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Thomas A. Fischer University of Bern, Bern, Switzerland, thomas.fischer@iwi.unibe.ch

Beena George University of St. Thomas, Houston, Texas, United States, georgeb@stthom.edu

Rudy Hirschheim Louisiana State University, Baton Rouge, Louisiana, United States, rudy@lsu.edu

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# PERSPECTIVES ON THE ADOPTION / REJECTION OF INNOVATIVE TECHNOLOGIES REVISITED – INSIGHTS FROM THE IS OUTSOURCING CONTEXT

- Thomas A. Fischer, University of Bern, Institute of Information Systems, Engehaldenstasse 8, 3012 Bern, Switzerland, thomas.fischer@iwi.unibe.ch
- Beena George, University of St. Thomas, Cameron School of Business, 3800 Montrose, Houston, TX 77006, USA, georgeb@stthom.edu
- Rudy Hirschheim, Louisiana State University, E.J. Ourso College of Business, Nicholson Extension, Baton Rouge, LA 70803-6302, USA, rudy@lsu.edu

# Abstract

Adoption of innovative technologies has been investigated using different theoretical perspectives for many years. In the research field of Management, Abrahamson has suggested four perspectives to explain the adoption / rejection behavior. Similarly, in our field, Fichman has provided us with different adoption perspectives. A review and comparison of these adoption perspectives yields common roots, but also some differences. While revisiting the common roots and integrating the perspectives offered by Abrahamson and Fichman in one framework, we identified two additional perspectives: pushed-selection and transfer perspective. The two additional perspectives seem to be particularly relevant for capturing the adoption decision of innovations in interorganizational relationships. As such, we explore our extended framework in the context of a present innovative technology: information technology (IT) outsourcing governance tools. Our results suggest that a combination of theoretical perspectives is appropriate to explain reasons for their adoption / rejection. This study contributes to adoption research by introducing two new perspectives on the adoption of innovative technologies. The two perspectives offer also important implications for practice.

Keywords: Adoption; Rejection; Innovative Technologies; IT Outsourcing; Governance, Management Fashion

# 1 Introduction

Adoption of innovative technologies has been studied following a dominant perspective, the 'efficientchoice perspective', for many years (Abrahamson, 1991; Fichman, 2004; Rogers, 1995). This perspective explains adoption decisions as a consequence of rational choice. A rational choice assumes that organizations are certain about their goals and preferences as well as about the technical efficiency of the respective innovation (Abrahamson, 1991; Rogers, 1995). During the last two decades, this perspective has been challenged by other perspectives which assume that organizations are uncertain about their goals or about the innovation's efficiency (Abrahamson, 1991; Fichman, 2004). These organizations tend to imitate the adoption decision made by other organizations. Moreover, given the information systems (IS) outsourcing context of this study, considering the influence from outside organizations (e.g., clients influencing their vendors or vice versa) on the decision to adopt / reject innovative technologies has provided us with additional insights.

This paper reviews and integrates the various perspectives on the adoption of innovative technologies suggested by the research fields of Management and Information Systems (i.e., Abrahamson, 1991; Fichman, 2004). Subsequently, this study empirically examines which of the theoretical perspectives is most appropriate to explain the adoption of a current innovative technology: IS outsourcing governance tools. IS outsourcing governance tools are software applications specifically designed to support clients in managing their outsourcing projects. The first of these tools on the market, Digital Fuel and Oblicore, have been introduced in 2000. Today, the adoption of these tools draws a contradictory picture. Though the number of adopters remains low (Blazenet and IAOP, 2012; Hirschheim et al., 2009), the number of tool providers as well as their revenues<sup>1</sup> are constantly growing. Today there are about five to ten tool providers, including Blazent, Janeeva, and Hiperos.

We utilize an exploratory case study to identify the appropriate theoretical perspective explaining the adoption of IS outsourcing governance tools. As such, we investigate the research question: For what reasons do organizations adopt / reject innovative technologies that are designed to manage IS outsourcing relationships?

