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Differences in Benefit Perception According to Alternative Statuses of Business Process Outsourcing Adoption

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ABSTRACT

Technology adoption theories propose that experience plays a major role in adopting or rejecting a new technology. This study analyses how the benefits of Business Process Outsourcing (BPO) as a major technological innovation are perceived differently, according to the BPO adoption status of the manager responsible. A survey of Germany's 200 largest banks has been conducted (response rate: 36.8%) to gather information on senior management's benefit perceptions. The responses were segregated into three groups, according to adoption status (level of experience): Pre-adopters, adopters and non-adopters. The groups report significantly different benefit perceptions. Cost savings, for example, are a benefit valued only by managers who have not yet outsourced a business process (pre-adopters). Experienced managers (adopters), on the contrary, recognize the major cost benefit in higher programmability of expenses. By applying technology adoption theories, this paper offers empirically grounded insights into senior management's benefit perceptions as an important antecedent of the outsourcing decision. This provides valuable contributions to theory and practice.

KEYWORDS

Business Process Outsourcing, Technology Adoption, Perceived Benefits

INTRODUCTION

While IT-outsourcing (ITO) is an extensively researched phenomenon (Dibbern, Goles, Hirschheim and Jayatilaka 2004), business process outsourcing (BPO) has received limited academic attention (Rouse and Corbitt 2004). This is surprising as BPO plays a major role in the restructuring of the corporate value chain in several industries, especially the financial services sector (Lamberti and Pöhler 2004).

One explanation for the limited research on BPO is that the outsourcing literature primarily focuses on the clients' problems in managing effectively the vendors' delivery of the expected benefits, rather than on the clients' initial perceived benefits of BPO. With the market for BPO in the early phase of its development, the problems of capturing the expected benefits are not yet salient. In contrast, understanding the perception of BPO benefits, which influence the intention to support BPO, is both timely and important. This paper analyses perceived benefits as a major factor influencing the decision by senior executives in German banks to increase the level of BPO, i.e. to adopt a major IT-based innovation.

To do that, this paper draws on the technology adoption literature to model the influence of benefit perceptions on the decision to outsource or not to outsource a business process. Technology adoption theory predicts that pre- and post-adopters employ different decision models. Pre-adopters base their judgments on normative influence processes. In contrast, post-adopters are influenced by models based on observed outcomes. This raises the critical question as to whether BPO contracts are typically based on the pre- or post-adoption model, with important consequences for benefit delivery and customer satisfaction.

To assess the perceived benefits of BPO a structural equation model is developed. The model is fitted to data from a survey of 218 managers in charge of business processes in 126 large German banks. The results show that the perceived benefits of BPO differ significantly between managers in active BPO engagements (adopters) compared to their colleagues who have not formally considered BPO (pre-adopters) or have considered but rejected BPO (non-adopters). Pre-adopters see benefits in maximizing profitability through cost reductions and efficiency gains. Their more experienced peers, the adopters, minimize risk, the variance in performance, through risk reducing mechanisms, including cost programmability and process execution with lower error rates. Non-adopters, develop the most complex mental models with which to evaluate BPO.

The paper begins with a review of the literature on BPO research and technology adoption. This identifies gaps in the current literature to assess the influence of experience on management's perception of BPO benefits. Building on these insights, a causal model to assess the benefits of BPO is developed. The model is fitted to the survey data and validations are conducted. The results are discussed and conclusions for theory and practice are drawn.

LITERATURE REVIEW AND RESEARCH QUESTION

The concept of outsourcing has been applied to different contexts, including hardware and software development, and business processes, with BPO being the most recent trend in outsourcing (Lee, Huynh, Kwok and Pi 2003). In BPO, the execution of a business process is the responsibility of the service provider (Weerakkody, Currie and Ekanayake 2003). For the scope of this paper, BPO is defined as "the management of [a] specific business process [...] by a third party, together with the IT that supports the process" (Halvey and Melby 2000, p.1). A business process is defined as a "set of logically related tasks performed to achieve a defined business outcome" (Davenport and Short 1990, p. 12).

Typically, outsourcing research adopts a macro level view of the firm, applying economic theories or strategic management concepts to identify the benefits of ITO (Dibbern et al. 2004). This approach, at least implicitly, excludes any understanding of "the motivations, preferences or attitudes of individual stakeholders and their impact on the [IT] outsourcing decision" (Dibbern et al. 2004, p.42). In this paper, we draw on the technology adoption literature to model the attitudes of the key managerial decision makers for BPO. Adoption of technological innovations has a long tradition within the IS research literature. However, this theoretical perspective has almost exclusively been applied to intra-organization adoption processes. The inter-organization adoption of technological innovations, including outsourcing, has rarely been the subject of research within the technology adoption theory framework.

