ENHANCING KIBS PERFORMANCES BY SUCCESSFUL CUSTOMER INTERACTIONS

An enabling organisation as accelerator for successful service interactions.

A study within the ICT and engineering sector.

Master Thesis Business Administration

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ADVISEURS EN MANAGERS

Preface

This report is the result of the research I conducted in the light of the final master's assignment for the study Business Administration. The research is conducted as an assignment for the business consulting organisation Twynstra Gudde. The main objective of the research is to discover the conditions that support service consultants within knowledge intensive business services in their interactions with customers.

The research is inspired on the perspective that is described by several business consultants from Twynstra Gudde. In their book: 'De Gedreven Organisatie' it is stated that the impact of services on the economy is rising. Within a service context value is actually created during the interaction between the service provider and its customer. A focus on interactions in organisational designs seems to be the key to both satisfied employees and customers. In practice, it is however noticed that many organisations seem to struggle with this challenge. Organisations seem to be stuck in industrial designs aiming for maximum standardisation and management control in order to cope with ambiguity. The results are de-motivated employees and dissatisfied customers.

Within the knowledge economy both the number and the impact of knowledge intensive services is rising. This fact, combined with the highly interactive nature of these services make this segment an interesting field to study. In order to gain insights in the light of the research objective a theoretical exploration, a qualitative study followed up by a quantitative study have been carried out. The combination of these elements has resulted in insight on enabling conditions that concern the organisational level, the personal level and the customer level.

During the process of this study I was supported by several people. I would like to thank my supervisors from the University of Twente; Carla Millar and Michel Ehrenhard. Their expertise has supported me a lot during the process of this thesis. I would like to thank them for their devoted time and motivation during the process. Furthermore, I would like to thank both of my supervisors at Twynstra Gudde; Simon Noorman and Bas Vlemminx who are both very enthusiastic about the subject. Their practical insights regarding the subject were valuable and motivating during the process of this thesis. I would like to thank everyone who contributed to this study by means of interviews or by participating in the quantitative study. Thanks to the time and effort of these people it was possible to actually gain practical insights regarding the subject of the study. Furthermore, I would like to thank my family and friends for all their mental support and the necessary distraction during the weekends. Last but not least I would like to thank everyone at Twynstra Gudde for the nice time during which I certainly learned a lot!

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Management Summary

Both the number and the impact of organisations that are providing Knowledge Intensive Business Services (KIBS) is growing. A consequence of the current knowledge based service economy is that customers are becoming more sophisticated and more demanding towards the offerings by organisations. In the light of these trends KIBS are challenged to provide services that add value and contribute to the competitive advantage of their customer's organisation. A characteristics of these complex services is that they are formed during a process of intense interaction between the customer and service consultant. For KIBS it is thus crucial to support service consultants in their interactions with customer. Many organisations however seem to be stuck in managerial and government systems designed during the Industrial Era which actually restrains service consultants in their interactions with customers.

This question that is answered within this study is: What are the main enabling conditions within Knowledge Intensive Business Services that support service consultants in their interaction with customers? The study focuses in particular on the ICT and the engineering consulting sector.

Enabling conditions are identified on individual level, the organisational level and the customer level. On the individual level it is not only important that service consultants have a solid expertise based background, 'softer' skills such as knowledge about the individual customer situation, social skills and knowledge on the integrated value the organisation can offer its customers are gaining importance. In addition, as customers are partially integrated within the boundaries of the firm customers can actually provide valuable knowledge or facilitate the service process by acting as a co-producer. As organisational conditions coordinate service consultant's daily behaviour, organisational conditions can either accelerate or restrain service interactions. The organisational level is thus a main determinant whether characteristics on the individual and customer level are exploited to their full extent.

The management of knowledge worker asks for a delicate balance between co-ordinated action while allowing room for creative processes, innovation and flexibility. This study states that congruence between normative coordination and structural coordination supports high levels of both performance and involvement. Characteristics of an enabling culture are a focus on autonomy, an improvement orientation, interdepartmental communication and an HR orientation. Congruence with formal structures is created when practices provide internal and global transparency, flexibility and repair. The combination of these characteristics leads to a collective frame of reference among service consultants on organisational priorities while allowing individual flexibility. Organisational leadership takes an important role in achieving this type of enabling organisation. Transformational leadership aims to activate employee's motivation for higher order values, arousing emotions to work and perform beyond simple transactions. Leadership behaviour characterised by idealised influence, inspirational motivation, individual consideration and intellectual stimulation combined with transactional elements stimulates both service consultant's creativity and efforts to perform tasks more effectively.

