Establishing Preconditions for Spanning the Boundaries in Public Private IT Megaprojects

Roman Beck, Johann Wolfgang Goethe University, Germany
Oliver Marschollek, Johann Wolfgang Goethe University, Germany
Robert Wayne Gregory, Johann Wolfgang Goethe University, Germany

ABSTRACT

Inter-organizational cooperations between public and private partners, called public private partnerships (PPP), are increasingly gaining more importance concerning renewal, standardization, and optimization of the information technology (IT) infrastructure of public sector organizations. Reasons for this trend include the search for partners with necessary technological and innovative knowledge of sourcing IT and the identification of cost-saving potentials. Unfortunately, IT-PPP-cooperations are particularly susceptible to failure due to the clash of different cultures. Divergent understandings, expectations, and pressure from the relevant stakeholders hinder a working partnership. Therefore, in this exploratory, qualitative single-case study from the German TollCollect IT megaproject, the authors draw on findings from boundary spanning literature to explain how establishing preconditions for boundary spanning and actively bridging the gap between the partners, moderated by external stakeholder support, affects the formation of mutual trust and success of an IT-PPP-megaproject.

Keywords: Boundary Spanning, Information Technology, IT Megaprojects, Public Private Partnerships, Trust Formation

INTRODUCTION

Public sector organizations are continuously searching for opportunities of optimizing the effectiveness and efficiency of their administrative processes. These information-based processes, such as the request for a valid identification card, are the core business of public administration work. Carrying out these processes requires special administrative, regulatory, and legal know-how. Hence, outsourcing the provision of these services to a private sector agent (Dibbern, Goles, Hirschheim, & Jayatilaka, 2004) is no valid option for public sector organizations due to the knowledge gap of private industry of public structures and the responsibility of public administration to deliver administrative services to the citizens themselves (Hodge & Greve, 2007). However, the increasing demand for delivering.....
innovative information technology (IT)-based services to citizens and the lack of technological and innovative know-how on the public side requires the exchange and cooperation with private companies to acquire the necessary IT resources. For these reasons, involving the sourcing of necessary technological know-how and IT infrastructure optimization of public sector organizations, the public administration often enters into technological alliances with private industry partners, called public private partnerships (PPP) (Reijniers, 1994). Considering the necessity of cooperation, PPPs allow for an opportunity for long-term, strategic cooperation focused on innovation using the core competences of both sides (Trafford & Proctor, 2006). Furthermore, this approach creates the possibility of realizing cost reductions, sharing risks, and raising new financial models for the public administration. In addition, PPPs are also gaining importance in IT megaprojects since increasingly public infrastructure projects are large IT projects rather than brick and mortar infrastructure projects as in the past (Brooks, 1987; Venugopal, 2005). IT megaprojects are unique, innovative multibillion-dollar investments which are affected by political and public stakeholders (Davies, Gann, & Douglas, 2009; Flyvbjerg, Bruzelius, & Rothengatter, 2005) and often do not meet the desired goals (Flyvbjerg et al., 2005; Nelson, 2007). Although the number of research contributions on IT project management practices in a purely private context (Cule, Schmidt, Lyytinen, & Keil, 2000; Kappelman, McKeeman, & Zhang, 2006; Sumner, Bock, & Giamartino, 2006) and success factors in the context of PPPs is increasing (Jacobsen & Choi, 2008; Jost, Dawson & Shaw, 2005; Trafford et al., 2006), we still have a lack of understanding of how IT-PPP-megaprojects can be successfully turned around in case of a failing course of action.

Hence, we conducted an exploratory, qualitative single-case study of the German TollCollect case to analyze how this IT-PPP-megaproject, which was on the verge of failure, finally succeeded. Preliminary research results and the initial setting of the project were already discussed in Beck and Möbs (2006). TollCollect is the German satellite-based toll collecting system for heavy trucks. With more than €3 billion of revenue streams per year and €2 billion costs for development and installation of the system, the TollCollect project is not only the single-largest PPP project ever carried out in Germany, but also the largest IT development project in Europe in the years from 2002 to 2005. Public and private partners in this project had to cope with challenges that gradually led to an initial breakdown of cooperation. However, this downturn was stopped by spanning the boundaries and reestablishing the partnership through the formation of trust between public and private parties leading to a successful implementation of the TollCollect system. Therefore, this case offered an interesting opportunity to answer the following research question: “How can the establishment of preconditions for boundary spanning and boundary spanning activities themselves reestablish a working partnership in IT-PPP-megaprojects?”

Public private cooperation requires bridging the gap of different cultural environments. Recent research on public private megaprojects has extended the external view of ongoing difficulties during their realization (Flyvbjerg et al., 2005) concerning project performance, budget and on-time delivery to an internally-focused view of actual practices in the light of project design and culture (van Marrewijk, Clegg, Pitsis, & Veenswijk, 2008). The cultural distance in these partnerships necessitates the exploration of boundary spanning practices for establishing a working partnership. Boundary spanning in this context deals with understanding, acknowledging, and respecting the different interests, values, norms, expectations, and regulations of the different cultural environments (Williams, 2002). Organizational research so far has focused on spanning the boundaries within organizations, between organizations, and between organizations and their environment (Leifer & Delbecq, 1978; Santos & Eisenhardt, 2005). Prior information systems (IS) research has mainly concentrated on evaluating the effects of the use of IT for boundary spanning in
[www.igi-global.com/chapter/technology-trust-b2b-electronic-commerce/6113?camid=4v1a](www.igi-global.com/chapter/technology-trust-b2b-electronic-commerce/6113?camid=4v1a)

User Developed Applications and Information Systems Success: A Test of DeLone and McLean’s Model
[www.igi-global.com/article/user-developed-applications-information-systems/1235?camid=4v1a](www.igi-global.com/article/user-developed-applications-information-systems/1235?camid=4v1a)