Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2012 Proceedings

Pacific Asia Conference on Information Systems (PACIS)

7-15-2012

Global IT Multisourcing: Objectives, Challenges And Requirements In Multinational Insurance Companies

Thomas Ph. Herz

Institute of Information Management, University of St. Gallen (HSG), Switzerland, thomas.herz@unisg.ch

Florian Hamel

Institute of Information Management, University of St.Gallen (HSG), Switzerland, florian.hamel@unisg.ch

Falk Uebernickel

Institute of Information Management, University of St.Gallen (HSG), Switzerland, falk.uebernickel@unisg.ch

Walter Brenner

Institute of Information Management, University of St.Gallen (HSG), Switzerland, walter.brenner@unisg.ch

Follow this and additional works at: http://aisel.aisnet.org/pacis2012

Recommended Citation

Ph. Herz, Thomas; Hamel, Florian; Uebernickel, Falk; and Brenner, Walter, "Global IT Multisourcing: Objectives, Challenges And Requirements In Multinational Insurance Companies" (2012). *PACIS 2012 Proceedings*. 52. http://aisel.aisnet.org/pacis2012/52

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2012 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

GLOBAL IT MULTISOURCING: OBJECTIVES, CHALLENGES AND REQUIREMENTS IN MULTINATIONAL INSURANCE COMPANIES

- Thomas Ph. Herz, Institute of Information Management, University of St.Gallen (HSG), Switzerland, thomas.herz@unisg.ch
- Florian Hamel, Institute of Information Management, University of St.Gallen (HSG), Switzerland, florian.hamel@unisg.ch
- Falk Uebernickel, Institute of Information Management, University of St.Gallen (HSG), Switzerland, falk.uebernickel@unisg.ch
- Walter Brenner, Institute of Information Management, University of St.Gallen (HSG), Switzerland, walter.brenner@unisg.ch

Abstract

In recent times, information technology (IT) multisourcing has emerged as a key strategy in the field of IT outsourcing. Most of the current scholarly and practitioner-related literature acknowledges the importance of multisourcing, but linear extensions of the dyadic client-vendor relationship are insufficient to capture its nuances. Multinational financial services providers (such as banks and insurance companies) have been pioneers in the field of IT outsourcing. However, there is a lack of experience-based research about the implementation of global IT multisourcing. In this article we present findings from a cross-case study investigating the implementation of global IT multisourcing in four leading insurance companies. First, the article presents the objectives of the insurers in pursuing global IT multisourcing. Second, the research reveals challenges the companies are facing in implementing global IT multisourcing. Finally, requirements for implementing IT multisourcing are derived. The insights of these real-life examples extend existing literature on IT outsourcing and provide helpful orientation for organizations that are implementing global IT multisourcing.

Keywords: Multisourcing, IT outsourcing, Offshoring, Insurance companies, Cross-case study.

1 INTRODUCTION

Global IT multisourcing is a phenomenon of considerable theoretical and practical importance in IT outsourcing (Bapna et al. 2010; Cohen and Young 2006; Hakkenberg et al. 2011; Janischowsky and Schonenbach 2009; Levina and Su 2008; Oshri et al. 2009; Oshri et al. 2011; Su and Levina 2011). By the term multisourcing we mean the blending of services from multiple company-internal as well as company-external providers in the pursuit of business goals (Cohen and Young 2006). The increasing need for cost efficiency, flexibility and quality in today's fast-paced and globalized economic world is the main reason for the emergence of global IT multisourcing as a key strategy in IT outsourcing (Levina and Su 2008).

In general, the field of IT outsourcing can be characterized by five major areas: (1) why outsource, (2) what to outsource, (3) which decision process to adopt, (4) how to implement the sourcing decision, and (5) what is the outcome of the sourcing decision (Dibbern et al. 2004). When we take a closer look at the fourth area we can observe that most of the research on IT outsourcing has addressed dyadic IT client-vendor relationships. The question of how and why large corporations implement global IT multisourcing is rather underexplored and only a little experience-based research exists in this area. In this context, Bapna et al. (2010, p. 749) mention that "linear extensions of dyadic client-vendor IT outsourcing relationships are insufficient to capture the nuances of the multisourced environment". Pioneers in the area of IT and business process outsourcing and offshoring have been, in particular, companies from the financial services industry such as banks and insurers (Levina and Su 2008). Several case studies about multisourcing in large banks can be found in existing literature (Levina and Su 2008; Su and Levina 2011). However, despite numerous examples of large insurance companies applying a multisourcing approach (see Da Rold and Karamouzis (2009) or Sinss and Schneider (2011)), insurance companies have not been investigated in a scientific manner so far. The purpose of this study is to fill this lack of experience-based research and contribute to the understanding of the implementation of global IT multisourcing in leading insurance companies with a special focus on the why and the how. Thus, we address this research gap by asking two distinct research questions:

[RQ1] Why are leading insurance companies implementing global IT multisourcing? [RQ2] How are leading insurance companies implementing global IT multisourcing?

