



# Contracts for Successful Outsourcing: Analyzing the Impact of Pricing Structures, Penalty & Reward Systems, and Liability Clauses on “Good” Sourcing Relationships

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## ABSTRACT

Outsourcing literature emphasizes the importance of contracts and contract management for outsourcing success. In particular, contract quality has been stressed as a critical success factor to attain expected benefits. But what constitutes an efficient contract from an outsourcer's point of view? To find out, we address in our case study research, the following research question: How does the design of certain contract elements (such as general terms and conditions, pricing structures, and service level agreements) influence the realization of expected benefits? Our overall goal is to provide a contract framework that highlights elements worth focusing on during contract negotiations as they greatly influence success of the outsourcing deal. First results indicate that (1) in- and outsourcers' objectives can be matched (ex ante) with penalty and reward systems incorporated in a service level framework and that (2) liability clauses addressing compensations for potential losses (ex post) are major contract issues. Furthermore, particular deal characteristics are identified that indicate when variable pricing is superior to fixed pricing (and vice versa).

## INTRODUCTION AND RESEARCH OBJECTIVE

Expectations of IT outsourcing and their realization have been discussed in IS literature in great detail (Lacity and Willcocks, 1998). Improving services while reducing IT costs are among the main reasons why outsourcing has been undertaken (Apte et al., 1997; Hancox, 1999; Loh, 1994). Nevertheless, just as any other uncertain business venture, outsourcing also implies risks (Aubert et al., 1998). To ensure that the expected benefits are realized and the potential risks are actively managed, the contract has been stressed as an important tool by various researchers (Aubert et al., 2002; Kern, 1997; Willcocks and Kern, 1998). So far, IS outsourcing research lacks an analysis of how the design and dynamics of contract elements impact on the outsourcer's satisfaction with the overall contract configuration (i.e. the degree to which contract elements enhance the realization of expected benefits) and analogously how contract configuration impacts on the perceived outsourcing success. Our goal is to close this gap by answering the following research question:

- How does the design of contract elements influence the realization of expected benefits?

We will use a causal model to analyze the impact of different contract components on outsourcing success. A theoretically grounded framework will be compiled by drawing on contract characteristics known from outsourcing literature. This model and the underlying hypotheses are validated by using multiple case studies.

## RESEARCH MODEL

As the contract is the most critical element of relationship management (Aubert et al., 2003) establishing the wrong terms can be as calamitous as overpaying for a company acquisition (Useem and Harder, 2000). In order to identify the “right” terms our causal model will be based on the following theoretical approaches:

- (1) *Production and Transaction Cost Economics* (Williamson, 1981) form the basis for the analysis of the impact of the realization of expected cost savings on contract satisfaction. ( $H_2$ ,  $H_3$ )
- (2) The analysis of the attainment of expected benefits (e.g. improvement of quality) on contract satisfaction is based on a *Business Value of IT* evaluation (Hitt and Brynjolfsson, 1996). ( $H_6$ ,  $H_7$ )
- (3) Handling outsourcing risks and the influence on contract satisfaction will be examined by applying general *Risk Management* approaches (Aubert et al., 1999; Earl, 1996). ( $H_{11}$ ,  $H_{12}$ )

With the help of case study research we aim to test whether or not the above mentioned approaches have a direct impact on an outsourcer's satisfaction with the contract configuration. When applying case study research several aspects have to be considered to ensure validity of research (Eisenhardt, 1989): Construct validity, internal validity, external validity, and reliability have been addressed according to (Yin, 2003).

Figure 1 presents an overview over the causal relationships in our model.

Perceived outsourcing success is defined, based on (Grover et al., 1996), as the satisfaction with benefits from outsourcing gained by an organization as a result of deploying an outsourcing strategy. We understand that this success is greatly determined by the degree to which a contract supports the realization of expected benefits.

Figure 2 offers brief descriptions of the different causal relationships with reference to relevant literature.

## INITIAL RESULTS

An initial analysis of our case study interviews indicates that general terms and conditions, pricing structures, and service level agreements (SLAs) have an impact on the overall satisfaction with the contract configuration and thereby influence the perceived outsourcing success. We surveyed European banks which outsourced IT application develop-

Figure 1.

