



Relationship, contract and IT outsourcing success: Evidence from two descriptive case studies

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ABSTRACT

In spite of the continuous increase in IT outsourcing activities globally, a significant percentage of outsourcing deals are considered either a failure or suffered from serious problems. In China where IT outsourcing practice is still at its initial stage, the situation is more serious. There lacks systematic guidance in terms of how to negotiate decent contracts and how to develop sound relationships. In view of this, an emerging trend of research has explored either the contract or relationship issues in successful IT outsourcing. However, few efforts have been paid to investigate the effects of both relationship and contract on IT outsourcing success with an integrated view. The current research develops a research framework based on the theories in Economics, Management and Marketing fields to investigate the effects of both relationship and contract on IT outsourcing success. To support the propositions, evidence was collected from two descriptive case studies conducted in Hong Kong and Mainland China respectively. The case analysis implies the dimensionalities of relationship and contract. What is more, IT outsourcing success is mainly evaluated from the technological benefits instead of the strategic or economic benefits the client company could gain from an IT outsourcing relationship. A significant contribution of this study is to look into IT outsourcing phenomenon with a balanced view and through an integrated theoretical lens. For practitioners, this research helps clear executives' doubts about simultaneously employing both relationship and contract as a governance mechanism in managing IT outsourcing deals.

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1. Introduction

IT outsourcing has witnessed continuous growth since its prominent adoption by Kodak 20 years ago. According to a recent report by Gartner Group [36], the global IT outsourcing market would rise from US\$268 billion in 2009 to US\$325 billion by 2013 at a compound annual growth rate of around 5%. Asia-Pacific region is one of the growth leaders compared to other regions. In China alone, the IT outsourcing services market has maintained an extremely rapid growth since 2004 (with a 29.7% compound annual growth rate) and will reach to US\$3 billion by 2011 [42]. Clearly, IT outsourcing trend is developing worldwide with a remarkable speed and into various forms [11].

Despite its steep growth trend, IT outsourcing is, however, fraught with difficulties and high rates of failure. Computerworld [14] reported that a low percentage of outsourcing relationships was considered successful and at least 50% of outsourcing relationships were terminated early. Recent examples could be found from the unsuccessful relationship between JP Morgan Chase and IBM [25] and Barclays and Accenture [15]. In China where the IT outsourcing situation is considered quite

different from those of western countries [59], problems also exist. In China, IT outsourcing decision makers are usually short of experience to select and evaluate service providers and immature in negotiating contracts, managing contracts and maintaining good relationships with the providers.

In view of the problems occurred at the implementation stage of IT outsourcing, researchers suggest that the research focus of IT outsourcing should be shifted to two major aspects [53]: the contract - the formal control mechanism of a sound relationship [10,31]; and the relationship - the informal control mechanism [5,70] in IT outsourcing. That is, how to manage the IT outsourcing process formally and informally to protect the benefits for both parties are key to a successful IT outsourcing project. To further shed light on the relationship and contract issues of IT outsourcing and their impact on IT outsourcing success, the present study takes an investigation at these phenomena through two descriptive case studies. Evidences are found to support the propositions that contract is a foundation of relationship, and both contract and relationship are essential and influential factors in IT outsourcing success.

The rest of the paper is organized as follows. First, we review the literature on relationship and contract issues of IT outsourcing. We then provide the theoretical foundations and the research framework of the current research. This is followed by a description of research methodology and a section on the details of case studies,

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including case introduction, analysis and discussion. The paper concludes with the contributions and limitations of the study and future research directions.

2. Literature review

2.1. Literature on relationship issues

The main stream of relationship issues of IT outsourcing focuses on the determinants and attributes of relationships that form partnership-style cooperation. For instance, Klepper [47] considered the development of IT outsourcing relationship as a partnership and developed a conceptual model based on the theory of contract and social exchange. Grover et al. [32] explored the effects of service quality and partnership on the success of IT outsourcing. Partnership in their research was measured by using indicators (communication, trust, cooperation, and satisfaction) derived from Anderson and Narus's [2] study in the Marketing literature. Kern [43] developed an IT outsourcing relationship model involving the operationalization of contract and the emergence of exchange behaviors external to the contract. Through case studies, a strong emphasis of his study was that the success of outsourcing depended not only on the service level but also on the satisfactory relationship between each other. Lee and Kim's [52] work is among the first to distinguish among determinants of relationship, quality of relationship and overall success of outsourcing. The results showed that partnership was a significant determinant of IT outsourcing success. However, they also hinted a potential problem on the unclear distinction between the determinants and components of relationship quality. Goles' [28] and Goles and Chin's [27] studies were based on relational exchange theory. The relational norms were discussed and classified into two categories of relationship: attributes and process. Their work suggests a pattern where attributes and processes of relationship interact with each other in a cyclical fashion and their combination determines the quality of outsourcing project and outsourcing success. Based on Goles and Chin [27], Blumenberg et al. [9] distinguished relationship quality from its determinant in a conceptual model. Their study is probably the most comprehensive collection of relationship quality constructs and its determinants to date; however, the conceptual framework has yet been empirically tested.

2.2. Literature on contract issues

Literature on contract issues can be broadly divided into two categories: the research addressing the contract itself and that examining contract management. First, Barthélemy's [4,5] studies provided the example of a good contract. In his 2003a's work, Barthélemy indicated that writing a poor contract is one of the seven deadly sins of outsourcing, and a good contract should be precise, complete, incentive based, balanced and flexible. In his 2003b's study, contract was regarded as the "hard side" of IT outsourcing management, and a contract is considered good only when it shows preciseness, completeness and balance. Gainey and Klaas [26] highlighted the importance of contractual specificity in the satisfactory outsourcing. They believed when incomplete contracting is minimized through incorporating high level of contractual detail and specificity, it is likely to be more difficult for vendors to engage in opportunistic behavior. In another study, Ariño and Reuer [3] introduced the dilemma IT executives need to face when choosing a complex contract associated with an alliance. Their study is also among the first to bring the concept of contractual complexity into the studies of interorganizational alliance. Barthélemy and Quélin [6] further conducted research on the issue of contractual complexity. Based on transaction cost theory, they gave the rationale for the existence of contractual complexity: when asset specificity increases, contracts need to become increasingly complex. More recently, Chen and Bharadwaj [11] believed that a good contract structure should include

four major dimensions: monitoring, dispute resolution, property rights protection and contingency provisions.

In terms of contract management, Klepper and Jones [48] recognized that managing a contract is crucial and complex, especially at the post-contract stage [1]. Currie and Willcocks [17] summarized that beyond having the ability to build and manage relationships, clients should also have the appropriate contract management ability. Lacity and Willcocks [50] suggested building up a centralized team consisting of members from both client and provider companies to deal with contract facilitation and monitoring problems. Similarly, Feeny and Willcocks [22] identified contract facilitation and contract monitoring as two core IS capabilities in an interorganizational relationship. Shi et al. [73] adopted Feeny and Willcocks' [22] concept about contract facilitation and contract monitoring and developed a new construct – contract management. This construct is adopted in the current study.

2.3. Literature on relationship between contract and relationship

The arguments of the relationship between contract and relationship tend to fall into two categories: (1) formal contract is the base for relationship development; and (2) a good relationship is needed since contract is not flexible in the implementation stage. As an example of the first category, Fitzgerald and Willcocks [23] found that contract to be a critical foundation for all subsequent relationships. Saunders et al. [71] emphasized that contract is the key to any outsourcing relationship, since contract lays the ground rules for governance and structure that guide the interaction between the parties [19]. Goo et al. [31], based on relational governance theory, found that the specific characteristics of service-level agreement are antecedents of trust and commitment (typical attributes of relationship), and trust and commitment lead to the success of IT outsourcing. Studies in the latter category mainly emphasize the importance of relationship in the outsourcing success. For instance, Fitzgerald and Willcocks [23] believed that relationship is necessary since it "overcomes the nasty legal contractual wrangles associated with contracts" (p.93). Clark et al. [13], from a relationship governance point of view, advocated two mechanisms of vendor governance (pure relationship and formal contract). Any IT outsourcing governance structure should be located in between these two extremes. They further mentioned that relationship exists since contract tends to be an inflexible mechanism for governing exchange. Lastly, Willcocks and Kern [77] suggested that "getting the contractual level right is central to success but falls into the necessary but not sufficient category" (p.43). From the relational governance perspective, Poppo and Zenger [65] found that formal contracts and relational governance function as complements instead of substitutes in IT outsourcing relationships. In line with Poppo and Zenger [65], Goo et al. [31] further examined a dynamic complementary relationship between a formal contract and relational governance.

