Governance of Offshore IT Outsourcing at Shell Global Functions IT-BAM Development and Application of a Governance Framework to Improve Outsourcing Relationships

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Abstract. The lack of effective IT governance is widely recognized as a key inhibitor to successful global IT outsourcing relationships. In this study we present the development and application of a governance framework to improve outsourcing relationships. The approach used to developing an IT governance framework includes a meta model and a customization process to fit the framework to the target organization. The IT governance framework consists of four different elements (1) organisational structures, (2) joint processes between in- and outsourcer, (3) responsibilities that link roles to processes and (4) a diverse set of control indicators to measure the success of the relationship. The IT governance framework is put in practice in Shell GFIT BAM, a part of Shell that concluded to have a lack of management control over at least one of their outsourcing relationships. In a workshop the governance framework was used to perform a gap analysis between the current and desired governance. Several gaps were identified in the way roles and responsibilities are assigned and joint processes are set-up. Moreover, this workshop also showed the usefulness and usability of the IT governance framework in structuring, providing input and managing stakeholders in the discussions around IT governance.

1 Introduction

Gartner (2005) observed that organisations generally do not have the proper governance in place, especially when the organisation is involved in outsourcing. "Through 2008, poor sourcing decisions will diminish the achievable value of services in 80 percent of service deals (0.7 probability)". As a result, organizations involved in outsourcing face lost opportunities, higher costs and many risks.

Shell Global Functions IT Business Application Management (BAM) is no exception. This part of Shell concluded recently that management control over at least one of their outsourcing relationships needed to be improved and required comprehensive governance of the outsourcing relationship. In this study we report on the effort by Shell BAM to assess and improve current outsourcing governance practices.

To better understand the need for outsourcing governance we start by reviewing outsourcing risks. These risks can occur during the contracting phase and after an outsourcing relationship is set up. We focus on the latter, as many organisations, including BAM, face the largest challenges after contracts have been signed. Furthermore we focus on a body shop relation, in contrast with for example a Managed Service relationship. In a body shop relation the outsourcer hires a specific amount of FTEs from an insourcer, while in a Managed Service relation they outsource a complete set of services and the amount of FTEs is not relevant. Beulen et al. (2006) provides a comprehensive overview of outsourcing risks categories (see Table 1).

Table 1. Partnership management risk categories (Beulen et al. 2006)

Risk category	Aspects requiring attention
Cost control	IT service delivery costs must be controlled.
Management control	The service recipient must clearly define the role of the service provider and manage the details and specifics of their service delivery.
Demand management	Service recipients need service delivery interfaces, both for their company's divisions and the provider.
Priority	The service provider must assign sufficient priority to the recipient's needs.
Confidentiality	No confidential information may be divulged to outsiders or unauthorized persons.
Information requirements definition	Service recipients must be able to define which IT services their providers must supply.
Business knowledge	Service providers must have sufficient knowledge of their client's business to ensure continuity in the delivery of the services needed.
Business dynamics	Service providers and the contracts made with them must never hinder the recipient adapting the delivery requirements as a consequence of business management changes.
Innovation	Service providers must regularly introduce new technologies in order to make possible and stimulate the recipient's innovation processes.
Vendor lock-in	Service recipient must always be able to change providers, and must not become dependent on any one supplier.

Furthermore, Beulen mentions five possible disadvantages of outsourcing that directly link to these risks. These disadvantages are (1) the increased dependence on suppliers, which is related to the risk category 'vendor lock-in' mentioned above, (2) a loss of knowledge and know-how, which is linked to 'business knowledge', (3) higher costs that is linked to 'cost control', (4) confidentiality risks that have clear overlap with 'confidentiality' and finally (5) difficulty in selecting the right service provider, which is a contracting risk instead of a managing risk.

Cross-checking this framework with risks that other authors define learn that Beulen's framework covers all risks. According to Yang "the most prominent risks in outsourcing are information security concerns and loss of management control" (Yang et al. 2007), which belong to respectively the second and the fifth category

Beulen mentions. King states that firms have higher risks in general when they have a higher dependence on the offshore vendor, which lands in the category 'vendor lock-in' (King et al. 2008).

Also Aron (2005) mentions that vendor lock-in is likely to happen, because "as outsourcing contracts mature, the power in relationships shifts from the buyers to the sellers", which means that "they cannot bring those processes back into the organization on short notice". This is what Aron calls a structural risk, because it appears on the long term. Another structural risk is that "rivals may steal their intellectual property and proprietary processes if they transfer processes offshore, especially to emerging markets", part of Beulen's risk category 'confidentiality'. As opposed to structural risks Aron identifies operational risks that are more critical in the initial stages of offshoring and outsourcing. One of the reasons for operational risks is the lack of effective, complete metrics because then the outsourcer has no idea of how the insourcer executed the work compared to how they did it themselves. This risk belongs to the category 'management control'. The second reason for operational risks is that knowledge and tasks are not codified or codifiable. This means that "service providers won't be able to execute business processes as well as their employees perform them in-house" and that there has to be room for a learning curve of the insourcer's employees. This falls under Beulen's category 'business knowledge'. Structural risks are caused by the extent to which you can measure the process quality (as with operational risks) and the ability to monitor work (Aron et al. 2005).

Research by Lacity confirms this. She states that "in the offshore outsourcing market, knowledge transfer has been one of the biggest impediments to success", which falls in the category 'business knowledge'. Furthermore, she also mentions high turnover as a risk, whereby interesting work is the key to prevent it (Lacity et al. 2008). Also Mirani (2007) recognises the problem of turnover, stating that rival vendors recruit staff away with 15-20% higher salaries, causing staff attrition rates to be as high as 45% (Mirani 2007).

Shell BAM's assessment of one of their outsourcing relationships revealed that some of the outsourcing risks were clearly present. There was a need to improve outsourcing governance to be able to prevent these risks to decrease the benefits of outsourcing and to mitigate these risks whenever they would occur. The research project we report on in this paper aims at identifying a framework that could guide Shell BAM in improving the governance of the service provision relationship with the insourcer.

Many authors stress the importance of good IT governance in outsourcing relationships. According to King "the offshoring of information systems and services has been one of the most discussed phenomena in IS [(Information Systems)] in recent years; it has significantly influenced the thinking of both academics and practitioners" (King et al. 2008). First, day-to-day outsourcing relations will be improved because an insourcer's activities can be closely monitored and coordinated (Gopal et al. 2003). Secondly, good governance will improve the chance on success of (offshore) outsourcing; several authors report that the fate of offshoring strategies is decided by the governance choices (Aron et al. 2005; Kern et al. 2001). Thirdly and finally, it has been argued that good outsourcing governance will help organisations to prevent poor management of interfirm relationships, which result in lower market value on the long term (Holcomb et al. 2007).

While much has been published on outsourcing benefits, contracting and risks, the topic of governing the outsourcing relationship has received less attention. As will be shown in section 3, governance literature mainly provides generic management frameworks and high-level best practices. In the Shell BAM project it became apparent that the current body of knowledge on governance of IT outsourcing did not provide enough guidance to design and implement governance structures. Shell BAM expressed the need for a generic but customizable framework that could be easily applied to improve the governance of the service provision relationship with the insourcer. Such a framework should help in setting up governance especially in areas were risks are likely to occur or would have a large impact. As no such method or framework could be found, it was decided to develop such a framework in this research.

The following research question was devised: *How can a generic but customizable framework be developed to aid an organisation in improving the governance of the service provision relationship with the insourcer?*

The remainder of this paper describes the research approach (section 2), research on IT governance (section 3), the development of the framework (section 3 and 4) and the application of the framework to Shell BAM (Section 5).The final section presents conclusion and future research.
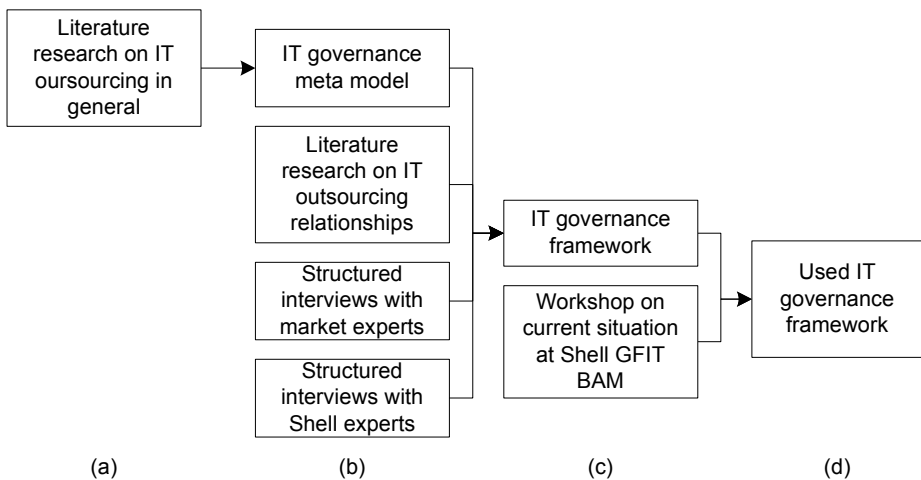
2   Research Approach

We follow a design science research approach as described by Hevner et al. (2004). Design research aims to achieve both rigor and relevance. "Design Science creates and evaluates IT artifacts intended to solve identified organizational problems" (Hevner et al. 2004). The artefact created in this research is the IT governance framework. Following the design science tradition, the requirements for the artifact are set by business needs, which are elicited by interviewing experts both inside and outside Shell. Also according to design science principles, we apply theories from the IT governance and outsourcing knowledge base to design the artefact. The artefact is assessed by applying it to the Shell BAM situation and by running a workshop with stakeholders to test its usability and understandability. Finally, as suggested by the design science approach, steps to implement the framework in BAM are suggested and contributions to the current literature are presented. Table 2 describes how the research approach adheres to the design guidelines expressed by Hevner et al (2004).