While intra-organization adoption decisions may follow different rules compared with inter-organization adoption decisions, the findings from the former research stream can initially help to frame the model of inter-organization adoption decisions. Specifically, the finding that the antecedents of intra-organization adoption change over time as the individuals involved engage with the innovation would be critical in the context of developing and managing an outsourcing contract. For example, if BPO sales and services contracts are framed by managers' pre-adoption attitudes, the contracts may not be supportive of managers' post-adoption attitudes, with consequences for both client and vendor future satisfaction.

The above general finding concerning post-adoption behavior is underpinned by the Theory of Reasoned Action (TRA) (Ajzen and Fishbein 1980) which assumes that an individual's behavior is influenced by subjective norms and attitudes. Ajzen and Fishbein find that subjective norms and attitudes change over time. Bhattacharjee and Premkumar (2004) point out that, while beliefs, attitude and usage of technological innovations change over time, most research has concentrated on the initial formation of those beliefs and attitudes. They call for more research "on the temporal structure of beliefs and attitudes toward technological innovations" (Bhattacharjee and Premkumar 2004, p.230).

Several prior studies provide evidence that beliefs and attitudes change over time. Karahanna et al. (1999), in their study of individuals' adoption of the Windows operating system, found that using a unitary set of beliefs to explain different stages of adoption is subject to model specification error. They argue for different assessment frameworks, contingent on the adoption status of the respondent. Social Cognitive Theory (SCT) (Bandura 1977) explicitly acknowledges the existence of an ongoing interaction between the individual's environment, cognitive perceptions and behavior (Compeau, Higgins and Huff 1999). In a longitudinal study on technology acceptance based on SCT, Compeau et al. present insights that clearly indicate that perceptions change over time, strongly influencing individuals' attitudes and behavior. Similar findings have been reported by Szajana and Scamell (1993), namely, that expectations and attitudes change with experience gathered. Venkatesh and Morris (2000) also report that direct experience influences behavioral intention in their analysis of the Technology Acceptance Model (TAM) (Davis 1989).

In addition, Karahanna et al. (1999) report that pre-adopters use a more complex set of behavioral beliefs than do adopters. They speculate that this may be due to the level of uncertainty, which is higher for pre-adopters as they have no actual experience. Pre-adopters, therefore, consider a larger set of variables than adopters, who, by gaining experience, focus on those variables that they value highly, discarding the ones they learn are less relevant. Drawing on these findings, Bhattacharjee and Premkumar (2004) develop a two-stage theoretical model of pre- and post-usage attitudes. They find changes in attitude associated with the usage of software packages, explaining the change in terms of the influences of satisfaction and disconfirmation.

The general research question for this paper is:

1. *How do senior managers' perceptions of the benefits of BPO vary with their experience of BPO?*

To answer this question, we address two inherent sub-questions:

2. Do the benefits of BPO, as perceived by experienced managers (post-adopters), differ from the benefits as perceived by managers who have not yet formally considered the BPO option (pre-adopters)?
3. How do the perceived benefits of BPO differ between adopters and non-adopters (managers who have formally investigated BPO and rejected that option)?

The technology adoption literature distinguishes between pre- and post-adopters, who vary in their expected use of the focal technology. The subjects of the research typically work for an organization and their expected usage rates vary from low to high. Here, the choice is not the level of usage by different individuals in an organization, but the decision by a manager, as an agent for the organization, to outsource a business process, or to extend or renew an existing outsourcing contract.

MODEL TO MEASURE THE PERCEIVED BENEFITS OF BPO

The proposed model integrates the theoretically and empirically identified benefits of ITO with insights from technology adoption theory. The arguments to support the hypotheses provided in this paper are rather brief, for detailed information please refer to Gewald and Yetton (2006). We begin by describing the fundamental research approach and developing the model. Key variables are defined and nine hypotheses derived.

Drawing on TRA and research on technology adoption, we focus on the antecedents of attitudes towards BPO to explain the decision to adopt BPO. Attitudes towards BPO influence the intention to increase the level of BPO. This approach is supported by two recent studies on IT outsourcing that include attitude as a dependent variable that enhances the understanding of the IT sourcing decision (Benamati and Rajkumar 2003; Dibbern 2003). The relationship between attitude and intention is grounded in TRA and well discussed in the IT literature.

Structural Equation Model

The theoretically derived relationships are integrated within a structural equation model (SEM) of BPO. The base model is presented in Figure 1. Within this model, we analyze three dependent variables. *Perceived benefits* influence *attitude towards BPO*, which influences *intention to increase the level of BPO*. There are four independent variables that influence a manager's level of *perceived benefits*. These are *cost advantages*, *core competencies*, *specialized resources*, and *quality improvement*. The SEM developed here includes both reflective and formative indicators to estimate the measurement model. The structural model presented in Figure 1 depicts only formative indicators.