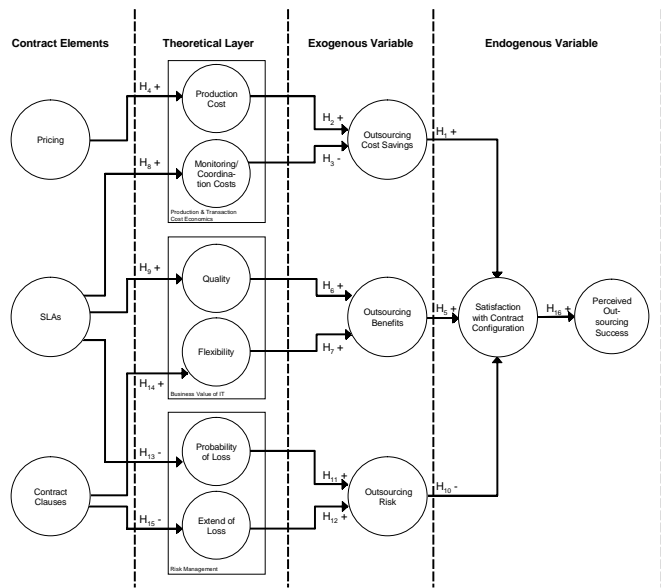


Figure 2.

No	Causal Relationship
H <sub>1</sub>	Realization of economic benefits fosters the success of an outsourcing deal (Grover et al., 1996). Achieving cost savings based on certain contractual elements increases the satisfaction with the contract configuration.
H <sub>2</sub>	Due to economics of scale, scope, and skill the vendor is able to explore production cost advantages (Dibbern, 2003). Thereby, he is able to provide services at a more favorable price than in-house production of the outsourcer (Ang and Straub, 1998). A decrease in production costs due to obtaining outsourced services results in enhanced cost savings for the outsourcer.
H <sub>3</sub>	Monitoring the performance and quality of the services provided informs the outsourcer whether the objectives have been met, what discrepancies there are, what controls need to be in place, and, eventually, confirms success (Alborz et al., 2003). Monitoring cannot be performed at no cost (Hancox and Hackney, 2000). An increased coordination and monitoring effort negatively influences cost savings related to outsourcing.
H <sub>4</sub>	Incentives are generally created through the pricing mechanism adopted (Harris et al., 1998). Variable pricing ties the payment stream to the output (McFarlan and Nolan, 1995). A fixed price contract may provide significant incentives for the outsourcing vendor to invest in technologies that improve its productivity (Elitzur and Wensley, 1997). Establishing the wrong pricing-scheme negatively affects production costs.
H <sub>5</sub>	Realization of expected benefits influences the satisfaction with outsourcing (Grover et al., 1996). Achieving benefits based on certain contractual elements increases the satisfaction with the contract configuration.
H <sub>6</sub>	The ability to provide service quality beyond expectations has a significant direct impact on benefit attainment. (Grover et al., 1996). Among other factors supplier quality is vital outsourcing success (McFarlan and Nolan, 1995). Quality of the services delivered directly influences the realization of outsourcing benefits.
H <sub>7</sub>	The major rationale for creating flexible contracts is to recognize the fact that certain external factors not under the control of the contracting units may change (Harris et al., 1998). Contracts need to be flexible because of the decreasing time to market and the fast technological developments (Beulen and Ribbers, 2002). Enhanced flexibility through an outsourcing relationship has a direct impact on the realization of benefits.
H <sub>8</sub>	Occupying employees within the outsourcer's organization to monitor and coordinate the outsourced services creates costs. Therefore, the controlling of SLAs brings along monitoring and coordination costs.
H <sub>9</sub>	Practitioners often proclaim that a key to managing sourcing relationships is the SLA (Goo et al., 2004). Well-defined expectations of an organization's IT requirement were also likely to lead to improved performance when the service was outsourced (Domberger et al., 2000). Setting-up and controlling the adherence to effective SLAs has a positive impact on overall service quality.
H <sub>10</sub>	Contractually implemented effective risk mitigation strategies enhance satisfaction with contract configuration.
H <sub>11</sub>	The probability of loss determines the overall outsourcing risk (Aubert et al., 1999)
H <sub>12</sub>	Strategic contracting deals with risk management by either reducing the probability that an undesired outcome occurs, or by cutting the losses of such an outcome (Aubert et al., 1999). The extend of loss influences the overall outsourcing risk
H <sub>13</sub>	Detailed SLAs can help to decrease the probability of loss.
H <sub>14</sub>	Contracts need to be flexible because of the decreasing time to market and the fast technological developments. Flexibility in the type, the level and the quantity of service is essential (Beulen and Ribbers, 2002). Certain contract clauses, such as procedures for change requests or initiation of new projects, enhance the overall flexibility within an outsourcing deal.
H <sub>15</sub>	Contract clauses, such as liability clauses and/or insurances can limit the extent of losses.
H <sub>16</sub>	Appropriate contract configuration positively influences perceived success of outsourcing (Alborz et al., 2004)

ment and/or maintenance. First results of the interviews conducted with the respective IT Project Managers can be found in the following:

