Therefore, Qi et al. (2012) tried to study these two factors from a comprehensive perspective. Finally they put forward three valuable findings: 1) both of these two factors: contract and relationship have a positive impact on IT outsourcing performance, and contract factors are the determinant of the factor of relationship. 2) "trust, commitment, knowledge sharing and communication quality are important factors in relationship dimension; and contractual complexity and contract management are major components of contract

dimension" (Qi et al., 2012) 3) Among Chinese enterprises, the biggest motivation for IT outsourcing is not to obtain strategic and economic benefits, but to obtain technological resource. Srivastava et al. (2012) also study different subcategories of control but their research is different from Qi's research. They focus on control mechanism within each subcategory. They defined control mechanism as "Control mechanisms are the ways in which different control modes are enacted, that is, "what" and "how" control modes operate". An understanding of control pairs helps to distinguish control mechanisms within the various control subcategories. Rustagi et al. (2008) focus on studying formal control. Furthermore they try to measure the formal control with the variable-"the amount of formal control" which is defined as "the variety of mechanisms used by a client to exercise control over a vendor and the extent to which each of those mechanisms is used". They collect the data to examine the correlation between the independent variables (Task uncertainty, degree of core competency involvement, technical knowledge, relationship management knowledge and trust) and the dependent variable (the amount of formal control).

Heiskanen et al. (2008) examine how customers manage vendors during software development. He finds out that the client's management method oscillates between control and trust to ensure the success of software development. This reveals that in the long-term process of IT outsourcing, customer management methods are inconsistent, but change in different stages according to different environments. Langfield-Smith et al. (2003) also study the effect of control and trust on IT outsourcing but they consider "the characteristics of the transaction (task programmability, output measurability, asset specificity and frequency of the transaction), the transaction environment and the parties" then on this basis, this paper analyzes how control mechanism and trust combine to influence the performance of IT outsourcing.

Kang et al. (2014) studied the relationship between outsourcing strategy and organizational control. According to their hypothesis, when a customer is inclined to choose an outsourcing strategy, he must choose the appropriate and matching control

mode. The data they collected tests the hypothesis and their findings show that "efficiency-seeking outsourcing, output control and process control are appropriate in creating successful outsourcing practices. As for innovation-seeking outsourcing, social control and process control are the most effective options".

Santanu (2017) aims to establish the significance of collaborative governance practices in creating higher business value from an offshore IT outsourcing relationship. Finally he proposes formal governance (i.e. formal control) and relational governance (i.e. social control) are vital components of a set of governance mechanisms.

Subasinghage et al. (2018) conducted a study to examine multi-level control conflicts among software development outsourcing project providers. Based on qualitative interview data, their study identified the importance of extending control theory to include a "strategic" dimension in order to minimize conflict. They proposed 'strategic' control as a higher-level construct, which complements formal and informal controls already in place.

Johann (2021) discusses the differences and interactive effects of contract and relationship governance mechanisms on relationship learning and joint innovation in IT outsourcing. The results show that contract mechanism is the main factor that determines joint innovation performance, and relational mechanism is the core of relational learning. Aligned governance yields better results than using a governance pattern as an alternative.

Ron et al. (2017) compare trust and contract in global IT outsourcing. IT outsourcing frequently occurs as a contract arrangement between two large, complex global organizations. Inter-organizational trust is one of the key elements for success in the outsourcing arrangement. Because of the complexity of many outsourcing arrangements, trust management between both parties plays a key role in a successful long-term relationship. The ability of both sides to restore trust without resorting to law

is significant. Jan et al. (2021) analyzed the interaction between trust and control when offshoring information systems development projects in two offshore outsourcing projects. The key insight is that trust is not a substitute for control.

A conducive classification of forms of control in line with TCE's previous criticism is the distinction between formal and informal control mechanisms. Anderson defines "control" as a behavioral attempt to guarantee that an individual or team acts in a way corresponding with achieving the anticipated goal. Jaworski et al. (2004) divided control into formal and informal control. Formal control is delivered via a written contract stipulating performance evaluation and rewards. On the contrary, informal controls, such as social norms, peer pressure, shared beliefs and experiences, supplement contracts with social strategies which are to reduce the gap between principals and agents.

Whether formal control is used or social control may depend on different circumstances. Generally speaking, some researchers have proposed that western enterprises are more inclined to adopt formal control to govern inter-organizational relations in outsourcing, while eastern enterprises are more inclined to adopt social control to govern inter-organizational relations. This logic relies on the assumption that formal contracts can only be adopted if there is a complete legal system (Rustagi et al., 2008).

In addition, whether a company adopts a control mechanism will also be affected by the corporate cultural background. Studies have pointed out that Eastern companies, especially Chinese companies, are more inclined to social control because they focus on social relations in Chinese culture (Xin et al., 1996; Luo et al., 2002). However, in recent years, there have been some changes in the use of control mechanisms in countries around the world (Uzzi, 1997). Some researchers point out that western managers have increased the use of social control to govern inter-organizational relations in outsourcing. Eastern managers, on the other hand, increasingly emphasize formal control (Peng et al., 2003; Zhou et al., 2003).

Formal control rests on the contracts and social control emphasizes the importance of trust. Each control mechanism has its own advantages and disadvantages. Formal controls prefer detailed contracts in which the actions and outcomes of the partners are defined as clearly as possible to protect opportunism. Social control can be used to deal with unexpected problems because it allows flexibility in responding to problems that are not defined in the contract. Obviously, the advantage of one control mechanism is the disadvantage of the other. Hence some researchers put forward the idea that formal control and social control complement each other (Peng et al., 2003; Zhou et al., 2003). However, the complementary theory is criticized by the substitution theory. The researchers argue that the adoption of one control mechanism may reduce the requirement of the other, so the use of both formal and social control is inefficient (Dyer et al., 1998).

Researchers from the substitution school of thought argue that adopting one control mechanism avoids adopting the other (Dyer et al., 1998). They argue that social control rests on the trust to govern the inter-organization relationship (Uzzi, 1997), while formal control emphasizes the contract to safeguard against opportunism with high contracting cost (Gulati, 1995). They hypothesize that the combined adoption of formal and social control will be uneconomical if trust between partners is strong enough to manage inter-organizational relationships. In this case, the researchers regard formal control and social control as substitutes.

However, some scholars disagree with this viewpoint, believing that formal control and social control are complementary, and social control can supplement the boundedness of formal control (Poppo et al., 2002). In a well-designed contract, the behaviors and outcomes of partners are explicitly defined, thus providing a legal framework for managing relationships. However, it is impossible for managers to forecast all possible future events and incorporate them into the contract, so it is difficult to sustain cooperation when unexpected problems occur. Even though trust may exist, ex ante

contract costs is hardly reduced. It is through these relationships that we can see social control as a complement to formal control. Given that the use of social control provides flexibility and promotes bilateral relations, social control may interact positively with formal control in interpreting cooperative performance.

Obviously, there are contradictory views on the complementary or substitute views of control in inter-organizational relations. The deficiency of a clear and definite description of the academic research field has not been fully explored. This is especially obvious when cultural issues produce a marked effect in the comparison of outsourcing practices between China and the West, given “the polarized either/or distinction is a simplification of reality concealing complex interrelationships” (Huber et al., 2013, p. 83). Table 2.3 presents previous literatures about control in the area of IT outsourcing.

Authors	Published time	Formal control	Social control	Conditions of substitutability	Conditions of complementarity
Carson et al.	2006	Fixed-price contract, Negotiable price contract regimes	Trust, Reputation, Continuity, History of the relationship	Ambiguity- formal control substitutes social control Volatility-social control substitutes formal control	-
Chen & Bharadwaj	2009	Provisions for - Monitoring, - Dispute resolution - Property rights protection - Contigency	Prior interaction - Trust - Learning	-	High levels of previous interactions
Chua et al.	2012	Formal controls - Outcome controls - Behavior controls	Clan control	-	-
Das & Teng	2001	Formal controls - Output controls - Behavior controls	Trust, Social control	-	-
Faems et al.	2008	Contract	Trust dynamics	-	-
Goo et al.	2009	Characteristics of - Foundation - Change management, Governance	Relational norms, Harmonious conflict resolution, Mutual dependence, Trust, Commitment	Change management characteristics-formal control substitutes social control	Foundation and governance characteristics
Gulati & Nickerson	2008	Type of governance: make, buy or ally	Trust, History of interactions, Conflict	High levels of per-existing organizational trust-social control substitutes formal control	-
Hoetker & Mellewigt	2009	Business plans, Balance sheets, Performance indies, Profit and loss accounts, Internal Prices, Economic efficiency calculations, Reports, Service level agreements	Steering committees, Project group, Expert committees, Cooperation manager, Face-to-face meetings at the top management level, Filling of key positions	Type of assets: Knowledge-based assets-social control substitutes formal control Property-based assets-formal control substitutes social control	-

Huber et al.	2013	Contract, Formal controls	Trust, Informal controls	Contextual triggers: Preceding complementarity, goal conflict-social control substitutes formal control Goal misalignment-formal control substitutes social control	Goal fuzziness
Inkpen & Currall	2004	Formal control	Trust	-	-
Krisch	2004	Formal controls - Output controls - Behavior controls	Social controls -Clan control -Self-control	Initial phase-social control substitutes formal control Development phase-formal control substitutes social control	-
Klein-Woolthuis et al.	2005	Contract completeness	Trust, Dependence	-	-
Li et al.	2010	Contract	Trust, Brokered access, Shared goals	-	-
Malhotra & Lumineau	2011	Control provisions, Corordination provisions	Trust	-	-
Mellewigt et al.	2007	Contractual complexity	Trust	-	-
Miranda & Kavan	2005	Hierarchy	Network	Nature of desired outcomes: Value creation-social control substitutes social control Value caputre-formal control substitutes social control	-
Poppo & Zenger	2002	Contractual complexity	Trust, Open communication and sharing of informaiton, Dependence, Cooperation	-	-
Puranam & Vanneste	2009	Governance	Trust	-	-
Rustagi et al.	2008	Amount of formal control	Trust	-	-

Table 2.3. Summary of previous literatures on formal and social control

Rustagi et al.	2008	Amount of formal control	Trust	-	-
Srivastava & Thompson	2012	Contract specificity, Mechanistic governance	Social controls	-	-
Tiwana	2010	Formal controls - Output controls - Behavior controls	Clan control	-	-
Vlaar et al.	2007	Coordination, Control	Trust	Starting conditions of distrust- formal control substitutes social control Low organizational performance in early stages-formal control substitutes social control	-
Zhou & Poppo	2010	Explicit contracts	Relational reliability	-	-

2.5.3 Guanxi Theory

2.5.3.1 Conception of theory

Hofstede (1993) points out that in business relations, culture influences individuals' thoughts and behaviors, so it is very important to understand the cultural background of an enterprise. Fang et al. points out Chinese culture is supposed to be interpersonal-oriented, reciprocal, tactical and network embedded. These characteristics are attributed to Chinese traditional philosophies (i.e. Confucianism, War Stratagem and Taoism). A Chinese businessman who is considered as "Confucian" prefers "win-win" business and cooperation, while the Chinese business man who is considered as Sun Tzu-like strategist prefers "zero-sum" and competition. Trust is considered as the key factor affecting the business decision of Chinese businessmen

Organizational trust (trust between organizations) in China is associated with "guanxi" which is considered as a critical trait of Chinese society, where "exchanges of favors between people over the long-term are facilitated through a set of interpersonal connections" (Luo et al., 2001). According to the definition, guanxi is taking place between two individual persons, but social control is taking place between two organizations (e.g. enterprises, departments). So guanxi in China is considered to be different from social control in the west. Luo (2001) points out Chinese persons prefer to get the things done through the "guanxi" way. Guanxi is considered as a "door-opener", "gate-keeper" and "peace-maker" in Chinese business context. It can be attributed to Confucians and can be considered as a pragmatic choice to maximize economic benefits. It provides a "moral and ethical framework" within which "transactions could take place appropriately in a weakly regulated society, where inadequacies in both laws and enforcement have weakened professional morality and social responsibility". Ultimately, guanxi is built up through common attributes such as friendships, clanships, schoolmates and it is cultivated and maintained via social activities.

In a word, guanxi is a fiber woven into Chinese society and the social life of every

Chinese. It is deeply rooted in Chinese culture and has become very important in China's business environment. Luo (2001) pointed out that guanxi is regarded as an effective tool in the Chinese market, which has a positive impact on the marketing and accounting performance of enterprises. Guanxi is also seen as a source of continued competitive advantage in doing business in China.

The term "guanxi" has many meanings, but there are three definitions of "guanxi" in academic circles. Generally, guanxi is considered as personal relationships. Luo (2001) defines guanxi as “interpersonal linkages with the implication of continued exchanges of favor”. Guanxi means implicit mutual obligations, understanding and assurance and leads Chinese attitudes to long-term business and social relationships. The second definition considers guanxi as subsets of relationships which work based on norms and reciprocity. The third definition is derogatory, which refers to immoral people who use their power to obtain economic or political benefits. In the study, the dissertation prefers the second definition since there are many types of guanxi in Chinese society.

2.5.3.2 Application of theory

Much contemporary research has focused on guanxi as a key tool for doing business in China. Lee and Humphreys (2003) point out that China's domestic market is difficult for foreign investors to understand, and that guanxi network can be an important source of information on market trends. Guanxi networks also help to attain physical and labor resources, and to build up the relations with local government. Park and Luo (2001) propose guanxi plays a critical role in formation of the relationship with government authorities and business community.

There are few researches on guanxi in outsourcing area. Lee and Humphreys point out that guanxi influences supply management in terms of supplier development, strategic purchasing and outsourcing, and that guanxi contributes to the development of more complete and closer supplier relationships. Abramson and Ai (1997) propose that “guanxi-based buyer–seller relationships similar to relationship marketing are strongly

related to lower levels of perceived uncertainty about the business environment and improved performance outcomes" (p.768).

Guanxi networks are adopted to overcome the distrust and uncertainty which plague economic transactions. Batjargal and Liu (2004) consider guanxi as a risk-mitigating tool in venture capital investments. The dissertation agrees that the buyers build up and maintain guanxi to manage the risk when they deal with supply risk with the suppliers. Transaction cost economics explains why guanxi can reduce uncertainty in the environment. The adoption of guanxi network can reduce the opportunistic behavior of suppliers and thus reduce the transaction cost. This stems from the nature of the guanxi network, where a supplier loses face if it fails to fulfill its obligations, and information spreads to all members of the network. An underperforming supplier loses reputation in the guanxi network and finds it difficult to rebuild its image in future. On the contrary, the guanxi network helps to select the right supplier based on its reputation. Therefore, due to the potential strength of the guanxi network, the transaction costs of purchasing and selecting suppliers are reduced, "which can also reduce the transaction costs associated with environmental uncertainty and opportunistic behavior" (Batjargal et al., 2004, p. 162).

Krause et al. (2007) propose that transaction cost economics can be adopted to explain the relationships between the buyers and the suppliers in outsourcing. However, social network theory studies the relationship in outsourcing from another perspective. Specifically, the dissertation employs social network theory to study how guanxi reduces supply risk and influences outsourcing success. Social network theory is employed since it is "a potent concept to explain inter-organizational processes" (Adler et al., 2002). The concept of social capital is one of the key elements in social network theory. Social capital has many definitions in academic circles. Coleman (1990) defines social capital as "some aspects of social structure, facilitating certain actions in individuals who are within the structure". Social capital is also defined as opportunities that players gain through relationships with others. Putnam (1995) considers social

capital as “the features of a social organization such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions”. Coleman (1990) proposes that closed cohesive networks benefit network participants in the creation of social capital in two ways. Firstly, closed cohesive networks facilitate access to information, since an important aspect of social capital is the underlying information inherent in social relationships. Coleman (1990) explains that “a person who is not greatly interested in current events but who is interested in being informed about important developments can save the time required to read a newspaper if he can get the information he wants from a friend who pays attention to such matters”. Secondly, within a dense cohesive network, the player’s transaction can be easily detected, and no one can escape the attention of others. Sanctions are allowed in closed networks, which reduces the risk of players trusting each other in the network. Guanxi is considered a type of social capital. Lovett et al. (1999) point out that the process of the creation of guanxi is the same as the accumulation of social capital. To cultivate and maintain guanxi is equivalent to the process of the accumulation of social capital. Cultivating and maintaining guanxi is like buying insurance so that you can ask for help when you need it. In this sense, guanxi is a kind of social capital that can be relied upon in times of need for help or support. Standifird (2006) points out that relationships can be thought of as a form of social capital that is nurtured and maintained between two participants through a series of reciprocal exchanges. Park and Luo (2001) also put forward the same idea that guanxi is a kind of social capital, which consists of the exchange of social obligations and results in the person’s social position in society. Therefore, in this study guanxi is considered as a form of social capital to influence the success of IT outsourcing.

In the West, however, such relationships are viewed very differently and are sometimes seen as immoral. Li and Wright (1999) noted that personal guanxi might lead to corruption and this view is supported by Snell (1999). Since guanxi is on the basis of trust, resulting in reciprocal obligations that are almost impossible to reject, in the context of an underdeveloped legal infrastructure, guanxi can lead to unethical business

practices, privileging treatment and improper dealings to its members of the same guanxi network. While some Western writers (Standifird et al., 2000) regard guanxi as a simple form of corruption, most Chinese writers (Luo et al., 1997) view the phenomenon from their own cultural perspective and still regard it as moral. For them, guanxi networks may be the only effective means of doing business before the legal system is fully developed. For example, many foreign-invested enterprises face the challenge of customs clearance no matter what products they sell, because China's logistics and distribution system is still complicated by bureaucracy (Luk et al, 1998). Most importers must establish close links with local customs officials and local trading companies to ensure fast clearance and efficient delivery. Moreover, given that "China's commercial law has historically been underdeveloped, in part because its inclusion in negotiations is thought to be indicative of bad faith", Chinese executives often rely on personal contacts and friendly discussions to resolve commercial disputes. This unique Chinese approach to resolving commercial conflicts also reminds foreign companies of the importance of building relationships with Chinese officials to protect their corporate interests in China. Coupled with the Confucian values of mutual respect and social harmony, it is not hard to understand that the practice of guanxi has different ethical meanings. While Westerners may consider certain business practices (such as gift giving) to be bribery, Chinese may consider them perfectly acceptable and necessary to foster mutual trust and a long-term relationship. In brief, a relationship-oriented business system that is not based on Western ethical standards is not necessarily unethical in the eyes of Chinese executives.

Cui (2017) aims to outline the challenges of IT outsourcing to China by answering the following research question: How does extant research portray the fundamental challenges of outsourcing IT to China? The study concludes that there are three major challenges to outsourcing IT to China, including guanxi/relationships, legal risks, and workforce/professional , and provides insights into why and how foreign companies understand and face these challenges before outsourcing IT to China.

Dan et al. (2020) find that effective inter-agency information sharing can facilitate the internal administration and external service delivery of government agencies, as well as help them address some complex social issues and then promote social development. Therefore, researchers and public administrators begin to focus on how to promote the success of information sharing among organizations. A large number of studies have explored the influencing factors of information sharing among organizations. However, few studies have considered the administrative systems of government that may affect inter-agency cooperation.In view of the composition of the administrative system of the Chinese government, this study examines and compares the factors that affect information sharing among institutions in vertical and horizontal dimensions. An extended technology–organization–environment (TOE) framework is used to organize the influential factors. The results show that marked differences in influential factors between vertical and horizontal inter-agency information sharing indeed exist.

Wenbo et al. (2017) study a case of a Chinese crowdsourcing middleman. The researchers explore the impact of inter-organizational governance on trilateral trust-building. The researchers point out that formal control and relationship governance mechanisms are critical for building rapid and knowledge-based trust in R&D crowdsourcing. The case also shows that Chinese companies continue to use guanxi (informal personal connections) as a relational and contingent mechanism to maintain emotion-based trust, but guanxi has held back the growth of open and innovative Internet crowdsourcing in China.

2.6 Conceptual Framework

Based on the above theory, the traditional motivation of ITO seems to be fading out of people's sight, because researchers' research focus has shifted to the post-decision stage. Although the issue of motivation will be revisited when new procurement varieties emerge, the number of such studies has been significantly reduced due to the saturation of the studies in the area. In contrast, in recent years there has been a growing interest in the study of customer-supplier relationships in the post-decision phase. This paper

attempts to assess the importance of contract governance and relationship governance in the successful process of IT outsourcing in China by studying the phenomenon of IT outsourcing in China. However, taking into account China's unique cultural background, the study also tests whether the governance arrangements supported by relationships have a significant facilitating effect on IT outsourcing. This research endeavors to answer the following questions, 1) are control mechanisms (i.e., formal control and social control) which exist in the west also prevalent in IT outsourcing in china; 2) what role (if any) does Guanxi play in the life-cycle of IT outsourcing (i.e., contact, contract and control phases) in China; and 3) in which situations might formal control, social control, and Guanxi (in the form of doing a favor) complement or substitute each other.

In order to answer the first question, the dissertation identifies the propositions that are found in the Western literature. The correlation between the independent variables (i.e., asset specificity, uncertainty and frequency) and the dependent variables (i.e., outcome control and behavior control) has been explained in the West using the principles of TCE, and this correlation must be verified in the context of Chinese firms. In China, enterprises pay attention to the social relations in Chinese culture, so they are more inclined to social control to govern the relations between organizations. However, in the recent years, some changes have taken place in the adoption of control mechanisms in China. Corporate managers increasingly emphasize formal control. In addition, managers also use formal control and social control as complements.

When the supplier asset is considered to be slightly more specific, it is difficult for the customer to understand the details of the project, or the customer's human resources are too limited to monitor the supplier 100%. Therefore, the client has to prefer outcome control to ensure the quality of the project:

Proposition 1: outcome control are positively associated with supplier asset specificity.

Environmental uncertainty includes not only a lack of understanding of the exact costs and outcomes of different alternatives, but often also a lack of understanding of what

the alternatives are. This increases supplier asset specificity and the buyer's interdependence, and therefore the buyer may prefer more behavior control than outcome control:

Proposition 2: Environmental uncertainty will have a negative moderating effect on the relationship between supplier asset specificity and outcome control.

When the customer has confidence in the capabilities and knowledge of the supplier, the supplier's behavior and results can be monitored. It means that behavioral uncertainty is considered as low, the client is motivated to monitor the supplier's behavior:

Proposition 3: There is a negative relationship between behavioral uncertainty and behavior control.