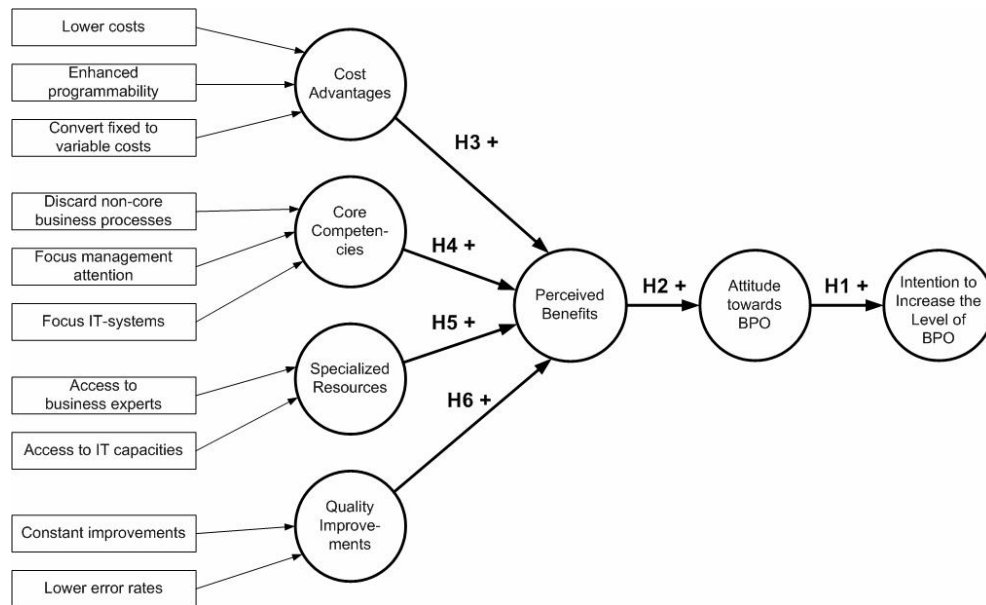


Figure 1: Perceived Benefits Model of Business Process Outsourcing

Attitude and Intention

'Attitude towards BPO' captures the attitude of a manager towards outsourcing the process for which that manager is responsible. The influence of attitude on intention is based on TRA, which states that the beliefs about an outcome (in this

case the perceived benefits) shape the attitude towards BPO. Attitude, in turn, influences the intention to act and, ultimately, influences the behavior itself (Wixom and Todd 2005). Therefore, the more positive the attitude towards BPO, the greater the intention to increase the level of BPO.

Hypothesis 1: Attitude towards BPO positively influences the intention to increase the level of BPO.

Perceived Benefits

This dependent variable captures the overall perceived benefits of BPO that are conceptualized to form the behavioral beliefs relating to BPO. While there are several factors besides perceived benefits influencing the attitude towards outsourcing, this research analyzes this one major factor in depth to provide solid empirical grounding for further studies. Thus, other factors have been excluded intentionally.

Hypothesis 2: The perceived benefits of BPO positively influence managers' attitude towards BPO.

In multiple studies of why firms choose to outsource parts of their business, four criteria are cited repeatedly (for an overview see (Dibbern et al. 2004). These criteria are *cost reduction*, *access to specialized resources*, *focus on core competencies* and *quality improvement*. Furthermore, a study of 82 banks from 19 European countries, conducted by the European Central Bank, confirmed these four as the major reasons for outsourcing within the banking sector (ECB 2004).

Cost Advantages

The core argument here is that transaction cost economics shows that, if internal production costs are higher than external production and transaction costs, then production could be outsourced and more efficiently performed through the market. Supporting that conclusion, studies typically report that the IT sourcing decision is driven by the motivation to reduce costs (Apte, Sobol, Sho, Shimada, Saarinen, Salmela and Vepsalainen 1997; Ang and Straub 1998; Lacity and Willcocks 1998).

Hypothesis 3: Expected cost advantages contingent on adopting BPO positively influence the perceived benefits of BPO.

Core Competencies

The strategic management literature builds a strong case for corporations to focus on their core competencies. The research literature reports that outsourcing helps an organization to concentrate on its core business (Saunders, Gebelt and Hu 1997; Lee and Kim 1999). Outsourcing frees up resources that can be used more productively in areas that create value for the company (Huber 1993).

Hypothesis 4: Focusing resources on the organization's core competencies through BPO positively influences the perceived benefits of BPO.

Specialized Resources

BPO vendors provide highly specialized services to their clients (Lamberti and Pöhler 2004). Climbing its learning curve, the vendor develops unique skills in managing third party business processes. Furthermore, economies of scale and scope allow the service provider to engage resources which cannot adequately be utilized by individual organizations (Wechsler 2002). Access to leading edge IT resources is a critical indicator of IT outsourcing success (Saunders et al. 1997; Lee and Kim 1999) and an important driver for outsourcing decisions (Huber 1993; Loh 1994; Apte et al. 1997).