Despite a large proportion of the literature has addressed relationship and contract issues toward IT outsourcing success, only a few of them have put both aspects into one single theoretical framework and explored their relationship in the IT outsourcing context. Though recent studies (e.g., [31]) have explored the relationships between some specific characteristics of contract and relationship governance and have detected a complementary relationship between the two governance mechanisms, the dimensionality of such broad constructs (IT outsourcing relationship, contract dimensions and IT outsourcing) has yet been explored, and the relationships between these constructs still need to be further understood. On the relationship dimension, there is no consistency in the formation of relationship dimension. On the contract aspect, little research has mentioned the concept of contract management at the post-contract stage. For IT outsourcing success, although the literature has suggested a multi-dimensional criterion to evaluate it, the possible components or contributing factors of IT outsourcing success have not been further discussed in the literature.

In view of the above, this research uses three broad constructs to summarize the three dimensions we are interested in the IT outsourcing

research context. It then employs two descriptive case studies to understand the significance of both relationship and contract in successful IT outsourcing and the possible relationship between the two seemingly opposite relationship governance mechanisms. The study also tries to look into the effects of relationship and contract dimensions on IT outsourcing success.

3. Theoretical foundation and research framework

3.1. Theoretical foundation

Exchange theories are used to explain the relationship issues since IT outsourcing is an interorganizational relationship and the primary conceptual focus underpinning a number of inter-organizational research approaches is exchange relations [21]. These relations are explained by either social exchange theory (SET) or relational exchange theory (RET) in many prior studies (e.g., [28,35,43,46,54]). Both theories can explain the elements of IT outsourcing relationship, but starting from different angles: SET mainly focuses on the behavioral or social side of exchange whereas RET emphasizes more on the legal, contractual or economical aspect of relationship. SET explains dyadic exchange relations as consisting of “voluntary transactions involving transfer of resources between two or more individuals” [8,16,41]. It was initially developed to examine interpersonal exchanges that were not purely economic, but has been extended significantly to the study of inter-organizational exchange [16,61]. In the inter-organizational context, SET focuses not only on the social process of give-and-take, but also aims to understand the behavior of each actor contributing to the exchange under social structures [45]. Trust and commitment are the core elements in SET [8], and have been characterized as central in distinguishing social from economic exchange [16]. Knowledge sharing and communication are also important factors that have been frequently studied in inter-organizational research.

RET provides a means to analyze the behavior and norms that are expected in particular types of contractual relations [56]. Norms, as one of the central elements in RET, are expected patterns of behavior [55] and the guidelines for the “initial probes that potential exchange partners may make towards each other” [72, p. 68]. They are also “designed to enhance the well being of the relationship as a whole” [38, p. 34]. Recognizing the critical role of norms, researchers have attempted to measure them in inter-organizational research. For example, Macneil's [56] has developed a taxonomy of nine norms that has been extensively used as a starting point for subsequent research. These norms were further translated into measurable constructs such as trust, commitment, interdependence, knowledge sharing, communication, conflict resolution, and cultural compatibility in the following studies (e.g., [21,44,67]).

Two other theories used in the current research are the transaction cost theory (TCT) and the relational governance theory (RGT). Both theories address the contractual, structural and governance aspects of inter-organizational transactions. TCT has its origin from the field of Economics and addresses the importance of contract (e.g., [6,11,69]). RGT, starting from a governance perspective, helps to understand the governance issues of IT outsourcing process (e.g., [31,65]). TCT maintains that economic efficiency can be achieved through comparative analysis of production costs and transaction costs. In the current research context, it mainly helps to address why contract is important, and what kind of contract should be used in a certain relationship. Based on TCT, Williamson [78] claimed that the behavioral attributes of transaction include asset specificity, uncertainty, and frequency. When asset specificity increases, contracts need to be increasingly complex to mitigate the possible opportunistic behaviors by the provider [6,65]. Uncertainty challenges an exchange by requiring the parties to adapt to problems raised from unforeseeable changes. It affects people's rational decision, and increases opportunism [63]. At this time, contract needs to be as specific and detailed as possible to protect possible and

inevitable changes in the exchange. Infrequent transactions also increase the likelihood of opportunistic behavior in later periods by reducing the threat of retribution. In sum, TCT 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.

Relational governance (in RGT) is considered as an intermediate mode of governance, while the two poles as defined by traditional economics theory are “market” and “hierarchy” [78]. It underlines both the economic rationale of transaction cost economics and the behavioral rationale of relational exchange [40]. This means, RGT suggests a combination of relationship-specific assets and a high level of social factors (e.g., trust) [81]. Unlike the “market” mode which relies heavily on contract, relational governance involves more flexibility and latitude that is suitable to explain the highly complex marketing relationships, e.g., relationship in IT outsourcing. In the IT outsourcing literature, the majority of the literature believed that the economic determinants of governance do not by themselves provide a complete understanding of the phenomenon. Rather, the combination of both economic and non-economic factors contributes to a better understanding of IT outsourcing relationships [45,52,70]. Therefore, RGT is believed to be a suitable theory to explain the governance mechanism in successful IT outsourcing arrangements.

The above four theories reflecting different perspectives of the issues being investigated in the current study are summarized in Table 1. The corresponding propositions and constructs are also listed here.

3.2. Research framework

Based on the theories discussed, a research framework (with three constructs and three propositions) is developed and depicted in Fig. 1. In the following, we first discuss the three constructs and their sub-dimensions and then present the theoretical development of the propositions.

3.2.1. Constructs

The constructs involved in our research framework are IT outsourcing success, relationship dimension and contract dimension. The definitions of them are discussed in the following paragraphs, and their respective sub-dimensions are presented in Table 2.

First, *IT outsourcing success* refers to the overall organizational advantage gained from IT outsourcing strategy. From SET and RET's perspectives, it is a performance measure of inter-organizational exchange and a criterion to evaluate whether IT outsourcing relationship is satisfactory. Grover et al. [32] evaluated IT outsourcing success by the satisfaction of benefits (strategic, technological and economic benefits) that a client company could achieve through outsourcing activities. Other researchers like Lee and Kim [52] and Han et al. [35] have also borrowed these criteria to measure IT outsourcing success. In line with the above researchers, IT outsourcing success in this study is viewed as a multi-dimensional construct evaluated from three perspectives – strategic, economic, technological benefits.

Relationship dimension is defined as the association between an IT outsourcing service provider and its client company, which involves the characteristics and process of the exchange behaviours. To explore the components of relationship dimension, prior studies in both IS (e.g., [28,32,43,47,52] and Management/Marketing literature [2,21,60,61]; et al.) addressing inter-organizational relationship were investigated. Most of these studies are based on social exchange or relational exchange theories. Based on the analysis of the frequency and the level of importance, trust, commitment, knowledge sharing and communication quality were selected as the major components of relationship dimension in this study.

Table 1
Theories and corresponding constructs/propositions.

Theory	Major arguments	Constructs/propositions
SET	SET explains dyadic exchange relations as consisting of “voluntary transactions involving transfer of resources between two or more individuals/organizations”. [8,16,41]. Trust and commitment are the core elements in SET [8].	Relationship dimension (trust, commitment, knowledge sharing, communication quality) and P1
RET	RET provides a means to analyze the behaviors and norms that are expected in particular types of contractual relations [56]. Trust, commitment, knowledge sharing and communication quality etc. are deemed as norms in RET [21,44,67].	
TCT	TCT maintains that economic efficiency can be achieved through comparative analysis of production costs and transaction costs [78]. When the transaction costs are high, outsourcing contracts need to be highly specific and complex to offset the risk of opportunism.	Contract dimension (contractual complexity and contract management) and P2
RGT	RGT underlines both the economic rationale of transaction cost economics and the behavioral rationale of relational exchange [40]. It is used to describe the governance mechanism of interorganizational relationship [81].	P1, P2 and P3

Notes:

1. SET = Social Exchange Theory; RET = Relational Exchange Theory; TCT = Transaction Cost Theory; RGT = Relational Governance Theory.
2. The theories suggested are the major theoretical underpinnings of each construct/proposition. There are overlaps in the use of theories to explain the same construct in the proposition development process.

