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Abstract

The relationship between the vendor and client in an IT outsourcing arrangement is important to the success of that arrangement (Lacity, Khan, and Willcocks 2009). Most studies have focused on the private sector; however, the government sector tends to do certain things differently (Bozeman and Bretschneider 1986; Gantman 2011). These tendencies are assumed to have little impact on the performance of IT outsourcing arrangements. This preliminary study seeks to address this issue. The study collates, consolidates and categorises these tendencies, then considers how these tendencies could impact on the various 'attributes' and 'processes' of the vendor / client relationship as described in Relational Exchange Theory (Goles and Chin 2005). This understanding will be gained by asking a set of government IT project managers to firstly rank the tendencies and explain how they affect the various facets of the relationship in the management of government IT outsourcing projects.

Keywords government IT, IT outsourcing, IT relationships, Relational Exchange Theory

1   Introduction

IT outsourcing is a mainstream practice in many organizations (Lacity et al. 2009), yet despite its commonplace, it can be problematic for those organizations that source some or all of their IT this way (Dawes, Pardo, Simon, Cresswell, LaVigne, Andersen, and Bloniarz 2004; Gantman 2011; Gordon and Walsh 1997). These ongoing issues are evident in both the private and public sectors, although there is some indication that the issues experienced in each sector are different (Bozeman and Bretschneider 1986).

IT outsourcing is defined as a "significant contribution by external vendors in the physical and/or human resources associated with the entire or specific components of the IT infrastructure in the user organization" (Loh and Venkatraman (1992) p.336). The study of IT outsourcing became a topic of interest to researchers more than two decades ago, from the publication of Loh and Venkatraman (1992) detailing Kodak Corporation's outsourcing its entire IT operation to IBM in 1989. After 25 years of work scholars have a good idea of IT outsourcing, addressing both a wide variety of IT outsourcing decisions and outcomes, but are yet to fully appreciate how best to manage IT outsourcing projects and their risks (Lacity et al. 2009). In general there are two perspectives on managing IT outsourcing, Contracts and Relationships (Goo, Kishore, and Rao 2009). The Contracts perspective was the first to be investigated, followed by the Relationships, and until recently they were considered quite separate, if not opposing, aspects of outsourcing. They are now seen as complementary (Goo et al. 2009).

Government IT outsourcing - that is, governments who outsource their IT to private sector companies (Bozeman and Bretschneider 1986) - is considered to be different to private sector IT outsourcing, with some distinct characteristics particular or pronounced within government IT outsourcing when compared to that of private sector companies (Bozeman and Bretschneider 1986; Bretschneider 1990; Gantman 2011; Gordon and Walsh 1997; Lin, Pervan, and McDermid 2007; Swar, Moon, Oh, and Rhee 2012b). Government IT outsourcing in Australia has a considerable budget of just under $1 billion a year in 2012 (CRN 2012). There is however evidence of failure in government IT outsourcing (Glass 2013; Pennington 2013; Rouse and Corbitt 2002). Moreover, the theoretical aspects of government IT outsourcing are considered understudied (Gantman 2011). This study is concerned with understanding the differences between government and private sector outsourcing and how these difference manifest in the Contracts and Relationships perspective of government IT outsourcing.

2   Background

2.1   Attributes and Processes

Relational Exchange Theory (RET) is a popular approach to encapsulate outsourcing relationships (Macneil 1980; Macneil 1985). RET has been applied to both private sector and government IT outsourcing (Goles and Chin 2005; Swar et al. 2012b).

RET focuses on the two parties involved in an exchange relationship, subject to a contract; however, the contract is insufficient to explain the empirical observations (Goles and Chin 2005). MacNeil explains this contract insufficiency using the concept of "norms" (Macneil 1980). Norms are an expectation of behaviour shared by the parties that are intended to strengthen the relationship (Goles and Chin 2005). Norms control behaviours through moral control and internalization rather than incentives, and define both appropriate and deviant behaviour (Burkert, Ivens, and Shan 2012). A contract norm is simply a norm in the context of the contract, and for a given contract norm, there are different modes of exchange depending on the different manifestations of the contract norm. Contract norms can be either discrete or relational, depending on where they fall in the discrete – relational spectrum (Kaufmann and Dant 1992).

Contract norms can be classified into attributes ("inherent characteristics or properties that contribute to the functionality and harmony of the relationship"), and processes ("the means by which attributes are developed") (Goles and Chin 2005, p.52-7). Goles and Chin (2005) classified the contract norms they uncovered in the literature up until 1999. We applied the same approach and sub-categories to the literature since then, as set out in Table 1.