In order to answer these research questions, we took a qualitative research approach, conducting a cross-case study on global IT multisourcing implementation at large insurance companies. In this article, we present the findings of our research on the objectives, challenges and requirements of implementing global IT multisourcing. We aim to contribute to the topic of IT multisourcing in the following three ways: (1) giving an overview of the real-life global IT multisourcing approaches of four leading insurance companies, (2) illustrating the different objectives of the insurers' IT multisourcing (why), and (3) highlighting the most important challenges and requirements of implementing a global IT multisourcing approach (how). In addition, we aim to provide informative and helpful insights for practitioners who are interested in comprehensive descriptions of the objectives, challenges and requirements of global IT multisourcing in insurance companies.

The rest of this article is organized in six sections. After introducing the fundamental theoretical terms and concepts in section two, section three outlines the research methodology. It is followed by the case descriptions illustrating the global IT multisourcing approaches of four leading insurance companies in section four. The main findings are presented and discussed in sections five and six. Finally, the article ends with a conclusion.

2 FOUNDATION AND RELATED RESEARCH

Oshri et al. (2011, p. 130) argue that multisourcing "appears to be the long-term dominant trend in global sourcing" and that multisourcing invigorates the growth of IT outsourcing and business process outsourcing markets (Oshri et al. 2011). In this regard, Cohen and Young (2006, p. 1) describe multisourcing as "the disciplined provisioning and blending of business and IT services from the optimal set of internal and external suppliers in the pursuit of business goals". The authors follow this definition as suggested by other authors (see, inter alia, Levina and Su 2008) and focus on aspects of IT. When this definition is applied to global IT multisourcing, the client company chooses an optimal set of company-internal and company-external suppliers. Even though multisourcing is not directly linked to offshoring, the multiple suppliers are often spread geographically (Bapna et al. 2010). To achieve the "optimal set of suppliers" (Cohen and Young 2006) the client company can apply any combination or even all of the major sourcing options as described by Oshri (2011) and Oshri et al. (2011):

- in-house (make, onshore)
- shared services (make, onshore) or captive center (make, nearshore / offshore)
- onshore outsourcing (buy, onshore)
- nearshore / offshore outsourcing (buy, nearshore / offshore)

Multisourcing approaches can be characterized by the *breadth* and *depth* of client-supplier relationships (Su and Levina 2011). These two dimensions lead to four archetypes of the multisourcing supply base:

- concentrated partnerships (low breadth, high depth)
- diversified partnerships (high breadth, high depth)
- diversified transactions (high breadth, low depth)
- concentrated transactions (low breadth, low depth)

According to Su and Levina (2011), the breadth is characterized by the number of suppliers, while the depth describes the level of investment in a specific client-supplier relationship. The authors apply the model of Su and Levina to characterize the IT multisourcing approaches of the case companies. In this regard, the authors have selected two out of five IS functions as described by Grover et al. (1996), namely, application development and maintenance (*ADM*) and systems operations (in the following *infrastructure*) to cover both a project-driven IS function (ADM) as well as an operations-driven IS function (infrastructure) (Beulen et al. 2005). Besides covering two relevant aspects of IS functions, these two IS functions are beneficial for a research project since ADM and infrastructure are well known and used terms in practice, as suggested in previous interviews with practitioners.

This research study investigates cases from the insurance industry and thereby covers both primary and reinsurance companies. Insurance can be defined as a business in which the insured makes a payment of a premium and thereby passes the risk to the insurance company (Farny 2006). While primary insurance companies have individuals or companies which are not insurers themselves as their clients (Farny 2006), the clients of reinsurance companies are insurance companies which thereby redistribute risks (Borch 1962). Therefore, the reinsurance market can be described as a secondary market (Plantin 2006). In the following, we use the term *insurance company* as a generic term for both primary insurance and reinsurance companies. Our research focuses on *leading* insurance companies acting on a global scale. Further, the insurance companies investigated in this research are profitable in terms of business. Both requirements limit the number of potential cases of insurance companies to just a few.