Contract dimension is defined as the characteristics and process related with drafting the text contract and contract management activities at the contract and post-contract stages. It is divided into two aspects: contractual complexity and contract management. *Contractual complexity* is the extent to which outsourcing contracts are composed of elaborate clauses [6] and is a criterion to measure the quality of text contract. A detailed and complex contract is more effective in IT outsourcing deals, since it gives enough space to involve preciseness, completeness, flexibility, balance, and other necessary controls to guide outsourcing behaviors [5,26]. *Contract management* is an action-oriented competence that provides the necessary performance measurement process and final performance information for the diagnosis of problems and the prescription of solutions in managing the IT outsourcing dyads' behavior [73]. It involves more actions at the post-contract stage to ensure the success of IT outsourcing.

3.2.2. Propositions

According to SET and RET, the preponderance of literature concerning relationships argues that relationship is a key determinant of exchange success. For instance, Halvey and Melby-Murphy [34] argued that ongoing relationship management forms an integral part of the post-contract management agenda, and its effective handling can make the difference between achieving the outsourcing objective or not. Grover et al. [32] asserted that partnership allows two organizations to achieve key organizational objectives and build competitive advantage in their respective industries. They further proved that a good partnership with the outsourcing firm is a key to the outsourcing success. Similarly, McFarlan and Nolan [58], Kern [43], Willcocks and Kern [77], Kern and Willcocks

[46] emphasized the importance of relationship in IT outsourcing by addressing that the success of outsourcing does not depend solely on achieving service levels, but also on the relationship between the two parties and how this helps them work towards a win-win situation. Lee and Kim [52] and Lee [51] further confirmed that relationship/partnership quality and the efficacy of outsourcing relationship are the critical success factors toward IT outsourcing. Lastly, Han et al. [35] addressed the significance of relationship intensity (represented by trust and commitment) in IT outsourcing performance. From RGT's point of view, the reason why relational governance is needed is that contract alone cannot explain the rich phenomena exist in the inter-organizational exchange. Relational governance refers to the role of the enforcement of promises, obligations and expectations that occur through trust and social identification [31]. A rich body of empirical work has demonstrated that relational governance improves the performance of inter-organizational exchanges in general [39,65,81] and IT outsourcing in particular [12,30]. Thus, the more effective the relational governance is, the more chances IT outsourcing is successful.

In sum, SET, RET and RGT all suggest that IT outsourcing relationship is an important factor leading to IT outsourcing success. SET and RET emphasize on the significance of exchange behaviors or social norms performed by the dyadic parties in IT outsourcing relationships; whereas RGT focuses on the governance mechanism in IT outsourcing. RGT believes that a relationship guided by a high level of social factors (as well as economic factors) is the most effective governance mechanism in IT outsourcing process. As to the specific component of relationship dimension, based on the literature and the theories presented in the current study, trust (e.g., [45,51]), commitment (e.g., [28,31]), knowledge sharing (e.g., [52,57]) and communication quality (e.g., [52,60]) are key attributes in IT outsourcing relationship and are the most important for the success of IT outsourcing. Based on the above discussion, we have the following proposition:

Proposition 1. *The relationship dimension of IT outsourcing is positively related with IT outsourcing success.*

From TCT's perspective, contracts represent promises or obligations to perform particular actions in the future [56]. It may detail roles and responsibilities to be performed, specify procedures for monitoring and penalties for noncompliance, and determine outcomes or outputs to be delivered. Contractual control is one of the mechanisms to mitigate risks: as exchange hazards rise, so must contractual safeguards [78], which act to minimize the costs and performance losses arising

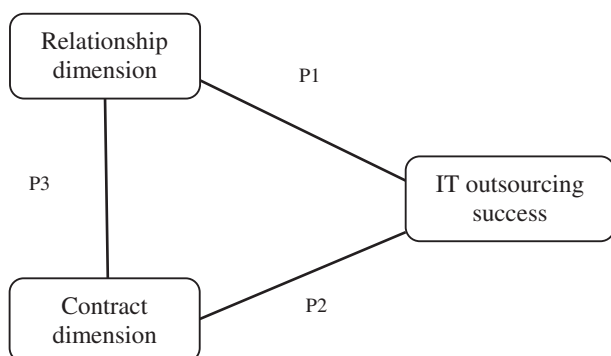


Fig. 1. Research framework.

Table 2
Definitions of constructs/sub-dimensions.

Construct	Sub-dimensions	Definition	Source
IT outsourcing success	Strategic benefits	The ability of a firm to focus on its core business, outsource routine IT activities so that it can focus on strategic uses of IT, and enhance IT competence and expertise through contractual arrangements with an outsourcer.	[32]
	Economic benefits	The ability of a firm to utilize expertise and economies of scale in human and technological resources of the service provider and to manage its cost structure through unambiguous contractual arrangements.	
	Technological benefits	The ability of a firm to gain access to leading-edge IT and to avoid the risk of technological obsolescence that results from dynamic changes in IT.	
Relationship dimension	Trust	The client company's confidence in the service provider's reliability and integrity.	[61]
	Commitment	The client company's belief that an ongoing relationship with the service provider is so important that it would warrant their maximum efforts at maintaining the relationship.	[31,61]
	Knowledge sharing	The activities of transferring or disseminating knowledge between the client company and the service provider	[57]
	Communication quality	The extent to which the formal and informal sharing of credible and meaningful information between the client company and the service provider are timely, accurate, credible, adequate, complete and useful.	[52,60]
Contract dimension	Contractual complexity	The extent to which outsourcing contracts are composed of elaborate clauses.	[6,26]
	Contract management	An action-oriented competence that provides the necessary performance measurement process and final performance information for the diagnosis of problems and the prescription of solutions in managing the client company and the service provider's behavior.	[22,73]

from such hazards [37]. In IT outsourcing context, Barthélemy and Quélin [6] believed that when asset specificity increases, contracts need to become increasingly complex because contracts could help to mitigate possible opportunistic behaviors by the provider, could help the client to avoid over-dependence on the vendor, and is flexible enough to respond to changes in the environment. Chen and Bharadwaj [11] further suggest developing a comprehensive coding scheme to capture IT outsourcing contract provisions. To summarize, a more complex contract leaves less room for opportunistic behavior in the face of unforeseen events, and thus guarantees the success of IT outsourcing. In terms of contract management, prior studies have stressed the importance of well developed contracts to the success of IT outsourcing deals; however, most of them have not differentiated between contract itself and actual behaviors of the parties aimed at enforcing the contractual terms. That is they are not sure whether both parties actually comply with contractual terms or are guided by them in their day-to-day exchanges. Therefore, contract management is equally essential to make sure the execution of existing contracts and future contracts, and the accountability of service provider at the post-contract stage [73]. In a holistic view, from RGT's aspect, contract dimension is another governance mechanism to ensure the success of IT outsourcing. Compared with the informal or relational governance mechanism, formal contractual governance is traditionally taken as the major governance tool in an interorganizational relationship, and serves to provide structure, guidance, and control to the implementation of IT outsourcing activities [30].

The above discussion based on TCT and RGT suggests that a well-designed contract or service-level agreement and an effective execution of the contract terms are consistent with IT outsourcing dyad's purposes and interests, which will definitely lead to the success of IT outsourcing. Therefore, the following is proposed:

Proposition 2. *The contract dimension of IT outsourcing is positively related with IT outsourcing success.*

According to economic theory, formal contract exists and works most effectively in discrete transactions, and “the idea of a discrete transaction is the foundation on which concepts of relationship are built” [21]. Based on this fundamental statement, researchers from RGT's perspective investigated the causal relationship from formal

contract to relational governance. For instance, Ring and Van de Ven [68] and Poppo and Zenger [65] believed that relational norms evolve from using contractual safeguards to protect relational specific assets. Zaheer and Venkatraman [81] also claimed that contractual governance structure is the first phase in the development of relational governance. In IT outsourcing literature, Lacity and Hirschheim [49] argued that a well-developed contract greatly influences the resulting quality of the relationship. Gulati [33] believed that drafting a good contract helps organize the relationship because it allows partners to set expectations and to commit themselves to short and medium-term goals. Finally, Goo et al. [31] claimed that a well-structured service level agreement plays an important role in cultivating favourable relationships in the course of outsourcing engagements, which will lead to the success of IT outsourcing. In line with the above researchers, this research distinguishes contract itself and the actual behaviors of IT outsourcing dyads, and believes that contract dimension as a whole is not only a determinant factor of IT outsourcing success, but also a necessary antecedent of relationship dimension in IT outsourcing activities. Therefore, we have the following proposition:

Proposition 3. *The contract dimension of IT outsourcing is positively related with the relationship dimension of IT outsourcing.*

4. Research methodology

4.1. Case study design

Yin [80] categorizes case studies into three types: exploratory, explanatory and descriptive case studies. The reason to use an exploratory case study is to define the questions and hypotheses of a subsequent study or to determine the feasibility of the desired research procedures (theory building); an explanatory case study is to test the causal relationships in the hypotheses (theory testing); and the purpose of a descriptive case study is to present a complete description of a phenomenon within its context [79]. Descriptive cases require that the investigator begin with a descriptive theory, or face the possibility that problems will occur during the project. The descriptive theory must cover the depth and scope of the case under study [74,80]. In the current research, descriptive case studies were used to describe the relationship and contract issues of IT outsourcing. The research framework and the

corresponding theoretical foundations serve as the “descriptive theories,” which are believed to be sufficient to cover the scope and depth of the subject being described. The research framework and theoretical foundations are also used as the predicted pattern in the pattern-matching data analysis process [76,80]. The check list from Dubé and Paré’s [20] on how to conduct good descriptive case studies was followed wherever possible.

4.2. Case selection

Number of cases and site selection are important strategies in case studies. For the number of cases, since it is not an extreme or unique case or a critical case inaccessible to scientific research, and the purpose is not to test a well-formulated theory [80], this research used a multiple-case strategy to describe the phenomenon. For site selection, Benbasat et al. [7] suggested that research on organization-level phenomena would require site selection based on the characteristics of firms, e.g., industry, company size, organizational structure and geographic coverage. Yin [79] further mentioned that researchers should select “exemplary” cases that reflect strong, positive examples of the phenomenon of interest; the (multiple) cases should also show replication logic to prove the theoretical generalization of the phenomenon. Following Benbasat et al.’s [7] and Yin’s [79] suggestions, the current research selected two cases. Both cases are leading companies in its own field and have used IT frequently in their daily operations. Furthermore, both companies are in the manufacturing industry, the one which was frequently reported as the largest sector of IT outsourcing service receivers [29,32,52]. Therefore these two cases are believed to be “exemplary” [79] or “typical” [24] cases whose success or failure is particularly typical for the majority of the cases under investigation.

4.3. Research settings

The primary source of information was gathered through onsite interviews. In designing the interviews, it is important to identify key informants who know the most about a particular topic in the organization and have decision-making authority for the general interested areas [62]. In this study, two interviews were conducted with the head of IT of each organization. Both IT executives were knowledgeable and highly involved in the IT outsourcing relationships with the service provider. The interviews were based on open-ended questions with a pre-designed interview protocol to assert the reliability of case study

research [80]. The questions were carefully worded and divided into two parts: (1) general understanding of the company’s IT background, IT outsourcing activities, and individual roles and responsibilities of the IT outsourcing projects; and (2) in-depth understanding of the role of each specific construct and sub-construct in their IT outsourcing projects. Pilot testing of the interview questions was conducted to refine the procedure of data collection. The final interview questions are listed in Table 3. The protocol consisted of an overview of the case study project, field procedures, case study questions, and a guide for case study report. Both interviews were recorded on tape, and lasted around 1 h. Follow-up phone calls were made for clarifying several unclear issues arising from the onsite interviews. Information from secondary sources such as project documents and internal reports from the interview companies, reports in newspapers/magazines and internet documents were also used to supplement the understanding of the organizations’ IT usage and their IT outsourcing activities during the investigated period [18,75].

5. The two case studies

5.1. Case introduction

Case one. TAL Apparel Limited (Hong Kong)

TAL Apparel is a private, family-owned company headquartered in Hong Kong. It is one of the world’s largest clothing manufacturers with networks spreading over the Asian countries and the USA. It specializes in producing and delivering high-quality garments for several world’s leading brands. Over the years, TAL had won many awards for its innovative technologies used in cloth design, and its cutting-edge supply chain management which has not only helped TAL itself but also its customers cutting costs and controlling inventory.

IT has been used almost everywhere in the organization, including data warehouse, supply chain management, help desk and data centre, etc. In terms of outsourcing, TAL had experienced both IT outsourcing and off-shoring since early 1990s. In 1993, TAL developed its own subsidiary in Shanghai, China with a full-functional development team focusing on application developments for its manufacturing systems. Compared with developing systems in Hong Kong, this IT offshoring facility greatly reduced the cost for TAL at that time. Second, since e-business supply chain management had always been TAL’s emphasis, the company had put every effort since 1995 in developing a web-based platform convenient for both internal

Table 3
Interview questions.

Interested dimensions	Major interview questions
General understandings	Where do you use IT in your business operation? How many percent did your company outsource IT? Can you describe the history and development of IT outsourcing projects in your company? Can you explain your role in IT outsourcing project in general? What is the purpose of outsourcing in your company? What’s your expectation of the future of IT outsourcing?
Relationship dimension	Do you trust your service provider in general? And Why? Do you and your service provider share knowledge frequently throughout the project? Is that effective? Do you feel commitment in the relationship? How do you feel the communication quality with your provider?
	Can you say your relationship with the service provider is a successful one? Why and why not?
Contract dimension	How do you evaluate the text contract with the service provider? Is that detailed and elaborate enough to cover all aspects in an IT outsourcing relationship? Do you have any mechanism to manage the contract with your service provider after signing the contract? What do you feel about the contract related issues between your company and the service provider?
IT outsourcing success	How do you evaluate the overall benefits/results of this IT outsourcing project.

and external usage. Besides cooperating with IBM, the great amount of programming work made TAL to seek help from local (Hong Kong) service providers. However, as TAL was not quite clear about their future requirements, the application developments were all project-based outsourcing. At that time, local service providers did not show commitment with the outsourcing contract, which led to continuous delay of the application development projects. The level of trust between TAL and the local providers dropped dramatically. Third, due to the unsatisfactory results delivered by the local providers, in 2007, TAL began the near-shore outsourcing with Freeborders, a US-based Shenzhen outsourcing provider to develop applications for the urgent and flexible needs from the Hong Kong office. The cooperation was satisfactory through these years. With the development of trust, TAL allocated more people and resources for applications development in Shenzhen.

Case two. Pepsi Cola Beverage (PCB) Company Limited (Guangzhou)

PepsiCo is one of the world's largest food and beverage companies, with annual revenue of over USD57 billion in 2010. The company employs approximately 294,000 employees worldwide with its products distributed in nearly 200 countries. In 1981, PepsiCo International (one of the group companies of PepsiCo) became one of the first American companies to enter China. Since then, it has invested over USD one billion in setting up bottling and concentrate plants in 20 cities of China. It also has more than 40 jointly or wholly owned ventures in the country. Pepsi Cola Beverage (Guangzhou) was one of the joint ventures founded in 1995 with its major revenues coming from its bottling plant. With several international-standard product lines, and the operational mode adopted from PepsiCo International, Pepsi Cola Beverage (Guangzhou) has been developing very fast in recent years.

IT was used to automate the product lines in the plant. To get the systems tailored to the company's requirements, they purchased standard systems directly from the vendors, and then re-developed and customized them by themselves. They once thought of outsourcing some application development to a third-party service provider, but the idea did not come through after evaluation. They found that the cost of outsourcing to a local, professional, high-quality IT service provider (who might provide offshore outsourcing services) was high, thus unable to save costs. If a small or medium-sized local vendor was chosen instead, the cost could be reduced, but the quality, privacy and flexibility could not be guaranteed (for the needs and standards of a multinational company). Therefore, they decided to hire people to develop the applications in-house for their core applications and only outsource their non-core tasks to local providers, including telecommunication systems and hardware maintenance. In the outsourcing arrangement, there was a certain level of trust between the company and its service providers, and the trust was based on the well-developed contract. These outsourcing activities helped the company acquire necessary technical resources and minimize the total cost of ownership in the long run.