Hypothesis 5: Accessing specialized resources through BPO positively influences the perceived benefits of BPO.

Improved Quality

The ability to improve production quality is a frequently quoted reason for organizations to outsource their IT (Jurison 1995; Baldwin, Irani and Love 2001; Dibbern et al. 2004). When outsourcing business processes, organizations expect benefits from better service quality in terms of faster execution and lower error/cancellation rates (ECB 2004). In addition, they expect the service provider to provide a cycle of continuing process improvements.

Hypothesis 6: Improving process quality through BPO positively influences the perceived benefits of BPO.

Pre-Adopter, Post-Adopter and Non-Adopter Models of BPO

The studies cited in the review of the literature indicate that attitudes change over time as a function of experience. In the context of this research, we can identify how experience influences managers' perceptions of BPO benefits. Here, we modify

Rogers (2003) stage model of pre-adopting activities, adoption decision and post adoption activities. We identify three levels of experience. First, there are pre-adopters. These are managers who have no experience with BPO. Second, there are adopters, who have significant experience with BPO. Finally, non-adopters are managers who have formally investigated but rejected BPO. Figure 2 presents graphically the three level classification of experience and the associated research questions.

To analyze managers' different perceptions of BPO and identify their different mental models, we formulate three hypotheses. In line with the stream of research based on diffusion theory, we emphasize the difference between pre- and post-adoption models. Integrating Karahanna et al. (1999) with Bhattacharjee and Premkumar (2004), we hypothesize that:

Hypothesis 7: Pre-adopters and post-adopters (adopters plus non-adopters) employ different decision models of BPO, where different decision models are defined in terms of different indicators influencing the managers' perceptions of the benefits of adopting BPO (see Figure 1).

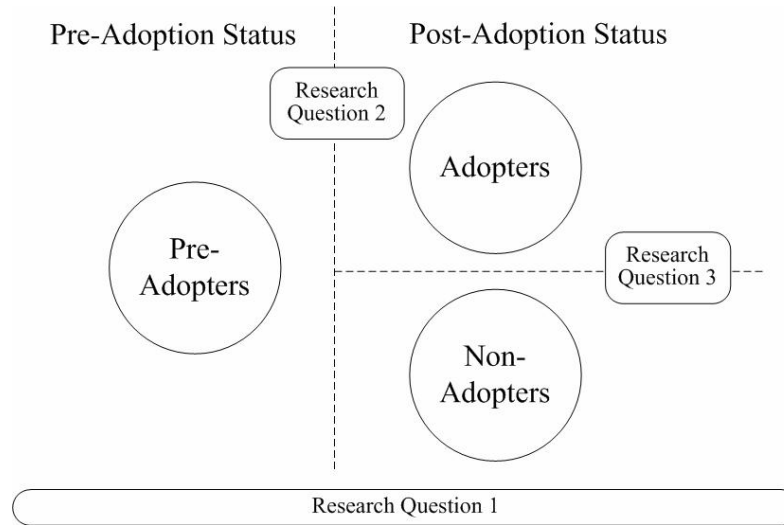


Figure 2: Research Framework

Based on Karahanna et al. (1999), we apply technology adoption theory to these three levels of manager experience. We hypothesize that:

Hypothesis 8: Non-adopters employ more complex decision models than do adopters to evaluate BPO, where 'more complex' is defined in terms of higher numbers of significant indicators (see Figure 1).

Finally, drawing on Bhattacharjee and Premkumar (2004), we hypothesize that:

Hypothesis 9: Adopters employ simpler models than pre-adopters to evaluate BPO, where 'simpler' is defined in terms of smaller numbers of significant indicators (see Figure 1).

METHODOLOGY

Operationalization of Constructs

The theoretically derived relationships presented in Figure 1 are framed within an SEM. Each of the constructs is represented by a set of indicators, i.e. survey questions. Wherever possible, existing measures were used, translated into German, and adjusted to the specific context of this research. The resulting draft questionnaire was improved by discussion with academics from the field and pre-tested independently with managers from three banks that were excluded from the sample. An overview of the constructs and a complete list (translated to English) of the indicators used is provided in the Appendix.

Data Collection

In 2003 (latest figures available at time of conducting the survey), 2,226 banks were registered to perform business in Germany. For this research, the 200 largest banks were chosen, based on their total assets as reported in the balance sheet.

Four banking processes were investigated: the back office/settlement processes for transactions in securities, consumer credits, domestic payments and foreign exchange/money markets.