3 RESEARCH METHODOLOGY

To identify why and how leading insurance companies implement global IT multisourcing, the authors selected a qualitative research design based on a cross-case study approach (Eisenhardt 1989). Especially to investigate complex phenomena (such as IT multisourcing), case studies are a fruitful research design which is widely used to explore research gaps in IS (Benbasat et al. 1987; Palvia et al. 2007). According to Eisenhardt (1989), new theories can be built on the basis of explorative case studies. The authors follow Eisenhardt's (1989) recommendation to use between four and seven cases by conducting a cross-case study with four leading multinational insurance companies that provide services on a global scale. Three of the four investigated cases are primary insurance companies and belong, based on operating profit in 2010, to the top five primary insurance companies. The remaining case is a reinsurance company which is one of the two leading reinsurance companies, based on both revenues and operating profit. All four insurance companies investigated in this cross-case study have deployed a global IT multisourcing strategy. However, the organizational context and the IT multisourcing implementation approach differ among the cases. The chosen industry for the case study is especially useful for investigating IT multisourcing in practice since – as argued by Levina and Su (2008) – financial services providers (such as banks and insurance companies) tend to be more proactive in outsourcing and offshoring IT and business processes, as well as basing their business model closely on IT with a very high penetration of IT in business processes.

In order to gather detailed information about the IT multisourcing approaches, the authors conducted multiple interviews with senior managers of the insurance companies. In total, 19 interviews were conducted by two researchers in person, each of them lasting between two and three hours. The data collection process was carried out over a four-month period in 2011. The interviews – a total of nine – with insurer ONE lasted 21 hours and were conducted with the multisourcing program / project manager, the transition manager, the vendor manager, a multisourcing controller, and the captive center manager. For insurer TWO, the authors conducted two interviews with a total duration of five hours, speaking to sourcing executives. Within five interviews, which lasted eight hours, the authors gathered detailed information about the approach of insurer THREE. The interviewees were the CIO and the sourcing executive. The last case was investigated by conducting three interviews with a total duration of six hours. At insurer FOUR, the authors interviewed the CIO and the senior sourcing governance manager. Expert interviews conducted in 2010 built the basis for the interview guidelines. The interview guidelines covered on the one hand general questions on the insurance companies and the global IT multisourcing approach applied and on the other hand specific questions on vendor selection, governance, and performance management in terms of IT multisourcing. The interviews were semi-structured and all were transcribed.

For data analysis the authors applied cross-case analysis and traditional open coding (Corbin and Strauss 1990; Eisenhardt 1989; Miles and Huberman 1994; Patton 2002) with two additional independent researchers not present during the interviews. To ensure consistency of the research, the authors applied triangulation of both sources and analysts (Patton 2002) by integrating supplementary data and the use of two independent researchers. By triangulating the interview transcripts with supplementary key documents describing the global IT multisourcing approach which the authors gained access to, the authors were able to triangulate sources (Denzin 2009; Patton 2002). Triangulation of analysts was ensured by using two additional independent researchers to review the transcripts and documents.

The derived findings were validated in two steps. First, the cross-case study findings were presented and discussed during an expert workshop with sourcing practitioners (focus group approach). And, second, two follow-up expert discussions validated the findings.

4 OVERVIEW OF SELECTED CASES

In the following, the authors describe the four leading multinational insurance companies that are the subject of this research study based on business and IT facts. In regard to business facts, the authors characterize the cases by business segment (primary or reinsurance), organizational aspects, revenues, operating profit and country presence. In regard to IT facts, the authors mainly focus on the multisourcing strategy as well as the IT governance mode according to Sambamurthy and Zmud (1999), who distinguish between centralized, decentralized, and federal governance modes.

All three selected primary insurance companies (insurers ONE, TWO and THREE) are among the top five primary insurance companies based on operating profit for 2010. Insurer FOUR is one of the top two reinsurance companies worldwide based on both revenues and operating profit. Considering the limited number of large, global primary insurance companies and the small market of truly global reinsurance companies, this sample represents leading multinational insurance companies with distinct organizational setups and IT multisourcing approaches in order to cover polar cases (Eisenhardt 1989). The organizational structure of all insurance companies can be characterized as business group structure according to Granovetter (1994), with a group center and numerous business entities (BE). The group center is usually associated with a minimum of common administrative, financial and managerial tasks, whereas the operational business is carried out by the business entities (Granovetter 1994). In the context of IS, the group center "provides group-wide IT services and exerts some degree of central leadership and control of IT activities" (Hodgkinson 1996, p. 248). Throughout the four cases, central IS leadership and control as regards sourcing is mainly driven by defining sourcing and shoring guidelines and by determining a set of strategic suppliers with whom, firstly, the group enters into a frame agreement and, secondly, a local BE engages on individual projects.

Insurer ONE is a leading primary insurance company that is present in more than 70 countries and generates more than EUR 5 billion in operating profit (2010) as well as over EUR 90 billion in revenues. It can be described as a large, multinational business group that grew through many mergers and acquisitions during the last two decades. Based on this, the organizational structure of the IT department is rather decentralized with an IT governance mode that has recently been changed from decentralized to federal. In regard to IT multisourcing, insurer ONE developed a global, group-wide multisourcing strategy in 2009 with a combination of captive center service delivery and offshore outsourcing through a limited number of strategic suppliers. It started its IT multisourcing endeavor with ADM and extended it recently to infrastructure services.