Attributes	Contract norms and references
Commitment	Collaboration (Artz and Norman 2002); Commitment (Artz and Norman 2002), (Perrin and Pervan 2005), (Swar et al. 2012a), (Blumenberg et al. 2008), (Yaqub

	and Hussain 2013); Continuity expectation (Kim and Chung 2002), (Kim and Chung 2003); Forbearance (Blumenberg et al. 2008); Joint commitment (Balaji and Brown 2010); Role integrity (Kim and Chung 2002), (Kim and Chung 2003)
Consensus	Congruence (Blumenberg et al. 2008); Consensus (Blumenberg et al. 2008); Mutual understanding (Blumenberg et al. 2008), (Swar et al. 2012b); Participation (Kim and Chung 2002); Satisfaction (Perrin and Pervan 2005), (Yaqub and Hussain 2013)
Cultural compatibility	Cultural compatibility (Swar et al. 2012a), (Swar et al. 2012b), (Blumenberg et al. 2008)
Flexibility	Flexibility (Joshi and Stump 1999), (Kim and Chung 2002), (Kim and Chung 2003), (Gottschalk and Solli-Sæther 2005), (Swar et al. 2012a), (Swar et al. 2012b), (Goo et al. 2009), (Blumenberg et al. 2008)
Inter-dependence	Conflict (Perrin and Pervan 2005), (Blumenberg et al. 2008); Interdependence (Swar et al. 2012a); Restraint (Kim and Chung 2002)
Trust	Overall trust (Blumenberg et al. 2008); Relationship trust (Blumenberg et al. 2008), (Balaji and Brown 2010); Solidarity (Kim and Chung 2002), (Kim and Chung 2003), (Joshi and Stump 1999), (Gottschalk and Solli-Sæther 2005), (Goo et al. 2009); Trust (Perrin and Pervan 2005), (Swar et al. 2012a), (Swar et al. 2012b), (Yaqub and Hussain 2013)
Processes	
Communication	Communication (Perrin and Pervan 2005), (Swar et al. 2012a), (Swar et al. 2012b); Communication quality (Blumenberg et al. 2008); Communication strategies (Artz and Norman 2002); Confidentiality (Swar et al. 2012b); Formal communication (Blumenberg et al. 2008); Influence (Blumenberg et al. 2008); Informal communication (Blumenberg et al. 2008); Information and knowledge sharing (Swar et al. 2012a); Information exchange (Joshi and Stump 1999), (Gottschalk and Solli-Sæther 2005), (Goo et al. 2009); Information sharing (Kim and Chung 2002), (Swar et al. 2012b)
Conflict resolution	Conflict handling (Swar et al. 2012b); Conflict resolution (Swar et al. 2012a); Monitoring of the vendor (Kim and Chung 2002), (Kim and Chung 2003)
Coordination	Coordination (Swar et al. 2012a)
Cooperation	Cooperation (Swar et al. 2012a), (Perrin and Pervan 2005), (Swar et al. 2012b)
Integration	Strategic fit (Blumenberg et al. 2008)

Table 1: Classification from attributes and processes in Goles and Chin (2005)

The Goles and Chin (2005) classification scheme accommodated all the additional contract norms we found, suggesting that their scheme is still current and suitable. Of note, the more recent studies tended to focus heavily on two categories of norms - Commitment and Trust, and Communication.

It is also apparent that the Goles and Chin (2005) scheme applies equally as well to government IT outsourcing norms as to private sector IT outsourcing norms, despite some specific differences between the norms themselves.

2.2 Government IT outsourcing

A number of studies have analysed public sector and government IT outsourcing by comparing it with private sector IT outsourcing (Bozeman and Bretschneider 1986; Gantman 2011; Gordon and Walsh 1997; Lin et al. 2007). A review of these works show that while there are similarities in the practices/characteristics of private and outsourcing (e.g. similar concerns with IT cost), there are also many differences between them, for instance government policy, governance structures, differences in the government IT function, and government procurement. The characteristics that are more common or more pronounced in the government than in private sector IT outsourcing we call the "tendencies".

A review of the literature uncovered a broad range of these tendencies. To make sense of this range we classify them according to the level of control that an outsourcing manager would have over that tendency: "Environment", where the manager has little or no control, and "Management" where the

manager has some control. We also classify when in the outsourcing cycle the tendency occurs, divided into the pre-contract, contract, and post-contract phases, following the natural phases of the IT outsourcing project. Table 2 sets out the government sector IT outsourcing tendencies found in the literature.