Figure 1 shows the steps in the research approach sequentially over time. The arrows show the outcomes needed in order to reach the goal, according to the technique as described by Verschuren and Doorewaard (1999).

Figure 1 shows that *(a)* a literature exploration about IT outsourcing will enable us to define our IT governance meta model. *(b)* The combination of this meta model with information from theory, the market and within Shell will enable us to define a generic IT governance framework. *(c)* Application of this framework on the current situation of Shell will test and demonstrate that *(d)* the framework is useful for workshops, being both generic and customizable.

Table 2. How the research approach follows design science guidelines

Design Science Guideline	How the guideline is applied in this research
Design as an Artifact	A customizable IT governance framework is created
Problem Relevance	The main problem of this research is both important and relevant to Shell GFIT BAM and comparable businesses that aim to improve their outsourcing governance. Experts internal to Shell and external experts on outsourcing were interviewed
Design Evaluation	In this research we performed a workshop with various stakeholders in Shell GFIT BAM to use and evaluate the IT governance framework
Research Contributions	The main contribution of the research is the Design Artefact itself, being the IT governance model. A customizable governance framework that is tested in and documented is currently lacking in literature
Design as a Search Process	Because researches have a certain scope and assumptions about the problem space, existing artifacts may not directly solve a problem in practice. The practical requirements guided us towards striving for a customizable framework. Multiple stakeholders with varying backgrounds may have different requirements. Therefore the assessment using a workshop helps in guiding the search process. Ideally, the artifact needs continuous development through similar workshops in Shell and other organizations
Communication of Research	The framework is described using visual and textual representations. In addition RASC charts are used to describe roles for certain process areas. To serve both Technology-oriented audiences and Management-oriented audiences formal and complex process notations are avoided. The goal was to find a balance between understandability and expressive power of the framework

Fig. 1. Research approach

3   Developing an IT Governance Metamodel

This research focuses on IT Governance of the relationship between the insourcer and Shell GFIT BAM. IT governance has been defined in different ways. Beulen (2006) gives an overview of the most important IT governance definitions (Table 3).

Table 3. Definitions of IT governance (Beulen et al. 2006)

Researchers	IT governance definition
(Brown et al. 1994)	IT governance describes the locus of responsibility for IT functions.
(Luftman 1996)	IT governance is the degree to which the authority for making IT decisions is defined and shared among management, and the processes managers in both IT and business organizations apply in setting IT priorities and the allocation of IT resources.
(Sambamurthy et al. 1999)	IT governance refers to the patterns of authority for key IT activities.
(van Grembergen 2002)	IT governance is the organizational capacity by the board, executive management and IT management to control the formulation and implementation of IT strategy and in this way ensure the fusion of business and IT.
(Weill et al. 2002)	IT governance describes a firm's overall process for sharing decision rights about IT and monitoring the performance of IT investments.
(Schwartz et al. 2003)	IT governance consists of IT-related structures or architectures (and associated authority patterns), implemented to successfully accomplish (IT-imperative) activities in response to an enterprise's environment and strategic imperatives.
(IT Governance Institute 2004)	IT governance is the responsibility of board directors and executive management. It is an integral part of enterprise governance and consists of the leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategies and objectives.
(Weill et al. 2004)	IT governance is specifying the decision rights and accountability framework to encourage desirable behaviour in using IT.

(Brown et al. 1994) discuss mainly the locus (place) of IT decision-making. (Luftman 1996; Sambamurthy et al. 1999) focus on the decision-making processes. Weill (2002) added return on investment, and in the same period van Grembergen (2002) stated that organisations should as well ensure the organisational *capacity* to formulate the IT strategy. In 2003 Schwartz added the observations that the environment influences the right IT governance structure, and so do the perceptions that the IT organisation and the rest of the company have of one another. Finally, Weill recognized the importance of accountability in 2004 (Beulen et al. 2006).

However, the definition that matches best with our aim is the definition of the IT Governance Institute (2004). Several other authors use this definition (e.g. (Gewald et al. 2006; van Grembergen et al. 2005)) and the advantage in the context of this research is that the distinction between organisational structures and processes is concrete enough to relate to the business (Brown et al. 1994).

Based on the definition of a governance model as described below by Gewald (2006) and our definition of IT governance as described above, we define a governance framework for managing an offshore outsourcing relationship as follows:

A governance framework of an offshore outsourcing relationship is a structure that describes the joint processes and organisational structures, whereby also control indicators and responsibilities are defined.

A governance framework should address the questions "what to do", "how to do it", "who should do it" and "how it should be measured"" (Gewald et al. 2006). The joint process fields describe the "what to do", "how to do it" is described by the combination of those processes with the organisational structures into roles and responsibilities, the organisational structures define "who should do it". How it should be measured" is the topic of the control indicators (CIs).

As described before, we are looking for a generic and customizable 'IT governance framework'. We therefore start by presenting a Meta-Governance model. This model is defined at a higher level (the meta level) and can be instantiated based on the organizational requirements to create a governance framework for a specific outsourcing relationship. The meta governance framework is depicted in Figure 2:
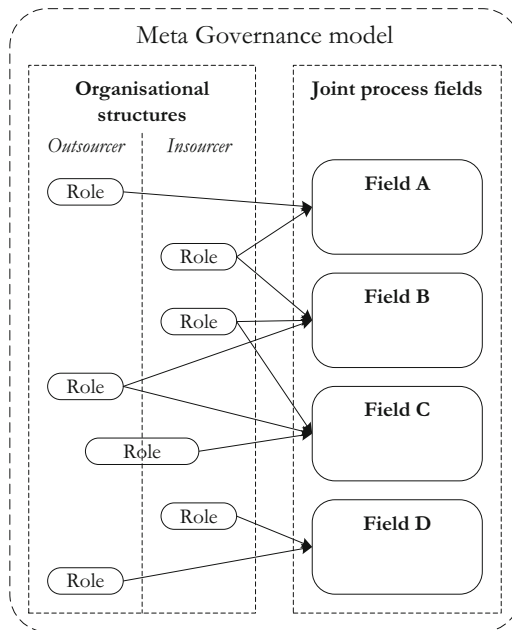

Fig. 2. Meta Governance Model

The meta governance model in Figure 2 can be specified on three hierarchical levels of an organisation; the strategic, tactical and operational level. This paper focuses on the tactical level. The tactical level defines the framework wherein the strategy will be executed, giving the defined direction to the organisation. Tactical roles translate the strategy in executable actions and divide the resources over the organisation. The tactical level focuses on middle term (in IT around 1 to 3 years).

3.1 Organisational Structures

The first element, the organisational structure, comes straight from our definition of IT governance and is also an element of Gewald's governance model. Gewald states that "the organizational structure comprises roles, functions and the necessary reporting and decision structure in the new organization". He further notes that responsibilities between organisational levels and partners are part of the organisational structures. Some responsibilities lay within the outsourcer's or insourcer's organisation and some are joint (Gewald et al. 2006).

Responsibilities are indeed part of our governance framework, but unlike Gewald, we argue that responsibilities are defined by the combination of organisational structures and processes and not within organisational structures only (also see 3.3 Responsibilities).

The 'who' from "who should do it" is defined by the roles in an organisation. For proper IT governance it is important that certain roles are fulfilled. Therefore we focus on roles and the "necessary reporting and decision structure" between them.

3.2 Joint Process Fields

The second element of an IT governance framework, the combination of the joint process fields, is also derived from the definition of IT governance and is the 'what' from "what to do" (Gewald et al. 2006). Gewald (2006) sees processes as a part of a governance model, whereby he specifically looks at *joint* processes. Joint processes are the processes that the in- and outsourcer share, so where roles from both in- and outsourcer are involved. This is also reasonable for this research regarding the focus on the connection between the outsourcing and the insourcing company.

We do not describe all joint processes in detail, as that would not have much sense because organisations have different detailed processes. Nevertheless, on a high level it is possible to describe fields of processes that are related to each other.

3.3 Responsibilities

The third element in the meta model is the linkage between roles and joint process fields. These arrows together describe the responsibilities of the organisation as a whole and relate to Gewald's question "how to do it" (Gewald et al. 2006).

A common way to define the responsibilities on a high level is to define a RASC-chart, or one of it variants. A RASC chart is a matrix with roles on a vertical axe and the joint process fields on a horizontal axe. The chart defines per intersection if the role is responsible (R), has to approve or accept (A, also called accountable), supports the person in the R role (S), or is a consultant for the other roles (C) for the concerning process field. It is possible to have a combination of responsibilities for one intersection and the combination A/R is not uncommon. There is a certain kind of hierarchy in the responsibilities, in the order A, R and S, where C should be consulted but stays outside this hierarchy.

A common alternative is RACI, were the I stands for a role that should be informed. We have followed Beulen (2006) in adapting the RASC chart because in our view it is common that stakeholders should be informed, and the S is relevant to agree on who executes the processes in the end.

3.4   Control Indicators

By defining control indicators (CIs) it is possible to answer the question "how it should be measured" (Gewald et al. 2006). CIs are linked to each other in a hierarchy, and together answer the question "are we in control?".

It is impossible to prescribe the entire hierarchy of CIs in a governance framework. The CIs should be defined in close cooperation with the business, should reflect their needs and therefore should be flexible by nature. Therefore we do not include specific CI's in the generic governance model.

4   A Governance Framework for Managing IT Outsourcing Relationships

In this section we instantiate the IT governance meta model into a specific IT governance framework based on a review of the literature and interviews with experts within and outside Shell. This instance of the meta model (the IT governance framework) is specific for a body shop relation.