The two cases above provide some insights of the relationship and contract issues of IT outsourcing and present positive examples of the phenomenon of interest. The TAL case highlights the diversified forms of IT outsourcing (due to the special geographical and economic position of Hong Kong) and provides a case why a company decides to terminate or choose an outsourcing relationship (trust and commitment). The PCB case gives a good example of the IT outsourcing situation most companies with operations in China need to face. Owing to the policy, cost, and trust/commitment issues, they only outsource some peripheral or non-critical projects to third party service providers. This phenomenon has been confirmed in Qu and Pinsonneault's [66] study that when firms in a country with an immature IT-related legal system, a lower level of social trust and an underdeveloped IT outsourcing market, they are less likely to outsource IT, especially the core IT, and they may choose to develop the needed IT expertise and functions in-house.

5.2. Case analysis and discussion

In analyzing case study evidence, we followed Yin's [80] suggested general analytic strategy and relied on theoretical propositions of the study. In this study, our case analysis and discussion was based on the following order: the analysis of the three propositions, components of relationship, contract and IT outsourcing success, and a brief summary of the case analysis results. The data were categorized and analyzed manually due to the small number of interview transcripts at hand. The summarized data were displayed in Table 4. Similar to Poon and Wagner's [64] approach, this study did not attempt to quantify qualitative data; instead, it looked for the absence or presence of a particular fact, and checked the existence of the supporting comments for the propositions.

5.2.1. Propositions

Pattern-matching is one of the most desirable strategies for case study analysis. It compares an empirically based pattern with a predicted one. If the patterns coincide, the results can help strengthen its internal validity; if the results fail to show the predicted pattern, then initial propositions should be questioned [76,80]. The information collected from the two case studies is presented and analyzed below.

Proposition 1 suggests that IT outsourcing relationship dimension has a positive impact on IT outsourcing success. This view is supported by IT executives from both cases. First, TAL's executive believed that in a successful IT outsourcing engagement, relationship was definitely more important than contract, since outsourcing was also a people's business. Whenever there were people, relationship mattered. PCB's executive also commented that "in China, relationship or Guanxi is very important in business collaborations. Though we have a well-designed contract, we still believe the role of relationship is more important than contract in IT outsourcing success." In terms of the specific dimensions, both interviewees mentioned the significance of trust, commitment, knowledge sharing and communication quality in IT outsourcing success. They believed these four factors were imperative contributors to a successful IT outsourcing project. These results are consistent with the literature on IT outsourcing relationship issues (e.g., [32,43,46,52]), which argue that relationship dimension (including the four elements) is a key determinant of IT outsourcing success. From relational governance perspective, it also proves that relational governance improves the performance of inter-organizational exchanges, especially those in IT outsourcing [12,30].

Proposition 2 asserts that IT outsourcing contract dimension has a positive relationship with IT outsourcing success, which means a higher level of contract dimension will lead to a higher level of success in IT

Table 4
Data display.

		TAL	PCB
Relationship dimension	Trust	✓	✓
	Knowledge sharing	✓	✓
	Commitment	✓	✓
	Communication quality	✓	✓
Contract dimension	Contractual complexity	✓	✓
	Contract management	✓	✓
IT outsourcing success	Strategic benefits	×	×
	Economic benefits	×	×
	Technological benefits	✓	✓
P1	Relationship dimension → IT outsourcing success	✓	✓
P2	Contract dimension → IT outsourcing success	✓	✓
P3	Contract dimension → Relationship dimension	✓	✓

Note: TAL = TAL Apparel Limited (Hong Kong).

PCB = Pepsi Cola Beverage Company Limited (Guangzhou).

✓ = discussed issue(s) well addressed.

× = discussed issue(s) not addressed or addressed but found unimportant.

outsourcing. The case study results support this argument. For instance, TAL executive indicated that *“a complex text contract is necessary when our relationship goes bad. It is a safeguard of our rights in the engagement. After signing the contract, regular contract management is needed to monitor the progress of the contract. Our unsuccessful experience with the local service providers owes to the poor contract management at that time.”* And PCB executive pointed out that *“In our company, a decent contract and its follow-up contract management are a must in outsourcing relationship. However, many other Mainland companies do not even have a decent contract since they believe relationship can do anything... this is a dangerous thought/behavior to us.”* Both IT executives believe that, same with relationship issues, contract issues (including contract itself and contract management) also play an important role in IT outsourcing success. This result underpins previous studies based on TCT that contractual control is one of the mechanisms to mitigate risks in inter-organizational exchange [78]. It is also consistent with the literature (e.g., [30]) based on RGT that formal contractual governance is one of the major governance tools in directing successful inter-organizational collaborations.

Proposition 3 emphasizes the determinant relationship between contract dimension and relationship dimension. It argues that contract is the foundation and the base of relationship. The data analysis results support this proposition, for example, *“contract is the basis of our relationship with the service provider. When the relationship is not stable, we will usually refer back to contract details.”*(TAL). And *“basically we trust our service provider, and the good relationship is based on the well-developed contract... Many Mainland companies do not even have a decent contract, because they believe a good relationship can do anything. In our company, this is not the case, we believe a detailed, balanced contract is essential for a good relationship, and relationship alone does not necessarily lead to the final success of the whole project.”* (PCB) The above quotations imply a strong and positive support for the relationship between contract dimension and relationship dimension. That is, relationship elements are built on and closely related with contract elements in IT outsourcing engagements, and contract factors usually have a determinant effect on the follow up relationships with the service provider. This result is consistent with the RGT regarding to the governance mechanisms of IT outsourcing, which has been discussed in previous studies such as Zaheer and Venkatraman [81], Poppo and Zenger [65], and Goo et al. [30].

5.2.2. Components of relationship, contract and IT outsourcing success

In terms of relationship dimension, both companies agreed that trust and commitment are central elements of a successful relationship, and knowledge sharing and communication are important and dynamic processes to maintain and strengthen the relationship. Evidence could be found from the transcripts of the two IT executives.

The IT executive from TAL was not satisfied with the services provided by the local service providers, but was quite optimistic with the new relationship with Freeborders (the Shenzhen partner). He commented, *“we terminated two contracts with the local service providers because they could not provide us committed resources which lead to continuous delay in our projects... and our new relationship with Freeborders is based on trust. Even though we are located at different geographical locations, and may even share different cultures, we have no problem in sharing necessary domain knowledge and communicating with each other.”* Overall, they believed a sustainable relationship depended to a large extent on whether trust and commitment mechanisms were built first, and whether the sharing of knowledge/information were in time and communication quality was high. When talking about the IT outsourcing situations in China in general, the IT executive of PCB addressed that *“a serious problem that leads to many failures in IT outsourcing or reluctance to outsource is lack of trust and commitment.”* (This view is consistent with Qu and Pinsoneault [66] that firms in low social trust countries are less willing to outsource IT with external IT vendors.) *“Even though there are thorough communications at the negotiation stage, the service providers*

will eat their words several days later; and even though they fulfil their promises, the quality of delivery is usually bad or the product is not exactly what the client wants.”...“Only when trust and commitment exist can effective communication and knowledge sharing play a role in the relationship.” They believed the four perspectives were important in any IT outsourcing relationship, especially in China where the level of trust and knowledge sharing between business partners were usually low. The results are consistent with the definition of relationship dimension – the relationship involves the characteristics (trust and commitment) and the processes (knowledge sharing and communication quality) of the exchange behaviours. They also concur to the literature of SET or RET that trust, commitment, knowledge sharing and communication quality are important components of IT outsourcing relationship. For IT executives, these further reflect their cautious concern about how to develop a sound relationship and what foremost factors are needed to consider in face of relationship issues.

For the contract dimension, the data analysis reveals that contractual complexity and contract management are two distinctive sub-dimensions of IT outsourcing contract issues, and both of them play an important role in a successful contractual relationship. TAL's executive is very confident with their contract and contract management capabilities with Freeborders. He said: *“Hong Kong is a legal society; a contract is a must in any business collaboration. Learnt from the unpleasant experience with local service providers, our contract with Freeborders is a complicated one. In the service-level agreements, we have clearly included a series of clauses, for example the scope of services, performance measurement, problem management, customer duties, warranties, disaster recovery, and termination clauses, etc.”* He also mentioned that after signing the contract, how to manage the contract effectively in the daily operation was another important issue in the later stage. They established an independent team to facilitate and monitor the contract execution from time to time. In this way, their interests/rights were guaranteed to a large extent in the contract management stage. Similar with TAL, PCB's executive also paid great attention to the contract issues in their outsourcing relationship. They recognized that both contract and contract management were essential at the contract and post-contract stages. Therefore, besides designing a detailed, balanced contract, they also dedicated to develop a cooperative contracting system to better improve the level of contracting control and optimize the standard business processes in the year when the interview was conducted. For the general situation of IT outsourcing in China, he further commented that contract and contract management were big challenges for companies in China. First, in Chinese culture, these “hard factors” sound uncomfortable and most people did not have the concept of contract management in their mind. Second, since IT outsourcing in China was still at the initial stage, both government policies and the legal systems were not mature enough to support or protect the cooperative parties in IT outsourcing deals.