The survey took place in mid 2005. All 200 banks were contacted by phone to identify the managers responsible for each of the four business processes. As some banks do not offer all four products, 593 rather than 800 questionnaires were distributed. Overall, 218 usable questionnaires from 126 banks were returned, a response rate of 36.8% for managers and 63% for the banks.

Structural Model Analysis

This section presents the results of the model validation. The measurement model consists of both reflective and formative measured indicators. Formative indicators require no specific correlation while reflective indicators are expected to correlate highly with each other.

Model Validity Tests

To evaluate the quality of the *formative* measurement model, the design of constructs and the relevance of indicators are analyzed. There are five critical issues determining the quality of the measurement model: content specification, indicator specification, indicator reliability, indicator colinearity and external validity. The quality of the *reflective* measurement model is determined by convergent validity, construct reliability and discriminant validity. All these factors have been carefully assessed and the model passed all applied tests.

Detailed reports on the applied tests and the respective data tables are published in Gewald and Yetton (2006).

Control Variables

To control for the influence of distinctive characteristics within the sample, two specific indicators were analyzed: the type of process and the status of outsourcing. The validity threat arising from multi-group behavior was analyzed by running bootstrap re-samplings for the various groups and treating the standard error estimates from each re-sampling in a parametric sense via t-tests. The results of these operations reveal that the *outsourcing status* and the *process type* do not have a significant influence on the structural model.

We also tested the effect of *firm size* on the intention to increase the level of BPO via a one-indicator construct. The result is a non-significant path coefficient. Therefore, for large German banks, firm size does not influence the intention to increase the level of BPO.

Explanatory and Predictive Power

The *explanatory power* is examined by inspecting the squared multiple correlations (R^2) of the dependent variables. Figure 3 shows that almost 60% ($R^2=0.59$) of the variation in perceived benefits is explained by the four constructs of cost advantages, focus on core competencies, access to specialized resources, and improved quality. Furthermore, more than 70% of the variations in the attitude towards outsourcing are explained by perceived benefits. The explained variance of the intention to increase the level of BPO ($R^2=0.56$) is moderate to substantial. *Predictive power* is tested by examining the magnitude of the standardized parameter estimates between constructs, together with the corresponding t-values that indicate the level of significance. All path coefficients exceed the 0.2 level, except the construct of specialized resources. In particular, bootstrapping revealed strong significance (at the 0.001 level) of all dependent variables except for specialized resources (n.s.).

RESULTS

Relationships among the Dependent Variables

The influence of perceived benefits on attitude (Hypothesis 1) shows a very high loading of 0.85 (see Figure 3), indicating that perceived benefits have a very strong influence on the attitude towards BPO. This finding is further supported by the R^2 of the attitude construct (0.73), indicating strong predictive power of benefit perception regarding manager's attitude towards BPO. Hypothesis 2 is also supported. The high loading of 0.75 and an explained variance of the dependent variable of 0.56 demonstrate that the managerial attitude towards BPO has good explanatory power in terms of the intention to increase the level of BPO. Therefore, the basic assumption of the model, that perceived benefits have a strong positive influence on the attitude towards BPO, which positively influences the intention to increase the level of BPO, is supported.

