

Evolving relationship structures in multi-sourcing arrangements: the case of mission critical outsourcing

ir. Ilja Heitlager (corresponding author)

Information Officer

iheitlager@schubergphilis.com

Schuberg Philis

Boeing Avenue 271

1119 PD Schiphol-Rijk

The Netherlands

+31 6 50 222514

dr. ir. Remko Helms

Assistant Professor

remko.helms@cs.uu.nl

Prof. dr. Sjaak Brinkkemper

sjaak.brinkkemper@cs.uu.nl

Department of Information and Computing Sciences

University of Utrecht

Utrecht

The Netherlands

Evolving relationship structures in multi-sourcing arrangements: the case of mission critical outsourcing

Ilja Heitlager, Remko Helms and Sjaak Brinkkemper

iheitlager@schubergphilis.com , remko.helms@cs.uu.nl , sjaak.brinkkemper@cs.uu.nl

Schuberg Philis, University of Utrecht, University of Utrecht

January 2010

Abstract

Information Technology Outsourcing practice and research mainly considers the outsourcing phenomenon as a generic fulfilment of the IT function by external parties. Inspired by the logic of commodity, core competencies and economies of scale; assets, existing departments and IT functions are transferred to external parties. Although the generic approach might work for desktop outsourcing, where standardisation is the dominant factor, it does not work for the management of mission critical applications. Managing mission critical applications requires a different approach where building relationships is critical. The relationships involve inter and intra organisational parties in a multi-sourcing arrangement, called an IT service chain, consisting of multiple (specialist) parties that have to collaborate closely to deliver high quality services.

To better understand the evolution of relationships in such an IT chain, we propose a modelling technique for the structure and evolution of the organizational aspects these relationships. Understanding this structure is relevant in discerning how interactions take place during the lifecycle of the outsourcing relationship. To validate the modelling technique we studied a Dutch provider of Mission Critical Outsourcing services, which is ranked independently as a quality market leader. In two international internet banking environments we analyse the evolution of the inter and intra organizational structure. The contribution of this paper is an approach to understanding the evolution of the organizational structure of collaborative multi-sourcing arrangements. Understanding the evolution of these structures is deemed relevant for the further study of successful high quality multisourcing arrangements.

Keywords: Mission Critical Outsourcing, IT Service Chains, Collaboration, Outsourcing Relationships, Organisational Modelling, Design Science

1 INTRODUCTION

Information Technology Outsourcing (ITO) is now a widely dispersed approach for the delivery of IT services and is still a growing phenomenon in the IT industry. It has also received considerable research attention, although commonly treated as a generic phenomenon. Most attention has been paid primarily to the customer perspective and the external factors of IT service delivery: what to outsource, how to outsource, how to select the suppliers, how to set up agreements, and how to manage the relationship from a customer perspective (Lacity et al., 2009).

Mission Critical Outsourcing (MCO), a niche in the outsourcing arena, is about the management of mission critical applications. These are applications on which business rely 24 hours a day, seven days a week, where any downtime of the IT service has a direct impact on the results of the organisation. Secondly, these applications are used in very dynamic and changing business environments. A characteristic which seems to be in direct conflict with availability. A third characteristic is that these mission critical environments are heavily regulated environments with a plethora of external rules, laws and regulations to which they must comply. Typical examples include trading floors and direct banking environments (Heitlager et al., 2010).

Dominant in research and practise of ITO however is the commodity paradigm: outsourced IT functions are non strategic, better and less expensively fulfilled by external firms. Furthermore the logic of commodity assumes that all vendors offer similar kinds of standardised services. Iff the outsourcing agreement runs unsatisfactorily, this is also primarily related to the external factors, like inadequately defined contracts, unclear demands, or poorly managed relations. To protect customers, multi-sourcing or selective outsourcing strategies have been proposed as a means to reduce risks (Lacity et al., 1995, 1996) (Gallivan and Oh, 1999). By multi-sourcing competition between (preferred) suppliers would control costs and prevent lock-in from suppliers.

Since mission critical applications are so tightly linked with highly dynamic and changing business needs, they are not well supported in the world of standardised commodity service. From our own

observations, we found that they require very customised service from specialist service providers. Resulting in multi-sourced IT services (Multi IT Outsourcing or MITO) where customers have explicitly chosen the best-of-breed approach for the provisioning of these services (Oshri et al., 2009). MITO and MCO is about selecting specific multiple parties (in house/outsourced or offshored), with each delivering a part of the IT service. This is either because of a lack of internal capabilities or because of a well-stated strategy to find the best specialists "to do the job".

Best-of-breed multi-sourcing arrangements require parties that know how to collaborate. Consequently, understanding the evolution of the relationship is very important. Since the IT service delivery is provided by multiple parties, the complete service is actually provided by a group of parties, resulting in an IT service chain. Due to the mission critical nature of the IT systems one is forced to look inside the service delivery, and into the development of the collaboration between these parties.

Little attention has been given however to the internal factors of outsourced IT service provisioning: the way service providers, internally and externally, actually collaborate and develop their combined service provisioning to end-customers. We believe that explicit documentation of this structure leads to a clear understanding of how parties are organised and collaborate. This is essential in the ongoing development of a continuous outsourcing relationship, which has already begun from the very first moment customer and provider have indicated an interest.

The purpose of this paper is to focus on one specific element of the service provisioning and to look at the structure of the (interpersonal) relationship. We would like to develop a modelling technique to explicitly study the evolution of the structure of these associations. In this paper we introduce this technique and evaluate the appropriateness based on two real case studies.