This study contributes to research and practice in several ways. First, the review of existing adoption perspectives from Management and Information Systems (IS) research and their integration into Abrahamson's (1991) typology suggests two new perspectives for future research. The extended set of adoption perspectives is of special interest for studying the diffusion of technologies in interorganizational collaborations. This also yields implications for practice. Second, we contribute to the field of IS outsourcing in practice and research by introducing an innovative technology.

# 2 Theoretical Perspectives on the Adoption / Rejection of Innovative Technologies

The research on adoption of innovative technologies is well established (cf., Fichman, 2004; Swanson, 1994; Williams et al., 2009). The majority of this research was built on the notion that the decision to adopt or reject<sup>2</sup> an innovation is based on an independent and rational choice (Abrahamson, 1991; Fichman, 2004; March, 1978; Rogers, 1995). This rational choice is directed at finding a suitable and efficient solution for a particular problem. Besides this efficient-choice perspective (also referred to as dominant paradigm) which is largely traced back to early work on innovation diffusion (e.g., Rogers,

<sup>&</sup>lt;sup>1</sup> "Oblicore Joins Inc. 500 List of Fastest-Growing Private Companies" Wireless News, August 28, 2007

<sup>&</sup>lt;sup>2</sup> Rejection in this article is equivalent to non-adoption.

1983), other authors like Abrahamson (1991) and Fichman (2004) have introduced additional perspectives explaining the adoption and rejection of innovative technologies.

Abrahamson (1991) distinguishes between imitation-influence and outside-influence dimension, when describing four perspectives: efficient-choice, forced-selection, fashion, and fad perspective. Similarly, Fichman (2004) describes three comparable theoretical perspectives to study the adoption decision of information technology innovations: dominant paradigm, management fashion, and social contagion. The theoretical perspectives provided by the two authors show some similarities, overlaps, and differences regarding the underlying central reason of the adoption decision. These are presented and compared in Table 1, followed by a brief summary for each perspective.

Perspectives introduced by Abrahamson (1991)	Main reason for adoption decision	Perspectives introduced by Fichman (2004)
Efficient-Choice	Rationality	Dominant Paradigm
Forced-Selection	Pressure	Social Contagion
Fashion	Imitation	Social Contagion
Fad	Initation	Management Fashion

 Table 1.
 Categorization of Adoption Perspectives

The *efficient-choice perspective* assumes that an organization *has little or no uncertainty* regarding its requirements, preferences, or goals as well as the technical efficiency of the respective innovative technology (Abrahamson, 1991; Grandori, 1987). Based on these assumptions, organizations make independent and rational decisions whether to adopt or reject innovative technologies (Abrahamson, 1991). Organizations within a group and with similar goals will then *independent from each other* tend to make the same decisions, e.g., by adopting or rejecting an innovative technology. Fichman (2004) refers to this perspective as the *dominant paradigm*.

Following Abrahamson, the *forced-selection perspective* argues that a *powerful organization* outside a group forces organizations within a group to either reject or adopt a technology (Abrahamson, 1991; DiMaggio and Powell, 1983; Fichman, 2004). This perspective refers to the political environment of an organization. If forced by law, organizations will have little or no choice whether to adopt or reject a certain technology. Hence, the process of diffusion is dependent on the existence and the power of an outside organization (Abrahamson, 1991). In Fichman's (2004) typology, this coercive pressure is part of the *social contagion* perspective.

In the *fashion perspective*, Abrahamson assumes that organizations are *uncertain* in terms of their preferences and goals as well as the technical efficiency of the respective innovative technology (Abrahamson, 1991). Based on this uncertainty, organizations will tend to imitate the exposed actions of other organizations. Hence, the underlying question for these organizations is rather which organization to imitate, than which innovative technology to adopt. These organizations tend to follow *fashion-setters*, i.e., organizations outside a group such as consulting firms (Abrahamson, 1991; Hirsch, 1972). According to this logic, the diffusion process would be as follows: Fashion setting organizations such as consulting companies inspire their clients to trust their choice (or advise) of a certain technology and the clients start to imitate them (Abrahamson, 1991). The fashion perspective has become more generally known as *management fashion* through the works of Abrahamson (1996) and Abrahamson and Fairchild (1999). This (management) fashion perspective is also described by Fichman (2004).