In recent years, western researchers point out social control is adopted to complement formal control especially in ITO projects with strategic importance and high value:

Proposition 4: The more strategically important the outsourced service is to the buyer, the more the buyer will rely on social control.

Proposition 5: The higher value the outsourced service is, the more the buyer will rely on social control.

Nicholson et al. (2006) divided the whole process of outsourcing into three stages: contact, contract and control. The core of this theoretical framework is that the transaction takes place differently in three stages. So at each stage, clients and suppliers will face different transaction cost. In the contact stage, clients are faced with the search cost while suppliers are faced with the marketing cost. In the contract stage, the cost mainly occurs in preparing the transaction contract, in which the client and the supplier will try to consider all the problems that may arise in the implementation process. TCE provides a theoretical framework to study the transaction cost in the contact stage and

the contract stage. As for the transaction cost in the control stage, researchers mainly consider management control theory (Nicholson et al., 2006). In IT outsourcing project process in Chinese enterprises there are also three stages: contact, contract and control. The transaction is taking place differently in these three stages, the transaction cost is different in three stages and guanxi play different roles in three stages. In Chinese cultural context, corporations adopt guanxi to overcome uncertain situations. The greater the environmental uncertainty, the more likely it is that firms will rely on guanxi to cope with the uncertain environment when entering into the exchange relationship. In contract phase, the buyers prefer the detailed contract to avoid uncertainty. However, due to bounded rationality, it is difficult for the buyer to initiate a detailed contract covering all possible issues in the future. As a result, they have to use incomplete contracts and face the risk of adaptation problems and opportunistic behaviour. These incomplete contracts need to be managed by guanxi. In control phase, guanxi influences the control mechanism. When the buyers and the providers cultivate and maintain guanxi, social control is increased and formal control is reduced.

Proposition 6: Guanxi helps to build up the trust in potential partners at the contact phase.

Proposition 7: Guanxi affects contract design. That is to say, if the customer has Guanxi with a vendor, the contract design can be less detailed.

Proposition 8: Guanxi enables the customer to adopt a "do-favor" in control phase. That is to say, customers utilize their Guanxi to access network resources to do a favor to control outsourced project.

Proposition 9: When trigger events occur which can potentially derail an IT outsourcing contract (i.e., goal fuzziness, goal conflict, and major goal misalignment), "do-favor" is complementary to formal control and social control. When none of trigger events happen, the need of "do-favor" is dismissed and formal/social control

prevail.

In an ITO project, instead of adopting a single control pattern, the client combines different control patterns to create a control portfolio. Customers' and suppliers' perceptions of factors influencing the choice of control patterns and mechanisms may change as they learn from each other in the project, which in turn motivates them to change the mix of control patterns and mechanisms. At the beginning of an ITO project, the client will develop and implement a set of control mechanisms based on its assessment of the influencing factors. Following each trigger event, the client would assess the adequacy of these initial portfolios of control, and whether their initial perceptions of the influencing factors were accurate or need to be reassessed. If it is deemed that the initial portfolio is not suitable for a revised view of the impact factors, other control mechanisms will be incorporated to supplement or replace these mechanisms.

Proposition 10: The portfolio of controls is changed through the phases of ITO projects or with the trigger events such as the failure of milestone.

Based on the propositions as above, the dissertation proposes the conceptual framework in Figure 2.3.

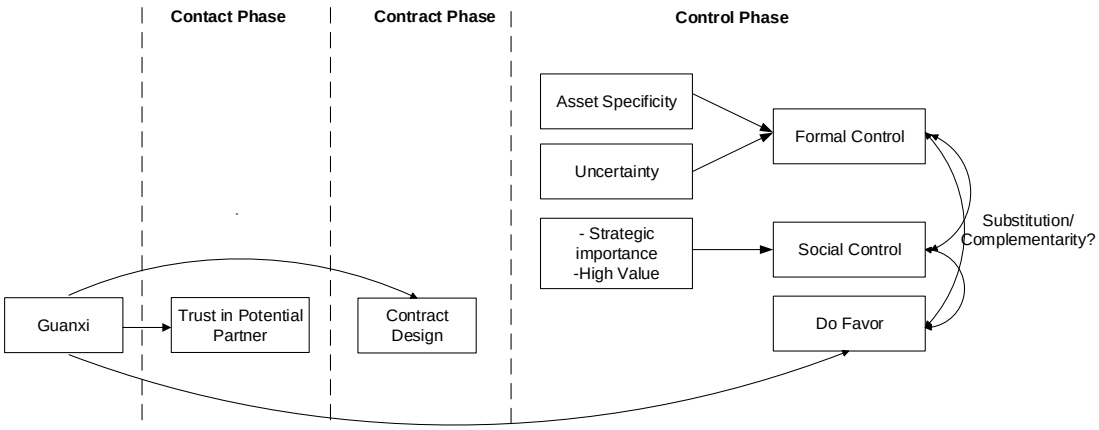


Figure 2.3 Conceptual Framework

The research contributes to academic research in two ways. First, in line with Western

literatures, the research investigates whether formal control and social control are prevalent in China. Second, the research highlights the different cultural contexts in China so as to study how guanxi influences IT outsourcing projects in China. Therefore, the research is helpful for buyers of outsourcing services to implement a wider set of decision-relevant criteria in their IT outsourcing projects in China

2.7 Conclusion

This chapter has reviewed studies in the three relevant principles: Transaction Cost Economics, Control Theory and Guanxi Theory. Strategically important IT outsourcing projects are of vital importance to the enterprise. Sometimes the success of such IT outsourcing projects are the success of the enterprise. Hence the governance mechanism is a strategic choice for enterprises to decide how to manage or leverage IT outsourcing projects.

There is also widespread debate among Chinese companies about the governance mechanisms of Western companies. The criteria for how to demonstrate the effectiveness of governance mechanisms may be converging, but the specific practices to achieve the effectiveness across various institutional environments could be divergent. Factors such as asset specificity, uncertainty and the societal and the enterprise's cultural context all point to diversity in effective management of IT outsourcing projects. The institutional environment in China leads to a greater reliance on Guanxi rather than contract and legal protection for IT outsourcing project management. However, whether guanxi complements or substitutes formal control and social control should be further reviewed for future best business practice.

Chapter 3. Research Methodology

3.1 Introduction

This dissertation explores the control modes (i.e., formal control, social control and do-favor) in IT outsourcing projects of Chinese enterprises. The present research is based on the influencing factors disclosed by literature review (i.e., asset specificity, uncertainty, strategic importance, high value and *guanxi*) and research trend discovered in available research. Specifically, this research explores the integrating methods of formal control, social control and do-favor in IT outsourcing projects of Chinese enterprises and under what conditions these control modes can supplement or substitute each other. This research aims to contribute to the IT outsourcing control theory against the backdrops of Chinese corporate culture, a relatively new area with immature theory. Therefore, the case study method centering on qualitative research may provide extensive and in-depth situational information in complicated situations.

This chapter elaborates the basic principles of the selected methodology, that is, qualitative multi-case study, and describes research design including case selection, interview sampling and data collection tools. Besides, the chapter explains the data collection process and the measures adopted to ensure quality and completeness. The part of data analysis describes the process and tools used for analyzing qualitative data

3.2 Epistemological positions

Epistemological positions refer to common philosophical orientations about the nature of a study and the world (Creswell, 2017). They describe different insights - what knowledge is and how to generate knowledge (Hirschheim, 1985). There exist four different types of epistemological positions as below (Chua, 1986; Creswell, 2017; Orlikowski & Baroudi, 1991).

Positivist Research: It originates in the 17th century and most of current IT research can be considered to align with this epistemological position (Hirschheim, 1985;

Orlikowski & Baroudi, 1991). The scholar (Creswell, 2017) points out positivist research started with natural sciences. Positivist researchers assume there exists the fixed cause-and-effect relationship which can be tested with hypotheses (Orlikowski & Baroudi, 1991). Positivist research focuses on finding out these relationships with neutral observation (Hirschheim, 1985).Positivist researcher starts with a theory, proposes hypotheses, collects data, examines the hypotheses using the collected data and finally accept the hypotheses or reject the hypotheses then establish the theory according to testing result (Orlikowski & Baroudi, 1991).

Interpretive Research: As positivist research has the issue when it is applied to social sciences, interpretive research was proposed (Hirschheim, 1985). This epistemological position assumes that the researcher has mutual effect with the world and comprehends the world with his own subjective value. (Creswell, 2017). Hence, the researcher tends to impact the obtained insights. He does not aim to generalize the findings in the research, but to understand the deeper relationships and structure within a certain phenomenon (Orlikowski & Baroudi, 1991). Normally, interpretive research is conducted in social science (Orlikowski & Baroudi, 1991).

Critical Research: It aims to criticize the current phenomenon by outlining the contradictions within the extant social system. It originates from interpretive research, but involves an action agenda and plays a much more active role in addition (Creswell, 2017). The target is to attract awareness and to change the social conditions (Orlikowski & Baroudi, 1991). Hence critical research is transformation oriented and often contains a political agenda (Creswell, 2018). According to Orlikowski and Baroudi (1991), this epistemological position is seldom utilized in IT research.

Pragmatic Research: Pragmatic research originates in recent years (Creswell, 2017). It focuses on the problem which is proposed by the researcher and utilizes the philosophy which works best instead of insisting on a specific philosophy. In pragmatic research, the researcher possibly combines epistemological positions which are previously

discussed. Researchers select multiple methods in the pragmatic purpose, propose different assumptions, and adopt different data collection methods and data analysis approaches.

This dissertation follows a pragmatic research epistemological position. The researcher has two reasons: 1) The research process is the one in which theory is extracted from practice and applied back to practice to form what is called intelligent practice and the researcher focuses on matters of fact or practical affairs. As documented by Russell (2013), "pragmatism is a philosophical tradition centered on the linking of practice and theory" (p. 257). 2) Pragmatic approach focuses on the application and context so both qualitative and quantitative research method can be utilized according to the context. The researcher focuses on considering research questions and selecting the research method which work best.

3.3 Research Design Underpinning

3.3.1 Qualitative Case Study

Qualitative research features the following characteristics: a small sample; a focus on interpretation; flexibility in the process of conducting research; an emphasis on subjectivity rather than objectivity; an orientation towards process; providing an overall viewpoint; focusing on participants instead of topics. (Cassell and Simon, 1994). To realize the objective of this research, that is, to establish the control modes of IT outsourcing projects in Chinese enterprises, and expand theoretical understanding, it is appropriate (Strauss and Corbin, 1990) to select the exploratory qualitative research methodology based on multi-case research design (Yin, 1994). Besides, a basic objective of a case study is to establish a comprehensive understanding of dynamic, inter-dependent and complicated relationships (Dubois and Araujo, 2007), and this research requires a profound overall understanding of complicated phenomena in the context of Chinese enterprises.

In the process of case investigation, by collecting data through interviews, we can

expect to obtain some creative ideas or discoveries (Eisenhardt, 1989). Guided by the theory proposed by Eisenhardt (1989), the dissertation analyzes the control modes within cases and comparison of control modes across cases. This research derives some general terms of the field (IT outsourcing) from the extant literature and focuses on control mode in IT outsourcing that is relatively new but has an impact on both theories and business practices. The researcher's relevant industry experience, guided by a steady academic research process, is conducive to exploring the significance of phenomena or behaviors, and applying the research outcomes to real industrial environments. The comparative case study method is adopted in the research. Under normal conditions, multi-case research can produce more solid results than single case research, particularly against the backdrops constructed by the inductive theory (Baškarada, 2014). Multi-case research can facilitate the exploration of cause and effect relationships through comparative analysis. It can also enhance the validity of research through data source triangulation (Yin, 2013). Considering these advantages, this research has selected the multi-case approach, but the collection and analysis of data will also be more complicated than the single-case approach.

3.3.2 Case Selection

A regular standard for selecting appropriate criteria is that a case should be representative of the phenomena under investigation (Buchanan, 2012). With reference to the theory of Yin (2009), in multi-case research, the cases selected either reflect literal replication or have theoretical replication (Baškarada, 2014). This research aims to explore the similar control modes (i.e., formal control, social control and do-favor) in several cases, and the research results in theory would be more representative and suitable for promotion.

According to ownership types, the enterprises in Chinese market can fall into four categories: joint ventures, foreign-funded enterprises, state-owned enterprises and private enterprises. Although Bjorkman and Lu (1999) points out "few Western companies make a total transfer to China of policies and practices from the foreign

company's home country operations" (p.306), joint ventures and foreign-funded enterprises have to follow the framework of the standards and requirements in their management methods and process of their headquarters (Simonetta and Adrienne, 2006) especially in IT area since there exists high technology specific in IT area and the headquarters have more skills and experiences. Therefore, the control modes of the two types of enterprises are consistent with those of the Western headquarters, which has already been studied by Western scholars.

State-owned enterprises and private enterprises in China may be regarded as representatives of Chinese enterprises, and their management methods and processes are deeply influenced by Chinese culture. According to a report of the State Statistics Administration (2020), by the end of 2020, private enterprises accounted for 65% of the GDP, with 65% of the patents, more than 75% of the technological innovation and more than 80% of the new product development in China accomplished by private enterprises. As the new forces of the national economy or the main carriers of employment, the employment stock of private enterprises accounts for nearly 80%, with an increment ratio exceeding 90%. On the other hand, the ratio of state-owned enterprises in the GDP has dropped from 80% in the early stage of reform and opening up to 20% now, but state-owned enterprises are still absolutely dominant in sectors with no competition with natural monopoly (i.e. tap water, electricity, gas and other public utilities), public goods (i.e. national defense, infrastructure, basic scientific research, etc.), fields vital to national economy and people's livelihood (i.e., military industry, energy, etc.). Therefore, private enterprise and state-owned enterprises are leading China's economy (Figure 3.1), and the research on them is of great significance to China's economy. The dissertation, by studying the control modes of IT outsourcing projects of Chinese enterprises, attempts to learn the similarities and differences of control modes between Chinese and Western enterprises.

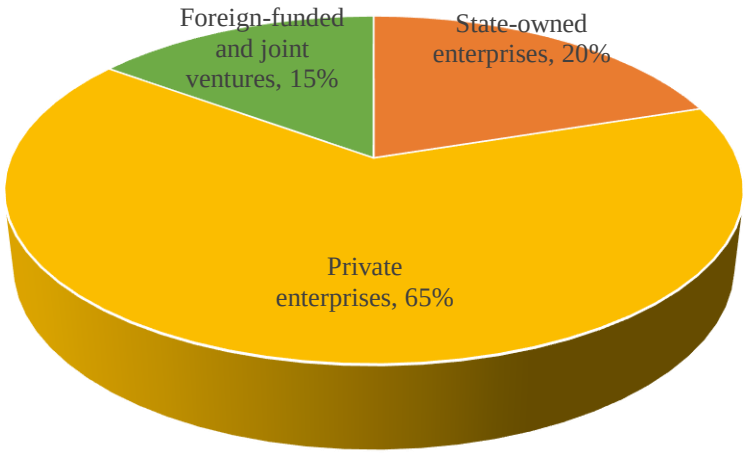


Figure 3.1 GDP Contribution of Chinese Enterprises

Therefore, this research selects samples of state-owned enterprises and private enterprises in China as target for study. Finally four companies have been selected, of which Company A and Company B are state-owned enterprises, while Company C and Company D are private enterprises. Therefore, the four enterprises, as feasible and manageable samples of this research, provide a powerful foundation for analyzing their similarities and differences in IT outsourcing projects. Considering inter-industry differences, for the ultimate research outcomes to be promoted in their respective industries, samples must represent different industries. Company A is a real estate company, a focus of Chinese economy in recent years. Company B is a financial enterprise. Company C and Company D are traditional manufacturing enterprises. The four enterprises from three different industries can help explain the similarities across different industries. Besides, two enterprises from the same manufacturing industry can help disclose the similarities of the control modes of IT outsourcing projects. These four companies are shown in Table 3.1

Name	Description
Company A	a wedding dress mall commercial real estate company
Company B	a venture investment company
Company C	a cup and kettle making company
Company D	a kitchenware making company

Table 3.1 Description of selected companies

The business of the four Chinese enterprises cover the whole country. To make data distribution reasonable and avoid any disparity caused by geographical factors, the interviewees have been selected from the two major economic zones in China: the Yangtze Delta Region, including Shanghai, south Jiangsu and north Zhejiang, and the Pearl River Delta Region (central and southern Guangdong).

After the selection of target enterprises, the researcher conducted preliminary communication with IT leaders of these enterprises, requiring them to review an IT outsourcing project critical to enterprise strategies or business, which should have a budget above RMB 10 million, estimated to be completed in the recent three years. As the projects have major strategic significance and high value, the clients are motivated to use all sorts of control modes (i.e., formal control, social control and do-favor) to make their project a success. This research aims to study the control modes of various IT outsourcing projects, identify their similarities, and construct a theoretical framework to help Chinese enterprises improve the success rate of their IT outsourcing projects. Finally, the E-commerce platform project of Company A, the project management system project of the investment projects of Company B, the industry sales order platform project of Company C, and the wholesaler inventory management system project of Company D are taken as units of analysis.

3.3.3 Interviewee Selection

The selection of interviewees follows two guiding principles: interviewee

representativeness and the quality of interviewee response to interviews with specific research purposes (Alvesson and Ashcraft, 2012). To ensure that the samples are representative and extensive, the dissertation considers the following dimensions: organization (state-owned or private), geographical location (the Yangtze River Delta Region or the Pearl River Delta Region), level (senior, intermediate or junior), posts (IT department and business department of the client company, and project department of the vendor company), and project quality (satisfied or dissatisfied). According to these dimensions, 25 interviewees have been finally selected from the four cases. (Table 3.2)

Case	**Company**	**Interviewee Coding**	**Interviewee Job Title**
A	Company A	AITM	IT Manager
		ABUM	Business Manager
		AVEM	Vendor Project Manager
		AMIM	Middleman
		AITE	IT Engineer
		ABUE	Business Employee
		AVEE	Vendor Engineer
B	Company B	BITM	IT Manager
		BBUM	Business Manager
		BVEM	Vendor Project Manager
		BITE	IT Engineer
		BBUE	Business Employee
		BVEE	Vendor Engineer
C	Company C	CITM	IT Manager
		CBUM	Business Manager
		CVEM	Vendor Project Manager
		CMIM	Middleman

		CBUE	Business Employee
		CVEE	Vendor Engineer
D	Company D	DITM	IT Manager
		DBUM	Business Manager
		DVEM	Vendor Project Manager
		DITE	IT Engineer
		DBUE	Business Employee
		DVEE	Vendor Engineer

Table 3.2 Interviewee list

In each case, we interviewed the client's IT manager and business manager so that we can learn about IT outsourcing projects from the client's perspective. To have an overall understanding of a project, the vendor's project managers have also been invited to participate in the following interviews. Similarly, the client's IT engineers and business department employees have also been interviewed to learn the client company's viewpoints, and the vendor's engineers were interviewed, who represent the vendor's viewpoints. However, Company C is an exception, as this project has been completely outsourced, with no IT engineers from the client in the project team. In pilot study, researchers interviewed a member of the senior management of Company A, but he said that as he did not know IT technology he did not participate in IT outsourcing projects. Therefore, he could not answer questions related to control modes in the IT outsourcing project. This situation is common among Chinese enterprises, so interviews with the senior management were canceled in the entire process of research. In qualitative research, the use of several pieces of evidence to measure the same phenomenon is conducive to improving the construction of validity (Yin, 2009, Baškarada, 2014). To present an objective project with possible triangular analysis, the researcher has selected interviewees at different levels (senior, intermediate and junior levels as shown in Figure 3.2) and on different posts (IT, business department and vendor).

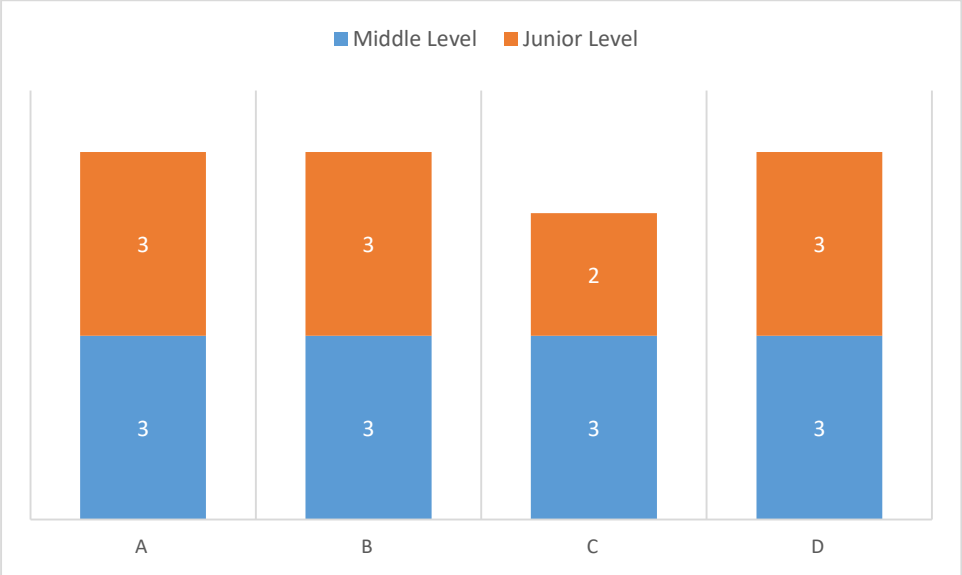


Figure 3.2 Interviewees by level in the four case studies

Of the four cases, in Case A and Case C, there is no direct guanxi between the management of the client and the vendor. But they have guanxi with the same person outside the client and the vendor. This person is called the middleman and he participates in the control practice of an IT outsourcing project. So the two middlemen have been invited for interview. Company A is a state-owned enterprise in China regulated by the government authorities. *Guanxi* is taken as a negative impact (causing corruption), so can not be discussed frankly. The interviewees of Company A which is a state-owned enterprise even denied the existence of individual relationships (*guanxi*) in the project. On the other hand, the middleman in Case A has established a good individual relationship (i.e., *guanxi*) with a manager of the client and a manager of the vendor. Through his introduction, a manager of the client company and a manager of the vendor have established *guanxi*, and as a bridge between the two managers, he even helps them coordinate and settle conflicts arising in the project. As a result, the middleman is very clear about *guanxi* in the project, and facts about *guanxi* can be found from the interview with him. The situation of Case C is completely different. In a private enterprise, *guanxi* is considered to exert a positive impact on an IT outsourcing project, and therefore the management of Company C has taken initiative to request the middleman to build *guanxi* with the management of the vendor. Also the middleman

has been invited to act as a consultant in the project, so that his good individual relationship (i.e. *guanxi*) with the vendor's management is leveraged to coordinate and control the vendor. Therefore, the interview with the middleman of Case C can offer more information from another perspective.