In the next section we briefly describe previous research. After this, we discuss the research approach. Subsequently, we introduce the modelling technique and following the introduction of the technique we apply it to two cases studies of MCO deals and then evaluate the technique. In the final

section we conclude and outline further research.

2 PREVIOUS RESEARCH

ITO has received ample attention in the research community, and indeed has some specific characteristics as opposed to outsourcing in general, such as an emphasis on contract and formal processes (Kern and Willcocks, 2000). Different aspects of ITO have received attention from: determinants, rationale, approach, the why and the how. Much of this research has taken a customer perspective and mostly addressed the contractual and formal aspects of the relationship. ITO is considered as a generic phenomenon, a "losers game", even. A phenomenon that has little strategic value and impact on business practise (Lacity et al., 2009), often lacking benefits at all (Cullen et al., 2008; Ertel et al., 2006).

In the outsourcing research literature, however, two schools of thought can be identified with respect to the quality and success of outsourcing: the contractual governance and relational governance. Earlier research has identified that both are equally important and can compensate for each other (Poppo and Zenger, 2002). There is one body of work that studies the configuration of outsourcing relations and specifically mentions the structural aspects of contract, transition and governance structure in the (primarily dyadic) outsourcing relationship (Alborz et al., 2003, 2004; Gong et al., 2007). Factors which we would like to call the 'external factors' of the relationship. Indeed it is our observation that relationships are built by people interacting and not solely defined in contracts. This relationship starts at the first moment of contact and is developed step-by-step as the outsourcing goes through the various phases.

Another body of work studies the relationship quality in isolation, independent of the type of service provided (Beimborn and Blumenberg, 2007; Blumenberg, 2008; Blumenberg et al., 2008). It mentions important aspects of outsourcing relationships, but without taking the evolutionary aspects of organisational structure into account.

The notion of the outsourcing lifecycle has received attention in both theory and practice. Different

models with five and even up to nine steps have been proposed (Cullen et al., 2005; Delen, 1999; Tjia and Poot, 2007). These models consider the high level evolution of the outsourcing process from a customer perspective, from the initial strategic decision to the possible backsource or re-insource decision. These models certainly structure the outsourcing decision-making process and describe the main steps to be taken. But what these models do not address is how parties and individuals within the various phases collaborate and interact.

However real emphasis on high quality service delivery in collaborative multi-sourcing arrangements has not, to date, received any attention and justifies our research.

3 RESEARCH METHOD

In our research we study exclusively the collaboration between various IT service providers in multi-sourcing arrangements for mission critical systems and applications. We seek to investigate the performance relationships and research those concepts and building blocks which form the foundation of these relationships. Confronted with many underperforming relationships a lot of the research is often focused on the most common critical failure factors. In our research we take a more positive viewpoint and assume that exceptional performance is not something contingent but that there are general lessons to be learnt (Avital et al., 2006).

We focus on MCO and the components of the service provisioning that comes with it. The three characteristics -high availability, frequent changes and regulated markets - lead to a different focus in the service provisioning from both service providers and customers. Firstly, the demands for high availability and the high impact on the business motivates a very risk-driven approach in which costs to mitigate risks in specific business contexts are more important than user acceptance in standardised environments.



Figure 1: The research framework to study multi-sourcing arrangements

Secondly, the combined characteristics of critical to the business and regulated markets demands very specialised parties, with parts of the complete IT service not unlikely to be fulfilled by multiple best-fit parties. Third and finally, the contrasting requirements of (high) availability and changing environments demands specific service providers capabilities, for example a high share of employees with full context (and understanding) of the customer business and systems.

The study of these kinds of environments leads to an integral model that investigates the collaborative capabilities of a multi-sourced best-of-breed environments of specialist providers, possibly both in-house and external (Cohen and Young, 2006). For this we have developed a research framework visualised in Figure 1. A full discussion of MCO and why it needs a specific research framework can be found in (Heitlager et al., 2010).

The integral research framework will focus on the quality of both the service and the relationship. These qualities are only perceived in interactions at all levels: decision-makers, design level and executioners. From a strategic perspective all the way down to the personal relationship, a factor that has been valued early in collaborative strategic management (Kanter, 1994), but has received little attention in IT outsourcing.

These interactions are structured within the configuration in which the business-IT initiative is set. How well parties setup up these structures is determined by the capabilities parties have.

In the rest of this paper we would like to focus on one precise element, the structure of the relationship. This is the setting in which the interactions take place. Operating in very specific and highly changing environments requires a lot of contextual knowledge of both the business and IT environments. This context is not easily explained, documented or taught, but grows through the

individual member's experiences. To understand how organisations design and implement services, the structure of relationships has to be made explicit.

To gain a deeper understanding of the relationship structure and its evolution, we introduce a modelling technique to model this relationship and how it changes over time. Guided by the principles of Design Science research we develop a new artefact for the deeper understanding of these relationships (Hevner et al., 2004). In this paper we introduce the technique, set clear guidelines to evaluate the applicability and test this with two real world case studies. The contribution of this paper is the introduction of this modelling technique, a discussion of its relevance to mission critical outsourcing and the lessons learned. We focus more on the managerial aspects and less on the methodological aspects, as we will develop the foundation and methodology of application in later research.