As described before in Figure 1 - Research approach, there are four building blocks for this framework. The meta model defines the elements of the framework. First, a theoretical version of the framework was composed based on literature research on IT outsourcing relationships. Beulen's (2006) research on roles and their hierarchies has been used as the basis for the organisational structures. Gewald's (2006) research on joint processes was used as the basis for the joint process fields. Our research differs from Beulen's and Gewald's researches because we first define a meta model, which we then customize to an IT Governance Framework, which then again can be customized in a workshop to fit a specific organization's views, context and needs. The results of this second step are not described in this paper, but as it was the basis for the interviews in the third and fourth blocks, it is incorporated in the final framework as described below.

The second and third blocks were composed by structured interviews, with four external outsourcing experts and three experts within Shell. The external experts were selected independently from their relation to Shell, they are recognized outsourcing experts. Mr. Vriends works at Getronics Consulting, Mr. Beulen is from Accenture and Mr Lachniet & Prins work for Logica. Mr. Hussey, Mr. Overbeeke and Mr. Brink work for Shell outside BAM and have experience with a major outsourcing programme in infrastructure. All experts agreed that their opinions could be quoted and used for the construction of the governance framework. The interviews took place between the 30th of September and the 15th of October 2008 and the following main questions were discussed:

1. What is your role and what is your experience with governance?
2. What roles would/did you define? And why?
3. What joint process fields would/did you define? And why?

4.1   Organisational Structures

The first of the three parts of the IT governance framework is the organisational structure. This paragraph describes the roles that should exist in an outsourcing relationship, according to the literature and interviewees.

Figure 3 shows the organisational structure that should be in place to enable a manageable outsourcing relationship. It is generic because it describes roles that are known to all organisations in this situation, with descriptions mainly based on literature.

The following two sub paragraphs describe the roles for respectively the out- and the insourcer, including the reporting lines. A third sub paragraph discusses the communication lines between all roles. Together these descriptions add up to Figure 3 below.
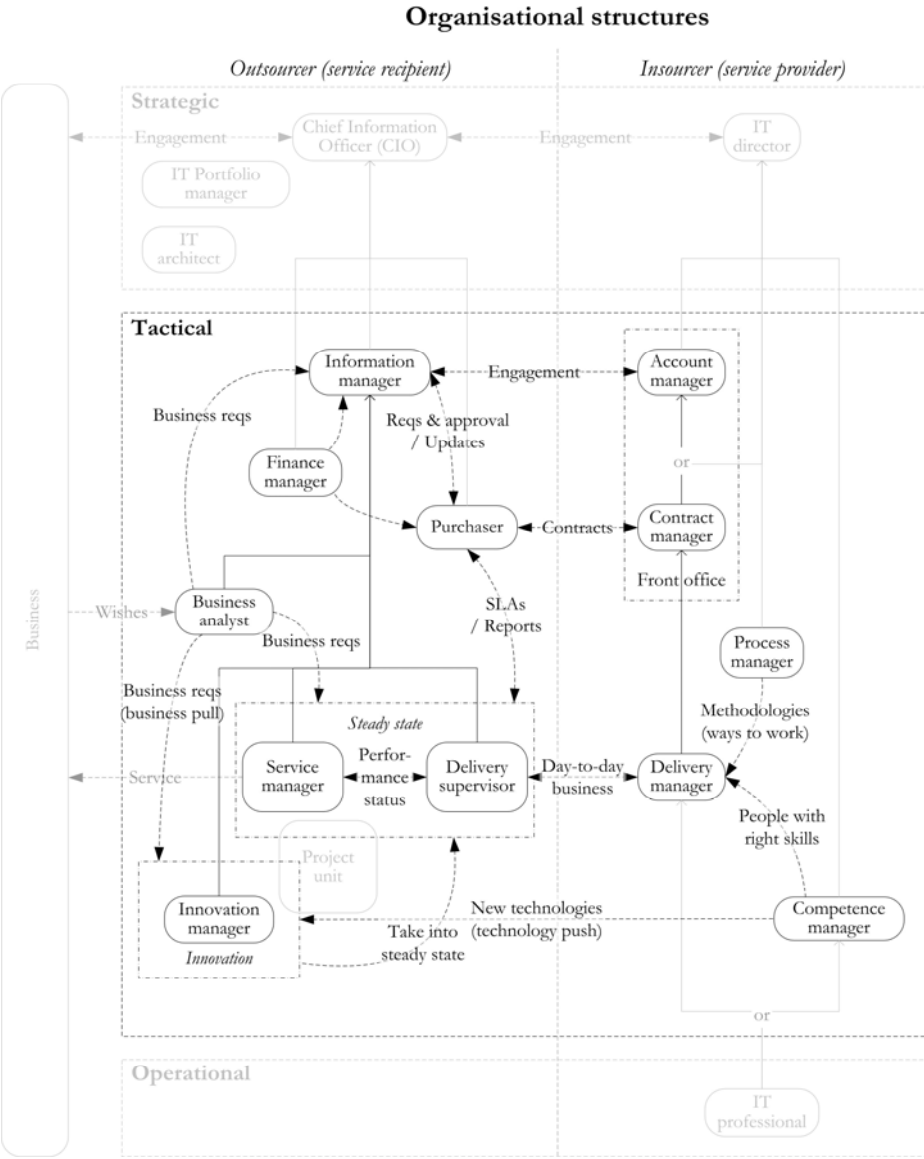

Fig. 3. Overview of all roles, reporting lines and communication from practice

The figure clearly shows that there are two different parts within the organisational structures; the outsourcer and the insourcer. In literature these are also referred to as the service recipient and service provider or supplier respectively (Beulen et al. 2006). We do not use these terms because often the service recipient is also an internal service provider and we are primarily interested in the relation between the two companies. Therefore we need to make a distinction based on organisational instead of functional boundaries. Another term for the outsourcer that can be found in literature is 'the retained organisation' (Gewald et al. 2006). However, for the sake of clarity we consequently use the term outsourcer throughout this entire paper.

4.1.1 Outsourcer

The roles at the outsourcer's side and the reporting lines between them are depicted in Figure 4. Just as in other figures, the grey areas are out of scope.

The overall role of the outsourcer is to receive and check the service provided by the insourcer. The outsourcer's department that takes up this role can be, and often is, a service provider within the outsourcer's organisation. The roles described below are the roles within the outsourcer's organisation on the interface with the insourcer, regardless of the relation to other roles within the outsourcer's organisation.

Information Manager

Beulen (2006) defines this role as follows: "Information managers are responsible for the IT services and the implementation of their company's IS [(Information Systems)] and IT strategies. They serve as contact persons for the company's divisions who must define their information needs. In large companies there may be several Information managers, each with responsibility for part of the company. Information managers report to the Chief information officer (CIO)" (Beulen et al. 2006).

There are no other authors who mention this kind of role, but because it clearly maps to some of the joint processes (as we will show in paragraph 4.2) we consider it necessary.

On the role of Information manager was little discussion in the interviews. On the tactical level Information managers have the most accountabilities and responsibilities as they are responsible for the IT services and the implementation of their company's IS and IT strategies (Beulen et al. 2006).

Service Manager and Delivery Supervisor

These roles are derived from what Beulen calls the Service delivery supervisor (Beulen et al. 2006). He defines this role as follows: "Service delivery supervisors manage external IT providers and, if applicable, the internal IT department. They report to their Information manager" (Beulen et al. 2006). From the RASC chart that Beulen sketches it becomes clear that the Service delivery supervisor should also manage the contracts and makes sure they are aligned with the business's requirements.

Gewald et al. (2006) describe two roles within the retained (i.e. the outsourcer's) organisation that together form a similar role as the service delivery supervisor; the contract manager and the service level manager. The contract manager maps to the Service delivery supervisor with respect to the contract responsibilities, as he "ensures that the service provider (i.e. the insourcer) delivers according to the contract". The
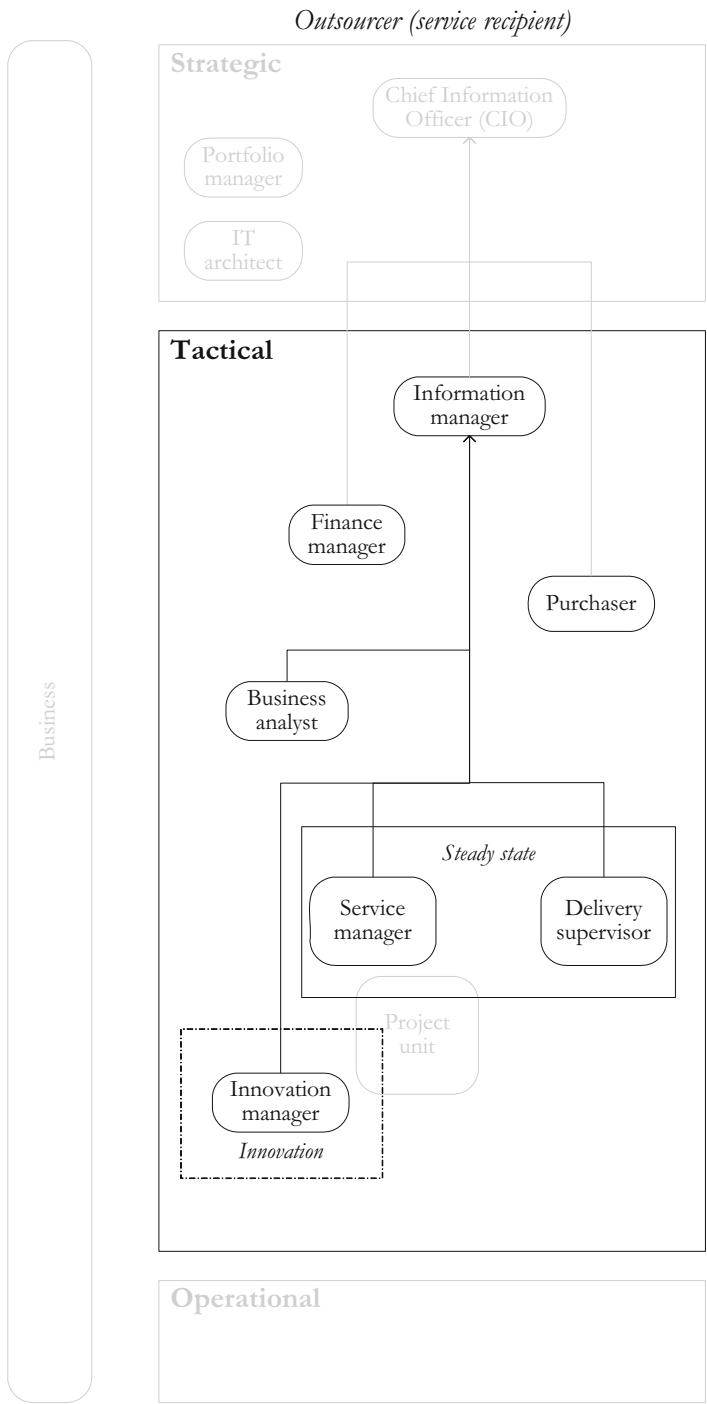
Fig. 4. Roles at the outsourcer