Cross-case description and comparing facts, such as organizational structure and management practice, can be more direct with less bias. However, the reliability of cross-case comparative study is based on the interviewees' understanding, which may pose a challenge. Even when interviewees are required to use the same evaluation form, for example, evaluating a certain problem with a score from 1 point (least) to 10 points (most), the same rating may mean different things in different cases, because interviewees may evaluate according to their different experience, reference and expectations. Interviewees with common working experience with the client and the vendor are ideal samples, because they ensure consistency in understanding. Fortunately, some interviewees have experience as a client and a vendor at the same time. Three IT managers (75%) from the client and four project managers (100%) from the vendor have the dual experience as a client and vendor.

3.3.4 Instrumentation selection: semi-structured interviews

Of the three types of interviews, structured, semi-structured and unstructured, semi-structured interviews allow researchers to flexibly re-focus on a problem or prompt interviewees to acquire more information (Baškarada, 2014) and to have a better understanding of the interviewees (Daymon and Holloway, 2002 cited in Baškarada, 2014). Therefore, semi-structured interviews are most suitable for this study. As critical and key problems within the scope of this study are limited, interviewees are also required to clearly state their answers. Meanwhile, the researcher can explore unexpected themes (James, 2013). Additionally, this research also involves some additional public information and some company documents.

Except for the two-hour interviews in the pilot study, all the other interviews lasted one

hour. Comprehensive questions have been prepared in the interview questionnaire. However, due to the limit of time and interviewees' knowledge, not all questions were asked in each interview. The focus of each interview was reviewed and adjusted, with consideration on which information was missing and which data to be obtained in the next interview. This was a constantly improving data collection process. For interviewees, one hour was a reasonable and acceptable time span. Interviews with intermediate level were all face to face, with only a few interviewed by telephone to provide supplementary information. Due the impact of the COVID-19 pandemic in February and March, 2020, all interviews with junior employees were conducted by telephone. Due to the nature of semi-structured interview, some questions calling for further inquiry could not be prepared before an interview. So the researcher should adeptly grasp the interview skills. All interviews were conducted directly by the researcher in order to control the research deviation caused by the interviewer. Against the backdrop of Chinese culture, interviewees may vaguely or indirectly express their answers for saving face. In such an event, it is critical for the researcher to listen carefully and apply the interview techniques of validating hints so as to ensure data accuracy. For example, when asked to score project satisfaction, the project manager AVEM of the vendor of Case A said, *"I will give the project a score of 9 points (out of ten points). After all, I should save their face (the client company's)."* In the Chinese context, this means that AVEM did not express his true opinion. Hence, the researcher, to seek the real answer, continued to ask, *"Not considering (the client company's) face problem, what do you think the actual score of this project (satisfaction) might be?"* Finally, the researcher discovered that the real satisfaction of the vendor's project manager about the project was only six points instead of 9.

To acquire firsthand information for further data analysis, we should avoid the deviation caused by memory after a long time. So most interviews were recorded with the consent of the interviewees. Only interviewee AMIM (the middleman of Company A) did not agree with voice recording, because *guanx*i he talked about is not discussed and denied in Company A. So only this interview went without voice recording. However, in the

interview, the researcher would repeat the answers supplied by AMIM and would write them down when they were confirmed. As soon as the interview ended, the researcher immediately organized the note to ensure that the memory was still fresh and clear.

3.4 Pilot Study

In early 2018, a pilot project was conducted to ensure the steadiness of the research process. Four face-to-face interviews were conducted with the IT manager and the operation manager of Company A, the vendor's project manager and the middleman. The average interview time was 109 minutes. In the pilot project, the researcher gained some experience, which was applied in interviews of a larger scale.

Such experiences included the preparation of participants' information tables, which were conducive to managing interviewees' expectations and making good preparation for the upcoming discussions. Besides, the approval of the senior management and participants' signing of the consent form could, to a very large extent, reduce the potential worries about research ethics, though research ethics has not been clearly defined in China. Additionally, the researcher would record the whole interview with the prior consent of the interviewee. An interview lasting 1.5 to 2 hours proved to be too long. So some general questions were deleted. Finally these questions were condensed into interview contents of 60-75 minutes. As to problems about evaluating the importance or the satisfaction, such as "do you think this project has reached the initial expectations", the researcher asked the interviewees to score from 1 point (the least important/feeling the worst) to 10 points (the most important/feeling the best), to provide possible comparative analysis.

All these questions were designed in English and translated into Chinese orally on the site of interview. But this process might cause information discrepancy. Learning interviewees' language (the jargons of their circles) is a strategy of questioning (Ostrander, 1993). After the first interview in the pilot study, the researcher prepared more standard interview questions in Chinese and used many terms of project

management, because the interviewees of both the client and the vendor were very familiar with PMP (Project Management Professional), and managed their projects in line with the procedure of PMP. When the researcher interviewed a middleman with a different business language, these questions needed to be explained, because the business language familiar to him should be simple and concise.

The workload far exceeded the researcher's expectations, especially because the interviews were conducted in Chinese while the transcription and analysis should be made in English. In the pilot study, an interview of two hours took the researcher seven to eight hours to transcribe the voice recording into words, and then over twelve hours to translate them into English. To ensure the consistency and high quality of follow-up data analysis, the translation must be done by the researcher themselves and it must be very precise. The strategy adopted in the large-scale interviews following the pilot study was to conduct interviews and preliminary analysis in Chinese and then conduct further analysis and result handling in English, with transcription (Chinese to Chinese) being outsourced. To ensure quality, the researcher has carefully reviewed each transcription.

The interviews were not always conducted smoothly. In the context of Chinese culture, an interviewee generally does not attempt to correct an interviewer. So long as the interviewer's understanding is not completely contrary to his/her opinion, he/she would keep silent even if the interviewer's understanding somehow differs from their answer. Hence the researcher is required to pay more attention to listening than talking. But the scholars (Hertz and Imber, 1993) points out that it is very difficult to establish the researcher's appropriate identity. The industry experience of the researcher and his position with IT background may cause deviation from the researcher's identity as a neutral researcher, which may also make interviewees puzzled. The participant's information table and interview guidelines helped remind the researcher that he should maintain his role as a neutral researcher, instead of discussing business with interviewees as a senior professional in the industry.

In the pilot study, when the researcher requested confirmation of the written interview record, the interviewees did not reply, partially because the interview records were too long, and also because of local habits and the interviewees' busy schedule. Later it was decided that the interview records would not be provided unless an interviewee requested the review of the written interview records. In fact, throughout the study no interviewee ever raised such a requirement. Meanwhile, not many interviewees replied to emails, and it seemed that most interviewees were not good at email communication. Therefore, the strategy suggested by Yin (2009) about key interviewees' review of case reports to improve construct validity is not feasible. However, the two other strategies proposed by Yin (2009), that is, the use of several evidence sources (representative interviewees, non-confidential project documents and public information) and the maintenance of an evidence chain (every word is recorded in the transcription), to a very large extent, were made use of.

3.5 Data Collection Process

Contacting appropriate interviewees according to a correct order can facilitate interviews (Ostrander, 1993). In the pilot study, the researcher first contacted the senior management of Company A and received their approval and support of this research. With the support of the senior management of Company A, contacting employees and intermediate management became easier. The interview of the vendor of Company A was realized by the introduction of the IT manager of Company A. Other case companies in this study have also been contacted through the researcher's personal network, and then with the introduction of the client company's manager, the researcher contacted their vendor. This is the most feasible method, especially because the research includes time-consuming interviews. In the current environment of China, visiting or calling a stranger can hardly collect accurate data.

When the researcher made an appointment with the interviewees from companies A, B, C and D, the researcher would ask them to help to arrange interviews with their vendors at the same time, preferably in the same place. In this way, the client's IT manager

made an appointment with the vendor's project manager, and the interview with the vendor's project manager could be started immediately after the interview with the client's interviewee, and the interviews were conducted in the same office. This method worked very well, because the interviewees of clients and vendors were involved in the same IT outsourcing project, they were able to describe their interactions and relationships well and explain their experiences and feelings from different angles. Meanwhile, in China's network environment, through the client's personal introduction, the data obtained from vendors and the data quality were better.

At the beginning of each interview, the researcher would share the interview information table with the interviewees, making clear the researcher's role as a neutral researcher in this research, not as a CTO of an Internet company, and emphasizing how the researcher maintains the confidentiality of the data. During an interview, the researcher recorded the interview, with the consent of the interviewee, who had been asked to sign the consent form in person. Telephone interviews were also recorded, also with the interviewee's oral consent. Figure 3.3 as below illustrates the process of data collection.

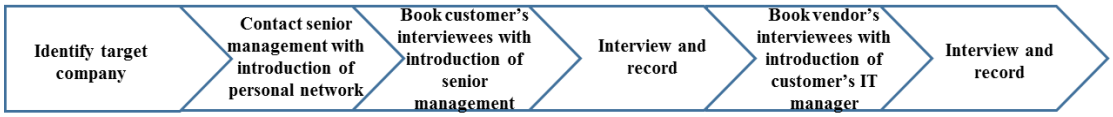


Figure 3.3 Data Collection Process

The interview time of companies B, C and D lasted from November 2019 to March 2020. If necessary, all telephone interviews were conducted through the interviewees' mobile phones, so that they could flexibly find a place to have a confidential conversation. Due to the social networking style in China, some interviews were conducted in restaurants, cafes, teahouses or the breakfast area of hotels, while others were conducted in private offices or conference rooms or cube areas of offices. Interviews could be carefully set up, not limited to the negotiation time (Thomas, 1993), especially in a social network environment like a teahouse outside the office. Some

interruptions might arise during an interview, either by some people asking for approval or telephone calls, especially in an office setting. The interview time varied from interviewee to interviewee. The higher the interviewee's position, the more knowledge and opinions they had to share and the longer an interview lasted.

3.6 Data Analysis Process

This study involves four IT outsourcing projects. Firstly, the project of Company A is analyzed. Mainly because the stakeholders in this project are easy to contact for interviews, it is taken as a pilot case, based on which the analysis framework of the other three cases has been established. The structure of Case A is used to analyze Cases B, C and D and then a comparative analysis of the four cases is made. Figure 3.4 as below illustrates the process of data analysis.

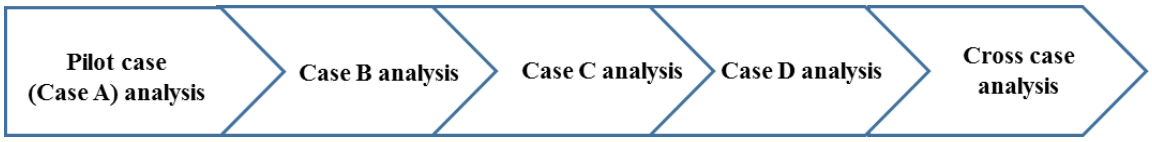


Figure 3.4 Data Analysis Process

There are few theories about the control modes of IT outsourcing projects of Chinese enterprises and the role of *guanxi* in them. The research in this dissertation attempts to enrich the theories in this respect. Qualitative data are used to develop and expand the theory. The researcher uses the following systematic data analysis methods. The initial step is to classify the subgroup through the open coding system, and screen the written records line by line according to the interview questions. The initial coding attempts to reflect and explain the problem from the interviewee's perspective (Kenealy, 2012). The code was developed from a written record, and further written records were supplemented during an interview. Early findings are used to ensure the relevance of research directions and to develop a more selective focus in the following interviews. Because interviewees lack relevant knowledge, or the correlation between a question and the core research is weak, some questions are deleted in further interviews. In the

interview process, the interview questions are more targeted at different interviewees. The initial keywords selected are everywhere with unclear themes and categories and unreasonable structures. The next step is to link codes, merge similar codes into advanced categories, and create subcategories. For example, weekly meetings, project planning, and change management are grouped into a subclass of behavior control. Team building, common goals and self-management are combined and classified as social control. The qualitative analysis software NVivo 12 is used in the first edition of the theme coding framework of Case A. The third step is to refine and select categories based on the guiding theory to form a general framework: asset specificity, uncertainty, strategic importance, high value, formal control, social control and *guanxi*. For example, in the theoretical framework, behavior control and outcome control are divided into formal control(Table 3.3).These three steps are not linear in the whole study, but circulates at three main research levels: pilot study, case study (A, B, C and D) and comprehensive cross-case study.

Category	Sub Category	Next-level Category
Outsourcing Motivation	Labor shortage	
	Core competitiveness	
Vendor selection	Vendor sourcing	
	Vendor criteria	
	Bidding procedure	
Contract design	Contract template	
	Contract content	
	Contract approval	
Formal control	Outcome control	Project acceptance
		System demo
		Milestone appraisal
	Behavior control	Project team
		Progress control
		Reporting approach
		Risk management
		3rd party supervision
		Change management
IT technology in projects		
Asset specificity		
Project invest	Custome invest	
	Vendor invest	
Environment uncertainty		
Social control	Ego management	
	Team building	
	Shared vision	

	Other soft skill	
Strategic importantce		
Guanxi	Explicit guanxi	
	Hinder guanxi	
Conflict solvement		
Governance dynamic in different stage of projects		
Project location		
Company management culture	Management style	
	Vendor policy	
	Communication policy	
	Budget policy	
Project satisfaction		
Vendor satisfaction		
Project attribute	Company description	
	Department description	
	Project description	
	Interviewees' career experience	

Table 3.3: Nvivo Coding Structure

Data analysis in a single case is defined as a systematic process of searching and arranging interview transcripts, observing notes and other non-textual materials, and researchers constantly accumulate such materials to enhance their understanding of phenomena. The process of single case analysis mainly includes coding or categorizing data. Basically, it includes rendering massive data meaningful, identifying important patterns by reducing the amount of original data, extracting meaning from data and finally establishing a logical evidence chain. Coding or categorizing data is the most important step in the process of single case analysis. Despite being a vital part in the process of single case analysis, coding does not mean the same thing as data analysis.

Coding usually includes sub-dividing massive amounts of original information and data, and then categorizing them. Simply put, coding is to label the data to be compiled in research and assign them meaningful topics or themes. Traditionally, coding is done manually, by using a colored pen to sort the data and finally rank the data. With the development of software technology, researchers have come to use computer software for coding. However, computers cannot replace researchers to complete single case analysis. Researchers must create codes and categories, decide which data to be classified, determine their pattern and extract meaning from the data. The use of software in single case study is very limited, mainly because of the nature of single case analysis itself. Single case analysis is very complicated due to unstructured data, characterized by a large amount of data, and very complicated ways of extracting findings and theory from data. Therefore, a program can only complete the marking, cutting, and sorting work that researchers used to conduct with scissors, paper and notes, helping researchers improve the efficiency of grouping data and searching topics according to categories. Finally, researchers must synthesize the data and explain the meaning extracted from the data. Figure 3.5 illustrates the process of single case analysis (Wong, 2008).

The data analysis approach employed in the research is multi-case analysis involving open coding, constant comparison, memo writing and theoretical saturation advocated in a grounded theory approach. Open coding has been introduced in previous paragraph. Then constant comparison is used to compare incidents that apply to each category, integrate categories and their properties, delimit the theory, and write the grounded theory. Items in the data are compared within the same organization or project team and with outside organizations and teams. During constant comparison analysis it is necessary to iterate back and forth between data collection and analysis. Memo writing was used to clarify, refine and sharpen categories, which evolved as new transcript data is added. Each memo comprised a short, often informal, essay on each topic including selected quotations to provide illustrative primary evidence. Theoretical saturation occurs as the study evolves and the richness and detail of the analysis is enhanced by

the increasing number of study participants. Gradually, each new participant provides evidence that is consistent with the categories already identified and has less impact on the categorization. We can use multiple cases to establish the range of generality and conditions of applicability of each approach. The multi-case approach provides the opportunity to triangulate findings across companies. This creates the opportunity to broaden the researcher's repertoire of observed events and practices.

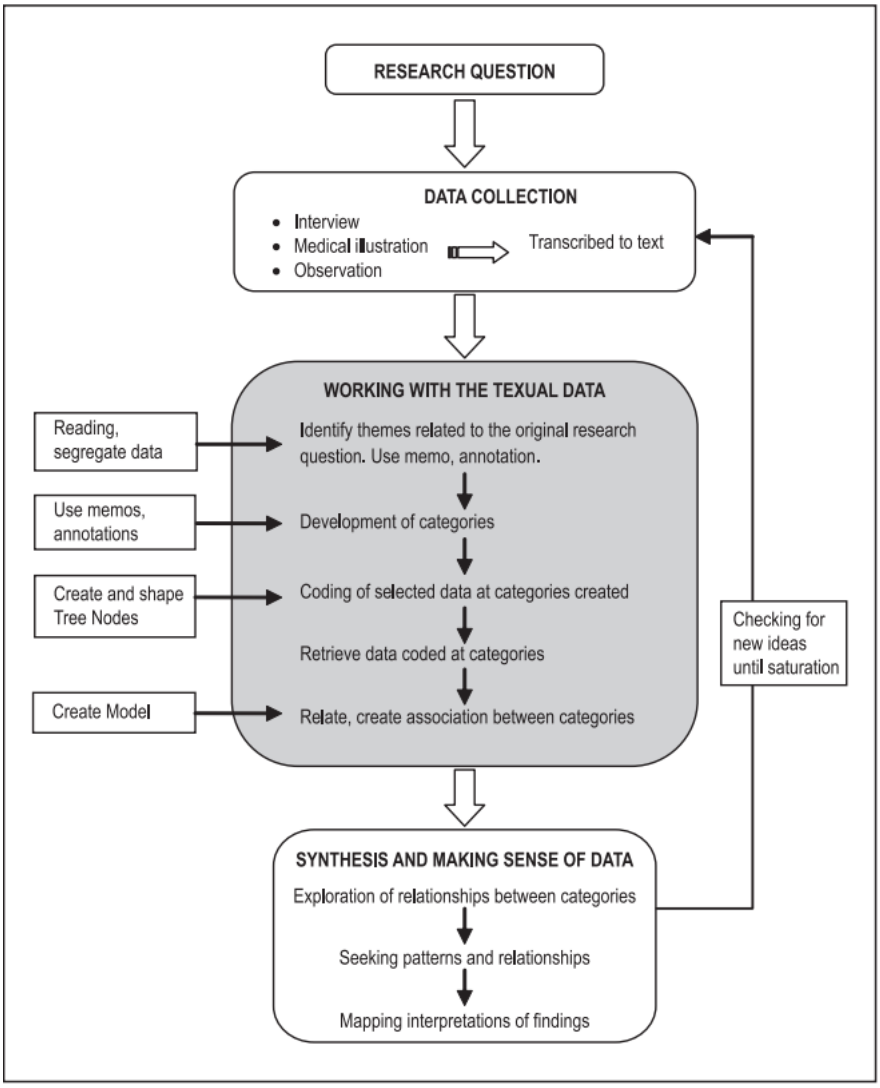


Figure 3.5 Single case analysis

3.7 Research Integrity

At the beginning of an interview, in order to ensure the interviewee's correct understanding of the research project, confidentiality and rights, the interviewee was

provided with a paper form of participant information in both Chinese and English. During a telephone interview, the researcher told the interviewee the contents of the participant information form through oral communication, and obtained the interviewee's confirmation reply.

The researcher also worked as CTO in an Internet company during the data collection period. This might be a concern for some interviewees, limiting their frank feedback. When interviewing the employees of Company A, the researcher emphasized the necessity of distinguishing the role of the researcher from his occupational role. Although the business of the researcher's company and the new E-commerce business of Company A are both Internet businesses, there is no direct competition and therefore no overlap in business operations, and almost no conflict of interest. In addition, researchers' familiarity with the interviewed industries before the interviews was conducive to open communication. In addition, the introduction of the purpose and confidentiality principle at the beginning of the interview helped to minimize their impact. The participants' information table further alleviated interviewees' concerns, because it meant written commitments and provided a channel for how to report problems when promises were not fulfilled.

Interviewees from Company C and Company D might have similar concerns about my occupational role. Company C and Company D are from manufacturing industry. Although their products are different and there is no direct competition between them, they sometimes do business with the same type of people in the market. In addition, they all know each other and may be worried about sharing some specific information of their company with people in the same industry. The confidentiality provisions and anonymity of the research institution and interviewees have greatly reduced these concerns. At the same time, introducing the credibility of researchers and people they know is also a key factor to increase their frankness and openness. The interviewees of Company C and Company D have been introduced to me by some highly respected people who once managed or guided the interviewees. This trust-based network plays

an important role in gaining access and collecting high-quality data.

Vendors' project managers interviewed were introduced by the IT managers after the researcher interviewed the IT managers of the clients. This might have some potential impacts, as the vendor's project manager might be worried that the researcher would share the interview results with the clients. This point was clearly stated at the beginning of the conversation, and all information was guaranteed to be confidential, including to their clients.

During the research, some interviews had some special arrangements. The interviewee (BITM, IT Manager of B Company-Venture Capital Company) invited his subordinate-IT Supervisor to attend the interview. Obviously, the IT manager played a dominant role in the interview, and his subordinate followed the direction of the IT manager in his answers. In the Chinese environment, it might be difficult for participants with superior-subordinate reporting relationships to participate in group interviews or focus group discussions, because subordinates may be worried about expressing their personal opinions or may want to save their boss's face. Therefore, the data of this interview is regarded as an interview with the IT manager. In an interview with the vendor's project manager of Company C, the researcher was accompanied by the IT manager of Company C. However, because in front of the IT manager of Company C, who might have direct conflicts of interest, the project manager of the vendor might be worried about speaking frankly especially giving negative comments, the IT manager of Company C was politely asked not to attend the interview.