The purpose of the modelling technique is to gain a clearer understanding of the relationship between people and the organisational units they operate in. To assess the quality of the modelling technique we consider three evaluation criteria:

1. Following the research framework, all relevant parties in decision-making, design and execution must be included.
2. The technique must be able to show intercompany organisational and interpersonal relationships, since it models multi-sourcing arrangements and must address the issues of personal context.
3. The technique must model the evolution over time, since we consider long term relationships.

After introducing the modelling technique we discuss two cases and evaluate the applicability based on these three evaluation criteria.

4 MODELLING THE EVOLUTION OF OUTSOURCING RELATIONSHIPS

In this section we introduce the modelling technique and discuss some of its details. An example is provided in Figure 2. The modelling technique is designed to capture the relationship, meaning the core interactions that take place, between groups of people in an interorganisational context. Besides this, we consider the evolution over time. For that, we track the evolution over time in rows, not necessarily linked with the formal stages of an outsourcing relationship, but more with the actual evolution over time. As the relationships develop, each row in the drawing will define a clear moment, either pre or post contract. Within an organisation multiple groups can be identified, thereby hinting at the intraorganisational

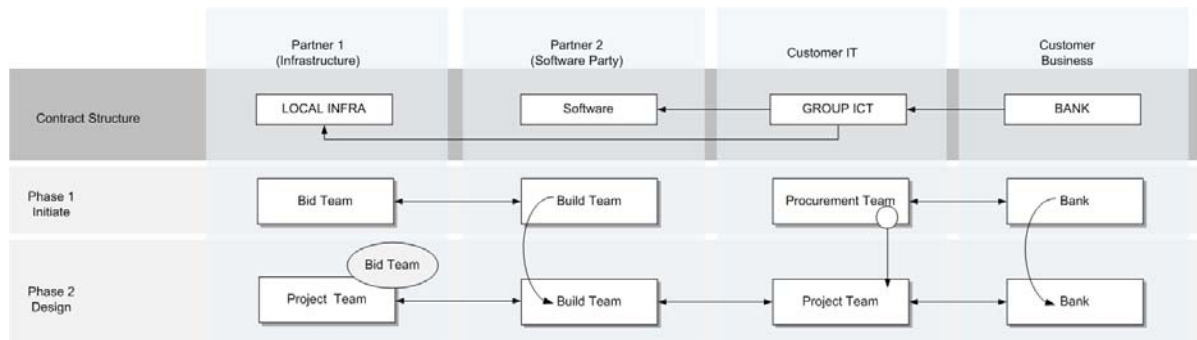


Figure 2: Example of relational structure diagram

context as well. An outsourcing relationship between organisations undergoes various phases from inception of the outsourcing need all the way up to the well established but growing relationship where additional or even new activities are executed.

4.1 The concept of an IT service chain

Central to the best-of-breed multi-sourcing arrangements is the grouping of various organisations with complementary services. Each party provides a specific service: infrastructure, application management, functional management, or business operations. Consequently, the complete IT service provisioning is broken up into a selection of explicit providers which we would like to call the 'IT service chain'.

Following the research framework, we distinguish between three separate levels of interaction within an outsourcing relationship: decision-maker level (basically those that develop and maintain the contract and service level agreements), the design level (architecture, solution definition) and execution level (day-to-day operations). These three levels are reflected in the modelling technique as follows:

The decision-making level is separated from the other two levels in the diagram: the contract and execution structure are two specific elements in the modelling technique. As shown in Figure 2, the contract structure is defined in the header and the execution, with its evolution over time modelled in the main body. To distinguish between the design and execution levels we introduce the execution and consulted groups (with respect to design), i.e. regulators have an impact on the design.

With each distinct moment in time as a row, we actually have swim lanes for the organisations and the various departments/groups. Thereby we introduce the concept of interorganisational structures with inter and intra organisational departments. To summarise we have an IT service chain in a contractual structure (header part) with organisations (lanes or columns). Organisations have departments (the blocks and ovals) and the relational structure evolves over time (rows).

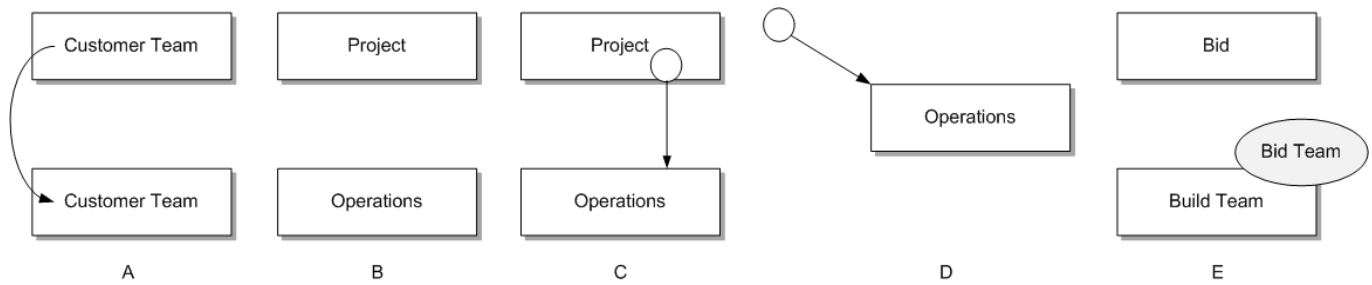


Figure 3: Five basic transitions

Specific to outsourcing is the transition in which existing services are carried over to the new service provider. And although on the highest abstraction level (and contractual) the relationship is consistent between the various parties/organisations, the relationship is effected by interactions between individuals representing this organisation. If the total relationship moves into a new phase, new roles and people are required and possibly complete service provisioning is transferred from one group to another. Understanding how transitions take place is a prerequisite to understanding how knowledge within teams is dispersed and to predicting when the relationship has to be developed or can "just work for itself".