Similar to the fashion perspective, the *fad perspective* explains diffusion based on imitation processes due to *uncertainty* about goals and technical efficiency of the innovation (Abrahamson, 1991; DiMaggio and Powell, 1983; Fichman, 2004). This mimetic behavior is also part of Fichman's (2004) *social contagion* perspective. Contrary to the fashion perspective, the fad perspective does not consider a fashion-setting organization influencing the decision of another organization to adopt an innovation (Abrahamson, 1991). Rather, organizations imitate other peers, i.e., organizations within *the same group*. As an example, organization A implements the same tool as used by organization B.

This is especially the case if organizations A and B are competitors and A imitates B to assure that B will not generate a competitive advantage based on the use of a certain innovative technology.

Beside the aspects of *social contagion* described within the fad and forced-selection perspectives, we identified two further explanations for adoption. These explanations are discussed separately as they form two new perspectives, extending Abrahamson's 2 x 2 matrix. We refer to these as *pushed-selection* and *transfer perspective*.

*Pushed-selection perspective* refers to the "more subtle and less explicit" pressures which may arise from other groups (DiMaggio and Powell, 1983, p. 151). There are three main reasons for being pushed by other groups of organizations. First, a related group of organizations has the necessary power to push an adoption decision. This power reflects dependency, e.g., suppliers in the automotive industry are dependent on their customers (Hart and Saunders, 1998). Hence, the power stems from a group and their relative power to push an adoption decision within another group of organizations (e.g., Premkumar et al., 1994). Second, positive network externalities (Arthur, 1996; Fichman, 2000; Markus, 1987) coming from a technology diffusing among a group of organizations might influence the adoption decision. The advantages of being part of the network may push other organizations to also adopt the respective technology. As an example, if many business applications are only available for a particular platform, companies will need to switch to this new platform to run the applications (Arthur, 1996). Finally, the adoption of interorganizational information systems may also explain the adoption based on push effects. Interorganizational systems electronically link organizations to their business partners (e.g., Lyytinen and Damsgaard, 2011; Premkumar et al., 1994). Hence, the adoption decision of an organization is tightly linked to a collaborating organization which implements an interorganizational system (Fichman, 2000; Hart and Saunders, 1998; Lyytinen and Damsgaard, 2011). In these cases, organizations may be pushed by other organizations to implement a particular technology. If a group of organizations starts to implement interorganizational systems, this adoption has an effect on a related group. Based on these three push mechanisms, this perspective explains the adoption of an innovative technology among a group of organizations which is pushed by a related group of organizations. We use the term *push* to express the rather subtle and less obvious pressures as described by DiMaggio and Powell (1983).

**Transfer perspective** refers to normative pressures arising from the goal of professionalization. This goal is pursued by leveraging social inter-organizational networks. This includes the diffusion of knowledge within "professional networks that span organizations" (DiMaggio and Powell, 1983, p. 152). Hence, knowledge is transferred from one group of organizations to another group. This knowledge exchange may cause imitation processes to diffuse across groups of organizations. Thus, when organizations within one group gain knowledge about an innovative technology which is diffused in another group of organizations, they may *transfer* the innovation to their own group. The knowledge about the diffusion of an innovative technology in another group may be exchanged through professional networks or through market observations.

To integrate the six different described perspectives, we follow Abrahamson's (1991) typology to distinguish an imitation-focus and an outside-influence dimension (Table 2). The imitation-focus dimension separates adoption perspectives following an imitation process from those where imitation does not influence the decision to adopt. Imitation is the consequence of *uncertainty* regarding an organization's goals and technology's efficiency. The outside-influence dimension reflects an organization's independence in making the decision. In this respect, the main distinction made by Abrahamson is between organizations *within* a group, e.g., competitors in the same market, and (*single*) organizations outside a group, e.g., organizations which have the power to force other organizations to adopt a certain technology. To adequately integrate our two new perspectives into the typology of the two dimensions imitation-focus and outside-influence dimension, we add another row to Table 2. This row represents adoption decisions within a group of organizations *influenced by an outside group of organizations* (extension marked in Table 2). We also illustrate the difference in Figure 1.