Some interviewees have experiences both as a client and as a vendor. According to the lack of required information and the relevance of interviewees, the focus of interviews with information providers with cross-company experience varies from topic to topic. The comparative information and related evaluation from the cross-company perspective of clients and vendors can facilitate triangular analysis.

3.8 Conclusion

The researcher uses the multi-case qualitative research method to explore a theoretical field yet to be established, that is, IT outsourcing control modes (namely formal control, social control and do-favor). The researcher has deliberately chosen four IT outsourcing projects for comparison. Semi-structured interviews are the main tool to collect data from interviewees. Interviewees are carefully selected to ensure their representativeness and quality, rendering triangulation possible. Construct validity is enhanced by using evidence from various sources. Research principles: process, interview guide, data collection, recording and analysis of one person (researcher) enhance internal reliability. The design and method of applied research provide a clear direction for the research, and it is recommended to pay attention to the data collection balanced between breadth and depth. Synchronous data collection, analysis, literature supplement and modeling at three research levels finally promote the identification of key findings both in theory and practice.

The systematic and structured analysis of each IT outsourcing project enables the researcher to conduct reliable comparative analysis across four cases. The results of data analysis will be presented in the following chapters: Chapter 4 describes each case and compares the basic parameters of each case. Chapter 5 analyzes different control modes in IT outsourcing projects of Chinese enterprises. Firstly, it discusses how Western control modes play a role in Chinese enterprises. Then, it further explores the role of *guanxi* in the life cycle of IT outsourcing projects and the complement and substitution of formal control and social control by the “do-favor” mode based on *guanxi* as a unique control mode of Chinese enterprises. At last, Chapter 6 summarizes the theoretical framework of the control modes in IT outsourcing projects of Chinese enterprises.

Chapter 4. Overview and Comparative Analysis of Cases

4.1 Introduction

This research attempts to explore the control mode of IT outsourcing projects and the impact of guanxi on the lifecycle of IT outsourcing projects in Chinese enterprises. Considering that East China is one of the heartlands of China's economy, four IT outsourcing projects completed by Chinese enterprises in East China in the recent three years have been selected for study in this research. Through interviews with key figures of the project teams, the control modes in the four projects and the role of guanxi in the project process are compared and analyzed.

This chapter does three things:

1) Firstly, it briefly introduces the four cases, including what IT project is outsourced, and why these IT outsourcing projects are strategically important in the enterprises. With the evaluation of the key figures from both the customers and the vendors, these IT outsourcing projects meet the original expectation and the key figures are also satisfied with the outcomes of these IT outsourcing projects. That means these IT outsourcing projects can be considered as the successful projects hence the control modes adopted in the projects are valuable to be studied.
2) Secondly, it conducts the comparative analysis of company profile (i.e. enterprise ownership, industry and enterprise annual sales amount) and project profile (project team scale, project cycle and project amount) among these four Chinese enterprises and discovers that these profile characteristics don't impact the control modes. Furthermore, whether in state-owned enterprises or in private enterprises, the positive role of guanxi is used to facilitate these IT outsourcing projects.
3) Thirdly, it considers project managers' outsourcing project management experience in these IT outsourcing projects as the control variable with no impact on any of the propositions, because the project managers of the customers and the vendors in the four cases have rich experience in managing IT outsourcing projects and therefore they can rationally choose appropriate control methods in the process of project

management.

4.2 Case overview

4.2.1 Case A

Company A, a real estate company and a state-owned enterprise in Jiangsu Province, manages the largest wedding dress mall in East China. Suzhou Huqiu District has been the largest wedding dress distribution center in East China since the 1990s, where more than 800 wedding dress sales merchants gather. Brides from East China and even other regions visit here to buy their wedding dresses, and some merchants from other places come here to purchase wedding dresses. The annual wedding dress sales amount to as high as tens of billions or even hundreds of billions yuan. However, since 2010, the wedding dress market in Huqiu District, Suzhou had confronted tremendous market pressure. Internally, the wedding dress market in Huqiu was too old in the architectures, with more than 800 wedding dress merchants scattered among shops in several streets. The shopping environment was irregular, resulting in poor consumer experience. Exernally, the rise of the wedding dress markets in Guangdong and Zhejiang lured many customers away from the original Huqiu wedding dress market. In 2012, the Suzhou Municipal Government planned to upgrade the wedding dress market in an attempt to enhance its market competitiveness. The Suzhou Municipal Government planned to invest RMB 3 billion yuan to build a large-scale shopping mall covering an area of 180,000 square meters, and then relocated all the wedding dress merchants and related supporting businesses scattered in several streets into the mall, thus providing one-stop services from wedding dress design, the procurement of wedding dress to the procurement of the accessory of wedding dress. Meanwhile, the wedding dress culture was promoted through building the wedding dress museum and organizing wedding dress fashion shows, so as to integrate culture, commerce and tourism. Company A was established against these backdrops with a registered capital of 300 million Yuan and 50% contribution from the Suzhou Municipal Government and the State-owned Assets Supervision and Administration Commission (SASAC), responsible for the construction of the shopping mall, investment promotion of wedding dress merchants

and the operation and management of these merchants after they settled in. Initially, it was planned to complete the construction of the mall by the end of 2015. After one year's merchant invitation, the merchants had all settled in and started trial operation by the end of 2016. In 2017, the whole mall was officially put into operation.

While building the physical shopping mall, the company was also planning to build an online shopping mall. Through market research, the company discovered that the online market mainly consisted of comprehensive online shopping malls such as JD.COM, Tmall and Taobao, without any specialized online shopping mall for the wedding dress market segment. The company thus planned to develop a professional online shopping mall for wedding dresses. The 800 offline merchants they had would settle in the online shopping mall as pilot users, and then the company would gradually expand to the whole country to establish a one-stop service system including design, production, sales and after-sales. Following project initialization, the company first invited a management consulting company to evaluate and plan the project. The first discussion subject was whether the online shopping mall project should be developed by an internal team or be outsourced. Because the company was by nature a real estate company, the IT department had only seven people, and as a state-owned enterprise it had strict control over the personnel budget, the internal human resources were not enough to independently develop such a system, and therefore they had no other choice but outsourcing. According to the requirements for state-owned enterprises, the company conducted public bidding and finally chose a local software development company. The project was initialized in 2015, and the software development started in 2016 and completed in 2017. It was originally planned to go online in 2017. However, due to the adjustment of its organizational structure, the priority of the project also changed, resulting in a delay of the project going online until 2018, and the whole project cost RMB 10 million. The whole project team consisted of over 100 people, including the IT department, the Internet Operation Department (business department representative) and the supplier development team for this project. Interestingly, the two parties (i.e. the customer and the vendor) of the project showed distinctly different

degrees of satisfaction.

IT manager and business manager of the customer company highly praise the outcome of this IT outsourcing project and are satisfied with the outcome. The satisfaction is evident in the quotation by IT manager and business manager of the customer.

> *"Objectively, the whole project has achieved the stated goal, because all the functional points required by us (Company A) have been developed in the system. However, whether the business expectation has been met can be discerned only after the system has been running for a period of time. So no conclusion can be drawn now. From the technical and project management perspective, we still find them (suppliers) competent because they (suppliers) can complete tasks with guaranteed quality and quantity. We cooperate with many suppliers, some of which can't meet our requirements." (AITM, IT manager of Company A)*
>
> *"The present system matches our current market environment, but the market environment of E-commerce is constantly changing, and the business decisions of (the management) are constantly changing as well. As a result, (the system) calls for continuous investment and iteration. They (suppliers) are quite well-behaved, because the technology is very mature and has been developed according to our needs (Company A). They (suppliers) have no outstanding innovation, but they are free from fault. We (Company A) will put them (suppliers) into the supplier list and cooperate with them on a long-term basis." (ABUM, Internet Operations Manager of Company A)*

However, project manager of the vendor seems have different opinion. He acknowledges the outcome of the project meet original expectation but he complains the vendor invests too much because there are too many additional developments due to fuzzy requirements and changes. The dissatisfaction is evident in the quotation by project manager of the vendor.

> *"We (suppliers) have developed all the functional points required by them*

(Company A) in the system, but I don't think this project is very successful, mainly because of the poor management of the project. As a result, we (suppliers) have invested too much. If this could be done again, (project management) could be optimized and a lot of resources saved. On the one hand, some schemes were developed without having clear requirements, leading to much rework; on the other hand, they (Company A) had no record of changes in requirements, and as a result no evidence was available when there was a dispute later on. Therefore, the main reason was that the project time was too tight and the (project) management was not properly conducted." (AVEM, Project Manager of a supplier)

In sum, the IT outsourcing project (i.e. E-commerce platform project) is strategically important to Company A since it is an innovation-seeking project to help Company A to win the position of the leader in the market. Finally, the project is considered as a successful project since the outcome meets the original expectation although the vendor is not satisfied with project management. Hence, the experience (i.e. control mode and the role of guanxi) in this project is valuable to be further studied.

4.2.2 Case B

Company B, an investment management company and a state-owned enterprise, is one of the top five investment management companies in Jiangsu, with assets of RMB 50-60 billion under its management. The company currently has mainly three business areas: 1) equity investment; 2)debt financing, and 3)investment and financing related services, such as recommending investment companies as a financial consultant. Headquartered in Suzhou, the company has branches in other major first-and second-tier cities, with more than 400 employees as a whole.

Initially, the company used EXCEL forms and Word files to update the progress and approval status in the process of the company's investment projects. With the increase of the company's business, however, more than 100 projects are currently under the

management, while several hundred and even over one thousand projects will be added each year. About 10% of these projects will receive the funding, and then enter the process of post-investment management. Meanwhile, the increasing number of branches in other locations leads to more communication and examination work in different places. Therefore, the previous project management method using EXCEL and Word documents can no longer meet the requirements of the company. The company expected 1) to control the whole investment process with automatic remind or alert from the system and 2) to enhance the integrity and security of the documents. Hence, the company considered developing a set of project management software to track each project, covering the whole lifecycle from the beginning of project selection to the end of a project. However, the company's internal IT staff is as limited as only three employees, and as a state-owned enterprise the company is also constrained by the control of personnel budget since the budget has to be submitted to the government department for approval and the government prefers to cut the headcount for cost reduction. Hence, the company decided to outsource the project from the outset. Then the company invited Deloitte Consulting to provide management consulting, and review the management process and the examination and approval process of investment projects. Investment project management can be divided into two stages of pre-investment management and post-investment management. The first thing to do is project registration, registering the basic information of a project and the preliminary financial and risk analysis. Then regular project review meetings are organized and only the projects that pass the reviews will be approved. After project initialization, the company will invest manpower to conduct due to diligence investigation. According to the feedback of due diligence investigation results, the company organizes a decision-making meeting again, and only the projects adopted in the decision-making meeting can finally get investment. The above steps form the stage of pre-investment management. There is still a lot of work to do at the post-investment stage, including directional analysis, quarterly reports and regular visits, all of which should be recorded in the system for tracking and approval. Generally speaking, this system is a project management system for the whole lifecycle management for investment projects. Work

at each stage of a project must be recorded in the system for approval and analysis at the next step. Deloitte reviewed the business process and prepared a requirements manual of software development. According to the software development requirements manual provided by Deloitte, the company conducted public bidding according to the requirements of state-owned enterprises, and finally software development was outsourced to Founder International Software Suzhou Branch. The whole project was divided into three stages. The first stage was 2016, which was mainly the management consulting stage of Deloitte. The second stage was from 2016 to 2017, which was mainly the software development stage of Founder Company. The third stage was from 2017 to 2018, which was mainly the maintenance and software iterative development stage of Founder Company. The whole project spanned three years and cost RMB 6 million. The project team consisted of over 30 members, including the IT application team of Company B (key users and IT personnel would be arranged in each business module), consultants of Deloitte Consulting Company and developers of Founder International Software Company. Company B and the software development company expressed a high degree of satisfaction with the project, leaving very good comments on each other.

IT manager and business manager of the customer company highly praise the outcome of this IT outsourcing project and are satisfied with the outcome. The satisfaction is evident in the quotation by BITM (IT Manager of Company B).

> *"Our (Company B's) initial (project) expected goal was to realize information sharing, that is to say, all platforms (business departments) should share basic data instead of becoming information islands. At present, this goal (information sharing) has been achieved, the basic data of (business department) has been entered, the examination and approval have all been conducted in the system, and the financial report can also be consulted. The next goal is intelligent BI analysis, but we still don't know how to achieve it. I think the current system can be rated a passing score of 70 points (out of 100 points). They (Founder Software Company) are very experienced in system*

customization and have good cost performance. The two parties of this project cooperate very well, willing to sustain our cooperation for a long time."(BITM, IT Manager of Company B)

Project manager from the vendor also highly praises the outcome of the project and look forward to continuous cooperation with Company B. The satisfaction is evident in the quotation by BVEM (Project Manager of Founder Software).

"The goal of IT application is dynamically changing within the enterprise, and there are annual goals every year. The initial goal of this project was to display all business information in the system, which has been achieved. Therefore, I think this project can score 95 points (out of 100 points) based on the evaluation of timely delivery and quality of delivery according to customers' requirements and our delivery every year. This year, their (Company B's) management has put forward a new goal, which is to carry out lean management through systematic data analysis. At present, the system still cannot meet this requirement, and we are discussing with them (Company B) about how to meet the new requirements."(BVEM, Project Manager of Founder Software)

In sum, the IT outsourcing project (i.e. project management system project of the investment projects) is strategically important to Company B since it is an efficiency-seeking project to help Company B to enhance operation efficiency to manage more investment projects. Finally, the project is considered as a successful project since the outcome meets the original expectation and both the customer and the vendor are satisfied with the process and the outcome of the project. Hence, the experience (i.e. control mode and the role of guanxi) in this project is valuable to be further studied.

4.2.3 Case C

Company C, a manufacturing enterprise and private company, mainly produces various thermos cups, and is currently a leading enterprise in the domestic cup and kettle

industry, with annual sales amounting to about 2 to 3 billion Yuan. The company's business is divided into three parts: the first part is OEM business to European and American markets, accounting for 60%~70% of the company's total sales; the second part is domestic market sales, accounting for 20%~30% of the company's total sales; and the third part is new business in the recent two years, mainly product customization. The company implements a multi-brand strategy, currently having three market segments with different brand positioning. The first is a brand created independently by the company, mainly for the domestic market, the second is an acquired Swiss brand, mainly for the sports market, and the third is an acquired French brand, mainly for the leisure and fashion market. Listed on the Shenzhen Stock Exchange in 2001, the company is the only listed company in China's cup and kettle industry. Headquartered in Zhejiang, the company has established production bases and trading companies in many places in China, employing a total of nearly 5,000 people.

As a leading enterprise in the domestic cup and kettle industry, the company has a monthly production capacity of 5 million thermos cups, far exceeding the actual order demand. After communicating with many other enterprises in the industry, the company has found that most enterprises in the industry have mismatched production capacity and external orders. Top enterprises have excess production capacity, while new enterprises entering the cup and kettle market, such as Xiaomi, Midea and Supor, have insufficient production capacity. Therefore, the company considered setting up an intra-industry order system, in which enterprises in the industry can release their redundant production capacity or orders to the online platform, and the platform acts as an information middleman to match production capacity with orders according to a preset algorithm. After matching, the platform will track the whole order production process to ensure production quality. This system goes beyond the internal scope of the enterprise to cover the whole industry. In the implementation process, the company needs to communicate with a large number of external enterprises in the industry. Project outsourcing has been adopted as the ability and experience of the IT staff in the company are insufficient to complete the project independently. First, Ernst & Young

Management Consulting Company was invited to sort out the business process of the system and work out the requirements manual of software development. Then, according to the requirements manual, the software outsourcers in the market were screened, and finally a software company in Shenzhen was selected for remote development. The whole project started in October 2018, the first phase went online in October 2019, and then the software was upgraded continuously according to the feedback after going online, and the whole project was completed by the end of December 2019. The whole project cost RMB 3 million Yuan, including early business consultation and later software development. The whole project team consisted of about 20 members, including an IT team, key users of business departments, consultants of Ernst & Young Consulting Company and developers of the software company. Company C and the software development company were basically satisfied with the project, and made positive comments on each other.

IT manager of the customer has some minor complaints about the delay of the project and the extra cost. But he also understands the delay and the extra cost come from the change requirements due to environmental uncertainty. Generally he expresses satisfaction with the outcome of the project and the appreciation with the vendor. He also provided the advice to the vendor for further improvement. The satisfaction is evident in the quotation by CITM (IT Manager of Company C).

> *"This project has been slightly delayed as compared with the original plan, postponed for three months. The project cost has also increased, which is RMB 600,000 Yuan higher than the original budget. But the actual effect of the system has met our expectations, and its functions are better than what we've required. The main reason was that there was a one-year interval between the initial design and the final go-live. During this year, the market environment changed, and both parties improved their awareness of the system, so some more requirements were added, resulting in time delay and an increase in costs. Therefore, I am basically satisfied with this project and would give a score of 70 points (out of 100 points). I recognize the professional knowledge of Ernst*

& Young's consultants, but their consulting costs are relatively high. I recognize the development skills of software development company personnel, but they (software developers) don't know enough about our industry (cup and kettle industry). In addition, because the software development company is based in Guangzhou, their service response and communication are not sufficient enough." (CITM, IT Manager of Company C)

The project manager from the vendor is very satisfied with the outcome of the project and points out improvement areas in the future. The satisfaction is evident in the quotation by CVEM (Project Manager of the software company).

"The first phase of this project was launched on time, and some new requirements were put into iterative development after we (software company) discussed with them (Company C). After iterative development, the system functions basically meet their (Company C's) requirements. I would score 80 points (out of 100 points) for this project. The deficiency is that when the needs are communicated, the two parties sometimes have misunderstanding, which may cause rework. But we will correct the deviations in time during testing."(CVEM, Project Manager of the software company)

In sum, the IT outsourcing project (i.e. industry sales order platform project) is strategically important to Company C since it is an innovation-seeking project to help Company C to enhance its sales revenue in the market. Finally, the project is considered as a successful project since the outcome meets the original expectation and both the customer and the vendor are satisfied with the process and the outcome of the project. Hence, the experience (i.e. control mode and the role of guanxi) in this project is valuable to be further studied.

4.2.4 Case D

Company D, a manufacturing enterprise and private company, has a multi-division operation mode. It currently has three divisions: the first business division is the cooker

business division, which includes kitchen utensils such as cookware and stoves, currently ranking first in the industry in China; the second division is the small household appliances division, including appliances such as hair dryers and irons, currently ranking second in the industry in China; and the third business unit is the household appliances business division, which includes televisions, refrigerators and other household appliances, currently ranking among the top ten in the industry in China. At present, the annual sales of the whole company amounts to about RMB 20 billion Yuan, and there are close to 20,000 employees in the whole company.

One important reason for the three business divisions of Company D to lead the respective industry is their long-term good cooperative connections with wholesalers. In this industry, consumers' needs should be met immediately, and manufacturers should produce products periodically, so wholesalers can place orders with manufacturers in advance according to market forecasts, and then the finished products produced by manufacturers are transported to the warehouses of wholesalers for storage, so that products can be immediately delivered once customers place their orders. Company D does not define wholesalers as pure business cooperating parties, but establishes a long-term partnership with them. Therefore, Company D has developed a wholesaler inventory management system to coordinate with the wholesalers to manage the inventory, and this system interfaces with each wholesaler's ERP system to update the inventory status of each wholesaler in real time. On the one hand, Company D can reduce the inventory in the whole supply chain through this system: if it is found through monitoring that the inventory of a certain product in all wholesalers is high, they will promote this product in the whole market through marketing activities to help wholesalers reduce the inventory; If Company D finds through monitoring that the inventory of a certain product is uneven among wholesalers, especially among different regions, they will coordinate the allocation of inventory among wholesalers. On the other hand, Company D can arrange the marketing plan of new products through this system. From a technical perspective, the development of this system is not complicated, but it requires a lot of work, which is mainly to develop the interface for docking ERP

systems of different wholesalers. There is currently an IT team of more than 50 people in Company D, but the team needs to support user teams of more than 20,000 people in three business divisions, leading to insufficient IT human resources. Moreover, the human resource demand of this system is temporary, and a lot of human resources are needed when developing an interface, but once the development is completed, only a few people are needed to maintain it. For this reason, Company D has chosen to outsource the development of this system. The whole project took 2 years from the completion of development to the launch of the system with wholesalers. The cost amounted to RMB 5 million, with the wholesalers and Company D bear half of the cost each. The whole project team consists of over 150 people, including the IT staff of Company D, key users of its sales department, IT staff of wholesalers and developers and implementers of software companies. Both sides of the project are highly satisfied, and have made good comments on each other.

IT manager of the customer is satisfied with the outcome of the project and appreciates the vendor and would like to cooperate with the vendor in future. The satisfaction is evident in the quotation by DITM (IT manager of Company D).

> *"This project is relatively complex, with both development outsourcing and implementation outsourcing. However, from the discussions of needs and customized development in the early stage to the small-scale piloting and comprehensive promotion in the later stage, the whole project team cooperated very smoothly, the system went online on time as scheduled, and the project cost was controlled within the budget range. The feedback after the launch of the system has also been very good, with the initial goal realized. Therefore, I will give this project a score of 90 points (out of 100 points). The cooperating suppliers are very good in terms of professional skills and project management, and we are willing to cooperate with them on a long-term basis."(DITM, IT manager of Company D)*

The project manager of the vendor is also satisfied with the outcome of the project and

points out the improvement areas for the future. The satisfaction is evident in the quotation by DVEM (Project Manager of the software company).

> *"The whole project has been completed smoothly, with only a few changes in the middle, mainly with regards to report forms, and we have all provided basic report forms. After communication some of their (Company D's) report forms with special requirements have been put into iterative development after going online, so the change ratio is below 10%, which shows that the management of the whole project has been very successful, and their (Company D and* wholesalers*') feedback about the system is also very good, so I will give this project 90 points (out of 100 points). We have been cooperating with Company D for 7 years, and both parties know each other well with a tacit understanding. We will continue to cooperate in the future. What needs further improvement is that we will try to fix the project members working with them (Company D), especially the project manager, so as to reduce the training time at the beginning of the project." (DVEM, Project Manager of the software company)*

In sum, the IT outsourcing project (i.e. wholesalers inventory management system project) is strategically important to Company D since it is an efficiency-seeking project to help Company D to reduce the inventory in supply chain for cost reduction. Finally, the project is considered as a successful project since the outcome meets the original expectation and both the customer and the vendor are satisfied with the process and the outcome of the project. Hence, the experience (i.e. control mode and the role of guanxi) in this project is valuable to be further studied.