service level manager is more concerned with the content part of the Service delivery supervisor's responsibilities as he is "responsible for the quality of the services delivered in accordance with the SLAs" (Gewald et al. 2006).

As a result of the interviews with Mr. Brink, Overbeeke and Vriends, we have split this role in two: the Service manager and the Delivery supervisor. They are responsible for two different axes within the IT organisation; the service for the business and the functionality or applications delivered by the insourcer. The service delivered by a Service manager is a combination of functionalities delivered by different Delivery supervisors, and the functionalities (the applications) that a Delivery supervisor delivers is input to several services of several Service managers. This is depicted in Figure 5 and implies that the Service manager focuses on the business and the Delivery supervisor on the insourcer.
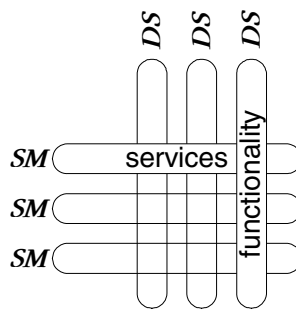

Fig. 5. Service managers vs. Delivery managers

How many Service managers and Delivery supervisors an organisation has depends for example on the size of the organisation, the amount and complexity required services and the size and complexity of the outsourced functionality. Both the Service manager and the Delivery supervisor report to the Information manager, where the two lines of functionality and services are combined. Apart from that they both give input to the Portfolio manager, who has to align the services and functional landscape.

There is a clear relation between the Service manager and Delivery supervisor and the description of the Service delivery supervisor from Beulen (2006). As discussed before, Beulen states that "Service delivery supervisors manage external IT providers and, if applicable, the internal IT department", but it also becomes clear that the Service delivery supervisor also manages the contracts and makes sure they are aligned with the business's requirements (Beulen et al. 2006). Here we see actually two roles within the description of a Service delivery supervisor; the Delivery supervisor who manages the external IT providers and the internal IT department, and the Service manager who makes sure that the delivered services are aligned with the business's requirements. As we described earlier, also Gewald defines a Service level manager, who is "responsible for the quality of the services delivered in accordance with the SLAs" (Gewald et al. 2006).

Purchaser

Beulen defines this role as follows: "Purchasers support their Information managers and the service provider's contract manager in selecting and managing external IT providers and, if applicable, managing the internal IT department. They represent both the IS function's interests and those of the company's divisions. They do not report to any official within the IS function" (Beulen et al. 2006).

Having a mainly supportive role, the purchaser is probably not the most critical role. Furthermore we found no other authors that identified this role. Nevertheless, the purchaser is involved in many of the tactical processes (as will be explained in paragraph 4.2).

From the interviews with Mr Brink, Hussey and Overbeeke it can be concluded that another name used for the Purchaser is the Contracting & Procurement role. The Purchaser is responsible for everything that concerns the contractual part of agreements and contracts.

Business Analyst

Beulen defines this role as follows: "Business analysts implement the IS and IT strategies. They serve as contact persons for the company's divisions who must define their information needs. In large companies there are several business analysts, each with responsibility for part of the company. They report to their respective Information managers" (Beulen et al. 2006). As business analysts form the link to the business, this role corresponds with what Gewald (2006) calls the Business Unit Manager.

The Business analyst is the linking pin to the business and helps them to transform their wishes into requirements. Interviewees agreed with the theoretical view on Business analysts. The Business analyst reports to the Information manager, but he is consulted throughout the outsourcer's organisation for his expertise and knowledge about the business.

Finance Manager

The Finance and/or Administration manager is mentioned by Gewald as one of the roles at the retained organisation. Beulen (2006) does not include this role. According to Gewald "financial and administrative functions are necessary to validate the service provider invoices ensuring adherence to the contract and the agreed prices as well as inter-company invoicing to the business units" (Gewald et al. 2006).

In the IT governance framework, the Finance/Administration manager is renamed to Finance manager because this role did not have specific administration tasks with respect to the joint processes that we defined. Interviewees agreed on the importance of this role with respect to its financial responsibilities. The Finance manager reports to the CIO.

IT Architect and Innovation Manager

Gewald (2006) identifies an architect or innovation role. According to Gewald the IT architect "ensures that the technical ability stays within the retained organization in order to maintain and to control architectural design. The architect has to ensure that the IT architecture reflects the business requirements" (Gewald et al. 2006).

However, most authors consider the IT architect as a strategic role, and so do our interviewees. But with the positioning of the IT architect on a strategic level, there

remains a gap on tactical level with respect to Innovation Management, as also described in paragraph 4.2 (Vriends 2008). Therefore the Innovation manager role is included and is responsible for the exploration and implementation of innovations on both business as technology areas, as long as they remain within the strategy as formulated on strategic level by amongst others the IT architect and Portfolio manager. The Innovation manager reports to the Information manager and has a functional line towards the IT architect and Portfolio manager.

4.1.2 Insourcer

The roles at the insourcer and their reporting lines are depicted in Figure 6. The grey areas are out of scope. The following paragraphs explain the roles defined at the insourcer's side.

The insourcer is mainly concerned with providing the agreed services. Nevertheless, as their customer's needs often change over time, they should be flexible in adapting their agreements as well. So their goal may not be to deliver the *agreed* services, but to deliver the *needed* services.

In order to do so, the insourcer needs to fill in the following roles (Beulen et al. 2006). Unfortunately, we have found no other authors in the field of IT governance and outsourcing that define the insourcer's roles.

IT Director

Beulen defines this role as follows: "IT directors carry final responsibility for the delivery of IT services as well as for the continuity of service delivery by external and, if applicable, internal IT providers. They are the IS function's strategic-level contact persons. If the IT services are outsourced, this role is played by the supplier's general manager" (Beulen et al. 2006).

Although Beulen defines the IT director as a tactical role, interviewees stated that he belongs to the strategic level. Hussey stated that because he is the highest in hierarchy at the insourcer he is the counterpart of the CIO. Of course this also depends on the importance of the insourcer to the outsourcer; if the insourcer is not very important the IT director will be the counterpart of the Information manager and thus on tactical level in the relationship.

Account Manager

Beulen defines this role as follows: "Account managers maintain relationships with the IS function (and the managers of the recipient company's divisions). Their contacts partly focus on widening the scope and increasing the scale of their contracts. They are held accountable for the scale of the services delivered and for customer satisfaction. Account managers serve as tactical-level contact persons for the IS function; together with the contract managers they are the provider's front office" (Beulen et al. 2006).

The interviewees mostly agreed with this definition of Account manager. Hussey mentioned that his work may to a certain extent be strategic as the Account manager is responsible for fulfilling all the outsourcer's needs. Nevertheless, as his main counterpart is the Information manager, he remains on a tactical level, as Beulen also explicitly stated (Beulen et al. 2006). He reports to the IT director.
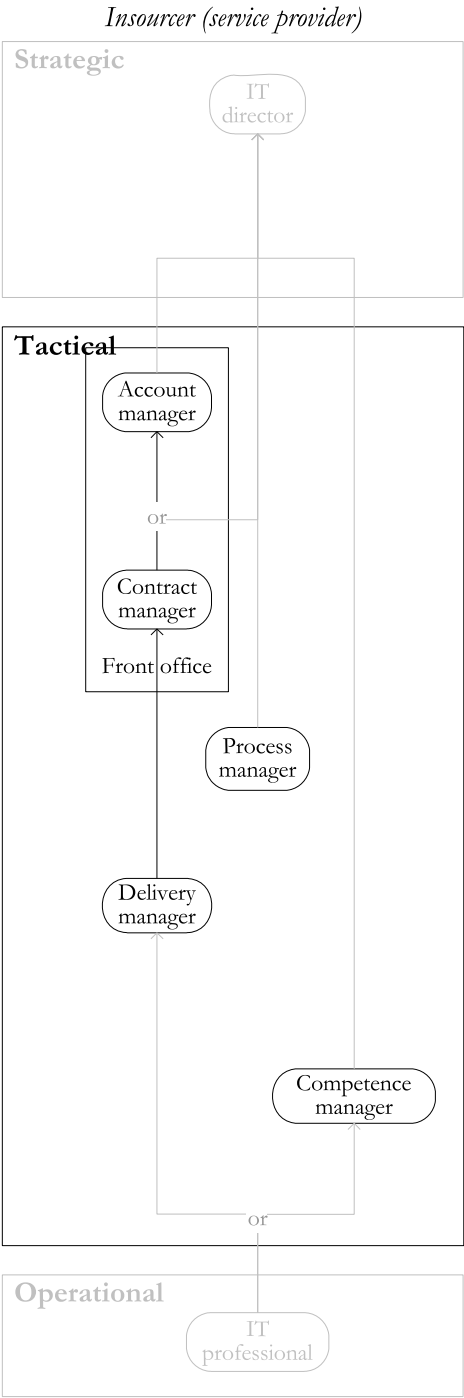
Insourcer (service provider)

Fig. 6. Roles at the insourcer

Contract Manager

Beulen defines this role as follows: "Contract managers are responsible for delivering the IT services contracted and for reporting and invoicing. For these aspects contract managers serve as contact persons for the IS function; together with the account managers they are the provider's front office" (Beulen et al. 2006).