		Imitation-Focus Dimension			
		Imitation Processes Do Not	Imitation Processes Impel		
		Impel the Diffusion or	the Diffusion or Rejection		
		Rejection	_		
	Organizations Within a Group				
ſ	Determine the Diffusion and	Efficient-choice	Fad		
ior	Rejection Within This Group	Perspective	Perspective		
ens	(see Figure 1a)				
im	Single Organizations Outside a				
e D	Group Determine the Diffusion	Forced-selection	Fashion		
nce	and Rejection Within This Group	Perspective	Perspective		
lue	(see Figure 1b)				
Inf	A Group of Organizations				
de-	Outside a Group Determine the	Pushed-selection	Transfer		
tsi	Diffusion and Rejection Within	Perspective	Perspective		
nC	This Group (see Figure 1c)				



Theoretical Perspectives on the Adoption of Innovative Technologies Based on Abrahamson (1991)



Figure 1. Organizations Influencing the Adoption Behavior of Other Organizations

# 3 Subject of Investigation

We have chosen to analyze an innovation which is not yet diffused among a large population of organizations to assure it has not yet been studied from one of the different adoption perspectives, as this might influence the findings of our study. To account for as many theoretical perspectives as possible, we had to select an innovation which is designed for interorganizational use and might affect more than one group of organizations (cf. pushed-selection and transfer perspective). The innovative technology chosen for this investigation is a set of tools known as IS outsourcing governance tools. These tools are supposed to make IS outsourcing governance easier and more efficient. The tools have first been introduced by DigitalFuel (now VMware) and Oblicore (now CA) in the year 2000 (Hirschheim and George, 2007; Hirschheim et al., 2009). During the last twelve years, further companies (e.g., Janeeva, Enlighta) have joined the market. However, the diffusion of these tools is rather low (Blazenet and IAOP, 2012; Hirschheim et al., 2009). IS outsourcing governance tools aggregate information for the management level (e.g., the sourcing manager) to monitor outsourcing relationships. For this reason, they condense technical information gathered previously by other tools (e.g., infrastructure management tools) and support the exchange of information specific to an outsourcing arrangement (e.g., service levels). Some of these solutions were nominated for innovation prizes such as the Global Sourcing Summit's 'Innovation Award' (Janeeva) or the 'Innovation of the Year' award at the Pink Elephant ITSM Conference (Digital Fuel). Table 3 provides an overview of selected commercially-available IT outsourcing governance tools. The tools differ in their provided capabilities, but they are all designed to improve various aspects of formal and informal outsourcing governance. Tool-supported formal governance results in improved transparency (e.g., automated progress reports) or enhanced on-demand near-time metrics (e.g., performance measures). Informal governance is supported by improving the relationship development based on enhanced communication facilities (e.g., information sharing platforms or discussion forums) (Hirschheim et al., 2009).

Tools	Tool Vendor	References
Business Service Insight	CA (former Oblicore)	Hirschheim &
Enlighta Govern	Enlighta	George (2007);
EquaSiis Enterprise, EquaSiis Workbench	KPMG (former EquaTerra)	Hirschheim et al.
Extended Enterprise Management	Hiperos	(2009); Leimeister
IT Finance, IT Service Level, and IT Vendor Manager	VMware (former Digital Fuel)	et al. (2010);
Janeeva Assurance	Janeeva	IAOP (2010)

Table 3.Selected IS Outsourcing Governance Tools

# 4 Research Design

Abrahamson (1991) explains that more than one perspective may be suitable to explain the adoption behavior of organizations. To examine the extended framework, we chose an exploratory approach. This approach was also used by Malmi (1999) to investigate the diffusion of activity-based costing in light of Abrahamson's theoretical perspectives. In our exploratory research design we explore the reasons for adoption / rejection of an innovative technology at seven different organizations, i.e., cases. An exploratory case study is especially appropriate to investigate "why" and "how" questions (Yin, 2009), such as *why and how organizations decide to adopt / reject an innovative interorganizational technology*.

#### 4.1 Data Gathering

Participating organizations in this study were selected purposefully based on methodological and theoretical considerations. First, for theoretical replication, the decision to adopt should vary among the organizations in our sample (Yin, 2009). Second, each decision (adoption / rejection) should ideally be apparent in more than one case to allow for literal replication (Yin, 2009). Thus, the sample of IS outsourcing clients and service providers was purposefully selected by including adopters and non-adopters (Eisenhardt, 1989; Yin, 2009).