4.3 Comparative analysis of company profiles

This research addresses IT outsourcing projects of Chinese enterprises as units of analysis. Enterprises in China fall into four categories according to the nature of owners: foreign-funded enterprises, joint ventures, state-owned enterprises and private enterprises. Foreign-funded enterprises and joint ventures are beyond the scope of this research, because such enterprises, whether a foreign-funded one or a joint venture, are

headquartered mostly in developed countries in Europe and America. European and American enterprises have outsourced IT projects earlier than Chinese domestic enterprises, and accumulated a great amount of experience, developing a complete set of IT outsourcing project management methods and processes. For IT outsourcing projects of their Chinese branches, the headquarters usually have the following several practices: 1) using common suppliers of the headquarters; 2) the headquarters sends a project manager or consultant to manage a project; 3) even if a Chinese branch uses local suppliers, it is managed by a local project manager, and the headquarters also requires the use of unified project management methods and processes. DITM's (IT Manager of Company D) previous experience in a foreign-funded enterprise supports this in the quotation, *"I've been engaged in IT work for more than 20 years, serving as IT manager and IT director in many enterprises. At first, I worked as an IT manager in a foreign-funded company. (This foreign-funded company) was a Fortune 500 company headquartered in the United States. The company headquarters had complete IT outsourcing project management methods and processes. We (IT managers of the Chinese Branch) received training from the headquarters and managed local IT outsourcing projects according to the methods and processes of the headquarters".* Therefore, the management of IT outsourcing projects by foreign-funded enterprises and joint ventures is of the Western style, not Chinese. Western-style IT outsourcing management has been studied extensively in previous literature (Chapter 2), and is therefore beyond the scope of this research. This research focuses on state-owned enterprises and private enterprises in the Chinese market, collectively referred to as Chinese enterprises.

Chinese enterprises are divided into different categories because of the different characteristics of enterprises and projects, including: enterprise ownership, industry, enterprise scale, project team scale, project cycle and project amount. In this research, these enterprise characteristics and project characteristics differ in the four cases, but they have no impact on the management of IT outsourcing projects.

	Case A	Case B	Case C	Case D
Enterprise ownership	State-owned enterprise	State-owned enterprise	Private enterprise	Private enterprise
Industry	Real estate	Investment	Manufacturing	Manufacturing
Enterprise annual sales amount (RMB)	>100 billion	50 billion	2 billion	20 billion
Project team scale	>100 people	30 people	20 people	150 people
Project cycle	3 years	3 years	1 year	2 years
Project amount	10 million	6 million	3 million	5 million

Table 4.1 Descriptive Analysis of Cases

In this research, Company A and Company B are state-owned enterprises, while Company C and Company D are private enterprises. The major shareholder of state-owned enterprises is the government, which will set up special administrative departments and prepare special administrative policies to intervene and manage the operation of state-owned enterprises. Therefore, compared with private enterprises, state-owned enterprises have less freedom in business operations. However, as IT outsourcing projects involve IT technology and are highly specialized, the administrative authorities of state-owned enterprises have not intervened in the IT outsourcing projects of the enterprises, or formulated any special administrative policies as guidance. To sum up, no obvious difference in IT outsourcing project management can be identified among the four cases due to different enterprise ownership. That means control modes in IT outsourcing projects in Chinese enterprises are not impacted by enterprise ownership (i.e. state-owned enterprises or private enterprises). Since the reform and opening up, guanxi has always been regarded as a

key to doing business in China, but resulting in a series of negative impacts such as corruption (Ricky et.al, 2002). The negative impact of guanxi in Chinese enterprises has not only been studied in academic circles, but also learned by the government. Therefore, the administrative authorities of state-owned enterprises have specially formulated strict policies to limit the negative impact of guanxi. The concern of the government is evident in the quotation by ABUM (Business Manager of Company A), "*We (Company A) are a state-owned enterprise, and the SASAC (the superior administrative department of Company A) has stipulated strict regulations on us, forbidding us from any guanxi with any suppliers to avoid corruption ... The SASAC requires us to choose suppliers through public bidding, so as to avoid any misconduct of black-box operation resulting from guanxi."* However, the regulations of the administrative authorities of state-owned enterprises cannot eliminate guanxi altogether. Robert (2010) has pointed out that guanxi in Chinese culture refer to personal relationships, including three types: first, family guanxi resulting from blood connections; second, social guanxi, such as friends and neighbors; and third, guanxi developed from shared experience, such as classmates and comrades-in-arms. These three types of guanxi will not disappear because of any policy or system. In addition, the policies and regulations of the administrative authorities of state-owned enterprises limit the negative impact of guanxi, but the positive impact of guanxi still plays a role in state-owned enterprises, only that it has just been concealed. AMIM (the middleman in Case A) verified the positive impact of guanxi in the state-owned enterprise in the quotation, *"The reality in our Chinese environment is that friends introduce business, because of their mutual trust ... Such guanxi, which acts like a lubricant, plays a decisive role in enhancing mutual trust between both parties both in the early communication of a project and in the later cooperation process."* Similarly, private enterprises also use the positive role of guanxi to facilitate their enterprises. CBUM (Business Manager of Company C) also verified the positive impact of guanxi in the quotation, *"Our (Company C's) selection of project suppliers is to let friends around recommend suppliers they have worked with before, because we can learn suppliers through friends."* To sum up, the positive role of guanxi is not impacted by enterprise

ownership (i.e. state-owned enterprises or private enterprises).

Table 4.1 presents the company profiles and project profiles of these four cases. The four companies which the researcher has selected involve real estate, investment and manufacturing, with annual sales ranging from tens of billions to hundreds of billions Yuan. Four IT outsourcing projects have been selected in the study: the E-commerce platform of Company A-a wedding dress mall commercial real estate company, the investment project management system of Company B-a venture investment company, the industry order and sales management system of Company C-a cup and kettle making company and the wholesalers inventory management system of Company D-a kitchenware making company. The team size of these four projects ranges from dozens to hundreds of people, the project amount ranges from several million Yuan to tens of millions Yuan, and the project cycle ranges from several months to several years. The four cases are sufficiently different, but no evidence from the extant literature or practice to present these differences of company profiles and project profiles impact control mode in IT outsourcing. Hence these differences have no obvious impact on the propositions in this research.

4.4 Control variable: project managers' outsourcing project management experience

In this research, "project manager's outsourcing project management experience" is considered as a control variable with no impact on any of the propositions, because the project managers of the customer and the vendor in the four cases have rich experience in managing IT outsourcing projects and therefore they can rationally choose appropriate control methods in the process of project management.

From the customer's perspective, all the four project managers who are also IT managers in each company have rich experience in IT management. During their careers, they have managed many IT outsourcing projects and even received special project management training, and they are able to apply their previous experience to

the current IT outsourcing projects. Experience in a foreign-funded company is evident in the quotation by DITM (IT Manager of Company D), *"I have been engaged in IT work for more than 20 years, serving as IT manager and IT director in many enterprises. At first, I worked as an IT manager in a foreign-funded company. (One of the former foreign-funded companies was) a Fortune 500 company headquartered in the United States. The company headquarters had a set of complete IT outsourcing project management methods and processes. We (IT managers of the Chinese Branch) had received training from the headquarters and managed local IT outsourcing projects according to the methods and processes of the headquarters. Later, I joined a private enterprise. My working experience in foreign-funded enterprises helps me a lot in my present job"*. Some IT managers of the customers have even worked in an enterprise that acts as the vendor. Thus they can better understand the vendors' working methods and thus have more effective management. The experience in the vendor company is evident in the quotation by AITM (IT Manager of Company A), *"Before I joined this company, I had been engaged in software outsourcing for 6 years, working in many IT outsourcing projects, including energy, education, banking and other industries. Although my mindset must be changed from the vendor to the customer, yet my previous experience is an asset for my present job, because if you know which key nodes in a project were important to the project when you were in a vendor enterprise, you will pay special attention to these (key nodes) in your current work."*

From the vendor's perspective, all the four project managers have prior successful experience in implementing IT outsourcing projects, and know how to cooperate with the customer to manage IT outsourcing projects. Some vendor companies even have special project management training for their own project managers to improve their management experience and competence. BVEM (project manager of the software outsourcing company in Case B) gave an examples, *"I started to work in IT outsourcing in 2013, first as a code developer, and then as a project manager. Our company has been engaged in IT outsourcing for many years, and is one of China's top ten software outsourcing companies. We have accumulated rich experience in project management,*

so every newly promoted project manager should receive training in project management. Before this project, I have successfully implemented several IT outsourcing projects in other enterprises".

4.5 Conclusion

Through in-depth interviews and comparative analysis, this chapter presents the similarities and differences of four cases, and analyzes the impact of such similarities and differences on the research topic (i.e. control modes and the role of guanxi).It is found that different enterprise characteristics and different project characteristics have no impact on the control mode of IT outsourcing projects and the role of guanxi. However, the outsourcing project management experience of the project managers does have an impact on the choice of IT outsourcing project control methods. Therefore, this factor is considered as a control variable in this research. That means the project managers of the customers and the vendors in the four cases are experienced in IT outsourcing project management, without obvious differences among them. Through the analysis in this chapter, factors with no impact on the control mode and of IT outsourcing projects and the role of guanxi may be disregarded. In Chapter 5, further analysis will be made on factors affecting the control mode of IT outsourcing projects and the role of guanxi.

Chapter 5. Data Analysis: Control Mode and Role of Guanxi

5.1 Introduction

This chapter explores control modes and the role of guanxi in IT outsourcing projects in Chinese enterprises, using research framework proposed from literature review (Chapter 2).

This chapter is divided into two sections. In the first section, the researcher firstly endeavors to find out whether control modes in the west (i.e. formal control and social control) from the extant literatures (Chapter 2) also prevail in Chinese enterprises. To identify the control modes used in IT outsourcing projects, the researcher first analyzes the management practices in the project process, and then classifies these practices according to the standards proposed by Kirsch (1997), correlating them with the corresponding control modes.

The researcher looks for the following management practices to prove that clients use outcome control in the project process:

- Management practices that can clearly and accurately define the desired results that can be evaluated
- Management practices, including information system, which can evaluate the quality and time of a supplier's output

The researcher looks for the following management practices to prove that clients use behavior control in the project process:

- Management practices in which the client formulates detailed policies, procedures and processes, and requires that suppliers comply with them
- Management practices that can help direct inspection of supplier behavior
- An information system designed to help the client supervise suppliers

The researcher looks for the following management practices to prove that clients use clan control in the project process:

- Management practices that can upgrade the shared objectives of the client and its suppliers
- Management practices that can upgrade and evaluate the shared beliefs and values of the client and its suppliers

The researcher looks for the following management practices to prove that the client strives to improve the self-control of suppliers in the project process:

- Management practices that encourage or inspire suppliers to use more self-control

- Management practices that help suppliers improve their internal management capabilities

Finally, the researcher presents which control modes from the west (i.e. formal control and social control) are adopted in IT outsourcing projects in Chinese enterprises as below (Table 5.1).

	Case A	Case B	Case C	Case D
Outcome Control				
-Requirements specification	√	√	√	√
- Acceptance criteria	√	√	√	√
-External design documents	√	√	√	
- Project plan	√	√	√	√
-Critical node schedule	√	√	√	√
-Regular code submission				√
-Client test software	√	√	√	√
-Client engagement analysis	√	√	√	√
Behavior Control				
- Project plan	√	√	√	√
- Client visits suppliers		√	√	√
-Supplier resides on site to work		√		
-Code walk-through				√
- Weekly, Monthly Report on Project	√	√	√	√
- Teleconferencing	√	√	√	√
Clan Control				
- Long-term relationships				√
-Supplier visits to learn about Client's corporate culture				
- Business dinner				
- Team building				
Self-control				
-Client recommends the software testing process				

-Client asks a higher level of participation of Supplier -Client interviews Supplier's project members	√

Table 5.1: Control Mode from the West (Formal Control and Social Control)

Secondly, the researcher endeavors to find out how the factors affecting the control mode are determined. When reading transcripts, the researcher focuses on the opinions when using the control mode, which are usually the reasons for choosing the control mode. That means that the researcher looks for concerns about too much control or too little control, and opinions that some control methods are not used or that some methods are used well. Secondly, researcher focuses on the context of the change of control mode, and looks for the trigger events that lead to such a change, which is usually the reason for choosing a new control mode.

In the second section, the researcher explores the role of guanxi in IT outsourcing projects in Chinese enterprises. Similar to Nicholson et al. (2006), the researcher divides the life cycle of IT outsourcing project into different phases: contact, contract and control. The interviewees are required to describe the context in which guanxi plays the role in different phases. Since guanxi is quite controversial in Chinese enterprises, sometimes the interviewees in project teams are not willing to talk about it. Hence the transcription of the middlemen are used as the data source triangulation.

In the analysis of case evidence, the researcher analyzes the propositions in the theoretical framework according to the strategy recommended by Yin (2003). Pattern-matching is the most desirable method in case study (Yin, 2003), as this method compares the pattern found in cases with the pattern proposed in the propositions. That the two patterns are consistent can strengthen the internal validity of the theory. If these two patterns do not match each other, the original proposition is found questionable and is rejected. Similar to Poon and Wagner (2001), this research does not attempt to quantify qualitative data, but tries to explore the existence of the patterns and find evidence to support the propositions.

5.2 Research Question 1: Are control mechanisms (i.e., formal control and social control) which exist in the west also prevalent in IT outsourcing in china?

5.2.1 Formal control

5.2.1.1 Outcome control

In this section, the research explores the data in support, or otherwise of proposition 1: *outcome control are positively associated with supplier asset specificity.*

Through the analysis of the four cases, it is found that outcome control is used in all the four cases, but to different extents. According to Kirsch's (1997) standard, two management practices justify that a client uses outcome control in a project process. The first management mechanism is a detailed description of the expected outcome. In these four cases, the clients signed formal contracts with their suppliers, stipulating the work that the suppliers should complete, and all the contracts were attached by specifications of software functions, which listed software functions. But the level of details of each requirements is different, and Company A gave the most detailed description. The details of requirements is evident in the quotation by ABUM (Business Manager of Company A), *"Our (Company A's) contract is very thick, consisting of more than 100 pages. From contract drafting to contract approval to final signing, we (Company A) and they spent more than a month together, because the contract terms were very elaborate, specifying the work they (the supplier) should complete and the responsibilities for breach of contract. For example, in the event that they (the supplier) postpone the time for the project to go online, we (Company A) should deduct money from their deposit, and there is a provision on how much should be deducted from the deposit for each day of delay.... The requirements specification in the annex to the contract is as detailed as possible, and specific (system) interfaces have even been drawn for some functions, which can ensure that the work they complete really meets our needs."*

Of the four cases, Company B has the simplest description of the contract and specification of software functions, which only list the general framework of requirements, with more detailed requirements left for discussion with suppliers during the project. They think that a contract, if too specific, will set limitations to both parties of the project, because the supplier will think that their work is done so long as the work listed is completed, and thus lack creativity generated by brainstorming in the project process. Even so, they have clearly defined the basic requirements of the project, including the functions to be developed, the launch time, the project amount, and the division of labor between the two parties. The details of the requirements of Company C and Company D are moderate.

To sum up, although the client's description of the expected output is either detailed or simple in the four cases, the expected output is all clearly defined.

Another management practice of outcome control is to define the deadline and to measure the quality of the deliverables such as project documents, source codes, demo system, final system and so on submitted by a supplier. In these four cases, the clients have all made a project plan and defined the final launch time. But the project plan of each case differs. As mentioned earlier, Company A has made a very detailed schedule, including not only the final launch time, but also the deadline of each milestone during the process. Also, punishment measures have been specified. A supplier failing to complete a milestone on time will be fined. Company B only made a final launch plan, while the deadline of each milestone in the project process was discussed and worked out with suppliers, and it was also flexible in the implementation process, and there was no penalty for failing to meet the milestones and the vendor is only required to meet the final launch time in Case B since Company B wants to offer the vendor a flexible project plan so the vendor can work more creatively.

In all these four cases, the clients have measured the quality of the deliverables submitted by the suppliers, mainly manifested in the fact that clients would arrange their internal IT departments and business departments to perform functional tests on the software codes submitted by the suppliers to ensure the quality of their outputs. In addition, Company A would also require the supplier to demonstrate the software to the company's management to ensure that the software developed by the supplier meets the demands of the management. Moreover, before the supplier's final submission of the software, Company A also hired a third-party consulting company to evaluate the quality of source codes. The measurement of the quality of deliverables is evident in the quotation by AITM (IT manager of Company A), *"We (Company A) formulated the development specifications at the early stage of the project, including (function) naming rules, and annotation requirements, among others. Source codes they (the supplier) finally submitted consisted of over 100,000 lines, which we (IT of Company A) could not evaluate. As a result, we (Company A) hired a consulting company to review all the codes and asked them (the supplier) to modify the codes according to the opinions put forward by the consulting company"*.

To sum up, in the four cases, the clients all used outcome control in the project process, of which Company A, in particular, used outcome control to the greatest extent.

Benoit et al. (1996) analyzes the asset specificity of suppliers in different IT outsourcing projects and they have observed that in IT outsourcing projects, pure hardware leasing projects have the lowest asset specificity, followed by manual services such as hardware installation and maintenance, while in software development projects, suppliers' asset specificity is the highest, because such development projects have the lowest degree of standardization. Through in-depth analysis of suppliers' asset specificity in each stage of the project according to the System Development Life Cycle, they have also found that in the initial stage of the project, an enterprise usually hires external consultants to assess the feasibility and business process of the project, and the specificity at this stage is the highest. Then, in the code development stage, enterprises usually outsource this part of the coding mainly due to the limit headcount of internal developers. The specificity of development is lower than that of the initial stage, but it is also very high.

IT outsourcing projects of the four companies in the case study have been introduced in Chapter 4. They are all software development projects, and Company A, Company B and Company C first hired consulting companies as consultants, and then outsourced the code development to software development companies. The outsourcing tasks in their three projects are demonstrated in the quotation by their IT managers as below. *"In the early stage of planning, our company assessed this project (online wedding dress shopping mall), and also invited a third party (consulting company) to assess it. The first point of assessment was whether this e-commerce platform should be developed by ourselves or by a third party. Secondly, we also asked a third party (consulting company) to help us sort out the modules and business processes of the online mall ... and then we invited bids to select a suitable software development company according to the business processes prepared by the third party (consulting company)."* (AITM, IT manager of Company A). *"This project (project management system of the investment project) is divided into two phases. In the first phase, Deloitte was employed to do management consulting, and in the second phase, Founder was asked to do software development."* (BITM, IT manager of Company B). *"We started this project (the sales order system of the industry) in October 2018. First, we employed Ernst & Young to design the blueprint of the whole system. After the blueprint was finished, we employed a software development company in Shenzhen to develop the code (according to the blueprint)."* (CITM, IT manager of Company C). Therefore, the asset specificity of the suppliers of these three companies in the initial stage of software development projects was the highest. Secondly, all the four companies outsourced

code development to software development companies. A software development company, once selected, can hardly be replaced. Just as was explained in the quotation by AITM (IT manager of Company A), *"Every software company has its own development specifications, so the codes developed by one software company are difficult to read for another, and even if they are understood, it would take a very long time to transfer. Therefore, a software development company should be chosen very prudently, because once chosen it would be very difficult to replace."*

Two conditions are required to measure the effectiveness of suppliers' work: observability and verifiability (Benoit et. al, 1996). Observability refers to the possibility that a client can observe the performance of a supplier, while verifiability refers to the ability of a client to confirm the observation results of the suppliers' work and provide evidence. However, due to the high asset specificity of suppliers, both observability and verifiability are low, so clients will choose outcome control. In this research, the reason to choose outcome control follows Benoit's findings in these four cases. AITM (IT Manager of Company A) explained the reason for choosing outcome control in the quotation as follows, *"We (IT Department of Company A) have limited staff (only two people), who (IT employees) have no experience in software development projects, so it is difficult for us (Company A) to manage the daily work of a supplier ... We (Company A) define the results to be achieved in a very detailed way. In this way we do not control how they (supplier) usually work, but only require that they submit the outcome meeting our requirements".* Company B, Company C and Company D have the same reasons to choose outcome control in their IT outsourcing projects. As result of data analysis, the research accepts proposition 1:

Outcome control are positively associated with supplier asset specificity.

This section investigates proposition 2: environmental uncertainty will have a negative moderating effect on the relationship between supplier asset specificity and outcome control.

According to Williamson (1976), "environmental uncertainty" refers to that "the environment is characterized by uncertainty with respect to technology, demand, local factor supply conditions, inflation, and the like" (p 82). Environmental uncertainty will compromise clients' ability to predict future output (Klein et al., 1990; Leblebici and Gerald, 1981). Moreover, it is difficult for clients to make contracts to cover all the changing environments. Therefore, when the environment changes, the supplier will be

very opportunistic, which will incur extra cost of communication, negotiation and coordination to clients (Williamson, 1991). When the environmental uncertainty is high, to control the resulting transaction costs, clients should adopt an internal control mode (Williamson, 1985).

Among the four cases, the software systems in Company A and Company C were pioneers in their industry. The environment uncertainty of e-commerce platform is evident in the quotation by ABUM (Business Manager of Company A) as follows, *"Our (Company A's) e-commerce platform differs radically from other e-commerce platforms, as it is determined by the unique characteristics of the products (wedding dresses). Firstly, the repurchase rate of wedding dresses is low, and secondly, wedding dresses should be customized according to customers' characteristics and needs. When we designed (the wedding dress e-commerce platform), we (Company A) first referred to other e-commerce platforms, such as JD.COM and Tmall, only to discover that they could not meet our needs. So we had to design it ourselves ... The demand put forward at the beginning (of the project) matched the market environment at that time, but the market environment of e-commerce is constantly changing, so is the business demand."* The environment uncertainty of industry sales order platform is also evident in the quotation by CBUM (Business Manager of Company C) as follows, *"We (Company C) designed this software for the whole industry. During our research, we found that Alibaba had put forward similar ideas, but no software had been developed. And we would design a wider range of functions, so we could only develop the software ourselves ... We (Company C) solicited industry opinions when doing demand analysis, but the business was constantly changing. At first, they (companies in the industry) didn't consider some requirements at the beginning or didn't have mature consideration, so when they saw the software prototype, they (companies in the industry) raised many new requirements."* Therefore, the environmental uncertainty in case A and case C is relatively high. However, the requirements of software systems in case B and case D were relatively stable, and the business environment had not changed much, so the environmental uncertainty in these two cases was relatively lower than Case A and Case C.