**Pricing**

Bank 1 and Bank 2 base their services on a variable pricing scheme. They report difficulties when negotiating this scheme as there is no clear standardized base from which to determine variable pricing (e.g. trans-

action volumes). Bank 3 whose contract contains fixed pricing does not report such problems. However, Bank 3 states that due to this fixed pricing and the non-existence of price adjustment clauses they feel very inflexible. Bank 2 reports that its vendor does not invest in technologies related to the outsourcing deal as variable pricing does not provide an incentive for the vendor to do so.

Outsourcing is often regarded as a tool to transform fixed into variable costs. However, variable pricing seems not to be a 'panacea'. During our interviews we identified situations when variable pricing is not incentive compatible. At the same time, fixed pricing can lead to disadvantages as the outsourcer may feel 'locked-in'. Therefore, a key challenge is to develop a pricing structure that is incentive compatible. This may encompass a combination of both fixed and variable pricing components.

**SLAs**

Bank 1 and Bank 2 have contractually agreed upon output- and behaviour based SLAs. In addition, their SLAs are linked with a penalty system. Bank 3 does not provide such a link within its outsourcing contract. This bank reports problems with its vendor for maintaining the service levels agreed upon. Furthermore, it is noticeable that despite the existence of standardized detailed service level frameworks (e.g. ITIL) most of our case study interview partners only apply the service levels 'Time to Respond', 'Time to Qualify', and 'Time to Resolve'.

In- and outsourcers' objectives can be *ex ante* matched with penalty and reward systems incorporated in a service level framework. Quality of services may be enhanced if SLAs are not only output-driven but also behaviour-based.

**Contract Clauses**

The contracts of Bank 1 and Bank 2 encompass liability and insurance clauses. The liability clauses of Bank 1 are related to the deal size. The contract of Bank 3 does not include any of those clauses. The management responsible for the outsourcing deal of Bank 3 is even not familiar with suitable insurance concepts for outsourcing deals (e.g. Captives).

Liability and insurance clauses can help to mitigate potential risk and losses related to outsourcing. Not implementing such clauses or not relating them to the deal size increases the probability that an outsourcer may suffer severely from negative outcomes.

These results are intended only to provide first indications as further interpretation of them, as well as of additional case studies, is necessary to provide detailed evidence. In the course of the following weeks we are going to test all hypotheses systematically against our case study results. At the time of the conference, we will be able to state whether or not our hypotheses can be confirmed and will present the complete findings of our research.

(Ang and Straub, 1998; Dibbern, 2003 ) (Alborz et al., 2003; Hancox and Hackney, 2000) (Elitzur and Wensley, 1997; McFarlan and Nolan, 1995) (Beulen and Ribbers, 2002; Harris et al., 1998) (Domberger et al., 2000; Goo et al., 2004) (Alborz et al., 2004)

**REFERENCES**

Alborz, S., Seddon, P.B., and Scheepers, R. "A Model for Studying IT Outsourcing Relationships," 7th Pacific Asia Conference on Information Systems PACIS, Adelaide, Australia, 2003, pp. 1297 - 1313.

Alborz, S., Seddon, P.B., and Scheepers, R. "Impact of Configuration on IT Outsourcing Relationships," 10th Americas Conference on Information Systems AMCIS 2004, New York, USA, 2004, pp. 3551-3560.

Ang, S., and Straub, D. "Production and Transaction Economies and IS Outsourcing: A Study of the U.S. Banking Industry," MIS Quarterly (4), December 1998, pp. 535-552.