For the purpose of our study, we sought to interview key informants at IT outsourcing client and vendor companies. To ensure that the client companies stem from organizations which are well-informed about innovations in the IT outsourcing context, we approached two large clients about the network of the International Association of Outsourcing Professionals (IAOP). The three other clients were chosen among the leading participants of an annual IT sourcing forum. One service provider was contacted as it is a leading service provider in its country. The interviewee of this company recommended us to another service provider who had also decided to adopt Oblicore.

Table 4 provides an overview of the outsourcing client and vendor companies. The interviews followed semi-structured interview guidelines (see excerpt in Appendix). The interview guideline included general questions about the context, experience, and background of the interviewee and the company. In addition the guideline accounted for the theoretical perspectives presented above. Moreover, the semi-structured nature of the interviews allowed us to give room for additional questions and insights (Eisenhardt, 1989). The average duration of an interview was around 45 minutes.

Most interviews were transcribed. In two cases (the two service providers) we were not allowed to record the interview, but written notes were taken. We complemented the interviews by analyzing other provided documents (e.g., presentation slides, MS Excel spread sheets) and publicly available information about the organizations and tools.

Organization	Description	Role of Interviewee
ENERGY	Large energy company.	IT director
TELCO	Large telecommunication company.	Director for partnership development
FLOWER	European branch of a leading flower delivery	CIO
	company.	
ROAD	Leading company in the area of road construction.	CIO
TRANSPORT	The leading transport and logistics company	Chief of operations management
	within its country.	
TRANSPORT-	This is a captive service provider of	Manager responsible for tool
PROVIDER	TRANSPORT.	implementation
FULLSERVICE-	A full-service outsourcing provider.	Manager responsible for tool
PROVIDER		implementation

Table 4.Interviewed Organizations

#### 4.2 Data Analysis

The interview data gathered by our exploratory case study was carefully analyzed following a threestep approach. First, based on the transcripts, field notes and publicly available information, we created little write-ups of the cases. Second, based on our theoretical considerations, we created an initial list of codes. The codes with which the interview excerpts were grouped and conceptualized basically targeted at the imitation-focus and the outside-influence dimensions of the (extended) framework (see Table 2). Third, the transcribed interviews were carefully read several times. Using NVivo 9 software, each quote indicating evidence for one of the codes was mapped to the NVivo nodes. After completion, the list of coded interview fragments was revisited and checked, whether their assignment was consistent. If not, a reassignment of interview fragments was performed. As our final result, we had an overview over the influence of the six theoretical perspectives on the adoption / rejection behavior in our cases.

# 5 Results

First we present the seven cases in isolation. In each case the theoretical perspectives having influence on the adoption / rejection decision are indicated in brackets. Subsequently, we summarize our findings in Table 5. This summary is followed by a comparison of the adoption behavior to pave the way for the subsequent discussion of our findings.

ENERGY is engaged in outsourcing projects with "about four or five different providers" (ENERGY). ENERGY has worked closely together with different advisors: "recently we brought in an advisor about a year ago and we had another advisor last year to identify, what are the best practices around all of our governance processes" (ENGERGY). Though the client was closely working together with different advisors, none of them recommended the adoption of an IT outsourcing governance tool. Instead, the advisors helped to improve the existing IT outsourcing governance based on the processes and tools at hand. For that purpose, one advisor recommended his self-developed MS Excel-based solution ("tracker"). Main purpose of the tool is to support the "issue and dispute resolution process" (ENERGY) and to track the achievement of service levels. ENERGY was quickly convinced to use the Excel-based "tracker", as "it really reduces some of the manual effort that we had to do" (ENGERGY). Now "it's all build in [the tracker]" (ENERGY). In contrast, compared to this improvement, the additional advantage of using a specialized IT outsourcing governance tool was

judged as too low. The client explained, "to be honest with you, we have not priced out any performance management tools to assist us in our governance processes. Not that we would be opposed to doing so. Just that we believe that we are currently managing in a very efficient manner [e.g., by using the tracker]. So we are not necessarily looking for ways to improve on that. It would be something that maybe we consider when we see a benefit" (ENERGY) (*efficient-choice perspective*). Thus, ENERGY was not convinced that an IT outsourcing governance tool would help to improve the current management, what manifests the efficient-choice perspective to explain the observed adoption behavior.