Due to the higher environmental uncertainty, Company A and Company C could not just rely on outcome control to manage the results in case that the frequent demand changes would incur extra costs. Therefore, both Company A and Company C adopt the management practice called "change management". That means that the project

team can't change the development easily but all the change requirement have to be approved by higher level management. Company A and Company C set up special change committees composed of high-level managers from both the client and the supplier. When the project team required change, project team submits a change application in writing to the change committee, describing the reasons for the change and the impact of the change, such as time extension and cost increase. The change committee would approve the change application and even organize a meeting to discuss it if necessary. Only the changes approved in writing by the change committee could be implemented, and each change must be recorded in writing. Through the management of the change process, Company A and Company C have effectively controlled the impact of change incurred by environmental uncertainty. As result of data analysis, the research accepts proposition 2:

Environmental uncertainty will have a negative moderating effect on the relationship between supplier asset specificity and outcome control

5.2.1.2 Behavior control

This section investigates proposition 3: There is a negative relationship between behavioral uncertainty and behavior control.

Through the analysis of the four cases, it is found that behavior control is used in all the four cases, but to different extents. First of all, the researcher looks for the management practice in which the customers define detailed project policy, procedures and processes and require the vendors to comply with. IT managers in the four cases, who are also the project managers of the clients, are very familiar with the project management process promoted by the Project Management Institute (PMI) in the United States, and the IT managers in Company C and Company D even have PMP (Project Management Professional) certifications. Therefore, in all of the four cases, the project manager of the client asked the supplier to operate the project according to the standard project management process of the PMI.

Secondly, the researcher looks for the management practices which are able to help the clients to monitor their suppliers, either through direct observation or through a designed information system. In the four cases, the clients all required the suppliers to provide regular weekly and monthly reports on their work progress, and periodic meetings (face-to-face meetings or video conferences) were held for the suppliers to report their work, generally on a weekly basis. Among the four cases, only Company B

asked the supplier to develop on site in source code development stage, so that Company B could directly observe how much manpower the supplier invested in this project every day. Among the four cases, only Company D arranged weekly walkthroughs, during which internal senior IT personnel sampled the codes developed by the supplier. This management practice of walkthroughs of codes in the development process is considered to increase direct observation of the supplier's work (Kirsch, 1997). To sum up, in the four cases, the clients all used behavior control in the project stages.

Williamson (1985) considers that behavioral uncertainty is very important, which is defined as "strategic non-disclosure, alienation or distance of information", and leads to opportunism. Behavioral uncertainty will mainly cause the problem of supplier performance measurement, because when a supplier's work is inefficient and ineffective, the supplier will resort to tricks to evade monitoring and management, thus incurring hidden costs (Williamson, 1985), which are mainly the costs of monitoring and correcting the opportunism. Williamson (1985) therefore predicted that when the supplier's behavioral uncertainty is high, the client reduces the monitoring of the supplier's actions in order not to increase the monitoring costs. In other words, when the supplier's behavioral uncertainty is low, that is, when the supplier's work can be easily monitored, the client tends to use behavior control more.

The suppliers in the four cases were all selected after many rounds of comparisons and communication. Thus the clients already had a certain degree of trust in the qualifications and capabilities of the suppliers even at the very beginning of the projects, and there were clauses in the contracts stipulating the workflow of the projects, which reduced the behavioral uncertainty of the suppliers. Therefore, the clients in the four cases could adopt behavior control. In addition, at the development stage of the project, Company B required the supplier to change from remote development to on-site development, mainly because in the last stage of the project, the supplier's delivery was seriously overdue, and the submitted outcome did not meet the requirements. However, due to remote development, it was impossible to monitor the specific working conditions of the supplier; that is to say, the supplier's behavioral uncertainty was high, so Company B required the supplier to develop the software on site, which reduced the supplier's behavioral uncertainty, and Company B could use behavior control to improve the supplier's working efficiency, and finally improve the supplier's working performance. As result of data analysis, the research accepts proposition 3:

There is a negative relationship between behavioral uncertainty and behavior control.

5.2.2 Social control

This section investigates proposition 4: The more strategically important the outsourced service is to the buyer, the more the buyer will rely on social control and proposition 5: The higher value the outsourced service is, the more the buyer will rely on social control.

IT outsourcing projects in the four cases are all of strategic importance to the companies, with the cost of each project exceeding one million Yuan, making them high-value projects. Company A had been operating the offline wedding dress mall before the e-commerce platform, which accommodated more than 800 wedding dress dealers. At its peak, it was the largest wedding dress mall in East China, and also ranked among the top three in China, with annual wedding dress sales amounting to tens of billions or even hundreds of billions of RMB. However, since 2010, Company A had been subject to the competition from the wedding malls in Guangdong and Zhejiang, which, with lower prices, grabbed a large amount of market shares. In this case, Company A started to consider developing an online shopping mall, a pioneering project in the wedding dress industry. On the one hand, Company A hoped to overcome geographical barriers through online transactions, thereby expanding its user groups and increasing its market shares. On the other hand, Company A hoped to reduce costs through online transactions, so that it could outdo its competitors in the price war. In other words, if the online mall could be launched smoothly and meet the initial expectations, the sales of Company A would multiply, which would not only restore but also improve its original market position. Therefore, the online shopping mall project became one of the strategic projects of Company A in 2015.

Company B, an investment company with its core business being the management of investment projects, currently has more than 100 investment projects under its management. At first, file server management was adopted, that is, a project folder was established on the file server to store all the project files. On the one hand, this way of management might lead to the omission and loss of important files because file storing was not streamlined and structured. On the other hand, when using files, it would take a lot of effort to find files. Therefore, Company B urgently needed to develop the management system of investment projects, which could significantly improve the efficiency of its core business, because the relevant files would be classified and

managed through business flow, which would also make future inquiry convenient. More importantly, in the system, users could use data to analyze the current stage of an investment project and speed up the decision-making process.

Company C is a leading manufacturing enterprise in the industry, but it is currently stuck in a bottleneck of annual sales of 2 billion Yuan. However, its total manufacture capacity is far more than 2 billion Yuan per year. As the company planned to become an enterprise with annual sales of 10 billion, it considered utilizing the redundant internal production capacity. Company C has launched an innovative business model in the industry, using its leading position to build an industry platform, on which the demand side (mainly new entrants to the industry) can issue their own orders, while the supply side uses its own production capacity. Thus the supply and demand sides are matched through the platform. Once an order is placed, the platform will monitor the production process of the supplier in the whole process to help the demand side supervise the quality (Figure 5.1). As Company C has the largest production capacity in the industry, a large part of the demand orders released on the platform will be taken by Company C, so that the annual sales of Company C will be greatly boosted. On the other hand, Company C takes advantage of its many years' experience to help the demand side ensure the quality through the platform, thus further consolidating its leading position in the industry. Therefore, the IT outsourcing project of this industry order platform holds strategic significance for the further development of Company C.

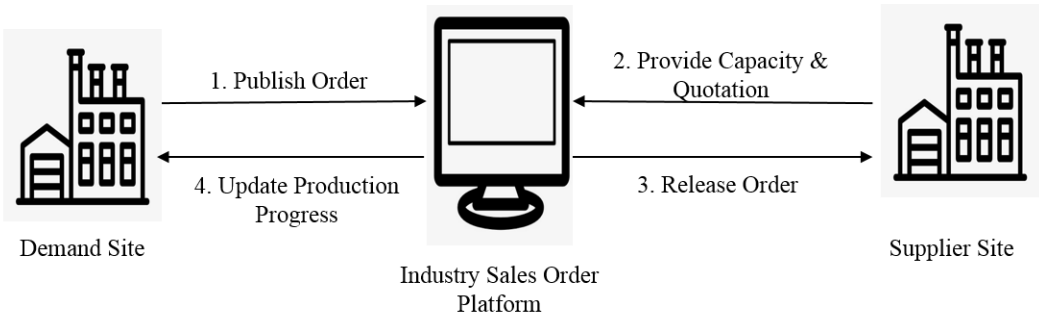


Figure 5.1 Industry Sales Order Platform in Case C

Company D is also a manufacturing enterprise and a leader in kitchenware industry, with a large number of distributors throughout the country. At first, Company D only regarded wholesalers as simple trading companies, and only paid attention to selling goods to them, without considering how they sold goods. However, with the intensification of market competition, Company D needed to integrate upstream and

downstream supply chains to optimize resource allocation, reduce costs and maintain market shares with higher turnover rate of the inventory. At this time, Company D regarded wholesalers as its own partners, and minimizes their inventory. Therefore, Company D planned to develop and implement a wholesaler inventory management system. By linking with wholesalers' own ERP systems, Company D gets to know wholesalers' inventory in real time, transfer between wholesalers, and decide its own production and sales plan according to wholesalers' inventory. The outsourcing project of Company D's wholesaler inventory system can help Company D truly realize an integrated supply chain and enhance its competitiveness.

To sum up, the IT outsourcing projects in the four cases are of strategic importance to their companies. In addition, in Chapter 4, descriptive analysis has been made for all four cases, and the contract value of all the four IT outsourcing projects exceeds RMB 1 million, making them high-value projects. 10 million Yuan (GBP 1100 thousand) was spent in Case A, 6 million Yuan (GBP 670 thousand) was spent in Case B, 3 million Yuan (GBP 340 thousand) was spent in Case C and 5 million Yuan (GBP 560 thousand) was spent in Case D

According to Western scholars' research, in high-value IT outsourcing projects of strategic importance, clients will adopt social control to reduce suppliers' speculative behaviors. That is, on the one hand, clients and suppliers share goals, beliefs and values and establish long-term relationships; on the other hand, clients encourage or motivate suppliers to use self-control and help suppliers improve their internal management capabilities. However, after studying the four cases of Chinese enterprises, the researchers have discovered something different from Western studies. Among the four cases, Company A, Company B and Company C cooperated with the suppliers for the first time, while Company D had cooperated with its supplier for several years before this wholesaler inventory management system project. But even in Company D, DITM (IT Manager of Company D) and DBUM (Business Manager of Company D) define the relationship with the supplier as a pure business relationship (i.e. buyer and seller). They admit that apart from working relationships, they usually do not deliberately establish a long-term relationship with a supplier so they don't share goals, culture or beliefs with the suppliers. They think that since they have signed a contract with the supplier, if the supplier can complete the work according to the contractual requirements, they will pay; if the supplier cannot complete the work, it will be punished according to the contract, and in the next project this supplier will not be

considered for cooperation. The other three companies (A, B, C) do not share goals, culture or beliefs with suppliers either.

Also, the four companies don't have team-building activities or dinners with the suppliers. With regard to Company A and Company B in particular, as they are state-owned enterprises, they clearly stipulate that they should have no private banquets or entertainment with any suppliers. The absence of team-building activities or dinners, and even preclusion of them are evident in the quotation by the ABUM (Business Manager of Company A), *"State-owned companies have eight regulations ... When we (project team members of Company A) visit our supplier (for work), we (project team members of Company A) have to pay for our own meals, and we can't accept the supplier's invitation to a banquet ... We (Company A) are a state-owned enterprise. The management is very strict… Anyone violating any regulation will be held accountable... We (Company A) have never even had dinner with them (the supplier), let alone having team-building activities."*

To sum up, the clients in the four projects did not share goals, culture or beliefs with their suppliers, nor did they try to establish long-term relationships through team-building and dinners. Therefore, clan control was absent in the four projects.

The suppliers in the four projects had their own methods and processes. CVEM (Project Manager of Company C's supplier) provided the evidence of the vendor's own project management methods and processes in the quotation as follows, *"We (Company C's supplier) have rich experience in outsourcing projects. From these projects, we (Company C's supplier) have summarized our own project management methods ... In addition to project meetings with clients, we (Company C's supplier) have our own regular project meetings. There is special project management software in the company to help project managers manage project progress and risks, and expert teams are regularly organized to carry out walkthroughs within the company about the codes developed for the project."* However, the management practice in which the vendors adopt their own project management methods and processes is not considered as self-control since because the self-control is driven by the clients in outsourcing projects, or the clients help suppliers to do it according to the extant literature. However, in these four cases, the suppliers adopted their own project management methods and processes spontaneously in order to protect themselves, and the clients don't push them. CVEM (project manager of Company C's supplier) explained the reason that the vendor

adopted their own method and process in the project in the quotation, *"We (Company C's supplier) act this way not because of any requirement from the client. They (Company C) only care about the outcome, but they (Company C) don't care how we (Company C's supplier) manage to do it"*. Therefore, there is no self-control in the four projects.

As result of data analysis, the research rejects proposition 4:

> ***The more strategically important the outsourced service is to the buyer, the more the buyer will rely on social control.***

And the research rejects proposition 5*:*

> ***The higher value the outsourced service is, the more the buyer will rely on social control.***

Why the four Chinese enterprises did not apply social controls in their IT outsourcing projects required further elaboration. First of all, in IT outsourcing projects of Chinese enterprises, clients are generally powerful, especially with regard to state-owned enterprises. They are more inclined to use contracts to resolve their differences and contradictions with suppliers. Even in the absence of any clear provisions in the contracts, they will use explanations favorable to themselves to deal with them. The power of the customer is evident in the quotation by AITM (IT manager of Company A), *"Customer company tends to be powerful, and generally stipulates terms 'including but not limited to', that is to say, after these things are finished, there may be additional tasks ... when a project goes beyond the scope of the contract, both the customer and the vendor have to negotiate, and when negotiation fails, the customer's opinions generally prevail"*. Suppliers accept clients' tough demands because the judicial proceedings arising from contract disputes are complicated and time-consuming in China's current judicial practice, and suppliers, unwilling to spend much energy and time in judicial proceedings, prefer to make appropriate concessions to resolve conflicts and disputes.

Besides this, China is a networked society, so clients often have contact with each other. Suppliers will worry that disputes with a client would affect their reputation in the network, and then affect new orders, especially projects with state-owned enterprises. Because all state-owned enterprises in China are managed by the same department under the government, the contact and communication among state-owned enterprises are closer than those of private enterprises; once a supplier has disputes with one of the

state-owned enterprises, its orders with other state-owned enterprises would be affected. Worse, once blacklisted by the management department of state-owned enterprises, a supplier will lose business with all state-owned enterprises. During the research, the suppliers of the four projects all expressed their helplessness in face of their powerful clients, but they all said that in order to gain the reputation in the industry, they could only accept the clients' requirements beyond the contract scope. Therefore, under such circumstances, clients tend to use contract as a simple and direct way to address the speculative behavior of suppliers. After all, social control takes a longer time for its effect to show, and sometimes it is not directly effective.

Secondly, using social control requires a client's project manager (usually IT manager) to have superb management skills and experience, because social control is more complicated and more indirect than formal control. According to the descriptive analysis of the four client project managers in Chapter 4, they all received PMP (project management professional) training from the Project Management Institute (PMI) of the United States, and the PMP training mainly introduced formal control. During the interviews, when being asked about social control, the four project managers all said that they did not understand the concept of social control and asked for explanations from the researcher. Then they all said that they did not apply social control in the project process and had no relevant experience in their previous projects. Therefore, the management experience and skills of clients' management personnel have to be upgraded, especially be trained to use social control in IT outsourcing project management in future.

5.3 Research Question 2: What role does Guanxi play in the life-cycle of IT outsourcing in China? And in which situations might formal control, social control, and do-favor which is based on guanxi complement or substitute each other?

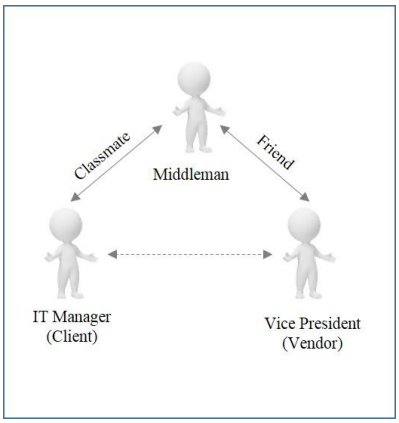
Guanxi, a unique characteristic of Chinese culture, refers specifically to an individual relationship (Luo, 2000), which differs from the term "relationship" in Western studies which mainly focuses on the relationship at the organizational level rather than the relationship between two individuals. Since China's reform and opening up, *guanxi* has been regarded as an indispensable factor for consideration when doing business in China, but no research has been conducted to analyze *guanxi*'s role in IT outsourcing projects. Therefore, this study firstly present *guanxi* between the clients and the vendors

in four cases then addresses the role of *guanxi* in the whole life cycle of IT outsourcing projects. Nicholson et al. (2006) divides IT outsourcing projects into three stages: contact, contract and control. This study draws on this distinction to study whether *guanxi* plays a role in the three stages, contact, contract and control, of IT outsourcing projects, and if so what kind of role it plays.

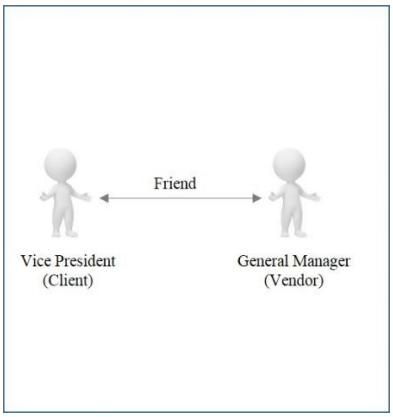
5.3.1 *Guanxi* between clients and vendors in cases

Guanxi is established between two individuals because they share common attributes, which include common family connections, common experiences (classmates, comrades-in-arms, or colleagues) and common interests (friends). *Guanxi* can be found in all the four cases of this study, and exists not only between the management but also between the employees of clients and vendors. Among the four cases, *guanxi* between clients and vendors' management in cases A and C was established through middlemen. *Guanxi* in Chinese society is networked, so if actors A and B has established *guanxi*, B and C has established *guanxi*, A and C can also establish g*uanxi* through the introduction of B. In case A, the IT manager of Company A is a classmate with the middleman, who is a friend with the sales Vice President of the vendor. When the vendor knew that the E-commerce platform project of Company A was to be outsourced, the vendor's sales Vice President asked the middleman to introduce the IT manager of Company A to him and they became friends. In case C, the IT manager of Company C and the middleman are neighbors and friends. When the IT manager of Company C was considering the outsourcing of the industry order platform, he asked the middleman to recommend vendors. As a result, the middleman introduced his former colleague and friend to the IT manager and they became friends. The person introduced by the middleman was the general manager of the vendor that Company C finally selected.

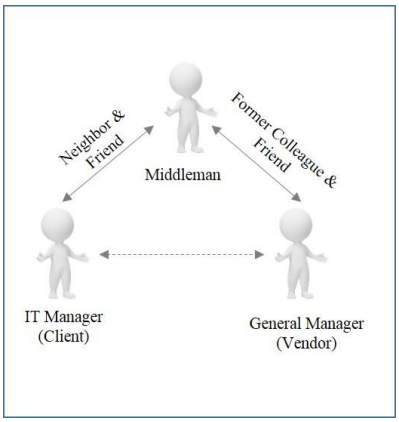
In case B, the Vice President of the parent company of Company B and the general manager of the vendor were friends; In case D, the IT manager of Company D and the general manager of the vendor used to be classmates (Figure 5.2).



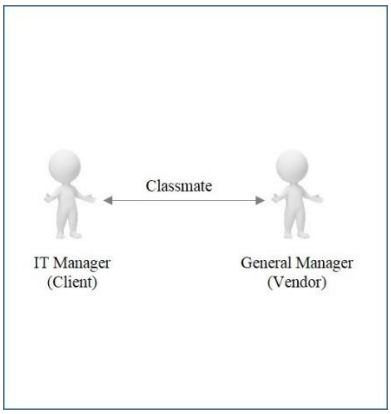
Case A



Case B



Case C



Case D

Figure 5.2 Guanxi between clients and vendors (Management Level)

In the four cases, the employees of the clients and the vendors also built *guanxi*, because they were IT engineers with common industry experience, and their *guanxi* was either that of old colleagues or friends.

5.3.2 *Guanxi*'s role in the contact phase

This section investigates proposition 6: Guanxi helps to build up the trust in potential partners at the contact phase.

According to Nicholson (2006), the contact stage of outsourced projects is actually the stage of vendor selection. With the improvement of the management process of Chinese enterprises, both state-owned enterprises and private enterprises have a set of standard procedures for selecting vendors, especially vendors of important projects. Similarly, vendor selection of IT outsourcing projects must also follow such a set of procedures. AITM (IT manager of Company A) explains the procedure of vendor selection in the

quotation, *"The process of selecting vendors for state-owned enterprises is relatively long, unlike that of some small company bosses ... Although our (Company A's) process (of selecting vendors) is long, it is very standard, because our (Company A's) projects must be audited in the end and must comply with regulations"*. CITM (IT manager of Company C) also mentioned that their company headquarters formulated the vendor selection process, which all branches and functional departments must abide by. A private enterprise as it is, Company C is a listed company, whose outsourced projects also must be audited.

In the contact stage, clients will do two things: first, select vendors among numerous applicants which is called sourcing phase, and second, evaluate the selected vendors which is called assessment phase. In the four cases, Company A and Company B are state-owned enterprises. According to the requirements of the government regulatory department of state-owned enterprises, the selection of vendors for outsourced projects with high value by state-owned enterprises must go through a bidding process, and the whole bidding process shall be completed by a third-party bidding agency recognized by the government to ensure the fairness of the vendor evaluation process. Company C and Company D are private enterprises, not subject to relevant regulations, so the whole vendor selection process is completed by the client companies themselves.

5.3.2.1 Vendor sourcing phase

In the four cases, the four client companies would all formulate vendor criteria in the competitive selection phase, which usually include a vendor's industry qualifications (determining technical capabilities), company size (determining resource capabilities) and successful cases (determining relevant experience). Then the client company would contact 8~10 vendors in the market asking them to provide basic company information such as company briefing, organization chart, company history and achievements etc. Then the client company would select 3~5 vendors to enter the assessment phase by comparing their company information and criteria.