Apte, U.M., Sobol, M.G., Sho, H., Shimada, T., Saarinen, T., Salmela, T., and Vepsalainen, A.P.J. "IS Outsourcing Practices in the

- USA, Japan and Finland: A Comparative Study," *Journal of Information Technology* (12) 1997, pp. 289-304.
- Aubert, B.A., Patry, M., and Rivard, S. "Assessing the Risk of IT Outsourcing," 31st Hawaii International Conference on System Sciences HICSS, Hawaii, 1998.
- Aubert, B.A., Patry, M., and Rivard, S. "Managing IT Outsourcing Risk: Lessons Learned," in: *Information Systems Outsourcing - Enduring Themes, Emergent Patterns and Future Directions*, R. Hirschheim, A. Heinzl and J. Dibbern (eds.), Springer, Berlin, 2002, pp. 155-176.
- Aubert, B.A., Patry, M., and Rivard, S. "A Tale of Two Outsourcing Contracts - An Agency-Theoretical Perspective," *Wirtschaftsinformatik* (45:2) 2003, pp. 181-190.
- Aubert, B.A., Patry, M., Rivard, S., and Dussault, S. "Managing the Risks of IT Outsourcing," 32nd Hawaii International Conference on System Sciences HICSS, Hawaii, 1999.
- Beulen, E., and Ribbers, P. "Managing Complex IT Outsourcing-Partnerships," 35th Hawaii International Conference on System Sciences HICSS, Hawaii, 2002.
- Dibbern, J. *The Sourcing of Application Software Development and Maintenance*, Springer, Berlin, 2003.
- Domberger, S., Fernandez, P., and Fiebig, D.G. "Modelling the price, performance and contract characteristics of IT outsourcing," *Journal of Information Technology* (15) 2000, pp. 107-118.
- Earl, M.J. "The Risks of Outsourcing IT," *Sloan Management Review* (Spring) 1996, pp. 26-32.
- Eisenhardt, K.M. "Building Theories from Case Study Research," *Academy of Management Review* (14:4) 1989, pp. 532 - 550.
- Elitzur, R., and Wensley, A. "Game Theory as a Tool for Understanding Information Services Outsourcing," *Journal of Information Technology* (12) 1997, pp. 45 - 60.
- Goo, J., Kishore, R., and Rao, H.R. "Management of Information Technology Outsourcing Relationships: The Role of Service Level Agreements," *International Conference on Information Systems ICIS*, Washington, D.C., USA, 2004, pp. 325-338.
- Grover, V., Cheon, M.J., and Teng, J.T.C. "The Effect of Service Quality and Partnership on the Outsourcing of Information Systems Functions," *Journal of Management Information Systems* (12:4) 1996, pp. 89-116.
- Hancox, M., and Hackney, R. "IT Outsourcing: Frameworks for Conceptualizing Practice and Perception," *Information Systems Journal* (10:3), 2000, pp. 217-237.
- Hancox, M., and Hackney, R. "Information Technology Outsourcing: Conceptualizing Practice in the Public and Private Sector," 32nd Hawaii International Conference on System Sciences HICSS, Hawaii, 1999.
- Harris, A., Giunipero, L.C., and Hult, G.T.M. "Impact of Organizational and Contract Flexibility on Outsourcing Contracts," *Industrial Marketing Management* (27:5) 1998, pp. 373-384.
- Hitt, L.M., and Brynjolfsson, E. "Productivity, Business Profitability and Consumer Surplus: Three Different Measures of Information Technology Value," *MIS Quarterly* (20:2) 1996, pp. 121-142.
- Kern, T. "The Gestalt of an Information Technology Outsourcing Relationship: An Exploratory Analysis," *International Conference on Information Systems ICIS*, Atlanta, USA, 1997, pp. 37-58.
- Lacity, M.C., and Willcocks, L.P. "An Empirical Investigation of Information Technology Sourcing Practices: Lessons from Experience," *MIS Quarterly* (September) 1998, pp. 363-408.
- Loh, L. "An Organizational-Economic Blueprint for Information Technology Outsourcing: Concepts and Evidence," *International Conference on Information Systems ICIS*, Vancouver, Canada, 1994, pp. 73-89.
- McFarlan, F.W., and Nolan, R., L. "How to Manage an IT Outsourcing Alliance," *Sloan Management Review* (Winter) 1995, pp. 9-23.
- Useem, M., and Harder, J. "Leading Laterally in Company Outsourcing," *Sloan Management Review* (41:2) 2000, pp. 25-36.
- Willcocks, L., and Kern, T. "IT Outsourcing as Strategic Partnering: The Case of the UK Inland Revenue," *European Journal of Information Systems* (7:1) 1998, pp. 29-45.
- Williamson, O.E. "The Economics of Organization: The Transaction Cost Approach," *American Journal of Sociology* (87:3), November 1981, pp. 548-577.
- Yin, R.K. *Case Study Research: Design and Methods* Sage Publications, Thousand Oaks, California, 2003.

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