Results of this study indicate that in practice KIBS perceive it to be quite challenging to achieve an optimal coordination of resources. Within both sectors service consultants can act quite autonomous and flexible, cultures do however not highly stimulate interdepartmental communication. This is reflected in formal practices that do not contribute to a broader understanding of the organisation's activities or reflect organisational goals and values. It are mainly these characteristics that contribute to an active understanding on the future direction of the organisation which stimulates service consultant's abilities to determine the exact value that can be offered to customers. In addition, these characteristics create awareness on which knowledge is valuable to incorporate as organisational 'best practices' in the light of organisational directions. Furthermore, outcomes illustrate that current leadership behaviour does not fully achieve the desired balance between coordination and flexibility. This may be a consequence of the fact that a congruence between organisational cultures and formal practices is not perceived to be highly relevant. A consequence is that leaders do not actually encourage service consultants to act on institutionalised knowledge that supports the vision of the organisation while regarding the environment as source of opportunity to explore new ways of doing things.

Although these challenges are quite similar within both sectors they do result from different market characteristics. The ICT sector is rather market focused in order to stay on top of customer preferences and innovative (modularised) service developments. The focus on customer identification however leads to a lack of shared perceptions on organisational directions and frame of reference on organisational priorities and internal strengths. Engineering consultants do have developed an internalised cognitive structure serving as a collective frame of reference. This frame of reference is however highly focused on individual expertise. Service consultants act rather autonomous during customers relationships that are often based on a recognition of each other's valuable expertise. This normative focus on expertise however does not stimulate collaborative behaviour across multiple disciplines throughout the organisation.

Both sectors desire a more market oriented approach towards their services beyond the expertise of individual service consultants. The influence of organisational conditions on achievement of these goals is however not fully recognised. A higher congruence between normative and structural coordination will be required in order to exploit benefits of highly skilled, autonomous service consultants with a drive to improve their services. Only when service interactions are approached as a bilateral process of knowledge transfer wherein service consultants are able to incorporate broader organisational capabilities, and collectively support the future direction of the organisation both customer value as organisational value can be achieved. This is key to achieve the strategic objectives of KIBS: services that provide maximum customer value in order to create long term customer relationships.

| How the customer explained it | How the project leader understood it | How the engineer designed it | How the programmer wrote it | How the sales executive described it |
| How the project was documented | What operations installed | How the customer was billed | How the helpdesk supported it | What the customer really needed |
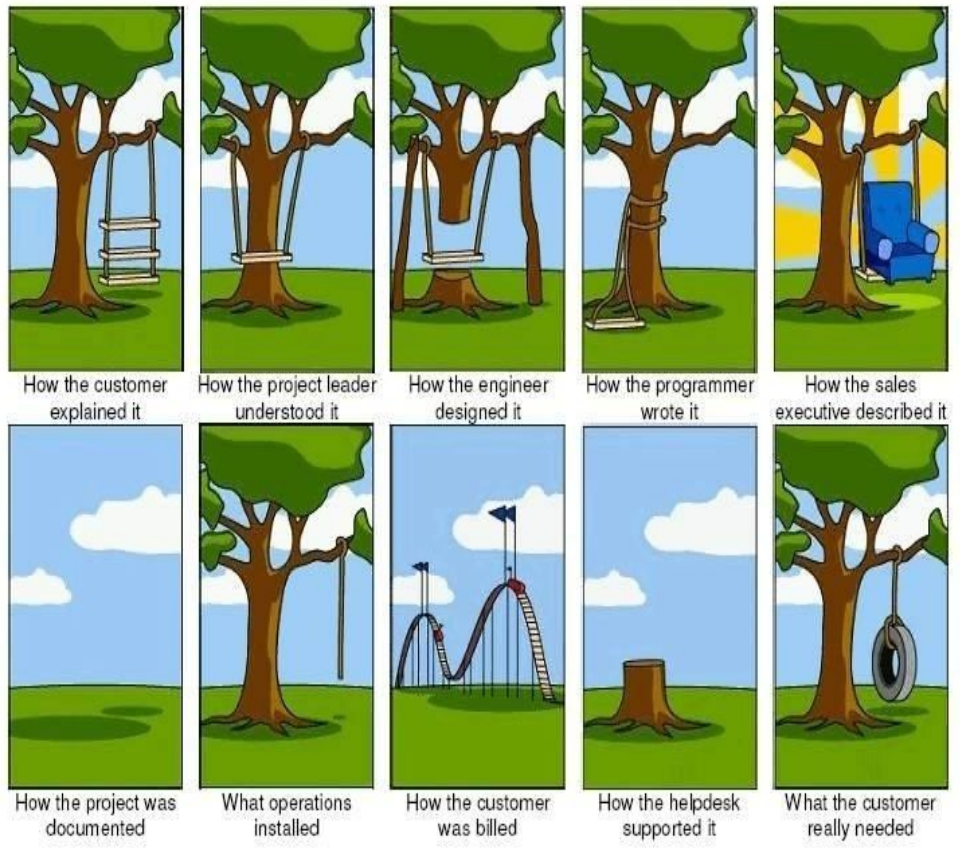
Introduction