The relationship goes through different phases and various outsourcing researchers and consultants have defined these phases. These mostly consist of the pre and post contract phases, with a transition in between. Although each phase has its own specific function and own specific activities, possibly executed by different groups of people, from a relationship and trust building perspective they are equally important. Meaning that, each phase adds to the development of the relationship between the various parties. Therefore we have put all phases in one diagram, without formalising these phases and illustrating the evolution of the relationship.

Looking at one particular party or organisation (one swim lane) we can distinguish several organisational changes in each "phase transition", which we will discuss below.

4.2 Evolution of the relationship

As we stated in the introduction, it is essential in MCO for a team to have both context and knowledge about both the business as well as its own activities. So in the basic transition the team or group stays intact, meaning that the most relevant team members remain in the team, as defined in Figure 3 A. The second type of transition is to have a new team perform the next phase. For example changing from a bid team, doing the sell, to the project team doing the implementation or transition, as shown in Figure 3 B. The third archetypical transition is when new members are added to a specific team for a certain phase, as is shown in Figure 3 C.

There are three basic team transitions, however these transitions are not extensive. Having the modelling technique allows the development of more different patterns of transitions. There are a few variants identified, like a new key player introduced into a team. A key player is a decision-maker at most and an influencer at least, as shown in Figure 3 D. Furthermore we identify the particular case in which a completely new team picks up a next phase but is in close contact with the previous team. In other words the team changes its role, as is shown in Figure 3 E.

4.3 Key elements of the modelling technique

To summarise the modelling technique consists of two main parts: the header with the contract structure and the body with the relationship structure evolution over time. In the body, rows denoting distinct moments in time and columns denoting organisations. For now we have defined two groups: actual teams that execute in day to day operations (rectangles) and groups that are consulted (ovals). The interactions are represented by direct arrows, the transitions over time with arcs. One additional transition is illustrated where the key player (small circle) moves from one team to another or is added to a team.

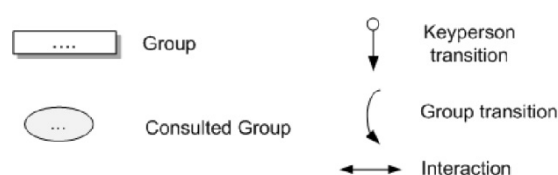


Figure 4: Legend

In total we have three distinct organisational objects (rectangle, oval and circle) and three arrows (transition, interaction and personal transition) as shown in the legend in Figure 4

5 MCO CASE STUDIES

Having defined the modelling technique, we continue with the application of two real life case studies to demonstrate the pertinence of the technique. We consider two international outsourcing deals from a Dutch infrastructure provider that operates in the niche of mission critical outsourcing. Both deals are with Dutch large multinational (financial) organisations that have well-developed IT organisations and infrastructures with broad experience of outsourcing.

Both case studies are based on interviews with various members of the team that provided the infrastructure outsourcing services. In these interviews we have considered the evolution over time of the relationships between the various departments and organisations. The infrastructure provider focuses primarily on service provisioning for mission critical applications and has developed the service capabilities based on the dedicated team model as shown in Figure 5. The service provider observed that most large IT service organisations developed their service around a tiered approach, following the logic of operational excellence, the service is optimised for costs by standardisation.

This approach, built for generic services and the handling of many incidents and requests, the service is organised in first, second and third line support. In the first line, all calls and requests are received and processed, possibly answered based on standard scripts. If handling of the requests is not handled in time the call is, according to procedure, nicely passed to the second line with more skilled support engineers. If however these engineers are not able to resolve the issue they have to pass it to the various experts in their own business units or stovepipes. The issue with this tiered model is that difficult requests and very problematic issues also have to follow this process. Because the skilled engineers have to service many customers, it is hard to maintain context or information about the customer environment. The dedicated team model, the grouping of engineers in a group dedicated to a customer environment, is an approach that values the collaboration and promotes the integration of knowledge between team members. Valuing the collaboration within the organisation and outside the organisation is the background of this research and the rationale for the development of this modelling technique.

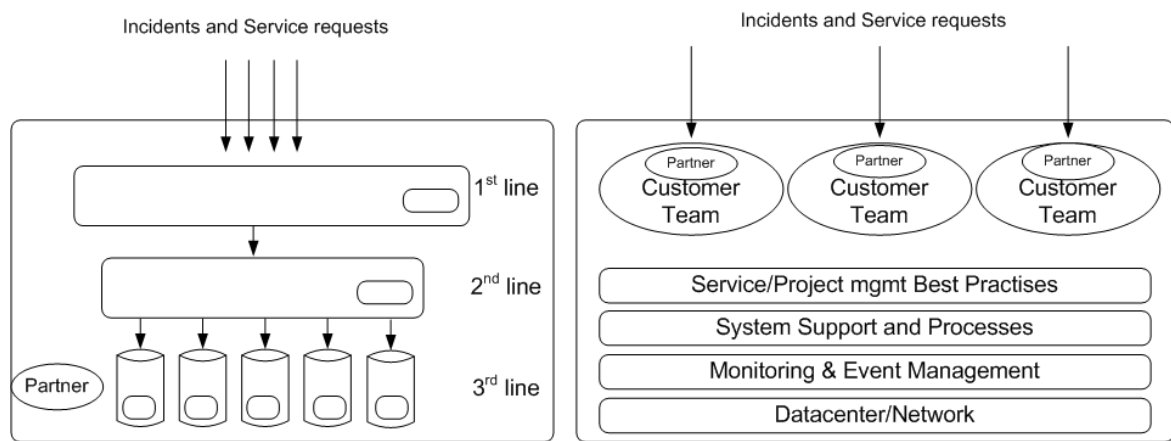


Figure 5: Two models of service provisioning: tiered model and dedicated team

5.1 Case 1: International bank

This case study concerns a large bank with a strategy to develop international online banks. An online bank is a retail/consumer bank where all operations are virtual and internet based. A variety of services are offered through the online bank ranging from savings accounts to mortgages. Typical online banks consist of web-based direct banking access, a local marketing department and a back-office unit for banking operations.