Insurer TWO – a primary insurance company – serves clients in more than 50 countries and generates revenues almost of a similar size to insurer ONE. It earns more than EUR 5 billion in operating profits, has a business group structure and can be characterized by a federal IT governance mode. Insurer TWO has applied IT multisourcing since 2007 using a combination of shared service center, outsourcing and offshoring whilst retaining a large part in-house. Currently it refines its approach by re-selecting strategic suppliers and targeting increased offshore service delivery.

Insurer THREE achieves a similar operating profit to insurer ONE and insurer TWO from just half of the revenues. Insurer THREE also acts in the primary insurance market and is active in more than 150 countries. The IT governance mode can be described as federal with a strong group center. As early as 2004, insurer THREE approached IT multisourcing with a radical change of its sourcing strategy, which developed from applications over infrastructure to business processes. Insurer THREE has a very strong tendency towards infrastructure outsourcing and ADM offshoring.

Insurer FOUR is one of the top two reinsurance companies worldwide. With more than EUR 45 billion in revenues, it generates around EUR 4 billion in operating profits and is present in more than 150 countries. With a centralized IT governance mode, insurer FOUR complements all three options of IT governance modes according to Sambamurthy and Zmud (1999). As early as 2000, insurer FOUR adopted a step-by-step approach – in contrast to insurer THREE – to IT multisourcing by reshaping the IT organization towards a service organization. The major difference between the

reinsurance case and the primary insurance cases is the heterogeneity in data and applications. In contrast to the reinsurance case, primary insurance companies serve many homogenous clients and therefore strive for economies of scale. Reinsurance companies target far fewer clients, yet customize business solutions and, in this context, applications to specific situations.

In order to further characterize the different cases of the four leading insurance companies as regards IT multisourcing, we created a matrix applying the IS functions of Grover et al. (1996) to the IT multisourcing archetypes of Su and Levina (2011) (see Figure 1).

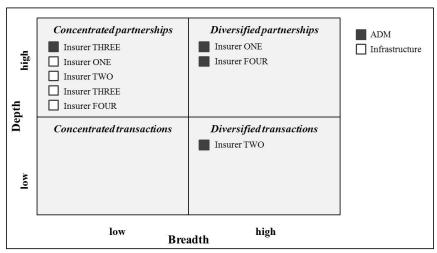


Figure 1. Characterization of cases according to archetypes of IT multisourcing supply base (based on Su and Levina (2011))

As regards the different archetypes of the IT multisourcing supply base, it is noteworthy that the supplier relationships of all insurance companies in the IS function *infrastructure* can be described as concentrated partnerships, though the degree of sourcing varies across the insurance companies. In contrast, the IS function *ADM* is more heterogeneous across the four insurance companies. Only insurer THREE applies concentrated partnerships in the ADM function as well. Both insurer ONE and insurer FOUR entered into diversified partnerships involving numerous suppliers for ADM. Insurer TWO, on the contrary, utilizes diversified transactions for ADM.

5 OBJECTIVES OF IMPLEMENTING GLOBAL IT MULTISOURCING

As regards research question one ([RQ1] why are leading insurance companies implementing global IT multisourcing?), we identified four major objectives as to why multinational insurance companies pursue global IT multisourcing. The investigated companies follow a global IT multisourcing approach in order to:

- reduce factor costs and optimize the overall cost structure
- increase organizational flexibility and scalability of services
- facilitate access to specialized resources and know-how
- generate value added through improved quality of services

Existing literature describes flexibility and quality as well as increased competition between the suppliers as benefits of IT multisourcing and suggests, as a consequence, that an IT multisourcing strategy allows for risk mitigation and cost reduction (Bapna et al. 2010; Cross 1995; Lacity and Willcocks 1998; Levina and Su 2008; McMillan 1990; Porter 1985; Richardson 1993).

All interviewees indicate consensus that cost reduction is an important motive for implementing IT multisourcing, accompanied by optimizing the overall cost structure. One manager stated, for instance:

```
[...] by utilizing IT multisourcing we move fixed costs to variable costs. By doing so, we aim to buy IT infrastructure in units from best-of-breed suppliers [...]
```

Another claimed in regard to competition:

```
[...] when outsourcing, we always create a competition between potential outsourcing suppliers [...]
```

Based on the possibility of acquiring, e.g., IT infrastructure units on demand, an organization increases its flexibility and provides the basis for scalability of IT services. This in turn, enables the business to pursue, for example, growth strategies both by new business and by merger and acquisitions, as another case study partner stated:

```
[...] our IT multisourcing strategy is aligned with our business strategy of growth and enables the business to achieve respective goals through flexible and scalable IT services [...]
```

Under the objective "flexibility and scalability" we also subsume accelerating the time-to-market of applications and insurance products. According to the research participants, flexibility also implies the freedom of business entities to choose from a pre-defined list of preferred suppliers in order to cope, e.g., with local market specifics. This further mitigates the risk of a lock-in effect with one single supplier and thereby prevents the emergence of a dominant supplier.