The interviewees agreed on this role of the Contract manager. In his interview Beulen stated that he reports to either the Account manager or the IT director.

Delivery Manager

The Delivery manager is deducted from Beulen's Service Delivery Manager. "Service delivery managers (SDMs) manage the IT professionals who deliver the IT services. They report to the contract managers" (Beulen et al. 2006).

The Delivery manager is purely responsible for delivering the products as specified in the contract and therefore manages one or more IT professionals. Brink, Hussey, Overbeeke and Vriends all stressed that in a body shop relation it is unimportant to the insourcer how these products map to services, as this is the responsibility of the outsourcer (the Service manager and Delivery supervisor). The Delivery manager reports to the Contract manager.

Process Manager

Beulen defines this role as follows: "Process managers set up and maintain the processes and certification of the IT services delivered. This responsibility does not pertain to any specific contract but to the IT services delivered for all the supplier's contracts. Process managers report to their IT director" (Beulen et al. 2006).

The insourcer's Process manager makes sure that IT professionals use the right methodologies and processes, such as for example ITIL, the ISO standards or specific tools for testing (Hussey 2008). In that way they ensure certification, which does, as Beulen (2006) mentions, not pertain to any specific contract but to all the supplier's contracts.

Competence Manager

Beulen defines this role as follows: "Competence managers investigate the potential of new technologies. This responsibility does not pertain to any specific contract but to the IT services delivered for all the supplier's contracts. The intention is to ascertain delivery continuity. Competence managers report to their IT director" (Beulen et al. 2006).

Hussey and Overbeeke indicated that the Competence manager is responsible for delivering the right people with the right skills to the Delivery manager. Furthermore, Vriends agreed with the definition that the Competence manager investigates the potential of new technologies. These two responsibilities fit together because training the right people with the right skills highly depends on the skills in technologies that outsourcers ask for.

IT Professional

Beulen defines this role as follows: "IT professionals deliver the IT services and investigate the potential of new technologies. They report to either the service delivery manager or to the competence manager" (Beulen et al. 2006).

As a result of the interviews, the IT professional is on an operational instead of a tactical level as Beulen (2006) indicates. All interviewees stated that the reason is that he is the professional who in the end delivers the products as described in the contract. Even though he may have a supportive role to the tactical level, his responsibilities remain on an operational level.
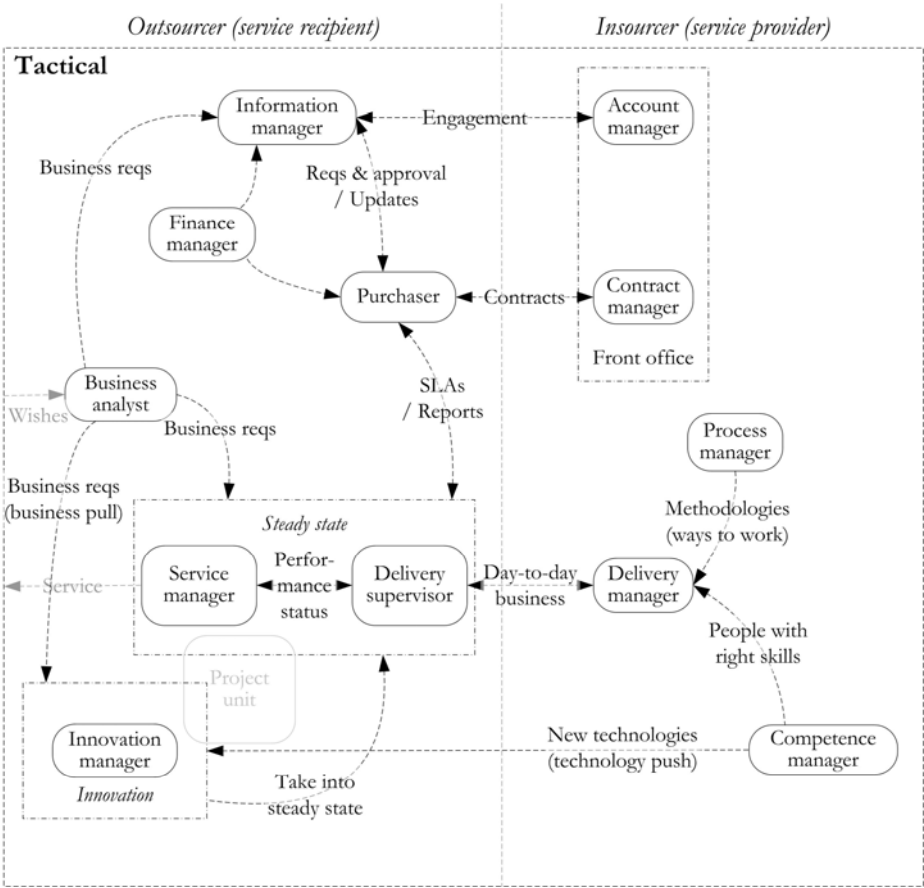
Fig. 7. Communication between roles

4.1.3 Communication

The communication lines between roles and out- and insourcer are depicted in Figure 7 below. This figure focuses only on tactical level and neglects communication already implied by the reporting lines.

Most of the internal communication within the outsourcer or the insourcer is already described above. What this figure clearly shows is that on a tactical level, there are four different levels on which out- and insourcer communicate together. First, there is interaction with respect to engagement on the highest level. The Account manager and Information manager focus on relational aspects and evaluate issues concerning the engagement.

Secondly, the Purchaser and Contract manager discuss contractual matters, including the negotiation in the setup phase of the relation. When a contract is in place, the relation between the Steady state and the Contract manager is stronger than between the Purchaser and the Contract manager. The reason is that the Service manager and Delivery supervisor are using the contract on an ongoing basis, although the contract owner will still be the Purchaser. Therefore the Purchaser gets involved if there are contract issues that require changes to the actual contract.

Nevertheless, for the Service manager and the Delivery supervisor the third interaction is most important, which is the relation with the Delivery manager and concerns the daily business.

The fourth important interaction on tactical level concerns new technologies. Both the Competence manager and the Innovation manager are responsible for innovation within their own organisation so they have to align which technologies are emerging and in which areas it is wise to invest.

4.2   Joint Process Fields

The second of the three parts of the IT governance framework are the joint process fields. This paragraph describes the joint processes that are desired to exist in an outsourcing relationship, based on literature and interviews.

Figure 8 shows the joint process fields of the IT governance framework, which we based on theory and the interviews. The theoretical basis for all processes except Performance Management comes from Gewald (2006).

As displayed in Figure 8 there are two different kinds of processes; horizontal and vertical processes. Vertical processes exist on multiple levels, while the horizontal processes only take place on tactical level (Gewald et al. 2006).

The following paragraphs describe each of these process fields, followed by a sub-paragraph that discusses alternative views of the cited authors and why we did not choose to incorporate these views.

4.2.1   Contract Management

The goal of Contract Management is *to facilitate contracts throughout all phases of the outsourcing lifecycle* and has a slightly administrative character (Beulen 2008). The financial maintenance of the contract, such as paying penalties or bonuses, is part of Financial Management (see the respective paragraph). Contract Management includes for example the set-up of a contract, but also the maintenance; adjusting the contract when business needs have changed. Also evaluation of the contract is part of contract management.

Other authors than Gewald that prescribe Contract Management as an important governance process field are Beulen (2006) and Van Bon (2007). Beulen states that 'contract facilitation' is one of the tactical processes concerning the governance of offshore outsourcing relationships and Van Bon states that "the services, service scope and contract reviews in comparison with original business requirements" should be monitored closely within the process supplier management in order to minimize risks (Beulen et al. 2006; van Bon et al. 2007).