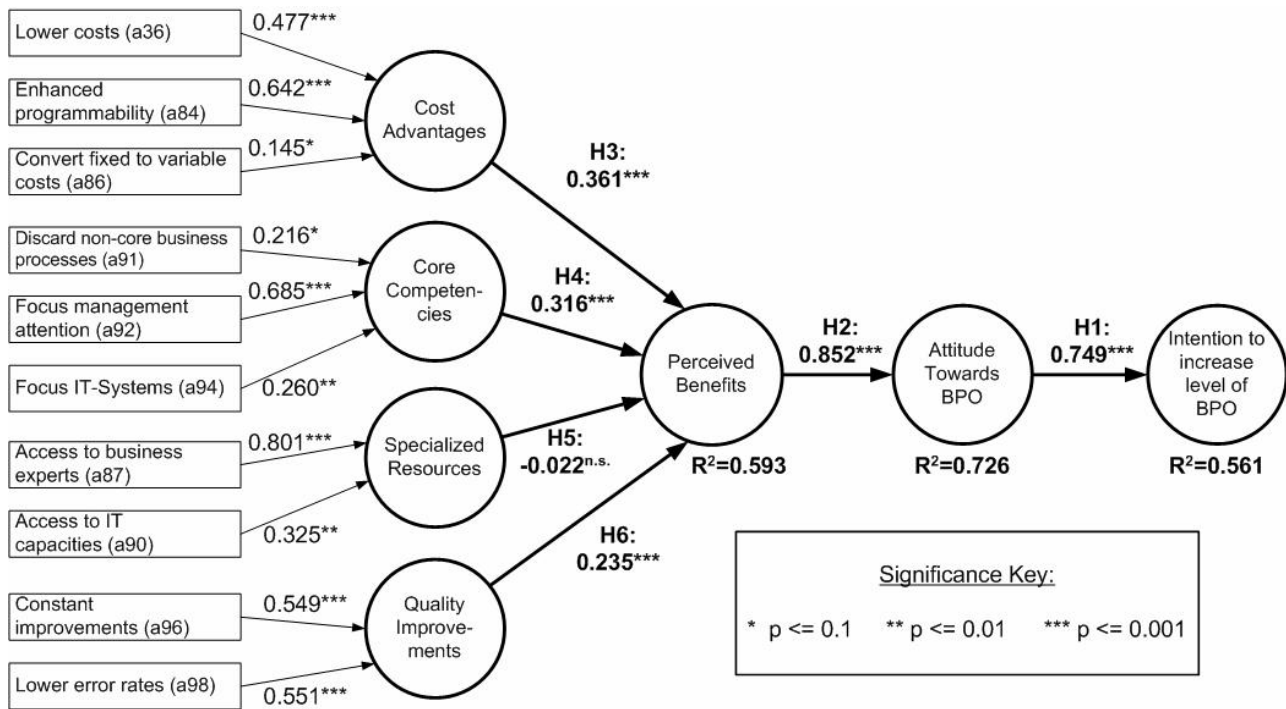


Figure 3: Result of the PLS-Calculation

The Impact of Different States of Adoption on Benefit Perception

To answer research questions 2 and 3, the model presented in Figure 1 was fitted to the three sub-samples depicted in Figure 2. Table 1 presents a picture in line with our expectations regarding the general benefit perceptions of the three groups. In general, adopters perceive the benefits from BPO to be high (i.e. positive). Although non-adopters perceive the benefits to be lower than do adopters, more than a third of the non-adopters still perceive the benefits of BPO to be positive. Pre-adopters, who have not yet formally engaged in assessing BPO, initially show a positive attitude towards BPO.

		Pre-Adopters	Post-Adopters		Annotation
			Adopters	Non-Adopters	
Benefit Perception	Positive	32	67	28	Perception calculated as average over indicators a47, a48 and a49 (7-point Likert scale) Positive = strongly agree, predominantly agree or rather agree Neutral = neutral Negative = rather disagree, predominantly disagree or strongly disagree
	Neutral	19	15	23	
	Negative	7	5	22	

Table 1: Benefits of BPO

To analyze managers' different perceptions and their different mental models, we tested hypotheses 7-9. Testing Hypothesis 7, we calculated differences in benefit perception between pre- and post-adopters (combined adopters and non-adopters). The results are presented in Table 2. For the post-adopters, eight of the ten indicators are significant. In contrast, for pre-adopters, only four are significant. Hypothesis 7, *pre-adopters and post-adopters employ different models to evaluate BPO*, is supported.

Construct	Item	Keyword	Pre-Adopters (n=58)		Post-Adopters (n=160)	
			Weight	t-value	Weight	t-value
Cost Advantages	a36	Cost savings	0.5930	3.27	0.4479	4.13
	a84	Programmability of costs	0.4781	2.12	0.6833	6.83
	a86	Convert fixed costs into variable costs	0.2634	1.30	0.1033	1.16
Core Competencies	a91	Discard non-core processes	-0.0471	0.10	0.2247	1.60
	a92	Management concentrate on core business	0.3277	0.68	0.6620	4.73
	a94	IT systems directed to core business	0.7657	2.09	0.2154	2.24
Specialized Resources	a87	Access to business experts	0.3884	0.56	0.8046	8.75
	a90	Access to better hardware	0.7053	1.03	0.3380	2.79
Improved Quality	a96	Process can be better monitored and constantly improved	0.8114	2.92	0.5105	3.98
	a98	Lower error rate	0.2846	0.85	0.5843	4.56

N.B. Indicators with sufficient reliability (weight >0.1 and significance level >95%) are printed bold.

Table 2: Comparison of Pre- and Post-Adopters

To compare non-adopters and adopters (Hypothesis 8), Table 3 reports the weights and t-values for each indicator. For non-adopters, the eight indicators are significant. In contrast, for adopters, only five are significant. Hypothesis 8, *non-adopters employ more complex models than do adopters to evaluate BPO*, is supported.

Construct	Item	Keyword	Adopters (n=87)		Non-Adopters (n=73)	
			Weight	t-value	Weight	t-value
Cost Advantages	a36	Cost Savings	0.2432	1.84	0.5906	3.45
	a84	Programmability of costs	0.8175	6.89	0.5671	3.03
	a86	Convert fixed costs into variable costs	0.1699	1.25	0.1148	0.64
Core Competencies	a91	Discard non-core processes	0.3482	1.51	0.1254	0.62
	a92	Management concentrate on core business	0.6892	3.06	0.5276	2.86
	a94	IT systems directed to core business	0.0370	0.26	0.4531	3.08
Specialized Resources	a87	Access to business experts	0.8215	6.76	0.6966	3.81
	a90	Access to better hardware	0.3445	1.97	0.4563	2.15
Quality Improvements	a96	Process can be better monitored and constantly improved	0.4316	1.66	0.4709	2.55
	a98	Lower error rate	0.7149	3.25	0.6026	3.64

N.B. Indicators with sufficient reliability (weight >0.1 and significance level >95%) are printed bold.