Being a bank, different rules and regulations have to be taken into account, ranging from: reports on individual savings accounts; tax office reports; and compliance to national banks in respect of the banking licenses. Because of audit requirements, these regulations have an impact on both system architecture and service provisioning because of audit requirements.

The bank had selected a provider of universal and direct banking software and had implemented the first bank as a pilot at its own datacenter. As part of further expansion and to gain fast and direct access to expertise in web-based applications, the bank predicted a need for external (outsourced) support.

In this situation, there are four organisations involved: the local banking business, the central banking IT department, offering business analysis and functional support, the software vendor and the infrastructure provider. The bank choose to have both the contracts for infrastructure and the software vendor at the central IT department. All design and decision-making, therefore, is centralised at the IT department.

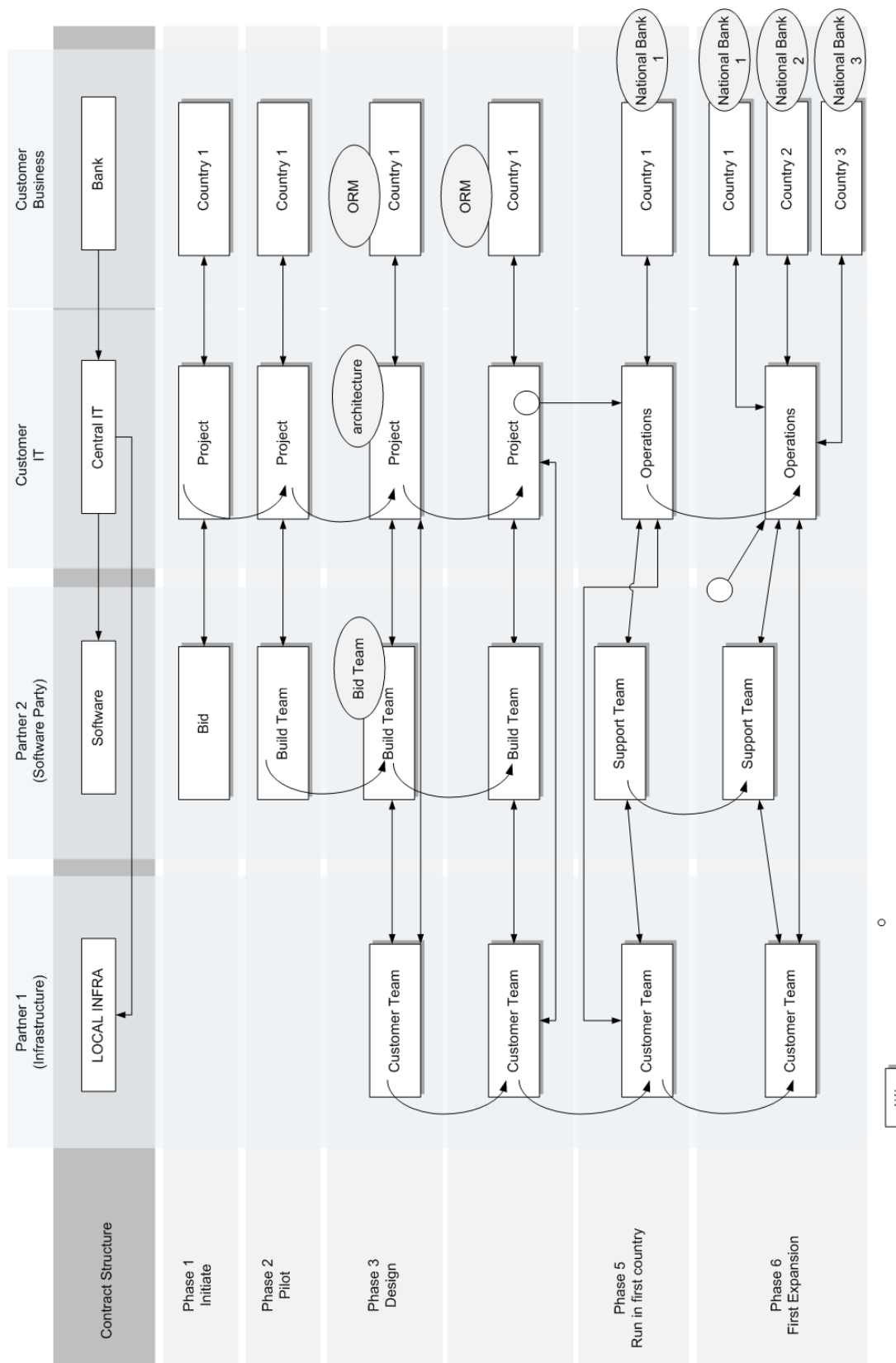


Figure 6: Relational structure evolution of case 1

Here we describe the first six phases of the relationship. In the first phase, the bank's IT department started to design the banking solution with the software vendor and the first country where the bank was rolled out. The focus was primarily on functionality. A sufficient pilot infrastructure was set up and the bank's project team provided all support. As this pilot was executed successfully, another solution was developed to support the further expansion into other countries. At that moment an RFI was sent out to both traditional and specialist outsourcers.