Interviewees agreed with the positioning and definition of Contract Management in the framework (Brink 2008; Hussey 2008; Vriends 2008).
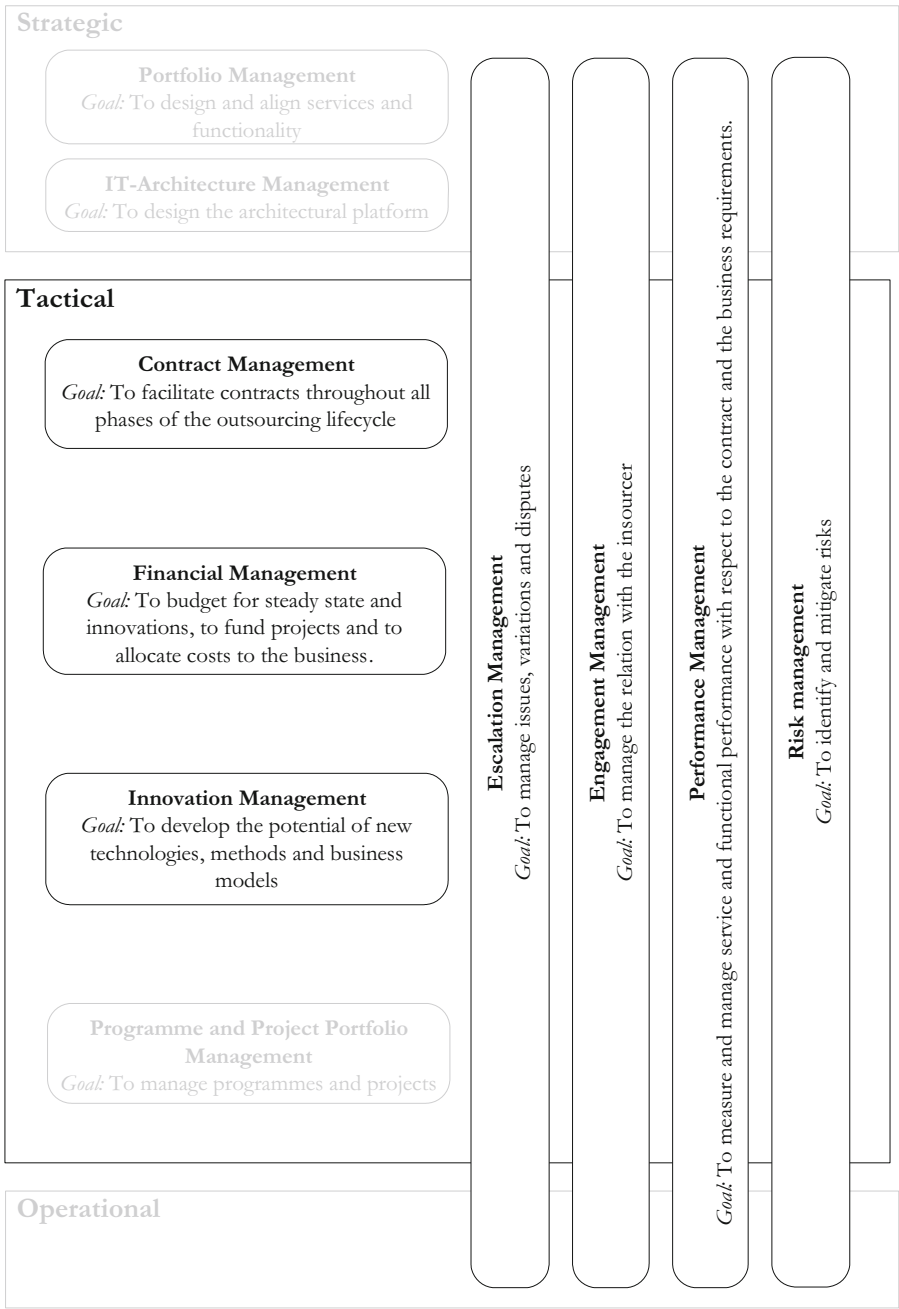
Joint Processes

Strategic

> **Portfolio Management**
> *Goal:* To design and align services and functionality

> **IT-Architecture Management**
> *Goal:* To design the architectural platform

Tactical

> **Contract Management**
> *Goal:* To facilitate contracts throughout all phases of the outsourcing lifecycle

> **Financial Management**
> *Goal:* To budget for steady state and innovations, to fund projects and to allocate costs to the business.

> **Innovation Management**
> *Goal:* To develop the potential of new technologies, methods and business models

> **Programme and Project Portfolio Management**
> *Goal:* To manage programmes and projects

Escalation Management
Goal: To manage issues, variations and disputes

Engagement Management
Goal: To manage the relation with the insourcer

Performance Management
Goal: To measure and manage service and functional performance with respect to the contract and the business requirements.

Risk management
Goal: To identify and mitigate risks

Operational

Fig. 8. Joint processes

4.2.2 Financial Management

Three interviewees added Financial Management to the framework, being Brink, Lachniet and Prins, and Vriends. The goal of Financial Management is *to budget for steady state and innovations, to fund projects and to allocate costs to the business*, and is mainly unrelated to the contract. It includes supply and demand forecasting, as budgets are based on those forecasts (Vriends 2008). Also reporting to the strategic processes that decide whether to invest or disinvest is a part of Financial Management. This joint process area is not specified in theory.

4.2.3 IT-Architecture and Innovation Management

Gewald (2006) mentions IT-Architecture and Innovation Management as one process field. Beulen (2006) states that 'architecture planning' is a strategic instead of a tactic process and 'investigating and developing the potential of new technologies' is tactical. On the basis of our interviews the IT governance framework also states that IT-Architecture Management is a strategic process, and Innovation Management is not. In his interview Beulen also stated that IT-Architecture Management has as goal *to design the architectural platform* and is therefore mainly technology focused, in contrary to IT Portfolio Management.

The goal of Innovation Management is *to develop the potential of new technologies, methods and business models*. Innovation Management focuses on two kinds of innovations:

- Technical innovations; innovation of IT related methods and techniques such as SOA, ESB etc.
- Business innovations; e.g. new business models such as offshoring or e-business.

Furthermore, Innovation Management has two main tasks:

- Translating the IT strategies in concrete plans that can be implemented on operational level (business pull),
- Providing innovative developments and opportunities on the market / in-sourcer to Functional Planning and IT-Architecture Management (technology push).

4.2.4 Escalation Management

The goal of Escalation Management is well described by Cullen (2005) and is *to manage issues, variations and disputes*. Gewald (2006) considers this process field as a vertical field that overlaps all organisational levels. In fact Escalation Management is vertical in its very nature, because issues, variations and disputes are escalated up the hierarchical tree. Only the most severe issues will reach the strategic level.

Brink, Hussey, Lachniet and Prins, and Vriends agreed upon the focus and place of Escalation Management. Nevertheless, both Overbeeke and Beulen mentioned the relation to Incident Management (an operational process). Where Overbeeke saw Escalation Management as a part of Incident Management, Beulen stated that it is closely related, as Incident Management is the delivery process and Escalation Management is the relational process.

We decided to include Escalation Management in two flavours; horizontal escalations and vertical escalations. Horizontal escalations are escalations on the same level

for e.g. additional knowledge or advise from a related team or colleague. Vertical escalations run up the hierarchy and may concern disputes, but also for example the need for extra resources. Vertical escalations may run parallel to incidents as Beulen suggested in his interview, but Escalation Management comprises of more than incidents, such as general performance issues or contractual issues.

4.2.5 Engagement Management

Engagement and Project Management is one of the three vertical processes of Gewald (2006), because it takes place on all levels of the organisation. Other authors mention 'vendor development' (Beulen et al. 2006) and 'invest in the relation' (Cullen et al. 2005). The term 'project' in Engagement and Project Management means something different from the same term in Programme and Project Portfolio Management as mentioned below. Insourcers use the term 'project' to refer to a contract with one of their outsourcers, which is the meaning in this context. We find it confusing to have two processes that address two different meanings of projects, so we renamed Engagement and Project Management to Engagement Management. The goal of this joint process is *to manage the relation with the insourcer*.

Three of our interviewees (Beulen, Hussey and Vriends) indicated that Engagement Management is not a process but should be a general norm or value, built in roles and functions. However Brink argued that Shell's Common Process Model explicitly describes a similar process; Supplier Relationship Management. Furthermore both Vriends and Beulen specified specific KPIs for this process, which implies that certain activities should take place to measure them and influence them if they are not satisfactory. Therefore Engagement Management is one of the processes of the IT governance framework.

4.2.6 Performance Management

Gewald does not mention Performance Management, although he already says in his paper that his processes are only examples of joint processes. Almost all other authors do address Performance Management as a distinct process field and therefore we have added it (Beulen et al. 2006; Cullen et al. 2005; de Looff 1997; van Bon et al. 2007). The goal of Performance Management is *to evaluate the performed work compared to the agreements in the contract and to measure the compliance to the business requirements*. Reporting is one of the main activities within this process field and Performance Management is a vertical process field.

All interviewees confirm the importance of Performance Management. Beulen and Lachniet and Prins see it as a part of Contract Management, but Brink and Vriends do not agree. Where Contract Management focuses on the contracts and is more administrative, Performance Management focuses on services and functionality and measures its performance. Performance Management also compares this to both the contracts and the business requirements, and triggers Contract Management if they are not aligned anymore and the contract should be revised. Performance Management has much to do with the day-to-day business.

4.2.7 Risk Management

The goal of Risk Management is *to identify and mitigate risks*. A part of Risk Management is to plan contingencies (Cullen et al. 2005). Also the IT Governance Institute

considers Risk Management as one of the five most important process fields (IT Governance Institute 2004).

Risk Management is a vertical process with responsibilities on every level, as confirmed by Beulen, Hussey and Vriends. Risks in for example supply and demand forecasting should be aligned with the supplier to be able to mitigate them. Risk Management is a broad process, which includes:

- Capacity & availability management
- Information security, or privacy & compliancy
- Continuity management.

4.2.8 Portfolio Management

Portfolio Management is derived from what Gewald calls Functional Planning (Gewald et al. 2006). Because Gewald did not give a definition of this process, we initially defined the goal of Functional Planning as: *to design a functional roadmap for IT assets.* However, Hussey and Vriends indicated that they saw Functional Planning as a strategic process. According to Vriends, Functional Planning is comparable to the more common term Application Portfolio Planning, as a functional roadmap should also be a part of an application landscape. Furthermore, also Shell's Common Process Model does not specify Functional Planning but does specify Portfolio Management & Standards as a process on strategic level. Brink states that this process is comparable to what we mean with Functional Planning. In short, Functional Planning has several characteristics of processes at a strategic level; it designs the functional roadmap, which is setting the direction. Defining the desired functionalities is also intertwined with the core and identity of the organisation, which is a strategic characteristic.