Table 3: Comparison of Adopters and Non-Adopters

Hypothesis 9, *adopters employ simpler models than pre-adopters to evaluate BPO*, is not supported. The comparison of the indicators for adopters and pre-adopters in Table 4 shows that adopters employ slightly more complex models (five indicators are significant) than the pre-adopters (four indicators are significant). However, the critical finding is that, with the exception of programmability of costs, adopters and pre-adopters do not share any common indicators. Specifically, out of eight significant indicators, they share only one significant indicator.

Construct	Item	Keyword	Pre-Adopters (n=58)		Adopters (n=87)	
			Weight	t-value	Weight	Weight
Cost Advantages	a36	Cost savings	0.5930	3.27	0.2432	1.84
	a84	Programmability of costs	0.4781	2.12	0.8175	6.89
	a86	Convert fixed costs into variable costs	0.2634	1.30	0.1699	1.25
Core Competencies	a91	Discard non-core processes	-0.0471	0.10	0.3482	1.51
	a92	Management concentrate on core business	0.3277	0.68	0.6892	3.06
	a94	IT systems directed to core business	0.7657	2.09	0.0370	0.26
Specialized Resources	a87	Access to business experts	0.3884	0.56	0.8215	6.76
	a90	Access to better hardware	0.7053	1.03	0.3445	1.97
Improved Quality	a96	Process can be better monitored and constantly improved	0.8114	2.92	0.4316	1.66
	a98	Lower error rate	0.2846	0.85	0.7149	3.25

N.B. Indicators with sufficient reliability (weight >0.1 and significance level >95%) are printed bold.

Table 4: Comparison of Pre-Adopters and Adopters

DISCUSSION

This research shows how senior managers perceive the benefits of BPO differently, depending on their respective BPO adoption status. The indicators of the four benefit constructs analyzed in our model underline this quantitatively, providing an answer to our *first research question*.

Consistent with the IT outsourcing literature, *cost advantages* is a major benefit construct. An interesting finding is that programmability of cost is of higher importance than cost savings to adopters of BPO. Costs are programmable because BPO allows the organization to negotiate and then control the service fee to the provider.

The ability to focus on the *core competencies* of the organization is also a major benefit construct. The opportunity to re-focus management attention, i.e. to better utilize these important and expensive resources for the core business, is important to adopters but not to pre-adopters. In addition, adopters do not value the opportunity to realign the corporate IT-systems, while pre-adopters do value that opportunity. Neither adopters nor pre-adopters value the overall restructuring of the company's process portfolio contingent on BPO. Perhaps management resources can be more easily readjusted than the unbundling and reorganizing of IT systems.

The access to *specialized resources* is often quoted in the IT outsourcing literature as a benefit of outsourcing. Here, support for this construct is mixed. While pre-adopters see no need to access specialized resources, managers who analyzed and adopted BPO see value in this opportunity. Probably pre-adopters assume that outsourcing business processes involves outsourcing activities that have been executed by the bank for a long time, probably longer than IT-systems have been in use. Therefore, they do not see that (external) specialist resources are required to deliver those processes. In contrast, adopters understand that highly qualified (thus expensive) resources can be better leveraged by an outsourcing service provider realizing economies of scale.

The ability to *improve quality* within the execution of the process has a significant effect on perceived benefits of BPO. However, the indicators for the benefits again differ between pre-adopters and adopters. Specifically, the ability to lower error rates is valued by adopters, while pre-adopters value continuous improvements. BPO is viewed as a way to get rid of problems (error rates, process improvements), rather than deploying it as a strategic option for a restructuring of the corporate process portfolio.

The *second* and *third research questions* are concerned with a comparison of the different adoption statuses. Our findings, consistent with technology adoption theory, strongly support Hypothesis 7: *Pre-Adopters and adopters employ different models of BPO* and Hypothesis 8: *Non-adopters employ more complex models than do adopters*. Hypothesis 9: *Adopters employ simpler models than do pre-adopters* is not supported. These findings have important implications for theory and practice, which are discussed below.

Implications for Theory

The contribution to theory is the application of technology adoption theories to the BPO decision, showing that managers' models of BPO benefits vary with their respective adoption status. Different models explain managers' attitudes to BPO, depending on the related experience of the manager. For example, adopters of BPO who undertake a contract renewal have different attitudes and beliefs compared with pre-adopters about to engage in their first outsourcing contract.