Furthermore, flexibility in combination with access to specialized resources and know-how (e.g. for the claims process) reduces the time-to-market of applications by picking specialized providers and thereby enabling the business site of an insurance company to provide products more rapidly (primary insurance) or customized (reinsurance). One participant acknowledged:

```
[...] with ADM multisourcing, we ensure we get the most knowledgeable people from the suppliers for dedicated ADM areas [...]
```

Besides costs, flexibility and know-how, the case study participants implement global IT multisourcing in order to add value through improved quality of services. According to the case study partners, the respective multisourcing suppliers are able to help the insurance companies to improve their service quality by means of the advanced maturity and knowledge of the suppliers in regard to methods and processes, as well as by the expertise and skills of their staff.

6 REQUIREMENTS FOR IMPLEMENTING GLOBAL IT MULTISOURCING

In order to derive the requirements for *how* to implement global IT multisourcing in multinational insurance companies and thereby targeting research question 2 ([RQ2] how are leading insurance companies implementing global IT multisourcing?) we analyzed the four insurance companies in regard to the challenges and requirements observed throughout their implementation of global IT multisourcing. By doing so, we aimed to describe the major challenges and suggest requirements to address those challenges.

6.1 Identified challenges of implementing global IT multisourcing

In this section, the authors highlight the major challenges derived from the cross-case study in the insurance industry. The challenges can be described in terms of five major issues:

- Internal change resistance
- Operational adjustments
- Retained organization
- Selection and management of multiple suppliers
- Invoking a group-wide IT multisourcing concept

Internal change resistance is closely related to people and is one of the most significant challenges to overcome in order to implement a global IT multisourcing strategy, according to the case study participants. Internal change resistance – due to uncertainty about one's own position in the future or to changing working conditions e.g. in terms of other cultures or languages – can inhibit commitment to and acceptance of IT multisourcing. One interviewee stated, for example:

```
[...] in IT middle management and IT team leads we observe a strong resistance especially towards offshoring and associated changes [...]
```

The implementation of an IT multisourcing strategy is in general accompanied by *operational adjustments*. The insurance companies face the challenge of adjustments of processes in order to collaborate with multiple suppliers. For example, the sourcing of application development to offshore locations results in modified working mechanisms for both the client company and the multiple suppliers. In this regard one interviewee mentioned:

```
[...] we split the v-model of application development; the upper part is accomplished internally, whereas the lower part is offshored to strategic providers in India [...]
```

Besides the internal change resistance and the adjustment of processes, the research study indicates that the *shaping of the retained organizational structure* is another challenge. Especially in comparison to in-house service delivery or dyadic outsourcing, the case study participants claim that it is challenging for a large multinational company to align the organizational structures and corresponding roles with a multitude of suppliers:

```
[...] the skillset of your people in multisourced environments shifts towards sourcing and vendor management and you might need to replace your current people [...]
```

And another emphasizes that:

```
[...] on both sides (client and suppliers) you need the right people [...]
```

Moreover, both the *supplier selection* and the required time and effort for the *management of numerous suppliers* are likely to be underestimated. The selection of appropriate strategic suppliers is a major challenge identified by the research study. Companies face the risk of choosing a wrong partner and not being able to collaborate as intended. Further, the research participants indicate the challenge of adjusting their management resources from internal service delivery or dyadic outsourcing relationships to multiple client-supplier relationships, which is linked to a certain sourcing experience and maturity:

```
[...] even after eight years of multisourcing, I would describe our maturity as at a rather early stage [...]
```

Additionally, the case study participants indicate that invoking IT multisourcing in a multinational insurance company with a group structure is challenging. Especially insurers ONE, TWO and THREE – all characterized by a federal or former decentralized IT governance mode – describe the difficulty of getting the buy-in of local BEs.

```
[...] in some cases strong local BEs refuse to work with centrally selected strategic suppliers [...]
```

In regard to all the challenges described, the case study participants indicated great consensus and all aspects were confirmed by at least three out of four insurance companies.

6.2 Requirements to address challenges in global IT multisourcing

In this section we provide an overview of the requirements to address the challenges of implementing global IT multisourcing. For the purpose of structuring the requirements, we applied the *Business Engineering Model* of Oesterle and Blessing (2000) (see Figure 2). This model is structured in the three layers of *strategy*, *organization* and *system* in order to provide an integral view on transformational topics and is accompanied by *change management* spanning all layers (Oesterle and Blessing 2000).