Environment tendencies	Citation
High levels of accountability and governance in the public sector	(Bozeman and Bretschneider 1986), (Gordon and Walsh 1997), (Bretschneider 1990)
Low level of efficiency in government	(Lin et al. 2007)
High levels of prescription of 'best value' in government	(Lin et al. 2007)
High levels of policy in government	(Gordon and Walsh 1997), (Moon et al. 2014), (Lin et al. 2007)
High levels of legislative protectionism in government	(Gordon and Walsh 1997)
High levels of institutional pressures in government	(Gantman 2011)
High levels of employee sensitivity and opportunity	(Gordon and Walsh 1997)
High level of government mandated to extend services to whole population	(Lin et al. 2007)
Limited length of the funding cycle	(Gordon and Walsh 1997), (Dawes et al. 2004), (Gantman 2011), (Moon et al. 2014)
High levels of stakeholders and competing goals	(Dawes et al. 2004)
High levels of complexity of government	(Swar et al. 2012a), (Moon et al. 2014)
High levels of interdependence of data in government	(Bozeman and Bretschneider 1986), (Bretschneider 1990), (Gordon and Walsh 1997), (Swar et al. 2012a)
High levels of concern for privacy and confidentiality of data in government	(Bozeman and Bretschneider 1986), (Peled 2001)
High levels of inflexibility of the bidding process	(Swar et al. 2012a)
Low levels of trust in public reaction	(Gordon and Walsh 1997)
High levels of cultural influences	(Gordon and Walsh 1997)
High level of public debate in IT management	(Gordon and Walsh 1997), (Swar et al. 2012a)
High level of risk aversion for government	(Dawes et al. 2004)
High levels of employment regulations for government IT workers	(Gantman 2011)
Greater antitrust concerns	(Gordon and Walsh 1997)
Pre-contract management tendencies	
Greater rigorous and open supplier selection process	(Swar et al. 2012a)
Rigorous project management for government	(Gordon and Walsh 1997)
Provision for continuity of involvement across the project for government	(Lin et al. 2007), (Bretschneider 1990)
Less opportunity for government IT workers	(Gantman 2011), (Swar et al. 2012a)
Contract management tendencies	
Lower level of knowledgeability about IT from senior staff	(Gantman 2011)

Government IT leans on external assistance from vendors	(Lin et al. 2007), (Gantman 2011), (Willcocks et al. 1999), (Peled 2001)
Greater regulated procurement in government	(Dawes et al. 2004), (Gantman 2011), (Lin et al. 2007), (Willcocks et al. 1999)
Incomplete contracting in government IT	(Willcocks et al. 1999)
More distributed decision-making power in government	(Swar et al. 2012a), (Gordon and Walsh 1997), (Dawes et al. 2004), (Bretschneider 1990), (Lin et al. 2007), (Moon et al. 2014)
IT is treated as an undifferentiated commodity in government	(Willcocks et al. 1999)
Less monitoring and evaluating performance in government	(Gantman 2011)
Under-managing intellectual property and trade practices	(Gordon and Walsh 1997)
Constraints in managing documents and information exchange	(Gantman 2011), (Moon et al. 2014)

Table 2: The Environment, Pre-contract management, and Contract management tendencies

No management tendencies were found in the post-contract phase. The Environment tendencies comprised 60% of the overall tendencies; these tendencies were the ones were the manager has little or no control. Thus the manager had influence in only around 40% of tendencies.

2.3   The tendencies can affect the attributes and processes

Some tendencies could affect the relationship side, in the sense of Goo et al. (2009), and thus affect the attributes and/or processes. However, some tendencies could affect the contract side; others, neither the contracts nor the relationships. We need to determine which tendencies affect specifically the relationships.

How these tendencies affect the attributes and processes is a complicated matter. Take for example the pre-contract management tendency "Less opportunity for government IT workers" (Table 2 above). It could be that the tendency affects the attributes and processes by shifting "Commitment" because it signals an unwillingness to devote resources to sustain an ongoing relationship (governments often won't offer competitive salaries to high quality IT professionals (Gantman 2011)). Alternatively, the tendency could shift "Consensus" by downgrading general agreement between the parties, or it could shift "Cultural compatibility" as governments ignore the IT workers' beliefs and values as well as impacting on "Flexibility" as government is unwilling to make adaptions in IT workers' salary. Similar difficulties exist for other tendencies.

Thus the research question is: **How do the tendencies affect the attributes and processes?**

3   Proposed Methodology

We propose a multi-phase project to address the research question. Firstly a pilot study will be undertaken to refine our understanding of the problem and clarify / develop the constructs necessary for the next phases. This pilot stage will involve government IT outsourcing managers who have had at least five years directly managing government IT outsourcing projects, from a range of different IT outsourcing projects such as a mix of large and small IT outsourcing projects, or a mix of ranges of applications such as software development projects or infrastructure projects. We expect the number of respondents will be around 15 government IT managers. The study will use the Delphi method (Skinner, Nelson, Chin, and Land 2015).

The government IT outsourcing managers will be asked to identify the tendencies they 'see' in their management activities and to rank those tendencies in terms of frequency of occurrence and importance. Once a ranked list has been established, then the participants will asked to assign the tendencies to onto the attributes and processes outlined by Goles and Chin (2005). The result will show whether the tendencies are on the discrete or relational end of the contract norm spectrum and thus determine the different effects on relationships in government IT outsourcing compared to the private sector.

It is envisaged that the second phase will be a quantitative analysis based on the understanding obtained from the pilot study that will involve a wide range of government IT outsourcing managers.

4 Conclusion

The paper's contribution to practice is to identify and classify the tendencies, and to explore the impact of the tendencies on the attributes and processes. In addition the contribution to theory of the paper is to advance the body of knowledge of government IT outsourcing.

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