

**INFORMATION SYSTEMS OUTSOURCING:
FIVE ESSAYS ON GOVERNANCE AND SUCCESS**

by

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ABSTRACT

This dissertation comprises five essays that address issues related to governance and success in information systems (IS) outsourcing. Two of these essays are conceptual in nature, while three draw on empirical data from a field study conducted late 2005 to early 2006 among senior IS executives in the UK and Germany. The two conceptual essays present a literature review (Essay 1) and a framework with ensuing research propositions (Essay 2). The three empirical essays, on the other hand, report on the development of a measurement instrument (Essay 3), present and interpret the results of the field study for a practitioner audience (Essay 4), and test a comprehensive structural equation model (Essay 5). In terms of epistemology, two essays in this dissertation take an exploratory approach (Essay 1 and Essay 4), whereas the remaining three are rooted in the positivist tradition of IS research (Essay 2, Essay 3, and Essay 5). Although quite different in individual focus and approach, all essays contribute to the main challenge of developing a better understanding of the relationship between governance and success in IS outsourcing.

The first essay (“Antecedents of information systems outsourcing success: A review of the empirical literature”) takes an in-depth look at the ever-growing body of literature on information systems outsourcing (ISO). Specifically, it explores conceptualizations of ISO success and its antecedents, which are of particular concern for many outsourcing practitioners and, as a consequence, also for researchers. A systematic survey of scholarly journals and IS conference proceedings identifies 39 pertinent empirical studies that are reviewed in detail and analyzed with regard to their theoretical foundations, research methods, and empirical findings. The analysis reveals that the success of an outsourcing endeavor is dependent on a multitude of different factors related to the outsourcing environment, outsourcing strategy, governance, the characteristics of the client-vendor relationship, and attained outsourcing benefits. These findings underscore the complex nature of the phenomenon and may explain why outsourcing continues to attract considerable research interest to date. Furthermore, the literature review highlights several shortcomings and gaps in the extant literature that translate into promising opportunities for future research. Examples include the dearth of comparative and longitudinal research designs, a notable lack of replication studies, and limited use of second generation structural modeling techniques for quantitative

data analysis. In summary, the essay provides a synthesis of the extant body of knowledge on IS outsourcing success that can inform practitioners and serve as a sturdy point of departure for future research on the subject.

The second essay (“Governance and information systems outsourcing success: A contingency perspective”) picks up on one of the key antecedents of outsourcing success identified in Essay 1. It extends prior research on IS outsourcing relationships by introducing a contingency framework for effective outsourcing governance. In contrast to the mostly universalistic advice found in the literature, this essay argues for a more situational approach to outsourcing management. Specifically, outsourcing success is proposed to be a function of the fit between the governance mechanisms employed in an outsourcing relationship and certain characteristics of the outsourcing environment. Developing the research model further, four relevant governance mechanisms (contracts, processes, structural liaison devices, and relational norms) and two important environmental factors (uncertainty, complexity) are identified from the extant literature. Their ensuing interactions are captured in eight testable propositions that operationalize the concept of fit in outsourcing governance. Concluding the argument, four typical, but very distinct outsourcing scenarios are discussed to illustrate the governance and management implications of these propositions. By laying out a contingency perspective on IS outsourcing governance, the essay contributes to theory development in this particular area of outsourcing research and introduces a novel approach to the academic discussion. Empirically testing its propositions may be an interesting avenue for future positivist research.

The third essay (“Governance practices in information systems outsourcing: Development and empirical validation of an instrument”) describes the development and testing of an instrument designed to measure the use of the four governance practices identified in Essay 2. Given the paucity of validated instruments measuring outsourcing governance practices in the literature, this essay thus addresses a notable gap. To develop the four measurement scales for contracts, processes, structural liaison devices, and relational norms, newly created and existing items adapted from prior studies are combined into a common pool and subjected to multiple rounds of refinement procedures. These procedures include a card-sorting exercise, expert reviews, and a pre-test. Data from the field study is subsequently used to explore the validity of the scales with the help of second generation statistical modeling (partial

least squares – PLS). The final instrument of 14 items exhibits a high level of reliability and validity. Furthermore, correlation analysis shows that all scales are significant predictors of IS outsourcing outcomes. In summary, the essay makes a notable contribution to the repertoire of validated measurement scales in IS outsourcing research. The instrument developed herein may prove valuable in future empirical studies.

The fourth essay (“An empirical study of information systems outsourcing governance practices in Germany and the UK”) takes a broader look at the empirical data collected from senior IS executives in the field study. It presents and interprets the responses of 102 study participants reporting on their organizations’ outsourcing governance practices and experienced outsourcing outcomes. Targeting a general management audience, the essay draws several interesting findings from the data while deliberately avoiding methodological overhead. For example, the results suggest that outsourcing client organizations consider detailed contracts very important, but are ultimately wary of enforcing them too rigorously. Instead, most clients emphasize the development of personal relationships, mutual trust and partnership spirit with their service providers. Furthermore, the data show that most respondents are satisfied with their outsourcing relationships overall – apparently for good reason since the great majority of them report cost savings, improvements in service quality, and other typical outsourcing benefits. To identify governance-related drivers of outsourcing success, the responses of successful and not so successful client organizations are compared. This analysis reveals a number of best practices that should be of interest for outsourcing practitioners. The essay closes with empirically derived management recommendations for client organizations and service providers.

Finally, the fifth essay (“Governance choice, transaction attributes, and information systems outsourcing success: An empirical study”) uses data from the field study to test a set of 19 hypotheses regarding governance choice and success in IS outsourcing. Responses from 84 senior German IS executives are used to analyze a two-level structural equation model with PLS. While the model bears some resemblance with the research model established in the second essay regarding the constructs under study, its focus is quite different as interaction effects are not considered. Rather, on the first level – drawing on transaction cost theory for theoretical foundations – the essay explores the influence of transaction attributes like uncertainty, asset specificity, and

complexity on client organizations' choice of governance mechanisms. On the second level, it investigates the impact of transaction attributes and governance mechanisms on IS outsourcing success. The results indicate that relational norms in the client-vendor relationship and well-specified contracts have a strong positive effect on success, whereas formalized processes, environmental uncertainty, and complexity show a negative effect. Furthermore, the data reveal a pronounced influence of transaction attributes on organizational choice of outsourcing governance mechanisms. Overall, these findings provide strong evidence of the relevance of transaction cost theory as a reference theory for the study of IS outsourcing relationships. The data confirm the critical nature of governance for successful IS outsourcing, while, at the same time, suggesting a more situational approach to its design. These findings have several important implications for outsourcing management and research, which the essay discusses in detail.

Collectively, the five essays in this dissertation address a number of interesting research questions related to IS outsourcing relationships, their governance, and the resulting outcomes. While far from exhausting the subject, they do offer a rich set of findings and raise a variety of interesting theoretical and empirical questions for future research. Thus, overall, this dissertation contributes to a deeper understanding of the complex dynamics of governance and success in IS outsourcing.

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Success is the ability to go from one failure to another with no loss of enthusiasm.

– Winston Churchill

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