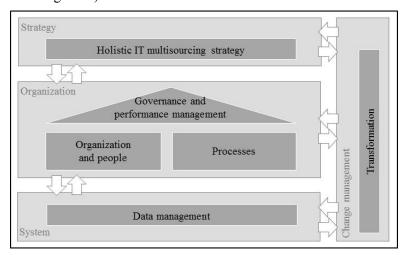


Figure 2. Overview of requirements to address challenges of implementing global IT multisourcing (based on Oesterle and Blessing (2000))

On the *strategy layer* multinational insurance companies must develop a holistic IT multisourcing strategy spanning the whole sourcing life cycle from planning to operation and disposal. Ideally, all three phases are integrated. For example, vendor selection criteria of the planning phase are incorporated into the metrics of supplier performance management in the operational phase and build the basis for disposal or replacement decisions in the last phase. Further, the timing of defining the governance, performance metrics or disposal criteria is crucial. Based on the experience of the participants, it is desirable to define these before the suppliers are selected and even to utilize these aspects as selection criteria. Additionally, it is recommended to elaborate a systematic multisourcing rollout, which can be described as a step-by-step process comprising clearly defined and achievable tasks. In contrast to a "big bang" approach, the step-by-step process aims to minimize change resistance throughout the whole organization, as stated by the study participants.

On the *organization layer* multinational insurance companies should focus on three major requirements: firstly, integrated multisourcing governance and performance management; secondly, a central multisourcing authority, as well as people and skills of the retained organization in the BEs; and thirdly, necessary operational adjustments. (1) Confirmed by all research study participants, a combination and alignment of IT (internal) and sourcing (external) governance is required. IT and sourcing governance are effective in different ways. IT governance invokes the internal implementation of IT multisourcing, whereas, sourcing governance is utilized to steer the multiple suppliers in the desired way. In terms of performance management, it is important to differentiate between a strategic and operational level. The operational level adheres to the daily business with, for instance, key performance indicators (KPI) for multisourced ADM services such as incidents or defects. In contrast, strategic level KPIs cover, for example, sourcing and shoring ratios as well as average daily rates for ADM. One major aspect of steering multiple external suppliers compared to

internal service delivery is the fact that they have to be steered by outcome and not by tasks. Referring to the defined objectives of IT multisourcing in multinational insurance companies, the case study participants limit their performance measurement mainly to cost and quality aspects (e.g., service level agreements and customer satisfaction surveys). Amplifying performance measurement to other objectives would be desirable. (2) One further notable requirement is the establishment and composition of a central multisourcing authority. Internally, this authority coordinates and bundles the sourcing activities across the group in order to ensure economies of scope. Externally, it communicates with the multiple suppliers and ensures alignment amongst them, for example by standardizing processes and collaboration methods. Two decisive factors in the composition of such a central authority are the diversity of the team and the skills of the members. A multisourcing team should be interdisciplinary (i.e., sourcing, legal, procurement, business, IT) and characterized by internationality. Moreover, the interviewed managers indicate that the methodic and strategic skills of the multisourcing team members are important in guaranteeing the success of this approach. The central multisourcing authority has a more strategic role in coordinating across the client organization, whereas the retained organization at the decentralized BEs is determined by more operational activities. People should combine business, IT and supplier management skills, as indicated by the case study participants. However, this might entail changes in the people structure. (3) Another major requirement on the organization layer is the need for operational adjustments and standardized methods across both the client organization and the multiple suppliers. A multisourcing client organization must establish processes and methods to support the collaboration with multiple suppliers. Moreover, the client company and the suppliers are required to adhere to defined processes and methods in order to ensure integrated service delivery.

On the *system layer* data management is an important requirement to be aware of. This is especially related to governance and performance management but is also crucial for contracts and other supplier related data. The multitude of data from various suppliers, on different levels (group-level versus BE-level) and different IS functions (ADM, infrastructure, etc.) leads to enormous complexity for the client company to deal with, and is likely to be underestimated. Furthermore, the cross-case study derived, for example, that data privacy is an important driver for a multinational insurance company in selecting the location for sourcing, and is directly related to the strategy layer.

All requirements within the three layers (strategy, organization and system) should be accompanied by *change management* that facilitates the transformation towards global IT multisourcing. This includes pro-active change management including stakeholder involvement as well as professional and transparent processes and communication along the whole sourcing life cycle. According to the research study participants, pro-active change management is effective in different ways. On the one hand it supports new organizational and operational requirements, helps to adjust the employee structure and skills, and addresses the resistance to change from management and employees. On the other hand, the supplier relationships must be managed pro-actively by consistent communication across all suppliers and a common course of action by the whole client organization. In regard to stakeholder involvement, the interviewees emphasize that especially the BEs, which execute the multisourcing approach, should be involved from the beginning (supplier selection and contract negotiations) as well as along the whole sourcing life cycle in order to abolish resistance and invoke the implementation of the IT multisourcing concept across the group.