TELCO has outsourced to "three very large suppliers" (TELCO). The client recognized "that there was going to be the need for some centralized ... software" (TELCO) to manage the outsourcing relationship. As a result, they "did a search of the industry" (TELCO) about suitable solutions. Moreover, they invited representatives of the IAOP: "we had a presentation of the IAOP Midwest chapter a few months ago" to compare and look "at a few tools" (TELCO). Nevertheless, they finally did not adopt an IT outsourcing governance tool. The interviewee explained: "Frankly, regarding the work processes, we still are at an early stage for being fully able to leverage that kind of automation. ... What we ended up doing was really building a customized tool that helped manage that relationship ..... So we have a lot of SharePoint and web-based tools so they are very simplistic but they are highly effective" (TELCO) (*efficient-choice perspective*). The simplicity of using several single solutions contributed to the rational choice of TELCO to not adopt an IT outsourcing governance tool. Nevertheless, a fashion setting company (IAOP) was also involved in the decision process (*fashion-perspective*), but only for increasing the awareness of available tools

FLOWER has outsourced "commodity services" (FLOWER) to one single provider in 2012. FLOWER selected its service provider based on its capabilities to monitor the operative infrastructure 24 hours every day. The monitoring results are provided to FLOWER, what "in fact is the most important" (FLOWER). Monitoring data of availability and other key performance indicators (KPIs) are provided to the client via a shared web-platform. The client explained "I want to define deliverables and I want to see them achieved [... but] I don't want to define the monitoring tool" (FLOWER). Asked about dedicated IS outsourcing governance tools, it turned out that the client had never heard about the tools. Hence, the client did not really make the decision to reject dedicated IS outsourcing tools, instead, the client did not know about such a tool. Thus, the rejection was not based on a clear decision, but rather on a state of not being aware of their existence. At the same time, the client felt no need to look for such a solution.

ROAD has outsourced to one single provider in 2010. ROAD is using self-developed IT solutions to monitor their "customized KPIs" (ROAD). The KPIs are related to assets such as notebooks. The CIO explained that based on the worldwide intercompany invoicing, they need to proof their auditors that cost allocation is done in a comprehensive and accurate way. The service provider delivers monitoring information stemming from "seventy different systems and metering points" (ROAD). "At the beginning they used to provide us excel spread-sheets and 47 reports from [infrastructure] monitoring systems. Now it is reduced to one file" (ROAD). Asked about IT outsourcing governance tools, the CIO said "no clue, never heard about [such tools]" (ROAD). Thus, the non-adoption behavior of ROAD may not be explained by one of the six theoretical perspectives, as ROAD was not even aware of IT outsourcing governance tools.

TRANSPORT has outsourced workplace services and data center to several providers. TRANSPORT evaluated the need for tool support. At this time TRANSPORT became aware of Oblicore by knowledge-exchange with its captive service provider (*transfer perspective*). Regarding "vendor management, we don't have adopted a tool, as we buy a service, and service delivery and management is obliged to the service provider" (TRANSPORT). Moreover, "we decided against, as we don't need large parts of the tool functionality in our sourcing model" and "to benefit from the information provided by the tools [i.e., IT outsourcing governance tools], you need a lot of technical skills" (TRANSPORT) (*efficient-choice perspective*). Hence, TRANSPORT became aware of IT outsourcing

governance tools through its service provider. However, TRANSPORT finally decided to non-adopt an IT outsourcing governance tool based on a rational choice.

TRANSPORT-PROVIDER is a captive service provider of TRANSPORT. The provider is responsible to ensure technical availability and functionality of transport infrastructure (e.g., traffic signs). This is a high risk area, as malfunction might cost lives or at least cause tremendous material damages. As TRANSPORT-PROVIDER needs to provide highly secure and professional services, they looked for appropriate tools supporting their service delivery. Thus, they evaluated several tools against self-developed decision criteria (*efficient-choice perspective*). Finally, they ended up implementing Oblicore. The interviewee, responsible for tool implementation, developed a commercially available methodology to implement Oblicore (or other tools) more easily.