The outsourcing party that won the bid, won it because it offered a dedicated team approach containing all the skills required for the operations. As opposed to the other bids, it emphasised an operating model where design/build and execution of the service would be provided by the same team. In the model, this is visualised in the transitions of this partner by complete team transitions.

The software partners offered a model in which the bid was executed by the first team and the subsequent implementation executed by another team, but tightly integrated with the bid team and able to consult closely with this team. Once the build was executed, services were transferred to a support team, but no members were shared between build and support teams.

The bank's central ICT function basically had two different teams: the project team and the operations team. A new team was formed once the bank went live, with the top manager and key player remaining after the transition. The bank itself provided the initial architectural support and the operational risk management group was consulted during the development and implementation of the solution. The project would not have initiated or continued without the support of these groups.

After the first country stabilised (depicted with Run), the bank expanded into other countries. However, the bank's IT department experienced personnel changes and a new key player came into place. Finally in phase six, for the expansion in other countries, new rules and regulations came into force which had to be taken into account for the final IT solution.

5.2 Case 2: New bank with offshore application provider

The second case study concerns an international organisation that started a new online direct bank. As a new enterprise for the organisation it had no applicable architecture to consult. It also decided to control the IT parties directly without any central IT group. With full mandate to deliver the solution, a totally new project team was founded to set up the initiative. The project teams consulted the ICT department for basic guidelines and practises.

In the model in Figure 7, we have defined the first four phases from initiation to 'go live'. Note that this particular case represents a new initiative, where all parties developed a new business project

within an existing organisation. The organisation decided to start simultaneous negotiations with both the software vendor, being its own integrator and the infrastructure party. And both began the initiation independently with the project team, which decided to mediate the bid phase.

The infrastructure party had the plan/build/run by the same team approach and the complete team made the transition in the first phases of the project. The software party had a local bid, local implementation and offshore development approach. For direct relationship and continuity it had a local relationship manager involved throughout the complete lifecycle. The bid team is replaced by an onsite development team that liaises between the customer and the offshore groups.

However the software vendor has an offshore development department on for the front-office system and one for the back-office system. Although this might seem trivial information, actually this has a major impact on the set up of the test environments to allow for parallel and independent development, a clear indication that implementation projects also show the affects of Conway's law (Conway, 1968). Having this clear overview allows for better project setups and is a motivation why system architecture and organisation are considered equal attributes for high quality service delivery in the research framework.

Also in this case the infrastructure partner offered the service by having the same team through-out the complete lifecycle. The software vendor underwent regular transitions from bid to delivery (an onsite/offshore combination) and offshore support teams. However to offer a high quality service to its customers, it provides local relation managers that are available throughout the lifecycle. A clear indication for both the infrastructure team and the customers team to start the relationship early on.