Guanxi plays an important role in the sourcing phase, whether the vendor company is a state-owned enterprise or a private enterprise. First of all, *guanxi* helps the client companies broaden their information channels and find vendors that meet the quantity standards in sourcing phase. In this phase, a client company first considers the vendors with which it has cooperated and other local vendors, but the number of such vendors that meet the criteria may not be enough because the criteria of the vendors in strategically important IT outsourcing project is quite high. Therefore, the client company can only search for qualified vendors through the Internet, but among the standards formulated by the client company, industry qualifications and company scale can be searched on the Internet, but not all successful cases of vendors are made public. In this case, the client company will turn to people with *guanxi* around and ask them to recommend familiar vendors, so that a sufficient number of vendors meeting the standards can be identified quickly. The role of guanxi to recommend familiar vendors is evident in the quotation by CITM (IT Manager of Company C), *"We (Company C) are located in Yongkang, where there are no large-scale (IT) outsourcing vendors. Instead of searching through the Internet, we have turned to some friends and vendors around us and asked them to recommend suitable vendors to us. No region limitation is set, and we mainly look for vendors experienced in our industry and willing to participate in our project. Then, we will investigate into and screen them."*

Secondly, *guanxi* can help a client quickly build trust in unfamiliar vendors in the sourcing phase. Most of the vendors in the phase of sourcing are unfamiliar vendors, with whom the client company has not cooperated before, while the company information provided by the vendors is all positive. Thus it is difficult for the client to know the real situation of the vendor companies, especially with regard to their technical capabilities, or even if the client gets to know them, it would take much energy and time. However, if the vendors are introduced through *guanxi*, on the one hand, the client can learn more real information about the vendors through *guanxi*, and on the other hand, the personal trust resulting from *guanxi* will be transformed into trust in an organization.

Therefore, in the four cases, most of the vendors in the phase of sourcing were introduced through *guanxi*. Company A only accepted vendors introduced through *guanxi*, and AMIM (a middleman of Company A) explained the reason in the following quotation, *"As far as I know, the client (Company A) had a similar project before, but did not succeed then. After the project failed, the client (Company A) started to build a bigger (E-commerce) platform, so the client (Company A) was very prudent in choosing vendors and would not choose a totally unfamiliar company."* To sum up, *guanxi* will play an important role in the phase of sourcing. The observable effects were to assist the client to broaden information channels to locate more vendors and to assist the client to quickly build preliminary trust in vendors.

5.3.2.2 Vendor assessment phase

However, in the phase of vendor assessment, *guanxi* plays a very limited role. In this phase, first of all, the client company has to communicate with a vendor many times to determine the demand, especially with regard to the IT outsourcing projects like Case A and Case C, which are innovative projects with no unequivocal demand in the very beginning, making it necessary for the client and the vendor to communicate clearly and repeatedly. The process of communication, on the other hand, also reflects the vendor's experience in similar projects. The more opinions the vendor gives, the more experience that the vendor is demonstrated to have, which will mark up its final score. Following the confirmation of the demand, the client company requires the vendors to issue a technical solution, project plan and project budget, and to present their technical solution on site and answer questions from the scoring team.

Meanwhile, the project team of the client company will prepare vendor scoring criteria to score vendors from multiple dimensions including technical solution, previous experience, labor resource, price and so on. After the last round of selection, the vendor companies selected will have little difference in company background (technical qualification and scale, etc.). The scoring items now mainly focus on the vendors'

solution and on-site question answering. It is not the project team of the client company that assesses the vendors. In cases A and B, the client companies are both state-owned enterprises. According to the above description, the selection of vendors for large-scale outsourced projects by state-owned enterprises needs to go through tendering of a third-party tendering agency certified by the government. Therefore, their scoring team is composed of an external expert advisory group (usually university professors and industry experts) appointed by the third-Party Agency and a senior management team of the client company. As the client companies in cases C and D are private enterprises, their scoring teams are composed of senior management teams of the client companies. Whatever form a scoring team takes, everyone in the team needs to read the vendors' plans and listen to their questions answering on site, and then score them according to the scoring rules provided by the project team. Finally, the scores given by every member of the team are synthesized to get the final score of a vendor, and the vendor with the highest score is selected.

It can be seen from the whole process that *guanxi* has a very limited impact. Firstly, the whole scoring process consists of collective decision-making, while *guanx*i can only affect individuals. Secondly, the whole scoring process mainly focuses on vendors' technical solution and price, and the scoring is also quantified as much as possible, so the most critical factor for the selection of a vendor is the technical solution and price, not *guanxi*.

Among the four cases, only in case B *guanxi* played a little role in this phase (vendor assessment phase). In case B, the final score showed that of the two vendors scoring the highest, the general managers of one vendor had *guanxi* with the Vice President of the parent company of Company B. At this time, despite his absence in the scoring team, the Vice President suggested that the scoring team select the vendor with which he had *guanxi*. Under the condition that the two vendors scored the same, Company B chose the vendor with *guanxi*. BITM (IT Manager of Company B) explained the reason for choosing the final vendor in the quotation, *"Our leader (Vice President of the parent*

company) recommended this vendor when the two vendors scored the same, and we (Company B) did not have any special reasons for not using them (the vendor), and indeed no other vendor was better than they". It can be concluded from this case that *guanxi* exerts its limited influence only when the technical capabilities and quotations are taken into full account.

As result of data analysis, the research partially accepts proposition 6:

***Guanxi helps to build up the trust in potential partners at the contact phase*.**

That means that *Guanxi* helps to build trust in potential vendors in sourcing phase in the stage of contact, but its role in the assessment phase is limited.

5.3.3 *Guanxi*'s role in the contract phase

This section investigates proposition 7: Guanxi affects contract design, that is to say, if the client has guanxi with a vendor, the contract design can be less detailed.

In the phase of contract, what the client and the vendor do is to draft and sign a contract (Nicholson et al., 2006). *Guanxi* exists between the client companies and vendors in the four cases both at the management level and the operation level, but the practice of the client companies in the contract phase differs. Among the four cases, Company A is most powerful, so the contract content is biased towards the client, and the contract of Company A also has the most detailed content, because Company A wants to control vendors through contracts. Company A's powerful practice in the contract is evident in AITM's (IT Manager of Company A) quotation, *"The client is relatively powerful, because we (Company A) are a state-owned enterprise, and we must do this project from the perspective of audit. Moreover, this agency is also very clear about this point. Attaching great importance to the rights and interests of the client, the agency will also require that the opinions of the client be dominant. The vendor can also raise its claim, but the contract is mainly based on the client's opinions, including staffing, reporting mechanism, prosecution of disputes, etc ...these will be specified in a very detailed manner. As a result, our (Company A's) contract is relatively thick, covering some*

details, including default. For example, in the event that the vendor delays delivery without the client's consent, the vendor's deposit shall be deducted, as the vendor has to pay a deposit for all our projects". Company A, foreseeing that the demand may increase no matter how detailed the contract is, has also added a clause allowing 15% extra workload change in the contract, and even set a clause of "including but not limited to". Company A has designed such a detailed and strict contract mainly because Company A has insufficient IT human resources (only two people), and is unable to monitor and manage the vendor's conduct every day, and can only restrain the vendor and protect its own interests through the contract.

Among the four cases, the contract drawn up by Company B is the simplest, with only a rough demand framework, which sets the deadline for project completion and clarifies the project budget, but does not specify details. Both the IT manager and business manager of Company B explained that they thought that as the demand was not fixed when designing the contract, there would be many demand changes during the latter process, and that too many details in the contract would pose constraints, as the vendor could refuse to meet a demand on the grounds that this demand was not listed in the contract. Meanwhile, both the IT manager and business manager of Company B had invested enough human resources in this project, including not only IT personnel, but also business personnel from headquarters and even subsidiary companies, so that project members could work with the vendor, discuss requirements, participate in development and system testing. Therefore, they did not need a very detailed contract to control the vendor. The contract details of Company C and Company D are moderate, consistent with their control methods for resource input and vendors. To sum up, how detailed a contract is depends on the control mode chosen by clients, while *guanxi* has no influence on contract drafting.

In the process of contract signing, the client company will first review the draft contract through its internal legal department (case C and case D) or through an external law firm (case A and case B), and the internal or external legal department will deliver

professional legal opinions and modify the contract accordingly. The final contracts approved by the legal department will be approved by the relevant leaders in the management one by one (from middle management to top management) according to the internal approval process of the company and the organizational structure. After the completion of the approval process, the contracts will come into effect formally. From the whole process of contract signing, the contract signing is either approved by professionals like lawyers or collectively by the management, so *guanxi* cannot play a role in this process.

As result of data analysis, the research rejects proposition 7:

> ***Guanxi affects contract design, that is to say, if the client has guanxi with a vendor, the contract design can be less detailed.***

5.3.4 *Guanxi*'s role in the control phase

This section investigates proposition 8: Guanxi enables the client to adopt a new control mode (do-favor) in control phase, that is, clients utilize the guanxi with vendors to ask vendors to contribute more to ITO.

According to Nicholson (2006)'s definition, the control phase of an outsourced project refers to the phase from formal start of implementation to completion of implementation after the contract of the outsourced project is signed. This phase is named the control phase because a client will use various control modes to ensure the smooth progress of the project. According to previous research (Millington et al., 2006; Cui, 2017), *guanxi* is helpful for doing business in China, because it will lead to do-favor conduct between two individuals in the relationship. Although it is conducive to business, such do-favor conduct is sometimes regarded as unethical (Park & Luo, 2001). Because *guanxi* sometimes gives rise to unethical do-favor conduct, state-owned enterprises and private enterprises hold a different attitude towards *guanxi*.

In the two state-owned enterprises (Company A and Company B), their IT managers

(AITM and BITM) and business managers (ABUM and BBUM) avoided answering questions about *guanxi* during the interviews, and even denied the existence of any *guanxi* with their vendors, because they considered the individual relationship as a private concern. ABUM (Business Manager of Company A) explained their concern in the quotation, *"We (Company A) are a state-owned enterprise regulated by government departments, so our (Company A's) (management policy) is the same as that of government civil servants ... The government now has 'Eight Regulations' specifying the criteria for our dealings with vendors, and we(project team members) are not even allowed to eat with vendors in our private capacity, not to mention establishing any individual relationship (i.e. guanxi) with vendors ... Once we(project team members) are reported to have an individual relationship (i.e. guanxi) with vendors, we(project team members) will be subject to investigation, and even if there are no adverse consequences, we(project team members) will be issued a warning. If any do-favor conduct is found out, we would receive disciplinary or even legal punishment."* Therefore, in state-owned enterprises, *guanxi* is not a topic of public discussion, but is concealed, or is manifested as a do-favor conduct via middlemen. When interviewing the operational employees of Company A and Company B, the researcher asked if they knew there was *guanxi* between their management and vendors, and the employees all said that they were not clear because even if *guanxi* existed, they would not know it. Therefore, the researcher could only get to know the role of *guanxi* in state-owned enterprises through interviews with middlemen or in the form of private interviews.

Company C and Company D, which are private enterprises, hold a totally opposite attitude towards *guanxi*. Company C and Company D attach great importance to do-favor conduct brought by *guanxi*, so they affirm the positive role of *guanxi* and even encourage the use of this positive role. Company C directly employed the middleman who had an individual relationship (i.e., *guanxi*) with the vendor as the consultant of the project, so that the company could take advantage of the good individual relationship between the middleman and the vendor to generate more do-favor conducts. The IT manager of Company D frankly mentioned the classmate *guanxi* between

himself and the general manager of the vendor and highlighted the positive impact of guanxi in the quotation, *"I was a classmate with their general manager (vendor), but the cooperation between us (Company D) and them (vendor) is public-to-public, not affected by an individual relationship ... I have a common language with him (general manager of the vendor) because he has been my classmate for many years. It is easy for me to communicate with him, as he can understand me as soon as I say something, while with other vendors, I have to take a long time explaining before they(other vendors) understand me." Guanxi* exists in Chinese enterprises, whether state-owned or private, or whether it is hidden or made public. Meanwhile, Chinese enterprise managers are trying their best to leverage the positive role of do-favor conduct resulting from *guanxi* while striving to limit the negative role of such conduct.

Do-favor can solve two kinds of conflicts between clients and vendors in the control phase: one kind is the conflict caused by exceeding the project scope. Upon the start of an IT outsourcing project, the scope of the project is formulated, including the goals to be achieved by the project, the deliverables of the vendor, the completion time and the budget of the project. However, in the process of the project, something beyond the project scope will inevitably occur. Most of the issues exceeding project scope are usually caused by the client company. On the contrary, the vendors usually strictly comply with project scope because the client company use the contract to control and restrict the vendor. However, when the issues exceeding project scope are caused by the clients, the vendors have to invest more resources e.g. developers to fix them. At this time, it would be difficult for the client company to request the vendor by contract, and other formal control such as behavior control will also be ineffective. According to Western research (Qi et al., 2012; Santanu, 2017), social control may play a role at this stage, but based on previous research (Section 2 in Chapter 5), Chinese enterprises do not adopt social control. Therefore, the client company can only use *guanxi* between the management to ask the other party in *guanxi* to do a favor, if the other party in *guanxi* also belongs to the vendor's management. As long as the other party in *guanxi* privately agrees, the vendor company can be asked to implement this decision. This is

because the corporate culture of Chinese enterprises is hierarchical, and the management expect their orders be executed within the company (Hofsted, 1993).

During the implementation of the project, Company C temporarily added a function of customizing product orders into the industry sales order platform. The original project scope only covered standard product orders, so the newly added function completely exceeded the project scope. Company C also recognized that this was an out-of-scope demand and that extra payment should be made to develop this function. However, this request for new function was developed in the fourth quarter in 2018, when the client's IT budget had been allocated. The application for a temporary budget would, first of all, involve a cumbersome approval process, and secondly affect the performance appraisal of the IT department in that year. Given this circumstance, Company C asked the vendor to develop this new function firstly with the payment made up after the new budget was approved in the next year. For vendors, this delays revenue and creates risks because there is no written demand change application and approval. According to the contract, the vendor has the right to refuse to develop the new function before receiving the written change application and advance payment. However, if this new requirement is not developed, it will affect other modules, so it will affect this project. In this case, Company C has no way to require vendors to develop this new demand by contract. In addition, as Company C and the vendor had cooperated for the first time in this outsourced project, no long-term relationship had been built up earlier, and in the process of project implementation, project manager in Company C did not know how to adopt social control to cultivate trust with the vendor (Section 2 Chapter 5). To get the vendor to meet this requirement, the IT manager of Company C could only use *guanxi* with the middleman and *guanxi* with the general manager of the vendor to ask the general manager of the vendor to do a favor. According to previous research (Section 1 Chapter 5), *guanxi* is networked. That means the general manager of the vendor trusted IT manager of Company C due to the middleman, and finally developed trust in Company C from trusting IT manager of Company C. As a result, the general manager of the vendor agreed to do a favor upon request and asked the development

team of the vendor to complete the development of new function with the delay of the payment and without written change application.

The other three cases have similar delayed payment due to budgets, and they also have other issues that the scope of the project is exceeded due to the client's circumstances. For example, a change in the senior management of Company A led to the adjustment of work focus, thus requiring the go-live date of the system to be postponed. AITM (IT manager in Company A) had to utilize guanxi to ask the vendor to do a favor to keep the development team in the project longer than original plan. The conflicts caused by exceeding the project scope were resolved through do-favor as a result of *guanxi* between the client and the vendor's management. However, do-favor based on individual relationship (*guanxi*) is risky, because vendors are willing to bear losses or invest more resources to resolve conflicts and disputes based on the trust in the commitment of a certain individual in the client company, and this personal commitment is generally a verbal commitment between individuals. Therefore, if this individual leaves the company (for example, resigning from the company) before the client company fulfills its promise, his previous promise may not be recognized by the company. Even so, clients and vendors are willing to use *guanxi*-based do-favor to solve conflicts in a project, because both parties are willing to establish and believe in the long-term relationship between individuals. As result of data analysis, the research accepts proposition 8:

> ***Guanxi enables the client to adopt a new control mode (do-favor) in control phase, that is, clients utilize the guanxi with vendors to ask vendors to contribute more to ITO.***

This section investigates proposition 9: When trigger events occur which can potentially derail an IT outsourcing contract (i.e., goal fuzziness, goal conflict, and major goal misalignment), "do-favor" is complementary to formal control and social control. When none of trigger events happen, the need to "do-favor" is dismissed and formal/social control prevail.

The second kind of conflicts between a client company and a vendor in the control stage that can be settled by do-favor is the conflict caused by requirement fuzziness, goal conflict, or major goal misalignment within the project scope. In IT outsourcing projects, although there are contracts, demand specifications, project plans and other documents to define requirements, goals, etc., there will still be conflicts caused by unclear definitions, and the most common conflict is caused by unclear requirements. Unclear requirements lead to serious consequences such as rework and delay. At this circumstance, the client company and the vendor need to distinguish the responsibilities and bear the consequences accordingly. However, it is usually difficult to define the responsibilities clearly, so it is necessary for both parties to compromise and reach an agreement, and the compromise is based on the trust relationship between the two parties. According to the literature in the west, the client adopts social control to establish trust between the client and the vendor. As previously analyzed, Chinese enterprises rarely use social control to establish the relationship between enterprises. Consequently, at this circumstance, the relationship between enterprises will be replaced by the individual relationship between the management of both sides (i.e. *guanxi*). Because of *guanxi*, both sides can compromise and resolve conflicts through do-favor.

The middleman in case A (AMIM) recalled a conflict in the E-commerce platform project of Company A, concerning the function of recommending wedding dresses according to the size data, dream style and budget input by consumers. This function is relatively novel in an e-commerce platform, with no point of reference to draw on. Therefore, when discussing the function, the business personnel of Company A did not explain it very clearly, while the vendor's demand analysts thought they had understand it, but actually they misunderstood it. Company A approved the requirement specification without careful reading. In addition, as the vendor was developing the source codes remotely, this error was not found in the development process, and this problem was not found until the software test. Because this function involved many

modules of the platform, the workload of rework was very high and the rework would cause serious delay. Company A thought that this was the vendor's problem, so they should rework for free and bear the penalty for delay. However, the vendor thought that Company A should be responsible for the problem, as the business personnel of Company A had not explained it clearly, and Company A had approved the requirement specification. The vendor only develops the platform according to the requirement specification. As the responsibility resided with Company A, Company A should bear the extra labor cost caused by rework. At that circumstance, the two sides of the project were unswervingly at odds, and as the conflict was escalated to their higher management separately, this lead to the intensification of the conflict, causing more trouble to the project. Because Company A is a state-owned enterprise, where *guanxi* is concealed and not made public, the IT manager of Company A and the sales Vice President of the vendor compromised with each other under the coordination of the middleman. Company A did not demand the penalty of delay from the vendor, nor did the vendor demand Company A to pay the labor cost of development and rework.

The other companies in the cases had similar conflicts solved through do-favor resulting from *guanxi*. Therefore, when formal control cannot solve a conflict between a client and a vendor caused by ambiguity, do-favor, as a supplement to formal control, is employed by both parties to solve the problem. At the same time, in Chinese enterprises do-favor based on individual relationship (*guanxi*) has replaced social control which prevails in the west based on organizational relationships.

As result of data analysis, the research partially accepts proposition 9:

> ***When trigger events occur which can potentially derail an IT outsourcing contract (i.e., goal fuzziness, goal conflict, and major goal misalignment), "do-favor" is complementary to formal control and social control. When none of trigger events happen, the need to "do-favor" is dismissed and formal/social control prevail.***

That means do-favor is complementary to formal control to solve the conflict due

to goal fuzziness, goal conflict and major goal misalignment. Since social control is not adopted in Chinese enterprises, do-favor is considered the substitute of social control as a soft skill to solve conflicts.

5.4 Dynamics of Portfolios of Control Mode

This section investigates proposition 10: The portfolio of controls is changed through the phases of ITO projects or with the trigger events such as the failure of milestones.

In IT outsourcing projects, client companies will not just resort to a single control mode, but apply a portfolio of controls (Kirsch, 1997). In the four cases, the client companies all applied the combination of outcome control, behavior control (explicit) + do-favor (implicit). That means that the client companies applied outcome control and behavior control in IT outsourcing projects. In the event of conflicts and disputes that cannot be addressed by formal control (i.e. outcome control and behavior control), do-favor is used as a supplement to formal control to solve conflicts and disputes. However, due to the particularity of *guanxi* in Chinese enterprises, do-favor is often used privately rather than publicly.

Many previous studies on control mode in IT outsourcing projects have adopted the static snapshot method. In this study, the researcher has found that the choice and application of control mode in client companies is dynamic. In the four cases, the client companies have all carefully and prudently selected vendors, including Company D, although the vendor finally selected by Company D was one with previous cooperation with the company. The vendor entered the evaluation process as a candidate together with two other vendors in the competitive selection phase. In the evaluation process, the three vendors were scored, and finally the vendor was selected scored the highest. The vendor's previous cooperation experience with Company D, despite having no direct impact on the rating, of course help the vendor understand Company D better so as to offer more targeted solutions, but these were indirect help.

Because of the careful selection of the vendor, the client company trusted the professional skills of vendors and the project management ability of the vendor's project managers. When the project was started, the client company could use outcome control more and refine the contract, demand specification and project plan as much as possible, while the use of behavior control could be maintained at a daily level, such as weekly project report in the form of an e-mail.

However, in the phase of demand analysis, the vendor was unfamiliar with the business of the client company, so the output in this phase (that is, the demand specification) would not meet the requirements of the client company. At this circumstance, the client company would strengthen behavior control. For example, Company B and Company C required their vendors to work in the client companies In this phase, the IT personnel of Company B and Company C personally participated in the demand discussion between the vendor and the business department; Company D required the vendor to submit business blueprints produced through discussion with the business department every day in this phase. Company A did not strengthen behavior control in this phase, but still relied on outcome control. Consequently, Company A encountered a problem with the requirement specifications, which led to rework of code development and great risks on the project.

After that, the project entered the code development phase, and all the four cases were developed remotely by the vendors in their own companies. At this circumstance, it was difficult for the client companies to monitor the vendors' actions, and the client companies' technical capabilities were not as strong as the vendors', so the clients mainly relied on outcome control. But if the vendor had performance problems at this stage, the client company would change the control mode. In case B, the vendor failed to submit the output on time at one of the milestones in this phase, and Company B immediately asked the vendor to arrange for the developers to use the office of Company B for on-site development, so as to monitor the vendor's actions more effectively.