FULLSERVICE-PROVIDER is a leading provider serving numerous clients in different branches. The interviewee explained that his company felt that they "had to adapt to the new customer requirements regarding multi-provider management and service integration" (translated excerpt from provided presentation) (pushed-selection perspective). Our interviewee has been responsible to enable the shift from the present resource-based to the service-based view demanded by their clients. The resource-based view is reflected by offering servers, data space, or network bandwidth to the client. In contrast, in a service-based view, services are provided to the customer. In this view, it does not matter, whether or not the server is available for 99.9% of the time, as long as the client's IT service is delivered. To reengineer the internal organizational processes to provide services, FULLSERVICE-PROVIDER was looking for an appropriate IT solution, which enables a client-based view (to the customer), but also a resource-based view on its internal systems, e.g., to quickly identify root causes for incidents. FULLSERVICE-PROVIDER compared several IT outsourcing governance tools based on a comprehensive list of decision criteria (efficient-choice perspective). Finally, the provider decided for Oblicore based on a rational choice. Interestingly, he explained to also rely on the methodology distributed by the interviewee of TRANSPORT-PROVIDER. Thus, this interviewee has served as a fashion setter, indicating a fashion perspective. Thus, FULLSERVICE-PROVIDER was influenced by the pushed-selection perspective to look for a tool, but the final decision for Oblicore was rather influenced by efficient-choice and fashion perspective.

Organization	Decision	Theoretical Perspective Influencing Decision					
	Adoption / Rejection	Efficient- Choice	Forced- Selection	Pushed- Selection	Fad	Fashion	Transfer
ENERGY	rejection	D					
TELCO	rejection	D				А	
FLOWER	rejection	-	-	-	-	-	-
ROAD	rejection	-	-	-	-	-	-
TRANSPORT	rejection	D					А
TRANSPORT- PROVIDER	adoption	D					
FULLSERVICE- PROVIDER	adoption	D		D		D	
D = Evidence found for influencing <i>decision</i> ; A = Evidence found for influencing <i>awareness</i>							

Table 5.Summary of Results

#### 5.1 Adoption

*Efficient-choice perspective*: The two service providers in our sample having adopted IS outsourcing governance tools, indeed, based their decision on an extensive evaluation of different tools, i.e., following the *efficient-choice perspective*. Both evaluated different tools based on self-developed decision criteria, and as a consequence, decided to implement Oblicore.

*Fashion perspective*: Our interviews did also show indications for the fashion perspective. The interview with TRANSPORT-PROVIDER was conducted with the employee responsible for implementing the tool. The same individual has developed a commercial methodology to implement respective tools more easily. Interestingly, FULLSERVICE-PROVIDER also draws on this methodology and implemented the same tool. Hence, FULLSERVICE-PROVIDER could have served as a fashion-setter advising a certain methodology and tool, which is typical for adoption based on fashion perspective.

*Pushed-selection perspective*: FULLSERVICE-PROVIDER has reported that his company felt an increasing pressure from their clients which had an influence on the decision to adopt an outsourcing governance tool. As a consequence, FULLSERVICE-PROVIDER decided to adopt an IS outsourcing governance tool. The service provider uses this tool to increase transparency regarding the delivered services and to align their service capabilities with the offered services in their service catalogue. Moreover, such a tool also prepares the service provider for future client demands to deliver necessary information via electronic interfaces (e.g., monitoring data).

#### 5.2 Rejection

*Efficient-choice perspective*: A rational evaluation of different IS outsourcing governance tools was performed by TELCO who had rejected the use of a tool based on rational choice. ENERGY and TRANSPORT did also decide not to consider the usage of a tool. The three companies perceived the existing management approach as appropriate to cope with the challenges arising from multi-sourcing.

*Transfer perspective*: The manager from TRANSPORT described that he was aware that TRANSPORT-PROVIDER is using an outsourcing governance tool. The knowledge about the efficient use of this tool at the client's service provider would nearly have influenced TRANSPORT to also implement such a tool. Nevertheless, they decided not to adopt.