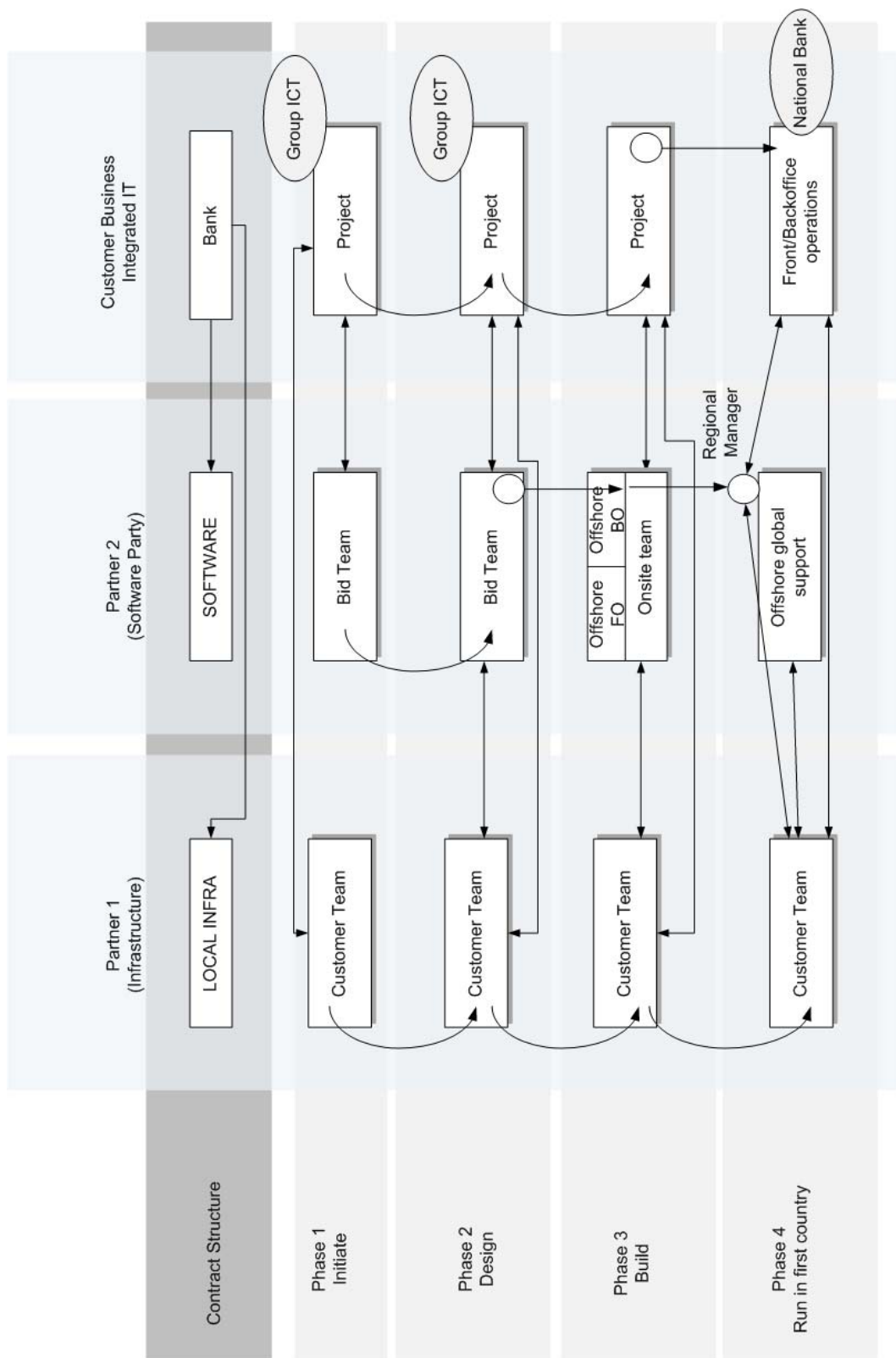


Figure 7: Relational structure evolution of case 2

6 EVALUATION

The purpose of this paper is to introduce a modelling technique that makes the evolution over time of organisational relationship structures explicit. A brief evaluation of the technique follows from the description of the two case studies. This evaluation is based on the three criteria presented in the methodology section of this paper.

Show all relevant parties for decision, design and execution (this is following the research framework) - In the research framework for MCO we emphasise the relevance of three parties: for the decision-making, the design and the execution. The modelling technique provides a complete overview of these three parties. The two cases show a clear difference in how the customer is organised not only in the relation between the internal IT department and the business, but also with other groups that have to be consulted. The transitions allow for visualisation of typical transitions between pilot, project and running phases.

In the first case, the customer decided on a central control model for the delivery of IT services to the various countries, having its own IT department as a decoupling point to service other countries. In the second case, the modelling technique has to be extended to show the offshore/onsite combination. An important aspect is how the offshore company had organised its local support to maintain context and customer proximity. In these cases the software companies decided to be their own integrators, typical for this industry. For future research it is also worthwhile to study cases where independent integrators are used and modelled as well.

Able to show intercompany organisational and interpersonal relationships (multi-sourcing and context) - Multi-sourcing is the orchestration of both internal and external groups and departments to deliver the full stack of services. Interactions between groups is currently modelled as a uniform relationship. What is interesting from both cases is how the initiation took place. In the first case, a pilot phase was introduced to start with the software party, after which the infrastructure organisation came into play. In the second case, both parties were involved from the start but not able to communicate directly. In future research the relevance and importance of these different starting configurations should be addressed.

Show the evolution in time (long term relationships) - In both cases, the various transitions and types were shown. Multiple evolutions were shown for infrastructure companies, software companies and customer organisation structures. Making it clear that different evolution patterns exist for different

parties in the IT service chain. This is an important finding in understand why organisations seem to learn and unlearn context of a particular customer case.

In both cases different steps were taken, leading to different phases with the evolution of the relationship not necessarily following a formal phase progressions. An important research topic will be how these steps relate and whether they should be seen as sub-steps or deserve to be identified independently as necessary steps to be taken.

7 CONCLUSION AND FURTHER RESEARCH

This paper focuses on the delivery of exceptional services in Information Technology Outsourcing. More specifically it focuses on the niche market of Mission Critical Outsourcing, a niche where best-of-breed configurations between specialist service providers are critical. In particular, that very close interaction between the various people in the different organisational units is essential. In this paper we have started the development of a precise modelling technique to make the structure explicit and understand evolution of these relationships. We have defined the technique and shown its value in discussing two global outsourcing cases.

We believe we should look into how service providers offer their services. Particularly for MCO we have to examine how each service is provided. In our research framework we state that the organisational structure and relationship between the various departments is essential for the delivery of quality service. Instead of solely relying on formal processes and contractual agreements it is critical to learn whom to collaborative with. Modelling the structure and the evolution of this structure is an important aspect in the understanding of, and reasoning about, interorganisational relationships. As a result, we believe this modelling technique contributes to this understanding.

The relevance for practise comes from both knowledge transfer and practical application. The modelling technique allows the expression of relevant factors in relationship building and explains what is relevant to the people involved. In actual usage, it helps to understand where to put the effort and "dedicate resources" to build relationships further. Having a clear overview of the evolution in one picture supports in defining next steps.

The relevance to scholars is that in IT outsourcing, service quality not only depends on contracts and formalities, but also on the development of trust and contextual knowledge in (interpersonal) relationships. The structure of these relationships has not been addressed in the past. With the modelling technique we have laid a foundation for the further study of these relationships and their

evolution.

This paper is the starting point and more research is required. The research should focus on three different aspects. For this technique to become more mature it needs more application. Although we focus in our research exclusively on MCO, its application is not limited and should add value in other domains and organisations as well. While maturing the technique it needs more formalisation to provide it with a sound and solid basis. This is also essential in being able to discern patterns of successful or unsuccessful configurations. In the evaluation of the cases some topics have been identified for further research.