7 CONCLUSION AND FURTHER RESEARCH

This article presents selected findings of a larger research project on global IT multisourcing in multinational insurance companies. The findings appear promising, as the cases encompass a relevant set of leading multinational insurance companies and the data is rich in detail. Our research is in response to the assertion by Bapna et al. (2010) that linear extension of dyadic IT outsourcing relationships is insufficient in the context of multisourcing. We aim to extend current literature on IT

outsourcing by describing the objectives, challenges, and requirements of implementing global IT multisourcing based on a cross-case study.

The four identified objectives (cost reduction, flexibility, access to resources / know-how, and quality) confirm the research of Su and Levina (2011), who identified key drivers in the IS and manufacturing literature. For example, the objective of cost reduction based on competition between multiple suppliers can be found also in management literature by Porter (1985). Under the objective "flexibility and scalability" we also subsume accelerating the time-to-market of applications and insurance products and thereby support the claim of Su and Levina (2011). According to the research participants, flexibility also implies the freedom of BEs to choose from a pre-defined list of preferred suppliers in order to cope, e.g., with local market specifics. It further mitigates the risk of a lock-in effect with one single supplier and thereby prevents the occurrence of a dominant supplier. Flexibility in combination with access to specialized resources and know-how (e.g. for the claims process) reduces the time-to-market of applications by picking specialized providers and thereby enabling the business site of an insurance company to provide products more rapidly (primary insurance) or customized (reinsurance).

The cross-case study revealed five major challenges. Firstly, internal change resistance, which is mainly related to the middle management and employees of the analyzed companies; secondly, necessary operational adjustments regarding the collaboration with multiple suppliers; thirdly, the roles and responsibilities of the retained organization that are require to ensure a balance between clients' and suppliers' staff; fourthly, and complementing the first three challenges, the selection and management of a multitude of suppliers; and, finally, as an overarching challenge, invoking the global IT multisourcing concept throughout the whole group company.

In order to address these five major challenges the research study derives requirements within the three layers of strategy, organization and system which are accompanied by change management that invigorates transformation across all layers. In this context, the study determines that a holistic IT multisourcing strategy should span the entire sourcing life cycle and that multisourcing governance and performance management have to comprise two dimensions. However, current performance measurement approaches lack an entire coverage of the identified IT multisourcing objectives and are mainly cost and quality driven. A central multisourcing authority together with the composition of the retained organization in collaboration with revised processes and methods constitute the organizational layer. Data management and privacy are requirements on the system layer.

We concede that this research study also has certain limitations. The cross-case analysis is based on only four cases in the insurance industry. Nevertheless, the authors were able to conduct at least two interviews with each insurance company and cover the top three insurers based on operating profits, in so doing also covering polar cases. In the case of insurer ONE, the authors had the opportunity to observe the implementation of IT multisourcing over several months and to gain in-depth insights into the chosen approach and related challenges (Golden-Biddle and Locke 2007). The analyzed cases mainly focus on IT multisourcing. Business processes, however, have been only scarcely subject to sourcing considerations. In order to extend this research strand, the researchers suggest including business processes to reflect the findings of this study. Additionally, it might be worthwhile to extend the research approach to other industries and compare the findings.