For all these reasons we decided to move Functional Planning to a strategic level and rename it to IT Portfolio Management. IT Portfolio Management in this context does not only include Application Portfolio Management, but also Service Portfolio Management. The goal is *to design and align services and functionality*. Concretely, this means that this process has as output the strategy for the service catalogue ('which services do we want to deliver and how?') and the application landscape ('which functionalities/ applications do we want to deliver and how?'). The process is focused on the business and translates business needs into the IT strategy.

4.2.9 Programme and Project Portfolio Management

Gewald is the only author that mentions Programme and Project Portfolio Management (in this context). We define the goal as *to manage programmes and projects in order to improve business and IT alignment* and consider that as a process that adds value to the framework. Beulen, Brink, Hussey, Lachniet and Prins as well as Vriends agreed on the importance and focus of Programme and Project Portfolio Management. However, as projects are out of scope the process is greyed out.

4.2.10 Other Process Fields from Cited Authors

Of course, the authors cited above also mention other processes than the ones mapped to our framework. This subparagraph shortly lists the reasons why these process fields were not incorporated in the framework.

'Maintain internal capacity', as proposed by De Looff, is not a joint process. On the contrary, both 'Measure compliance to requirements' and 'Enforce compliance' are relevant. As we do not see fit with one of Gewald's processes, both can be linked to a 'new' relevant process field; Performance Management (de Looff 1997).

Van Bon says that the performance of suppliers should be monitored, which is done by Performance Management. Secondly, he states that the services, service scope and contract reviews in comparison with original business requirements should be monitored. We consider this part of Contract Management as it is related to the insourcer-outsourcer contract and its linkage with the business (van Bon et al. 2007).

Finally, Cullen mentions nine activities that are relevant for existing outsourcing relationships. We consider the first, 'Invest in the relationship (plan, assess and improve)', part of Engagement Management. The second is 'Meaningful reporting and analyses', which we see as a general value that is important for each and every process field. It is therefore not included in Figure 8. The same holds for the third and fourth processes; 'Regular communication and meetings' and 'Diligent documentation and administration'. Activity five is 'Manage risks and plan contingencies' and part of Risk Management. We see the sixth activity, 'Manage issues, variations and disputes', as part of the vertical Escalation Management process field. For the seventh activity, 'Effect continuous improvement and streamlining', the same holds as for the second to fourth activities; it is a general activity that should be implemented throughout all process fields. Finally, the eight and ninth both are part of Performance Management as they are 'Evaluate and audit supplier (controls, performance, compliance)' and 'Evaluate organization both as a customer and contract manager' (Cullen et al. 2005).

4.3 Responsibilities

The third and final part of the IT governance framework is the responsibilities of the defined roles in the defined joint processes.

When combining the organisational structures with the joint process fields, it is possible to describe responsibilities by defining a RASC chart (see subparagraph 3.3). Table 4 shows the accountable, responsible, supportive, and consulting roles, which are explained below in Table 5. This chart was initially based on a literature study, where some of the responsibilities are adopted from Beulen (2006). The result of this initial study was discussed in the interviews with experts from inside and outside Shell, which in the end resulted in the RASC chart displayed below.

5 Application of the Governance Framework to Shell BAM

To test the applicability of the IT governance framework in practice, we have again customized the framework in a third layer which is specifically designed for Shell Global Functions IT BAM, a part of Royal Dutch Shell plc which currently is involved in an outsourcing relationship. The third layer for BAM is their specific desired situation.

This section starts with a high level introduction of Shell (GFIT) BAM, then describes the workshop that we did with representatives, and ends with the outcomes of the workshop regarding the usability and usefulness of the framework. For reasons of

confidentiality, we cannot report on the details of the Shell BAM outsourcing governance. We do not view this as a very critical constraint as the main objective of the Shell BAM case study is to validate the Governance framework rather than to zoom in on the specifics of the outsourcing relationship.

Table 4. RASC chart from practice

		Outsourcer							Insourcer				
	Role	Information manager	Purchaser	Finance manager	Business analyst	Service manager	Delivery supervisor	Innovation manager	Account manager	Contract manager	Delivery manager	Process manager	Competence manager
Process Fields		a	b	c	d	e	f	g	h	i	j	k	l
Contract Management	1		A/R	S		S	S			R	S		
Financial Management	2			A/R		S	S				S		
Innovation Management	3	A			C	S	S	R			S		C
Escalation Management	4	A				R	R		R	R	R		
Engagement Management	5	A							R				
Performance Management	6	A	C		C	R	R	C			R	S	S
Risk Management	7	A/R	S	S	S	S	S	S	R	S	S	S	S

(Horizontal: rows 1–3; Vertical: rows 4–7)

5.1 IT Governance at Shell GFIT BAM

Global Functions IT Business Application Management (GFIT BAM, or simply BAM) is responsible for the applications of the business[1], including support, transition to support and service delivery. A different part of GFIT is responsible for all infrastructure, including the infrastructure for the applications, but BAM has the final responsibility to deliver the services to the business.

BAM is using 'body shopping' or 'staff augmentation' to hire people at the insourcer, which means that the insourcer reserves a specific number of FTE's per BAM team, specified per technology group of applications. A technology group is a group of applications that are based on the same technology (e.g. Visual Basic, .Net, etc.).

BAM's customers for support are the businesses, that provide the complaints and wishes on which the relation with the insourcer is based. The end-users are Shell employees within these businesses that use the applications. This is depicted in Figure 9.

We conducted a stakeholder and problem analysis within BAM, which showed that BAM faces a common problem in outsourcing relations: there is a lack of management control in at least one of their offshore body shop outsourcing relations. As described in the introduction, this is one of the key risks and problems that the outsourcing industry currently faces.

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[1] For the sake of clarity a different part of GFIT, called the 'Line of Business', is not considered in this description. The LoBs are placed in between the BAM and the businesses, but this is not relevant for the remainder of this paper.

Table 5. Description of responsibilities

| Cell	Explanation
1b	On a tactical level, the Purchaser is both accountable and responsible for Contract Management. Organisation wide, the accountability of the contracts may lay with a different role on a strategic level.
1c, e, f	The Finance manager, Service manager and Delivery supervisor support the Purchaser in Contract Management. The Finance manager will support the Purchaser in his financial negotiations. As described before, the Service manager and Delivery supervisor will trigger the Purchaser if contracts should be revisited. They are managing the contract on a daily basis, but the ownership of the contract remains with the Purchaser.
1i, j	From an insourcer's perspective, the Contract manager is responsible for Contract Management. He is supported by the Delivery manager for input from performance perspective.
2c	The Finance manager is both accountable and responsible for Financial Management.
2e, f, j	The Service manager, Delivery supervisor and Delivery manager support the Finance manager by providing budget proposals and performance information.
3a, g	The Information manager is accountable for Innovation Management, but delegates the actual investigation and implementations to the Innovation manager.
3d, l	The Information manager consults the Business analyst to get the business requirements and innovation needs (business pull) and the Competence manager for technical innovations (technology push).
3e, f, j	The Service manager and Delivery supervisor support the Innovation manager by taking innovation into the steady state and advising him how to align innovations with the steady state. The Delivery manager will in the end implement the innovations at the insourcer.
4a, e, f	As the highest in the outsourcer's hierarchy, the Information manager is on a tactical level accountable for Escalation Management. The Service manager and Delivery supervisor are responsible because they have other people reporting to them, and are the first point of contact in the escalation path for these people.
4h, i, j	Within the insourcer the Account manager is responsible that escalations are also managed across boundaries towards the outsourcer, and he delegates that to the roles under his reporting line, the Contract manager and Delivery manager.
5a, h	The Information manager is accountable for the engagement with the insourcer, and the Account manager is responsible, as it is his core role.
6a, e, f, j	The Information manager is accountable for good Performance Management towards the strategic level. He delegates the responsibilities towards the Service manager and Delivery supervisor on the outsourcer's side, and to the Delivery manager on the insourcer's side. They manage the day-to-day Performance Management.
6b, d, g	The Purchaser and Business analyst advise the Service manager and Delivery supervisor in Performance Management in the matters of respectively contracts and business requirements. The Innovation manager advises them in upcoming innovations that should be taken into the steady state.
6k, l	The insourcer's Process manager and Competence manager support the Delivery manager in respectively working according to the insourcer's standards, methods and techniques, and making use of the right people with the right skills.
7a, h	The Information manager is accountable and responsible for Risk Management on a tactical level. Part of this responsibility also resides with the Account manager, as he has the responsibility to comply as much as possible with the needs of the outsourcer. He therefore also has to assess risks together with the Information manager
7b, c, d, e, f, g, i, j, k, l	All other roles support the Information manager and Account manager in assessing and mitigating the risks on their own fields, like Financial Management, Innovation Management and Performance Management. They have to report high risks to the Information manager or Account manager.
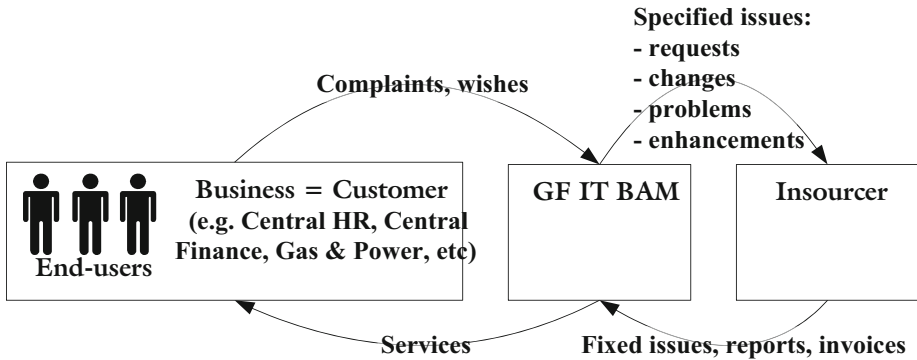
Fig. 9. Relations of BAM Support

5.2   Workshop for Shell BAM

In order to help BAM to increase the management control in their outsourcing rela-
tionships we conducted a workshop with representatives of the organisation. The goal
of the workshop was twofold: (1) to help BAM increase control, but also (2) to test
the usability and usefulness of the framework in a concrete situation.