This paper is part of a larger research framework. The technique proposed is essential in understanding the relationships. The framework is based on an integrated approach and we believe that the modelling of the structure is essential in developing a deeper understanding of outsourcing relationships. We have high expectations of the merging of this modelling technique with other aspects of IT outsourcing service provisioning as a consequence of the research framework.

References

- S. Alborz, P.B. Seddon, and R. Scheepers. A Model for Studying IT Outsourcing Relationships. In Proceedings of the Seventh Pacific Asia Conference on Information Systems (PACIS'03), pages 1297–1313. Shanghai, China, AIS, 2003.
- S. Alborz, P.B. Seddon, and R. Scheepers. Impact of configuration on IT outsourcing relationships. In Proceedings of the 10th Americas Conference on Information Systems (AMCIS 2004), Atlanta, GA, USA, 2004. Association for Information Systems.
- M. Avital, K.J. Lyytinen, R. Boland Jr, B.S. Butler, D. Dougherty, M. Fineout, W. Jansen, N. Levina, W. Rifkin, and J. Venable. Design with a positive lens: An affirmative approach to designing information and organizations. *Communications of the Association for Information Systems*, 18:519–545, 2006.
- D. Beimborn and S. Blumenberg. How to Measure Relationships—Merging Alignment and Outsourcing Re-search towards a Unified Relationship Quality Construct. In Proceedings of the 13th Americas Conference on Information Systems (AMCIS 2007), Atlanta, GA, USA, 2007. Keystone, Colorado, Association for Information Systems.
- S. Blumenberg. IT outsourcing relationship quality dimensions and drivers: Empirical evidence from the financial industry. In Proceedings of the 14th Americas Conference on Information Systems (AMCIS

- 2008), Atlanta, GA, USA, 2008. Association for Information Systems.
- S. Blumenberg, D. Beimborn, and W. Koenig. Determinants of IT Outsourcing Relationships: A Conceptual Model. In Proceedings of the 41th Annual Hawaii International Conference on System Sciences (HICSS'08). Computer Society Press, 2008.
- I. Cohen and A. Young. Multisourcing: Moving Beyond Outsourcing to Achieve Growth And Agility. Harvard Business School Press, Boston, MA, 2006.
- Melvin E. Conway. How Do Committees Invent? Datamation magazine, April 1968.
- S. Cullen, P.B. Seddon, and L.P. Willcocks. Managing Outsourcing: The Life Cycle Imperative. MIS Quarterly Executive, 4(1):229–246, March 2005.
- S. Cullen, P.B. Seddon, and L.P. Willcocks. IT outsourcing success: a multi-dimensional, contextual perspective of outsourcing outcomes. In Second Information Systems Workshop on Global Sourcing: Service, Knowledge and Innovation, Val d'Isere, France, 2008.
- G. Delen. De pendulumbeweging van uitbesteden - Never outsource a problem (in dutch). IT-Beheer Praktijkjournaal, (3), april 1999.
- D. Ertel, S. Enlow, and K. Barr. Managing Outsourcing Relationships: Essential Practices for Buyers and Providers. Technical report, Vantage Partners, Boston, MA, January 2006.
- M. Gallivan and W. Oh. Analyzing IT Outsourcing Relationships as Alliances among Multiple Clients and Vendors. In Proceedings of the 32th Annual Hawaii International Conference on System Sciences (HICSS'99), volume 32, pages 277–277. Computer Society Press, 1999.
- H. Gong, M. Tate, and S. Alborz. Managing the Outsourcing Marriage to Achieve Success. In Proceedings of the 40th Annual Hawaii International Conference on System Sciences (HICSS'07), page 239c. Computer Society Press, 2007.
- I. Heitlager, R. Helms, and S. Brinkkemper. Studying multi-sourced IT service chain arrangements: The relevance for Mission Critical Outsourcing. Technical Report, submitted for publication UU-CS-2010-001, Department of Information and Computing Sciences, University of Utrecht, February 2010.
- A.R. Hevner, S.T. March, J. Park, and S. Ram. Design Science in Information Systems Research. MIS Quarterly, 28(1):75–106, 2004.

R.M. Kanter. Collaborative advantage: the art of alliances. *Harvard Business Review*, 72:96–108, 1994.

T. Kern and L. Willcocks. Exploring information technology outsourcing relationships: theory and practice.

Journal of Strategic Information Systems, 9(4):321–350, 2000.

M.C. Lacity, L.P. Willcocks, and D.F. Feeny. IT Outsourcing: Maximize Flexibility and Control. *Harvard Business Review*, pages 84–93, May-June 1995.

M.C. Lacity, L.P. Willcocks, and D.F. Feeny. The Value of Selective IT Sourcing. *MIT Sloan Management Review*, 37:13–25, Spring 1996.

M.C. Lacity, S.A. Khan, and L.P. Willcocks. A review of the IT outsourcing literature: Insights for practise.

Journal of Strategic Information Systems, 18:130–146, 2009.

I. Oshri, J. Kotlarsky, and L.P. Willcocks. *The Handbook of Global Outsourcing and Offshoring*. Palgrave Macmillan, 2009.

L. Poppo and T. Zenger. Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal*, 23(8):707–725, 2002.

Paul Tjia and Maarten Poot. Zeven stappen naar succesvolle offshore uitbesteding (in dutch). *Informatie*, July–August 2007.