In summary, both cases support that a complex contract with elaborated clauses and competent contract management are necessary and essential elements of IT outsourcing contract dimension. This result is consistent with the literature on contractual complexity, especially those supported by TCT (e.g., [6,26]), and the studies on contract management in IT outsourcing (e.g., [22,73]). This result further proves that studies stressing the importance of contract issues in IT outsourcing without distinguishing contract itself and contract management is inappropriate.

When being asked about how IT outsourcing success was measured in each individual company, both interviewees gave similar responses. Cost reduction was not the number one criterion to evaluate IT outsourcing success. Instead, achieving necessary technological resources (including human resources) was the top objective. As commented by the TAL executive, *“cost reduction is not the major reason for outsourcing/offshoring; instead, seeking for high-quality and professional deliveries, and gaining necessary IT skills not available internally are the main objectives.”* Similarly, the PCB executive said, *“We are quite cautious in outsourcing IT (especially the core IT), since we do*

not think there is any strategic or economic issues involved yet. We care more about whether we can acquire necessary technical resources and minimize total cost of ownership in the long run.”

The above finding is however different from the literature [32,35,52], which continuously addressed that IT outsourcing success is measured from the satisfaction of benefits that a client company could acquire from an IT outsourcing engagement. The special characteristics of the locations where the cases were conducted could give some possible explanations of the current results. In Hong Kong, on one hand, the cost of outsourcing IT to a local service provider is usually high; even though they choose to do near-shoring (like what TAL did), it is still expensive compared with outsourcing to other further-away but low-cost and IT labor-intensive regions. On the other hand, Hong Kong's pillar industries include finance, real estates, logistics and services. Though Hong Kong has an IT industry, the business scopes of most companies in the industry are largely focusing on sales, marketing and after-sales services. In such situation, companies in Hong Kong have to outsource IT to the near-shore service providers with a purpose to acquire necessary technical resources which may be short in Hong Kong. For China, as shown in the PCB's case, many companies could not save cost from outsourcing as western countries do. What is more, due to the cultural, security and policy issues, they are usually not willing to outsource core ITs to the third-party service providers. This means, they are not yet ready to use IT outsourcing as a strategic tool. This result is consistent with Qu and Pinsonneault's [66] recent results that the maturity of the IT-related legal system in a country is positively associated with the decision of IT outsourcing. In countries where there lacks well-established laws and regulations governing IT-related activities, firms may have more concerns about the security issues and would be less likely to adopt IT outsourcing. Thereby, under such a context, gaining technical expertise to help develop/maintain peripheral IT applications becomes the major purpose of outsourcing.

5.2.3. Summary of case analysis results

In summary, the case analysis results reveal a similar (cross-case) pattern [20]. As suggested by Yin [80], in analytic generalization, if two or more cases are shown to support the same theory, replication may be claimed. The replication logic of the two cases is thus summarized and listed below. First, both relationship dimension and contract dimension are positively related with IT outsourcing success, and contract dimension is the determinant of relationship. These results are consistent with the literature on relationship and contract issues of IT outsourcing using the theories of SET, RET, TCT and especially RGT. The results concur with the findings of extant research focusing on the governance mechanism of IT outsourcing relationships, which emphasize that both relationship and contract are necessary and effective governance mechanisms in managing IT outsourcing deals. Second, regarding the formation of relationship and contract dimensions, both cases supported the original assumptions that 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. In terms of the measurement of IT outsourcing success, the results of the current study are however different from the literature. In Hong Kong and China where the current study were conducted, gaining strategic and economic benefits were not the strongest motivation of IT outsourcing, instead, achieving technological resources (technological benefits) was a major criterion to measure IT outsourcing success. The case analysis results (replication logic and pattern matching results) are summarized in Table 5.

6. Contributions, limitations and future research

6.1. Contributions

The main theoretical contribution of this research lies in the development and use of a “relationship–contract” framework to investigate the determinants of IT outsourcing success. To the best knowledge of the authors, it is among the first to put both relationship and contract dimensions in one integrated framework, and to explore the effects of these two seemingly opposite influencing factors on IT outsourcing success. From the relational governance perspective, the findings suggest that both relationship and contract are indispensable governance mechanisms in directing IT outsourcing engagement. It thus reinforces the suggestion by Fitzgerald and Willcocks [23] that partnership issues in IT outsourcing must be considered only in conjunction with contractual arrangement. It also extends the view propagated by Poppo and Zenger [65] that formal contracts and relational governance function as complements rather than substitutes.

The second contribution lies in exploring the components of the three constructs. For relationship dimension, there are inconsistencies in the literature in constructing the components of this construct. The description and findings of the case analysis provide evidence to support that trust, commitment, communication quality and knowledge sharing are influential factors in this dimension. As to the contract dimension, the present study is among the first to divide this dimension into two elements (contractual complexity and contract management) and depict the characteristics and process in IT outsourcing contractual activities. Different from the extant literature, IT outsourcing success is found to be mainly evaluated by the technological benefits gained through IT outsourcing activities. This inconsistent result may reflect the specific situations of Hong Kong and China, where the current study was conducted. This finding fills in the gap in the literature on how to assess IT outsourcing success outside western countries where IT outsourcing environment/ practice is relatively immature.

The third contribution comes from the use of theories. Since this study involves the elements of both relationship and contract, multiple theories (e.g., exchange, contract, economic and governance theories) from different domains (e.g., Management, Marketing, Economics, and Information Systems) were used to explain the complex phenomenon under investigation. IT outsourcing research is not adequate to be explained by any single theory, we hope the theories used in their

Table 5
Case analysis results.

Construct/proposition	TAL	PCB
P1: Relationship dimension → IT outsourcing success	Support	Support
P2: Contract dimension → IT outsourcing success	Support	Support
P3: Contract dimension → Relationship dimension	Support	Support
Relationship dimension (consisted of trust, commitment, knowledge sharing and communication quality)	Support	Support
Contract dimension (consisted of contractual complexity and contract management)	Partially support	Partially support
IT outsourcing success (consisted of strategic, economic and technological benefits gained)		

Note: TAL = TAL Apparel Limited (Hong Kong).

PCB = Pepsi Cola Beverage Company Limited (Guangzhou).

combination could spark more interest for IS researchers in conducting IT outsourcing research.

For practice, by using descriptive case studies, this research describes the possible situation IT executives might face in their IT outsourcing activities. The results can be employed as a general guidance of IT outsourcing operations for (at least) organizations located in Hong Kong and China where the current study was conducted. To be specific, this research emphasizes the importance of both relationship and contract in successful IT outsourcing. Relationship dimension consisting of trust, commitment, knowledge sharing and communication quality is a critical factor in determining IT outsourcing's fate, no matter whether IT outsourcing occurs in eastern or western culture. IT executives could evaluate whether their outsourcing relationship is satisfactory by checking the four critical sub-dimensions. Besides relationship dimension, contract dimension also plays an important role in promoting a satisfactory relationship and IT outsourcing success. Contractual complexity and contract management both take an important role in this dimension. Without a precise, complete and well-balanced contract, IT outsourcing relationship could not be effectively governed at its early stage; and without a careful execution and management of contract in daily operations, IT outsourcing relationship could not be sustained in the long run. Therefore, contract is the base of relationship, and a satisfactory relationship contributes to the final success of IT outsourcing. In sum, this research removes executives' doubts about employing both relationship and contract (traditionally opposite mechanisms) as governance tools in managing IT outsourcing activities.

6.2. Limitations and future research

As with all studies, there are limitations in the current research. The first limitation lies in the use of a descriptive case study methodology. Although descriptive case studies could provide descriptive information regarding the research issues, they are not able to facilitate in understanding the causal relationships between constructs or the in-depth explanations of phenomena under investigation. An explanatory case study is therefore needed to further test the proposed relationship in the research framework. What is more, a quantitative study (e.g., conducting a large scale survey) could provide more empirical support and methodological triangulation for the propositions or the formation of constructs in the current research.