These findings are consistent with technology adoption theory. Pre-adopters take a normative view of BPO, while adopters take a descriptive or experience-based one. Effectively, pre-adopters are looking for a competitive advantage through lower costs etc. In contrast, adopters have learned that you cannot 'buy' a competitive advantage and, instead, treat BPO as a commodity, attempting to reduce their risk exposure. These results show that the pre- and post-adoption literature developed with respect to intra-organization behavior generalizes to inter-organization behavior such as adopting BPO.

Implications for Practice

Service Providers engaging with a potential client should identify the client's significant indicators as reported in this study. For the manager (pre-adopters), the critical indicators are lowering the cost of delivering the process, improving cost programmability, IT systems directed to core business, and continuous improvements in quality. A contract with an experienced client, a pre-adopter that has now become an adopter, to deliver those benefits would be unsatisfactory because adopters value only one of those benefits, increased programmability of costs. Adopters also value increased ability to concentrate on core business, access to business experts, access to better hardware and lower error rates.

In addition, the large group of banks that has decided against outsourcing may not be lost for the BPO market, as a substantial proportion still perceives positive BPO-related benefits. However, as this group has developed complex mental models, we assume in support of their previous rejection of BPO, it will be difficult for a service provider to effect a changed decision, as the vendor needs to satisfy eight of the ten indicators reported in Table 3. Vendors could use this information to partition their (potential) client base to focus selling efforts on clients who are potentially easier to convince than non-adopters.

LIMITATIONS OF THE STUDY

The model as it is currently applied is a cross-sectional, traditional static model as used in most research studies on technology innovation adoption. Care should therefore be taken in assuming that current pre-adopters will, with experience, adopt the attitudes of current adopters or non-adopters. Supporting that assumption, the findings reported here are consistent with the findings on the technology adoption literature. The findings also have high face validity.

FURTHER RESEARCH

This research reports an analysis of the benefits of BPO as perceived by senior managers of German banks. As benefit perception is only one of several influential factors in the overall BPO decision, more research on the antecedents of the decision needs to be conducted to build a full understanding of the specific circumstances of this type of outsourcing. The next step would include an analysis of the risks associated with BPO, to investigate the tradeoff between perceived risk and benefits. A conceptual model of this interrelation, drawn from finance research is reported in Jurison (1995). This research could be extended to a BPO context, building a more inclusive and powerful model of the deployment of BPO.

APPENDIX

Construct	Indicator	Item	Weight	Sign. level
Cost Advantages	Outsourcing lowers the costs that arise from executing a business process.	a36	0.477	0.001
	Outsourcing the process results in better programmability of the cost of process execution.	a84	0.642	0.001
	Outsourcing converts the fixed costs of process execution into variable costs.	a86	0.145	0.05
Core Competencies	By outsourcing the bank is able to discard non-core business processes.	a91	0.216	0.1
	By outsourcing the management is in a better position to concentrate on developing the core business.	a92	0.685	0.001
	By outsourcing the bank's IT systems can be better directed towards its core business.	a94	0.260	0.01
Specialized Resources	Through outsourcing the bank gains access to business experts whose knowledge is not available within the bank.	a87	0.801	0.001
	Through outsourcing more efficient hardware than that available within the bank is at our disposal.	a90	0.325	0.01
Improved Quality	Outsourcing the process ensures that the performance of the process can be better monitored and constantly improved.	a96	0.549	0.001
	The outsourced process can be performed with a lower error rate by the service provider.	a98	0.551	0.001

Table 5: Weights and Significance Level of Formative Indicators

Construct	CR	AVE	Item	Indicator	Loading	Significance level
Perceived Benefits	0.940	0.838	a47	Outsourcing of business processes has a lot of advantages.	0.9092	0.001
			a48	Outsourcing of business processes is a useful instrument for corporate management.	0.9097	0.001
			a49	Overall, I consider outsourcing of business processes to be a useful strategic option.	0.9276	0.001
Attitude	0.943	0.805	a50	Overall, my attitude towards outsourcing of business processes is positive.	0.9014	0.001
			a51	The outsourcing of business processes is an attractive alternative to internal production.	0.9310	0.001
			a52	I believe that the benefits of business process outsourcing outweigh the associated risks.	0.8606	0.001
			a53	Overall, the outsourcing of business processes provides our bank with added value.	0.8940	0.001
Intention	0.919	0.792	a54	If there is a superior offer, the process I am in charge of should be outsourced.	0.8419	0.001
			a55	Our bank should increase the existing level of outsourcing.	0.8924	0.001
			a56	I support further outsourcing of business processes.	0.9325	0.001

Table 6: Indicator and Construct Reliability of Reflectively Measured Constructs

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