References

- Bapna, R., Barua, A., Mani, D. and Mehra, A. (2010). Cooperation, Coordination, and Governance in Multisourcing: An Agenda for Analytical and Empirical Research. *Information Systems Research*, 21 (4), 785-795.
- Benbasat, I., Goldstein, D.K. and Mead, M. (1987). The Case Research Strategy in Studies of Information Systems. *MIS Quarterly*, 11 (3), 369-386.
- Beulen, E., Fenema, P.V. and Currie, W. (2005). From Application Outsourcing to Infrastructure Management: Extending the Offshore Outsourcing Service Portfolio. *European Management Journal*, 23 (2), 133-144.
- Borch, K. (1962). Equilibrium in a Reinsurance Market. Econometrica, 30 (3), 424-444.
- Cohen, L.R. and Young, A. (2006). *Multisourcing: Moving Beyond Outsourcing to Achieve Growth and Agility*. Harvard Business School Press, Boston, MA.
- Corbin, J.M. and Strauss, A.L. (1990). Grounded Theory Research: Procedures, Canons and Evaluative Criteria. *Qualitative Sociology*, 13 (1), 3-21.
- Cross, J. (1995). IT Outsourcing: British Petroleum's Competitive Approach. *Harvard Business Review*, 73 (3), 94-102.
- Da Rold, C. and Karamouzis, F. (2009). *Case Study: Zurich Financial Services Group Delivers Business Value Through its Multisourcing Strategy*. Gartner Research, Stamford, CT.
- Denzin, N. (2009). *The Research Act: A Theoretical Introduction to Sociological Methods*. Transaction Publishers, Piscataway, NJ.
- Dibbern, J., Goles, T., Hirschheim, R. and Jayatilaka, B. (2004). Information Systems Outsourcing: A Survey and Analysis of the Literature. *The DATA BASE for Advances in Information Systems*, 35 (4), 6-102.
- Eisenhardt, K.M. (1989). Building Theories from Case-Study Research. *Academy of Management Review*, 14 (4), 532-550.
- Farny, D. (2006). Versicherungsbetriebslehre. Verlag Versicherungswirtschaft GmbH, Karlsruhe.
- Golden-Biddle, K. and Locke, K. (2007). *Composing Qualitative Research*. Sage, Thousand Oaks, CA.
- Granovetter, M.S. (1994). Business Groups and Social Organization. In *The Handbook of Economic Sociology* (Smelser, N.J. and Swedberg, R. Eds.), Princeton University Press, Princeton, NJ.
- Grover, V., Cheon, M.J. and Teng, J.T.C. (1996). The Effect of Service Quality and Partnership on the Outsourcing of Information Systems Functions. *Journal of Management Information Systems*, 12 (4), 89-116.
- Hakkenberg, M., Himmelreich, H., Ketterer, H. and Woelders, F. (2011). Shared KPIs in Multivendor IT Outsourcing. In *IT Advantage* (BCG Ed.), pp. 16-19, The Boston Consulting Group, Boston, MA.
- Hodgkinson, S.L. (1996). The Role of the Corporate IT Function in the Federal IT Organization. In *Information Management: The Organizational Dimension* (Earl, M.J. Ed.), pp. 247-269, Oxford University Press, Oxford.
- Janischowsky, B. and Schonenbach, R. (2009). *Getting Multisourcing Right!* Sovereign Publications, London.
- Lacity, M.C. and Willcocks, L.P. (1998). An Empirical Investigation of Information Technology Sourcing Practices: Lessons from Experience. *MIS Quarterly*, 22 (3), 363-408.
- Levina, N. and Su, N. (2008). Global Multisourcing Strategy: The Emergence of a Supplier Portfolio in Services Offshoring. *Decision Sciences*, 39 (3), 541-570.
- McMillan, J. (1990). Managing Suppliers: Incentive Systems in Japanese and U.S. Industry. *California Management Review*, 32 (4), 38-55.
- Miles, M.B. and Huberman, A.M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook.* 2nd Edition. Sage Publications, Thousand Oaks, CA.

- Oesterle, H. and Blessing, D. (2000). Business Engineering Model. In *Business Engineering Auf dem Weg zum Unternehmen des Informationszeitalters* (Oesterle, H. and Winter, R. Eds.), pp. 61-80, Springer, Berlin.
- Oshri, I. (2011). *Offshoring Strategies: Evolving Captive Center Models*. The MIT Press, Cambridge, MA.
- Oshri, I., Kotlarsky, J., Rottman, J.W. and Willcocks, L.P. (2009). Global Sourcing: Recent Trends and Issues. *Information Technology & People*, 22 (3), 192-200.
- Oshri, I., Kotlarsky, J. and Willcocks, L.P. (2011). *The Handbook of Global Outsourcing and Offshoring*. 2nd Edition. Palgrave Macmillan, Basingstoke.
- Palvia, P., Pinjani, P. and Sibley, E.H. (2007). A Profile of Information Systems Research Published in Information & Management. *Information & Management*, 44 (1), 1-11.
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. 3rd Edition. Sage Publications, Thousand Oaks, CA.
- Plantin, G. (2006). Does Reinsurance Need Reinsurers? *The Journal of Risk and Insurance*, 73 (1), 153-168.
- Porter, M.E. (1985). Competitive Advantage. Free Press, New York, NY.
- Richardson, J. (1993). Parallel Sourcing and Supplier Performance in the Japanese Automobile Industry. *Strategic Management Journal*, 14 (5), 339-350.
- Sambamurthy, V. and Zmud, R.W. (1999). Arrangements for Information Technology Governance: A Theory of Multiple Contingencies. *MIS Quarterly* 23 (2), 261-291.
- Sinss, F. and Schneider, R. (2011). Elektronische Versicherungswelt. *Versicherungswirtschaft*, 21, 1542-1543.
- Su, N. and Levina, N. (2011). Global Multisourcing Strategy: Integrating Learning from Manufacturing into IT Service Outsourcing. *IEEE Transactions on Engineering Management*, 58 (4), 717-729.