The second limitation is also related to the design of the descriptive case studies. Though the reliability of the case studies was supported by the use of case study protocol, the construct validity is yet to be confirmed. Yin [80] proposed three remedies to ensure construct validity in case studies: using multiple sources of evidence, establishing a chain of evidence and having a draft case study report viewed by key informants. In this research, the chain of evidence was maintained, the draft report was reviewed by the key informants, but we were unable to collect data by using multiple sources especially multiple informants to analyze the case results (though the project reports/documents were used to facilitate the case writing). The major reason was that the research topic involves a high level of business sensitivity, especially the relationship and contract issues; it is difficult to access other key informants to address the related topics. Hence, to safeguard the construct validity, future studies should invite multiple informants and collect data from multiple sources to get a richer context and deeper analysis of the current research issues.

Third, as suggested by Poppo and Zenger [65] and Goo et al. [31], the relationship between contractual control and relational governance is complementary, which means that there may be a bi-directional relationship between these two constructs in the research framework. However, in the present study, we only explored one-directional relationship starting from contract to relationship. Further research using longitudinal data or a quantitative research model with causal relationships will be needed to further test these bi-directional relationships.

Fourth, this study was conducted in Hong Kong and China, where the maturity level of IT outsourcing practice is considered not as high as many of the developed countries in the West. Cautions need to be paid when interpreting the results to the context of other geographical locations.

Lastly, since the evidence of the case studies were collected from the clients' perspective, there was a lack of understanding of the view from the service provider's perspective. What did service providers think about the relationship or contract issues, and how did they evaluate IT outsourcing success? What were the differences of perceptions between service providers and client companies? These are the issues that could be addressed in future research.

7. Conclusions

Using a descriptive case study approach, this research attempts to fill a gap in the literature on IT outsourcing research. It brings theories from Economics, Information Systems, Marketing and Management fields to the IT outsourcing context and investigate the effects of the two seemingly opposite dimensions or governance mechanisms on IT outsourcing success. It is among a few studies to explore the dimensionalities of relationship, contract, and IT outsourcing success and the relationships among them. The proposed framework consisting of the abovementioned constructs was examined through two descriptive case studies. The results show that contract is an important underpinning of relationship, and both relationship and contract dimension have a positive impact on IT outsourcing success. We hope that this study can serve as a stepping stone for further research in this important and interesting area.

References

- [1] S. Alborz, P.B. Seddon, R. Scheepers, A model for studying IT outsourcing relationships, Proceedings of the 7th Pacific Asia Conference on Information Systems, 10–13, July, Adelaide, South Australia, 2003.
- [2] J.C. Anderson, J.A. Narus, A model of distributor firm and manufacturer firm working partnerships, *Journal of Marketing* 54 (1) (1990) 42–58.
- [3] A. Ariño, J.J. Reuer, Designing and renegotiating strategic alliance contracts, *The Academy of Management Executive* 18 (3) (2004) 37–48.
- [4] J. Barthélemy, The seven deadly sins of outsourcing, *The Academy of Management Executive* 17 (2) (2003) 87–98.
- [5] J. Barthélemy, The hard and soft sides of IT outsourcing management, *European Management Journal* 21 (5) (2003) 539–548.
- [6] J. Barthélemy, B.V. Quélin, Complexity of outsourcing contracts and ex post transaction costs: an empirical investigation, *Journal of Management Studies* 43 (8) (2006) 1775–1797.
- [7] I. Benbasat, D.K. Goldstein, M. Mead, The case research strategy in studies of Information Systems, *MIS Quarterly* 11 (3) (1987) 369–386.
- [8] P.M. Blau, *Exchange and Power in Social Life*, Wiley, New York, 1964.
- [9] S. Blumenberg, D. Beimbom, W. Koenig, Determinants of IT outsourcing relationships: a conceptual model, Proceedings of the 41st Hawaii International Conference of System Sciences, Big Island, Hawaii, USA, 2008.
- [10] C. Cellings, Outsourcing relationships: the contract as IT governance tool, Proceedings of the 40th Hawaii International Conference of System Sciences, Big Island, Hawaii, USA, 2007.
- [11] Y.Y. Chen, A. Bharadwaj, An empirical analysis of contract structures in IT outsourcing, *Information Systems Research* 20 (4) (2009) 484–506.
- [12] V. Choudhury, R. Sabherwal, Portfolios of control in outsourced software development projects, *Information Systems Research* 14 (3) (2003) 291–314.
- [13] T.D. Clark, R.W. Zmud, G.E. McCray, The outsourcing of information services: transforming the nature of business in the information industry, *Journal of Information Technology* 10 (1995) 259–267.
- [14] Computerworld, Outsourcing and the strong CIO, April, 30, 2007 (Assessing date: March, 16, 2008).
- [15] Computerworld, Barclays drops £400m Accenture deal, <http://www.computerworld.com/news/outsourcing/18267/barclays-drops-400m-accenture-deal/> 2010 (Assessing date: October 5, 2010).
- [16] K.S. Cook, Exchange and power in networks of interorganizational relations, *The Sociological Quarterly* 18 (1977) 62–82.
- [17] W.L. Currie, L.P. Willcocks, Analyzing four types of IT sourcing decisions in the context of scale, client/supplier interdependency and risk mitigation, *Information Systems Journal* 8 (20) (1998) 119–143.
- [18] P.R. Devados, S.L. Pan, J.C. Huang, Structural analysis of e-government initiatives: a case study of SCO, *Decision Support Systems* 24 (3) (2003) 253–269.