After the completion of code development, the project entered the testing phase. At this time, the client company would strengthen behavior control, because the IT personnel and business personnel of the client company personally participates in the code testing process.

During the whole phase of the project, do-favor would appear from time to time to solve conflicts that formal control could not solve. In Chinese enterprises, clients and vendors value individual relationships (i.e., *guanxi*) more than organizational relationships, so clients and vendors prefer to apply "do-favor" instead of social control.

As result of data analysis, the research accepts proposition 10:

> ***The portfolio of controls is changed through the phases of ITO projects or with the trigger events such as the failure of milestones.***

5.5 Conclusion

This chapter explores the control modes and the role of guanxi in IT outsourcing projects in Chinese enterprises. The researcher finds that the control portfolio of formal control (i.e. outcome control and behavior control) and do-favor is adopted in IT outsourcing projects in Chinese enterprises. Social control which prevails in the west is expected to be adopted in IT outsourcing projects in Chinese enterprises but the findings reject the proposition. Social control is based on organizational relationships in the west. But in Chinese enterprises, the management team prefers to establish individual relationships (i.e. guanxi) rather than organizational relationship. Hence do-favor based on individual relationships (i.e. guanxi) replaces social control based on organizational relationships in Chinese enterprises. The researcher also finds guanxi in different stage of IT outsourcing projects in Chinese enterprises. In contact stage, guanxi partially impacts vendor selection; in contract stage, guanxi does not impact contract design and in control stage, guanxi impacts control mode.

Chapter 6. Contributions, Limitations and Future Research

6.1 Contributions

The academic contributions of this study are mainly manifested in the following three aspects:

First of all, this study corrects Western scholars' misunderstanding on the application of social control in Chinese enterprises. Western scholars have always believed that as Western society is based on institutions, Western enterprises mostly use formal control in IT outsourcing project management; while in Chinese society based on relationships, Chinese enterprises mostly use social control in IT outsourcing project management. Furthermore, with the further development of IT outsourcing projects in recent years, Western enterprises, realizing the limitations of formal control in IT outsourcing project management, have started to apply social control more. Therefore, Western scholars believe that Chinese enterprises will use social control more than Western enterprises. However, through four cases studies of Chinese enterprises (i.e., state-owned enterprises and private enterprises), it is found that Chinese enterprises in the research have come to attach great importance to the application of formal control in IT outsourcing project management, seldom using social control. In order to generalize the finding to other Chinese enterprises, quantitative approach-surveys can be utilized to explore large samples in future.

In this study it has been further found that the relationship proposed in Western studies refers to the relationship between organizations (intra-organizational), and therefore social control is based on organizational relationships. However, in Chinese society, people pay more attention to individual relationships (*guanxi*), especially individual relationships with managers. Because Chinese culture advocates obedience to authority, establishing a good individual relationships with managers, especially senior managers, equals building good relationships with the organization. For this reason, Chinese enterprises prefer to use "do-favor" based on individual relationships (*guanxi*) instead

of social control based on organizational relationships to resolve conflicts.

The second contribution of this research concerns the role of *guanxi* in the life cycle of IT outsourcing projects, from launch to completion. In previous research, *guanxi* was considered as a "gate-keeper", "door-opener" and "peace-maker" in doing business in China. However, this research has found that Chinese enterprises have realized the negative effects of *guanxi* in business activities, which can bring problems such as corruption. Therefore, Chinese enterprises will limit the possible negative effects of *guanxi* in business activities and actively use the positive effects brought by *guanxi*. This study, by analyzing *guanxi*'s role in different phases of the life cycle of IT outsourcing projects (i.e., contact, contract and control phases), finds that *guanxi* plays a role in broadening information channels in the early phase of the project, but exerts no influence on supplier selection and contract signing. In the project implementation stage, Chinese enterprises mainly rely on formal control, and *guanxi* will not have an impact. Only in the event that a dispute cannot be solved by formal control emerges will *guanxi* give rise to "do-favor" conduct as a supplement to formal control to solve the conflict.

The third contribution of this study relates to the finding of a unique control mode (do-favor) for IT outsourcing projects of Chinese enterprises. The essence of this control mode in IT outsourcing projects is to solve conflicts between client companies and vendors. However, this study finds that a special kind of conflict appears in the process of IT outsourcing projects (that is, conflicts arising from exceeding the project scope and conflicts arising from ambiguity in contracts or requirements), which cannot be solved by formal control. Chinese enterprises do not resort to social control to solve them, but adopt a mechanism unique to Chinese enterprises to solve them. This practice has been named "do-favor" by previous scholars, and it results from *guanxi* (i.e., individual relationships). The "do-favor" practice conforms to the conception of a control mode, so the researcher considers it as a control mode unique to Chinese enterprises, and as a supplement to formal control and a substitute for social control.

This research also holds great significance to business practice. In recent years, the number of IT outsourcing projects of Chinese enterprises has been increasing year by year, and these projects have also become more and more difficult and complex. But the managers of Chinese enterprises are also confronted with the problem of how to succeed in IT outsourcing projects. The cases in this study are four IT outsourcing projects of four Chinese enterprises, all of which are strategic projects, with the project budgets amounting to as high as one million Yuan (GBP 110 thousand). That means these four projects are complicated and difficult, but they all achieved the expected goals in the end, with high satisfaction from both the clients and the vendors. Through the analysis of these four successful cases, we have learned how the managers of these four enterprises choose outsourcing suppliers, how to design contracts, and what kind of control mode to use in different phases of projects or in the face of different conflicts. The challenges experienced by the four Chinese enterprises in the research can provide a frame of reference for other Chinese enterprises when implementing IT outsourcing projects.

In practice, this study also helps Chinese enterprise managers to understand control modes in IT outsourcing projects. Companies that outsource IT services usually have to depend on the professional skills, knowledge and scale of their suppliers. Such dependence on suppliers leads to the long-term relationship between clients and suppliers to ensure the benefits from this relationship, but risks may also arise from such dependence. Outsourcing is a contractual relationship between clients and their suppliers, which leads to interdependence and information asymmetry between them. Information asymmetry inevitably entails contradictions and conflicts. As frequent conflicts would hurt the long-term relationship between them, adequate measures have to be taken to address the conflicts and reduce their harm, so as to enhance the long-term cooperation between them and achieve the expected outsourcing outcome.

In IT outsourcing projects, the absence of proper formal control can incur many risks,

such as the speculative behavior of suppliers and disappointing outsourcing performance. Therefore, in IT outsourcing projects, clients need to exercise formal control in key outsourcing processes to avoid and minimize potential risks. Especially in China's economic environment plagued by many uncertain factors due to rapid development, exercising formal control in the key processes of IT outsourcing projects is conducive to defining the responsibilities and obligations between clients and suppliers, and to defining the project objectives and implementation methods, thus effectively avoiding errors and conflicts caused by ambiguity. Of course, excessive exercise of formal control could also exert a negative impact on IT outsourcing projects and the relationship between clients and suppliers. Therefore, clients should identify the stages or scenarios in IT outsourcing projects where formal control should be exercised, and to what extent formal control should be exercised, in efforts to effectively manage IT outsourcing projects.

Meanwhile, clients need to understand the role and function of guanxi in IT outsourcing projects of Chinese enterprises, and develop guanxi with suppliers, so that they can fully leverage guanxi with suppliers to handle conflicts and maintain long-term cooperation with them. In case of any unexpected conflicts arising from a project, such as the demand exceeding the contract, or the demand not unequivocally defined due to any ambiguity in the contract, the client can promote cooperation between the two parties through guanxi, exchange valuable resources and information, and finally settle these conflicts smoothly.

Additionally, Chinese enterprises, when implementing IT outsourcing projects, need guanxi with their suppliers to make up for the inadequacy of formal control in dealing with unpredictable conflicts, especially when implementing strategically important IT outsourcing projects with high value, because such projects are usually highly complicated and uncertain. Meanwhile, the Chinese market, being in the midst of rapid development, is also characterized by high environmental uncertainty. Such characteristics have rendered IT outsourcing projects of Chinese enterprises low in

observability and predictability, which make it difficult to fully exercise formal control. Given such circumstances, Chinese enterprises need to make use of the relational governance mechanism, that is, guanxi unique to China, to make up for the limitations of formal control. Therefore, Chinese enterprises should not only implement formal control in the key processes of IT outsourcing projects, but also cultivate guanxi with suppliers to reduce conflicts and redress the deficiencies of formal control.

6.2 Limitation and future research

Like all studies, this study is subject to some limitations:

First of all, this study is limited by the sample size of qualitative research, which covers four IT outsourcing projects of four Chinese enterprises, with a total of 25 people interviewed. Although the researchers have analyzed the cases according to the methodology of Yin (2011, 2013), the sample size is too limited draw any generalizable conclusions. Future research could extend on the findings through a questionnaire to study the correlation between control mode and influencing factors, as well as the complementary or substitutive relationship between control modes.

Secondly, the four cases selected in this study are all IT outsourcing projects that have recently been completed, so the interviewees endeavor to recall the whole process, but there are inevitably omissions and deviations in their memory. Although the researcher endeavors to avoid the limitation of recall by interviewing several persons involved in the same project for data source triangulation, future research can consider adding the study of on-going IT outsourcing projects. In addition, the four IT outsourcing projects selected in this study are quite successful. Through the comparison of successful experiences, many common uses of control mode have been identified. In future research, we can consider increasing the number of cases with project failures to see if the client companies use different control mode and if *guanxi* plays different roles in these cases with project failure. Finally, the four IT outsourcing projects selected in this study are all complex and high-value projects. In future research, we can consider adding some relatively simple and low-value IT outsourcing projects, such as desktop

maintenance, hardware installation etc., to see if the control mode used by client companies is different among these simple IT outsourcing projects.

Thirdly, this research has studied the role played by *guanxi* in all phases of the IT outsourcing project, focusing on the positive role of *guanxi*. However, many scholars have pointed out the complexity of *guanxi* and its two sides: *Guanxi* can play an active role in broadening information channels and resolving conflicts and disputes for client companies in IT outsourcing projects, but it may also bring corruption, which means *guanxi* is a double-edged sword. Future research can focus on the negative impact of *guanxi* in IT outsourcing projects and how to limit such negative impact through other control modes.

Appendix

Appendix 1.Participant Information Table

Participant Information Table 参与人信息表

You are being invited to take part in a research study as part of a DBA student degree project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.
邀请您参与工商管理博士生研究课题。在您决定前，您对研究的原因和如何参与的了解至关重要。烦请仔细阅读以下信息，如果您希望，也可与他人讨论。如有不清楚之处或需要更多信息，欢迎提出。欢迎花时间思考是否愿意参与。感谢您阅读此信息。

Who will conduct the research? 谁做此课题研究？
Wen Jiang 蒋文
DBA Participant from Manchester Business School of University of Manchester
曼彻斯特大学商学院 工商管理博士研究生
CTO, Shanghai Qianba Financial Information Service Co., LTD
上海钱吧金融信息服务有限公司首席技术官
School Address 地址: Booth St W, Manchester, Greater Manchester M15 6PB, United Kingdom
School Phone 电话: +44 161 275 6333

Title of the Research 研究课题
Control mode and the role of guanxi in IT outsourcing projects in Chinese enterprises
中国企业的 IT 外包项目中的控制模式和关系在 IT 外包项目中所起的作用

What is the aim of the research? 研究目的？
I am hoping to answer the following questions by the doctoral degree research 我希望通过博士课题研究回答以下问题：

1) Are control modes (i.e., formal control and social control) which exist in the west also prevalent in IT outsourcing in china?
   在西方企业的 IT 外包项目中所使用的的控制模式（正式控制和非正式控制）是否同样适用于中国企业的 IT 外包项目？

2a) What role (if any) does Guanxi play in the life-cycle of IT outsourcing (i.e., contact, contract and control phase) in China?
关系在中国企业的 IT 外包项目的生命周期（联系、合同和控制阶段）有没有起到作用？如果有，起了怎样的作用？
2b) In which situations might formal control, social control, and Guanxi (in the form of doing a favor) complement or substitute each other?

在什么样的情况下，正式控制、非正式控制和关系（也就是帮忙）可以互相补充或者取代？

Why have I been chosen? 为何选择我？
You are one of the key figures of IT outsourcing project team in Chinese enterprises. There will be some other team members to be interviewed.
您是企业 IT 外包项目中的核心成员之一。此研究也会访谈其他项目组成员。

What would I be asked to do if I took part? 我将如何参与？
I plan to conduct qualitative analysis on control mode and the role of guanxi in IT outsourcing projects. The interview will be leveraged for the study. I will conduct the interview with you to get your insights on this area.
本课题将采用定性的方法研究 IT 外包项目中的控制模式以及关系在其中的作用，采用访谈的方法，我将在相关领域对您进行访谈。

What happens to the data collected?
收集的数据如何处理？
The data collected from individual interviewees will be consolidated and analyzed for the academic research purpose. Any original data from each individual interviewee will only be utilized in the research team and will not be shared in industry for specific business purpose of companies with individual identity.
从个人访谈中收集的信息将汇总，并以学术研究为目的进行分析。任何个人访谈中收集的原始数据只会在课题组中使用，不会在行业中为特定公司的商业目的分享能够识别被访者个体的信息。

How is confidentiality maintained?
如何保密？
The record of interviews and original documents including data will be stored and kept secure in private search computer. Video will be destroyed when the DBA dissertation is completed and Manchester Business School does not require further video record.
访谈记录和原始资料包括数据将在个人研究电脑中保存。录音将在博士论文答辩完成时，曼大商学院不再需要录音记录后销毁。

What happens if I do not want to take part or if I change my mind?
如何我不想参与了或我改主意了会怎样？
It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself. 参加与否由您个人决定。如果您决定参与，您将会保留此份信息表并签署同意书。如果您决定参加，您仍然能够随时退出，不需要任何原因，对您无损害。

Will I be paid for participating in the research?
参与此研究是否有偿？

For this academic research, there is not pay for the participation. Appreciate your contribution for the research.
此学术研究是无偿参与的。感谢您对此研究的贡献。

What is the duration of the research?
此研究的时间是多久？
The interview will be around 90 minutes. Appreciate if there could be some further follow-up clarification when it is necessary.
访谈大概需要 90 分钟。 如果在未来需要时可以有进一步澄清信息的可能，不胜感激。

Where will the research be conducted?
访谈的地点。
Your office or appointed place
您的办公室或约定的地点

Will the outcomes of the research be published?
研究结果是否发表？
The research is expected to be published but without interviewees' individual identity without permission. Provide details of anticipated outcomes in respect of publication of findings.
本研究计划发表，但是未经被访者同意，不会有个体访谈者在文中被识别。

Contact for further information
进一步信息的联系人
Wen Jiang 蒋文，Phone 电话 86 139 1312 5965, Email 电子邮件:wen.jiang@postgrad.manchester.ac.uk

What if something goes wrong? 如果有错误
If a participant wants to make a formal complaint about the conduct of the research they should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road,
Manchester, M13 9PL.
作为参与者，如果您希望对于研究中的行为进行正式投诉，您可以联系研究办公室主管：the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL

Appendix 2. Consent Form

CONSENT FORM 同意书

If you are happy to participate please complete and sign the consent form below
如果您高兴参与，请完成下表并签字同意

	Please Initial Box 标识项
1. I confirm that I have read the attached information sheet on the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily. 我确认已阅读有关上述项目的所附信息，并由机会考虑上述信息、提问，并得到满意回答。	☐
2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to any treatment/service 我明白参与此项研究是自愿的，可以随时退出，无需提供原因，对于待遇、服务等无损害。	☐

I agree to take part in the above project 我同意参与上述项目

Name of participant 姓名 Date 日期 Signature 签字

_____ _____ _____

Appendix 3.Questionnaire

访谈大纲
Questionnaire

【个人和公司信息】

【Basic Information】

1. 贵公司所在行业、公司规模、IT 部门规模、您的职位、您在贵公司的工作时间。
   - the industry and the scale of the company
   - the scale of IT department
   - your job title
   - how long have you been in the company?

IT 主管/相关业务部门负责人

IT leaders/Business leader

【项目信息】

【Project Information】

1. 请回忆一下最近或者您印象最深刻的 IT 外包项目。首先，能否简单介绍一下这个项目？该项目对于公司的战略或者业务发展有什么样的意义？
   Pls recall one of the recent IT outsourcing projects or one of the most important IT outsourcing projects. Firstly, could you please brief the project? How important is the project to the strategy of the company or the development of the business?

2. 这个项目所涉及的业务流程或者 IT 技术是否有您们公司的特色或独特之处？（如有，则继续问）这对项目开发以及开发商有什么特殊要求？（如没有，则问）开发商的选择上有什么要求？
   Is business process of IT technology related to this IT outsourcing project unique or special? If yes, what is the unique requirement to the vendors? If not, what is the requirement to the vendors?

3. 这个项目中外包的 IT 技术或服务是市场上已经成熟、稳定的技术或服务？还是市场上比较新的或者变化比较快的技术？

What is IT technology or service outsourced in the project? Is it mature or stable in the market? Or is it new or changing rapidly in the market?

4. 您们为什么选择这家外包方？（如果讲得不具体，继续问）为什么，什么因素促动，能否给些具体的事实、案例。
   Why do you select this vendor? What factors motivate the selection? Could you please share a story?

5. 这家供应商之前跟贵公司熟/有交情或者是别人推荐的吗？（如果有）之前的交情或者别人的介绍能不能帮助您快速了解或者加深了解及信任这家供应商？为什么？
   Were you familiar with the vendor before this project or is the vendor recommended by others? If yes, is it helpful for you to understand and trust the vendor? Why?

6. 在选型阶段，除了这家供应商，贵公司还看了几家供应商？这些供应商和公司有交情或者是通过别人推荐的吗？ 为什么没有选择他们？
   Besides the selected vendor, how many other vendors have you reviewed in selection process? Were you familiar with these vendors or are they recommended by others? Why don’t you select them?

【项目实施】

【Project implementation】

1. 贵公司和该供应商的合同是如何制定的？有模板吗，需要在此基础上进一步逐条定制的？
   How is the contract designed? Is there the existing template? Or is it customized one item by item?

2. 项目执行过程中，合同是不是覆盖了项目的全部工作内容？如果没有，可否举些例子，你们又是怎么处理的？如果覆盖了，您觉得其中的利弊？
   Does the contract specify all the jobs of the project? If not, could you please show some examples? And how do you deal with them? If yes, how do you consider the advantage and the disadvantage?

3. 在项目过程中你们是如何实施进行管理和监控的，确保项目的顺利进行？ （以下问题是给研究人员看的，除非没有提及到，否则不要逐句问。最好是通过文档获取信息为佐证）

3.1 贵公司是否在项目过程中设立了项目管理委员会或与之类似的机构？如果有，组成成员有谁，职责是什么？

3.2 贵公司在这个项目中的申请、批准和评审方面遵循怎样的流程？能否举个例子？

3.3 贵公司在这个项目中的汇报机制是怎样的？能否举个例子？

3.4 贵公司在这个项目中的风险管理是怎样的？能否举个例子？

3.5 贵公司在这个项目中的决策机制是怎样的？能否举个例子？

How do you control the project implementation? (Do not need to ask the questions one by one unless it is not mentioned. We can get the information from project documents).

- Is there project management committee? If yes, who are the members and what are their responsibilities?
- What is the process of application, approval and appraisal in the project? Could you please show one example?
- What is the process of reporting in the project? Could you please show one example?
- What is the process of risk management in the project? Could you please show one example?
- What is the process of decision making in the project? Could you please show one example?

4. 除了这些正式的机制，还有其他柔性的方式吗？能否详细讲讲，举些例子

   Besides the formal control, are there any soft methods to control the project? Could you please show me some examples?

5. 和供应商的交情在这过程中起着什么角色？能否具体举些例子？

   How does the relationship with the vendor help or hinder in the implementation process? Could you please show me some examples?

6. 当在项目过程中遇到困难或意见不一致时，贵公司和供应商是如何面对和解决的？能否举例子？

   How do you fix the issues when you have the conflict with the vendor or there are some difficulties in project implementation process? Could you please show me one example?

7. 项目实施过程中，遇到供应商能力或者资源解决不了的问题吗？当时是怎么解决的？
   How do you fix the issues when the vendor can’t solve the difficulties or the vendor doesn’t have enough resources to solve the difficulties? Could you please show me one example?

8. 我们了解了贵公司在这个外包项目中的正式控制、非正式控制以及关系行为。那您认为，在这个外包项目中，正式的控制和非正式控制，以及关系行为是一种什么关系？能否举个例子？
   We understand there are formal control, social control and doing a favor in the project. What relationship do you consider among them? Could you please show me some examples?

9. 项目是否到达了你们的预期目标（时间、预算、效果）？具体体现在那些地方（体会、故事或事实，特别是业务部门，这个要多问）？
   Does the project meet the expectation (time, budget and quality)? Could you please specify it (It should be asked to business leader)?

10. 请评价一下这个外包项目中的供应商。贵公司会和这家供应商长期合作吗？或者如果您的朋友有类似项目，您愿意向他们推荐这家供应商吗？
    Could you please evaluate the vendor in the IT outsourcing project? Will you have the long-term business with the vendor? Or would you like to recommend the vendor to your friends if they have similar IT outsourcing projects?

公司高管

Top management

1. 贵公司通过哪些渠道来获取供应商？筛选供应商的原则有哪些？
   How do you source the vendors? What factors influence you to select the vendors? Is the relationship considered when you select the vendor?

2. 在项目实施过程中，贵公司通过哪些方式来管理供应商以确保项目顺利进行？

How do you control the project implementation?

3. 请您谈谈您对于公司 IT 外包现状的评价
   Could you please evaluate the status of IT outsourcing in your company?

4. 请您谈谈您对于公司 IT 外包的规划和设想
   Could you please share the plan of IT outsourcing in your company?

供应商

Vendor

1. 供应商平时是如何介入到项目中的？供应商起着什么角色？
   What role does the vendor play in the IT outsourcing project? How do you work with the customer in project implementation? Could you please share some examples?

2. 当在项目过程中遇到困难或意见不一致时，你们作为供应商是如何面对和解决的？能否举例子？
   How do you fix the issues when you have the conflict with the customer or there are some difficulties in project implementation process? Could you please show me one example?

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