   We selected the participants on the basis of their involvement during the research
and their role in the current organisations. We sought to invite an audience who
would cover most roles in our framework.

   From the outsourcer (i.e. Shell) participated the following people:

- Service Manager HR, whose dominant role was Service manager.
- Delivery Manager non-SAP EU team, whose dominant role was Delivery
  supervisor.
- Business Analyst, whose dominant role was obviously Business analyst
- On/off boarding team lead and Contract Resourcing, whose dominant role
  was Purchaser.

   From the insourcer participated one person:

- Engagement manager, whose dominant role was Account manager.

5.2.1   Workshop Methodology

The workshop took three hours, including a 15-minute coffee break. Before the work-
shop we explained the framework to all participants individually to make them com-
fortable with it and to enable us to start quickly with the contents during the work-
shop. They received the programme one week in advance with a 10-page explanation
of the framework and the following homework assignment:

   "Identify, prior to the workshop, three 'best practices' and three issues that you see
from your current role with respect to the current IT governance in your IT outsourc-
ing relation(s). E.g.:

- Best practice: There is one person that manages all my contracts and
  he/she is reachable for all my questions and issues.

-   Issue: My counterpart at the insourcer gets his assignments and in-
    formation from several persons throughout our organisation. He
    sometimes knows more than I do and executes work I did not know
    of, while I am responsible for his actions."

The workshop was led by one person and assisted by another. The assistant did not
have specific knowledge of the framework or research but primarily helped with mak-
ing photos and notes. We did not record or film the workshop, as this could limit the
openness of the attendees.

After the workshop we analysed the notes, photos and forms that the participants
filled in. We split the workshop in two parts, where the part before the break was
about the current situation (IST) and after the break about the desired situation
(SOLL).The programme is shown in Table 6. During the first part we started with a
few slides to welcome everybody and quickly showed the framework. In round 2 the
participants each had to put stickers with their own colour on the roles and processes
they identified themselves with. They also had to put an A, R, S or C on the stickers
they put in the processes. During round 3 we discussed these roles and processes in a
plenary session and combined them into a RASC chart. The first part took an hour
longer than planned, but as the discussion in round 3 was very important to come up
with a shared RASC chart we catered for this.

After the break we focused on the input from the homework assignment, and par-
ticipants were divided into pairs. They jointly had to fill in a form where they linked
the issues and best practices to the framework and designed their desired situation. In
round 5 they presented their views. A lively discussion followed about specific out-
sourcing items. This shows that stakeholders were engaged in the practical discussion
around the subject and practical implications of the framework. The debate was not
about the structure or limitations of the framework, but about its contents. Finally, we
wrapped up and thanked the participants for attending the workshop.

Table 6. Workshop programme

Time (mins)	What	How
15	Welcome & introduction to framework	Plenary presentation
30	Match your role, activities & responsibilities	Stickers on poster
45	Combine responsibilities in one RASC chart (IST)	Plenary on flip over
15	*Break*	
30	Map good points/ issues to IST and framework and come up with Shell solution (SOLL).	In two smaller groups on basis of forms
25	Present SOLL	Two presentations
20	Wrap up & thanks	Plenary

5.3 Usability and Usefulness of the IT Governance Framework in the Workshop

The detailed outcomes of the workshop that relate to the current and desired practice
at BAM are confidential. Nevertheless, most important for this paper is the question
whether we achieved the goals of the workshop: did we help BAM to increase man-
agement control, and how useable and useful was the framework?

In general, participants were enthusiastic about the workshop, the use of the framework, as well about the outcomes and recommendations for BAM. The workshop showed that the framework was particularly useful in two areas: the contents of IT governance and the stakeholder management.

Concerning the contents of IT governance, the use of the framework added value for several reasons:

- The framework worked as a tool that enabled to describe the current and desired situation in detail. It made a rather intangible and broad concept IT governance very tangible and provided the level of detail to enable a meaningful discussion. Basically it proved to structure the discussion and analysis.
- Using the framework, the current and desired states could be described in detail. The framework identified clear gaps between the current and desired situation.
- Thirdly, besides the meta model also the IT Governance framework is customisable; it does not prescribe one truth. In the workshop the IT governance Framework was customized into the third layer; the desired situation for BAM specifically. BAM deviated mainly on the RASC chart, details are confidential.

Concerning the stakeholder management, the framework proved also to be very valuable:

- The framework helped participants understand their added value in the bigger picture, and also the value of other roles and hence people in their organisation. This forced them to think broader than just their own 'kingdom' and role, but instead focus on the bigger picture.
- The discussion between people helped them to break through false assumptions. For example participants may assume accountability for a process lies with a certain person, while in practice this is not true (independent from what it should be).
- The proposed situation in the framework can be rather confronting, because it makes participants think about their real value and their core responsibilities. As one of the attendees commented on the conclusions drawn from the workshop: "this shows a very clear understanding of the Shell case, and considerable insight into what is missing and what can be done about it".

6   Conclusions and Discussions

An outsourcing relationship comes with many risks, concerning areas such as confidentiality, business knowledge and management control. Industry and theory have an increasing need to manage the relationship with insourcers. This research has addressed the question 'what practices can be developed to better govern the relationship with offshore vendors?', which is in the top-3 of key outsourcing research issues. Current literature on IT governance has resulted in many definitions and descriptions of IT Governance. Unfortunately, these are generally too vague to practically address in an organisation. Based on a literature survey and expert interviews this study develops a meta model consisting of (a) organisational structures, (b) joint process fields, (c) responsibilities and (d) control indicators, which is then customized into an IT governance framework. The first three elements are addressed in this paper. The

presented IT governance framework gives researchers insight in the best practices currently available in the market, as well as an overview of research done on IT governance frameworks for offshore outsourcing relationships so far. Another strength of using a customized meta model is that it can also be customised for e.g. a Managed Services relationship, as we now did for a body shop relation.

To validate the usefulness and usability of the developed framework, this research also applies the Governance framework to the case of Shell GFIT BAM, which gives valuable information about the applicability of the Governance Framework in a real world situation. The workshop organized indicates that the framework can be very useful as well as useable to a company that outsources part of its work and needs to setup, assess or improve governance of the relationship. The framework is particularly valuable because it provides a structure for the discussions and analysis, a founded proposal to arrange the IT governance, as well as a means to involve stakeholders and manage their assumptions, views and (self-)criticism. The second customization into the desired situation gives organisations the flexibility to fit the situation to their own context and needs, which can for example been done in a workshop.

On a high level, another lesson learned about the governance of offshore IT outsourcing relationships is that it is extremely important for an outsourcer to *co-operate*. Many of the risks in outsourcing are mitigated by one or more of the joint processes defined in the IT governance framework. For example, information security and confidentiality is perceived as an issue in practice and a risk within literature. The reason is that information crosses organisational boundaries and the amount of control by the outsourcer decreases. The joint process Risk Management mitigates this risk, because in- and outsourcer are jointly responsible for security and confidentiality. A RASC chart makes these responsibilities clear and shows that although the outsourcer is accountable, the insourcer is also responsible. This 'softens' the organisational boundaries and enables the outsourcer to have more control when information crosses this line.

Another example is the lack of innovation, one of the main risks described in literature. The joint process Innovation Management makes sure that innovation is in place, and that the insourcer also has certain responsibilities in this process. In this way outsourcers make sure that also the insourcer innovates.

Nevertheless there is room for improvement and extra research regarding the framework and this research. First of all, further research on maturity models and designing a maturity model suited for the IT governance framework may give more insight in the dynamics of the framework. A maturity model can offer clear guidance on priorities and phases in the implementation trajectory. Furthermore also the relation to capability models like e.g. the eSourcing Capability Model from Carnegie Mellon is interesting to investigate. It is promising to see how this framework influences the capabilities of the insourcer, which will probably also make the value of the framework for the insourcer clearer. Second, it can be very valuable to validate the IT governance framework on the basis of more case studies. Research questions can address issues such as: "what is the typical RASC chart?" and "which variables influence the customization of the governance framework?". Variables that might cause the framework to change are for example: the size of the company, the size of the outsourcing contract, previous experience of both parties with outsourcing, the amount of trust and formalization in the relationship, the base country of out- and

insourcer, … etcetera. By investigating more cases, best practices will come to light. Third, further research on customising the meta model for a Managed Service relationship instead of the current body shop configuration will add value to many companies, including Shell. Many outsourcers have started their relationships on the basis of body shopping, but are currently looking into outsourcing the complete management of services. The expectation is that in the framework certain roles and responsibilities will move towards the insourcer, but probably it is also necessary to create new roles and/or processes. Fourth, a thorough investigation on the insourcer's vision, risks and concerns related to the framework will eliminate some of the limitations. The current situation at the insourcer will become clear, as well as the gaps that influence the outsourcing relationship. As literature mainly describes outsourcing from an outsourcer's perspective this may also have a positive theoretical impact. Fifth, the impact on the relationship with the business is not taken into account. Still, it is very important to involve the business in developing the governance structure. Often, the business does not trust the IT governance structure when they do not have a say in it, as also Mr. Brink indicated in the interview. Therefore, it will be interesting to investigate the relation between the outsourcer's IT department(s) and the business who in the end has to pay for the services. Finally, through conducting multiple case studies, a library of common and proven Control Indicators (CIs) could be defined. This can make it feasible for organisations to select possible or widely used CI hierarchies from a library and fill in the measurement area of the Governance meta model.

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