- [19] J. Dibbern, T. Goles, R. Hirschheim, B. Jayatilaka, Information systems outsourcing: a survey and analysis of the literature, *The Data Base for Advances in Information Systems* 35 (4) (2004) 6–102.
- [20] L. Dubé, G. Paré, Rigor in information systems positivist case research: current practices, trends, and recommendations, *MIS Quarterly* 27 (4) (2003) 597–635.
- [21] F.R. Dwyer, P.H. Schurr, S. Oh, Developing buyer-seller relationships, *Journal of Marketing* 51 (1987) 11–27.
- [22] D.F. Feeny, L.P. Willcocks, Core IS capabilities for exploiting information technology, *Sloan Management Review* 39 (3) (1998) 9–21.
- [23] G. Fitzgerald, L. Willcocks, Contracts and partnerships in the outsourcing of IS, in: J.J. Degross, S.L. Huff, M.C. Munro (Eds.), *Proceedings of the 15th International Conference on Information Systems*, 1994, pp. 91–98, (Vancouver, British Columbia).
- [24] U. Flick, *An Introduction to Qualitative Research*, 4th ed. Sage Publications, 2009.
- [25] C. Forelle, J.P. Morgan ends accord with IBM, *Wall Street Journal* (Eastern ed.) (2004) A.3.
- [26] T.W. Gainey, B.S. Klaas, The outsourcing of training and development: factors impacting client satisfaction, *Journal of Management* 29 (2) (2003) 207–229.
- [27] T. Goles, W.W. Chin, Information systems outsourcing relationship factors: detailed conceptualization and initial evidence, *The Database for Advances in Information Systems* 36 (4) (2005) 47–67.
- [28] T. Goles, *The Impact of the Client-Vendor Relationship on Outsourcing Success*, Ph. D. Dissertation, University of Houston, 2001.
- [29] J. Goo, R. Kishore, K. Nam, H.R. Rao, Y. Song, An investigation of factors that influence the duration of IT outsourcing relationships, *Decision Support Systems* 42 (2007) 2107–2125.
- [30] J. Goo, D. Huang, P. Hart, A path to successful IT outsourcing: interaction between service-level agreements and commitment, *Decision Sciences* 39 (3) (2008) 469–506.
- [31] J. Goo, R. Kishore, H.R. Rao, K. Nam, The role of service level agreements in relational management of information technology outsourcing: an empirical study, *MIS Quarterly* 33 (1) (2009) 119–145.
- [32] V. Grover, M.J. Cheon, J.T.C. Teng, The effect of service quality and partnership on the outsourcing of Information Systems functions, *Journal of Management Information Systems* 12 (4) (1996) 89–116.
- [33] R. Gulati, Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances, *Academy of Management Journal* 58 (1) (1995) 85–112.
- [34] J.K. Halvey, B. Melby-Murphy, *Information Technology Outsourcing Transactions: Process, Strategies, and Contracts*, John Wiley and Sons, New York, 1995.
- [35] H.S. Han, J.N. Lee, Y.W. Seo, Analyzing the impact of a firm's capability on outsourcing success: a process perspective, *Information Management* 45 (2008) 31–42.
- [36] J. Harris, K. Hale, R.H. Brown, A. Young, C. Morikawa, *Forecast: Outsourcing Worldwide Forecast Database, 2000–2013*, Gartner, 2009.
- [37] J. Heide, Interorganizational governance in marketing channels, *Journal of Marketing* 58 (1994) 71–85.
- [38] J. Heide, G. John, Do Norms Matter in Marketing Relationships? *Journal of Marketing* 56 (2) (1992) 32–44.
- [39] J.B. Heide, A.S. Miner, The shadow of the future: effects of anticipated interaction and frequency of contact on buyer-seller cooperation, *Academy of Management Journal* 35 (2) (1992) 265–279.
- [40] M.T. Holden, T. O'Toole, A quantitative exploration of communication's role in determining the governance of manufacturer-retailer relationships, *Industrial Marketing Management* 33 (2004) 539–548.
- [41] G.C. Homans, *Social behavior: Its Elementary Forms*, Harcourt Jovanovich, New York, 1961.
- [42] IDC, *China IT outsourcing 2007–2011 forecast and analysis*, <http://www.idc.com/getdoc.jsp?containerId=CN221106P2007> (Assessing date: March 21, 2008).
- [43] T. Kern, The gestalt of an information technology outsourcing relationships: an explanatory analysis, *Proceedings of the 18th International Conference on Information Systems*, 1997, pp. 37–58.
- [44] T. Kern, K. Blois, Norm development in outsourcing relationships, *Journal of Information Technology* 17 (2002) 33–42.
- [45] T. Kern, L. Willcocks, Exploring information technology outsourcing relationships: theory and practice, *The Journal of Strategic Information Systems* 9 (2000) 321–350.
- [46] T. Kern, L. Willcocks, Exploring relationships in information technology outsourcing: the interaction approach, *European Journal of Information Systems* 11 (2002) 3–19.
- [47] R. Klepper, The management of partnering development in IS outsourcing, *Journal of Information Technology* 10 (4) (1995) 249–258.
- [48] R.W. Klepper, W.O. Jones, *Outsourcing Information Technology, Systems and Services*, Prentice Hall Englewood Cliffs, NJ, 1997.
- [49] M.C. Lacity, R.A. Hirschheim, The information systems outsourcing bandwagon, *Sloan Management Review* 35 (1) (1993) 73–86.
- [50] M.C. Lacity, L.P. Willcocks, Relationships in IT outsourcing: a stakeholder perspective, *Framing the Domains of IT Management: Projecting the Future through the Past*, Pinnaflex Education Resources, Cincinnati, OH, 2000, pp. 355–384.
- [51] J.N. Lee, The impact of knowledge sharing, organizational capability, and partnership quality on IT outsourcing success, *Information Management* 38 (2001) 323–335.
- [52] J.N. Lee, Y.G. Kim, Effect of partnership quality on IS outsourcing success: conceptual framework and empirical validation, *Journal of Management Information Systems* 15 (4) (1999) 29–61.
- [53] J.N. Lee, M.Q. Huynh, R.C.W. Kwok, S.M. Pi, IT outsourcing evolution – past, present and future, *Communications of the ACM* 46 (5) (2003) 84–89.
- [54] J.N. Lee, M.Q. Huynh, R. Hirschheim, An integrative model of trust on IT outsourcing: examining a bilateral perspective, *Information Systems Frontiers* 10 (2) (2008) 145–163.
- [55] S.M. Lipset, *Social Structure and Social Change*, in: P.M. Blau (Ed.), *Approaches to the Study of Social Structure*, The Free Press, New York, 1975.
- [56] I.R. Macneil, *The New Social Contract: An Inquiry into Modern Contractual Relations*, Yale University Press, New Haven, 1980.
- [57] J.Y. Mao, J.N. Lee, C.P. Deng, Vendors' perspective on trust and control in offshore information systems outsourcing, *Information Management* 45 (7) (2008) 482–492.
- [58] F.W. McFarlan, R.L. Nolan, How to manage an IT outsourcing alliance, *Sloan Management Review* 36 (2) (1995) 9–23.
- [59] McKinsey, *Can China compete in global IT outsourcing*, http://www.mckinsey.com/client-service/bto/pointofview/pdf/MoIT4_ChinaOuts.pdf (Assessing date: May 12, 2010).
- [60] J. Mohr, R. Spekman, Characteristics of partnerships success: partnership attributes, communication behavior, and conflict resolution techniques, *Strategic Management Journal* 15 (1994) 135–152.
- [61] R.M. Morgan, S.D. Hunt, The commitment-trust theory of relationship marketing, *Journal of Marketing* 58 (1994) 20–38.
- [62] M.D. Myers, *Qualitative Research in Business & Management*, Sage Publications, Thousand Oaks, CA, 2009.
- [63] M. Nyrhinen, T. Dahlberg, Is Transaction Cost Economics Theory Able to Explain Contracts Used for and Success of Firm-wide IT-Infrastructure Outsourcing? *Proceedings of the 40th Hawaii International Conference on System Sciences*, Big Island, Hawaii, USA, 2007.
- [64] P.P. Poon, C. Wagner, Critical success factors revisited: success and failure cases of information systems for senior executives, *Decision Support Systems* 30 (2001) 394–418.
- [65] L. Poppo, T. Zenger, Do formal contacts and relational governance function as substitutes or complements? *Strategic Management Journal* 23 (8) (2002) 707–725.
- [66] W.G. Qu, A. Pinsonneault, Country environments and the adoption of IT outsourcing, *Journal of Global Information Management* 19 (1) (2011) 30–50.
- [67] P.S. Ring, A.H. Van De Ven, Structuring cooperative relationships between organizations, *Strategic Management Journal* 13 (7) (1992) 483–498.
- [68] P.S. Ring, A.H. Van de Ven, Developmental processes of cooperative interorganizational relationships, *The Academy of Management Review* 19 (1) (1994) 90–118.
- [69] S. Rustagi, W.R. King, L.J. Kirsch, Predictors of formal control usage in IT outsourcing partnerships, *Information Systems Research* 19 (2) (2008) 126–143.
- [70] R. Sabherwal, The role of trust in outsourced IS development projects, *Communications of the ACM* 42 (2) (1999) 80–86.
- [71] C. Saunders, M. Gebelt, Q. Hu, Achieving success in information systems outsourcing, *California Management Review* 39 (2) (1997) 63–79.
- [72] J. Scanzoni, Social Exchange and Behavioral Interdependence, in: R.L. Burgess, T.L. Huston (Eds.), *Social Exchange in Developing Relationships*, Academic Press, Inc., New York, 1979.
- [73] Z.Z. Shi, A.S. Kunnathur, T.S. Ragu-Nathan, IS outsourcing management competence dimensions: instrument development and relationship exploration, *Information Management* 42 (2005) 901–919.
- [74] W. Tellis, *Introduction to Case Study*, *The Qualitative Report* 3 (2) (1997).
- [75] T.S.H. Teo, P. Devadoss, S.L. Pan, Towards a holistic perspective of customer relationship management (CRM) implementation: a case study of the housing and development board, singapore, *Decision Support Systems* 42 (3) (2006) 1613–1627.
- [76] W. Trochim, Outcome pattern matching and program theory, *Evaluation and Program Planning* 12 (4) (1989) 355.
- [77] L.P. Willcocks, T. Kern, IT outsourcing as strategic partnering: the case of the UK inland revenue, *European Journal of Information Systems* 7 (1) (1998) 29–45.
- [78] O.E. Williamson, *The Economic Institutions of Capitalism*, Free Press, New York, 1985.
- [79] R.K. Yin, *Applications of Case Study Research*, Sage Publications, Beverly Hills, CA, 1993.
- [80] R.K. Yin, *Case Study Research, Design and Methods*, 3rd ed. Sage Publications, Newbury Park, 2003.
- [81] A. Zaheer, N. Venkatraman, Relational governance as an interorganizational strategy: An empirical test of the role of trust in economic exchange, *Strategic Management Journal* 16 (5) (1995) 373–392.

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