*Fashion perspective:* When TELCO started to look at different tools in the market, they also relied on a third party, which might have served as a fashion setting company (i.e., IAOP). However, thought IAOP presented different available tools to TELCO, they finally decided against any of those tools, based on a rational choice.

# 6 Discussion and Contribution

This study sought to gain insights into the *reasons for adopting/ rejecting IT outsourcing governance tools*. For this purpose, we first reviewed and integrated existing theoretical perspectives on the adoption / rejection of innovative technologies. Next, we conducted an exploratory case study within the IS outsourcing context to explain the current adoption behavior in light of the different theoretical perspectives. Based on our findings, we contribute to research on adoption of innovative technologies and IS outsourcing practice in several ways.

By integrating different theoretical perspectives into one typology, two additional theoretical perspectives became apparent: *pushed-selection* and *transfer perspective*. These two perspectives extend Abrahamson's (1991) four theoretical perspectives especially for the future investigation of interorganizational contexts. Our empirical exploration showed that client demands pushed one service provider to look for and finally adopt an IT outsourcing governance tool. Thus, we found evidence for the perspective of pushed-selection in the IT outsourcing context. However, at the same time, the pushed-selection did not fully explain the adoption behavior. We also found evidence for the transfer perspective. While the knowledge about IT outsourcing governance tools was transferred from the group of service providers (TRANSPORT-PROVIDER) to the group of clients (TRANSPORT), an IT outsourcing governance tool was finally not adopted (based on efficient-choice). We call for future research to further substantiate or test the influence of the two perspectives on the adoption decision in interorganizational contexts.

Moreover, while the IT outsourcing context seems specific, we believe that our extended framework may be applicable to help explaining the diffusion of other innovations that concern interorganizational relationships. Hence, future research could examine the extended framework within interorganizational relationships in more detail. This is especially true for those contexts in which the diffusion process of an innovation is much more advanced than it is the case for IS outsourcing governance tools. Future research could investigate the extended theoretical model within another type of interorganizational relationships. For this purpose, platform ecosystems which are characterized by a significant power-imbalance between companies like IBM or SAP (platform vendors) and small solution providers (complementers) seem to be a promising context, as platform vendors tend to implement innovative technologies like a new middleware from time to time. The aspect of power-imbalance may help to better understand the pushed-selection and transfer perspective. As an example, the powerful platform vendors might be pushed by the group of dependent complementers, which may also be powerful when their demands aim in the same direction (e.g., demanding for a particular technology or interface). Moreover, the transfer perspective could help explaining how innovative technologies diffuse across networks, i.e., different ecosystems.

By exploring the resulting six theoretical perspectives with regard to an innovative technology within the IS outsourcing context, we found evidence for more than one theoretical perspective explaining adoption and / or rejection. However, rational choice was found to be the most frequent influencing perspective. This supports the finding of prior research that in the early stage of innovation diffusion, efficient choice based on internal evaluation aspects is the predominant influencing adoption / rejection perspective (Abrahamson, 1991; Malmi, 1999).

# 7 Limitations

In this study, we have conducted an exploratory case study with seven IS outsourcing client and vendor companies to examine the adoption of innovative technologies. This revealed valuable insights into different adoption perspectives. Nevertheless, we are aware that the number of interviews and the single informant approach urges us to be careful with the generalization of our findings. The exploratory nature of our study also entails the limitation that the two new theoretically derived perspectives have not been found in all of our cases. This calls for future research to substantiate and, if necessary, refine the two perspectives. As a promising context we highlighted the area of platform ecosystems in the discussion of this study.

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# Appendix

Excerpt of the semi-structured interview guideline used for IS outsourcing clients.

- What have been the reasons for you (not) to adopt an IS outsourcing governance tool?
- Based on which criteria did you choose / reject the IS outsourcing governance tool? Please describe your evaluation process.
- Are you currently using other tools within this outsourcing arrangement?
- Was the use of the IS outsourcing governance tool included as part of the contractual agreement between you and the service provider(s)? OR Was it implemented as a reaction on a certain event (e.g., bad performance)?