A consequence of the current knowledge based service economy is that customers are becoming more sophisticated and more demanding towards the offerings by organisations (Lowendahl, 2005). In order to keep up with the changing requirements of customers, organisations are more and more driven by knowledge and innovations to create a competitive advantage (Halinen, 1997). In the light of these trends both the number and the impact of organisations that are providing Knowledge Intensive Business Services is growing. Recognising this makes this particular segment of organisations an interesting field to study (Lowendahl, 2005; Peppard, 2000; Peters & Siadin, 2000; Griffiths et al, 2001). Moreover, Knowledge Intensive Business Services (KIBS) are among the most dynamic organisations within the service sector which makes them an even more interesting field to study (Liu, 2009).

The services of these organisations are often characterised by a large amount of specialised knowledge. Furthermore, exchanges in business to business markets commonly take place within interactive customer relationships. This is acknowledged by the statement that adding value to corporate clients is tightly connected with knowledge, relationships and interaction (Dawson, 2000). Establishing and maintaining satisfied customer relationships can therefore be regarded as a main contributor to the achievement of sustainable competitive advantage. The significance

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of the emphasis on customer relationships and interaction is also acknowledged in the service management literature. Grönroos (2007) for example states that customers who engage in relationships with organisations are more loyal and profitable than customers who engage in one time transactions. Moreover, loyal customers can attract new customers by means of word of mouth recommendations (Grönroos, 2007).

Considering these arguments, managing the interaction between the organisation and their customers in such a manner that a sustainable relationship is established is quite crucial for KIBS. Services are formed during a process of interaction between the customer and the service consultant who is a representative of the organisation. The perceived service quality is thus in large part based on the actions of the service consultant during interaction with the customer. Service consultants who are able to react flexibly and appropriately to individual customer requirements will have a positive impact on perceived service quality which is a contributor to customer satisfaction (Schneider, 1995).

It is however acknowledged that many organisations seem to be stuck in managerial and government systems designed during the Industrial Era which actually restrains service consultants in their interactions with customers. The knowledge based economy however, asks for new ways of organising (Ul-Bien et. al., 2007). This study aims to discover conditions that create a supporting organisation that enables service consultants to provide these flexible services that add customer value, hereby increasing the chances of successful interactions. An organisation that is capable of this is referred to as an enabling organisation. This leads to the main question of this study:

What are the main enabling conditions within Knowledge Intensive Business Services that support service consultants in their interaction with customers?

Within the segment of Knowledge Intensive Business Services this study will focus in particular on the ICT and the engineering consulting sector. Organisations in these sectors can be labelled KIBS II type of services which means that the services of these organisations are related to emerging technologies and technological challenges. This makes these services distinctive from KIBS I type of services which are the traditional professional service firms such as accounting, legal services and management consulting (Liu, 2009; Toivonen, 2004).

The choice for the ICT and engineering sector is particularly interesting because these sectors are among the least represented within academic studies concerning the sector of Knowledge Intensive Business Services (Boxall & Steeveld, 1999, Baark, 2001). During the remainder of this study organisations that provide Knowledge Intensive Business Services within the ICT and engineering consulting sector (KIBS II) will be referred to as KIBS.

The study is divided into a theoretical part and an empirical part. The first theoretical chapter will provide an introduction to KIBS and will provide more insight in the relevance of the main question. This chapter will discuss the characteristics of KIBS services and the role of the interaction between the service consultant and customers within this process. The second and third chapter aim to gather enabling conditions derived from theory on the organisational level as well as the individual level. The motivation behind this choice is the logic that interaction is a *social* process between

the service consultant and the customer that can be enabled or restrained by the organisation. Thus, while the organisation certainly influences and frames the interaction process it is also the individual service consultant who shapes the interaction process. These theoretical chapters will provide the input for an explorative, qualitative study among 9 organisations in the ICT and engineering consulting sector. This study provides empirical insights into the relevance of the conditions derived from theory that foster service provision and may lead to further insights on additional conditions that enable service consultants to improve their services. These additional conditions are discussed in the light of available theory within chapter five. Chapter six includes the conducted quantitative study. This study has been carried out to validate the findings from scientific theory and the qualitative exploration. The last chapter draws conclusions, merging the data derived from each of the previous chapters. The study is discussed and evaluated in this chapter and limitations are given. Furthermore, a set of recommendations for further research are given. A graphical display of the research model can be seen in figure 1.
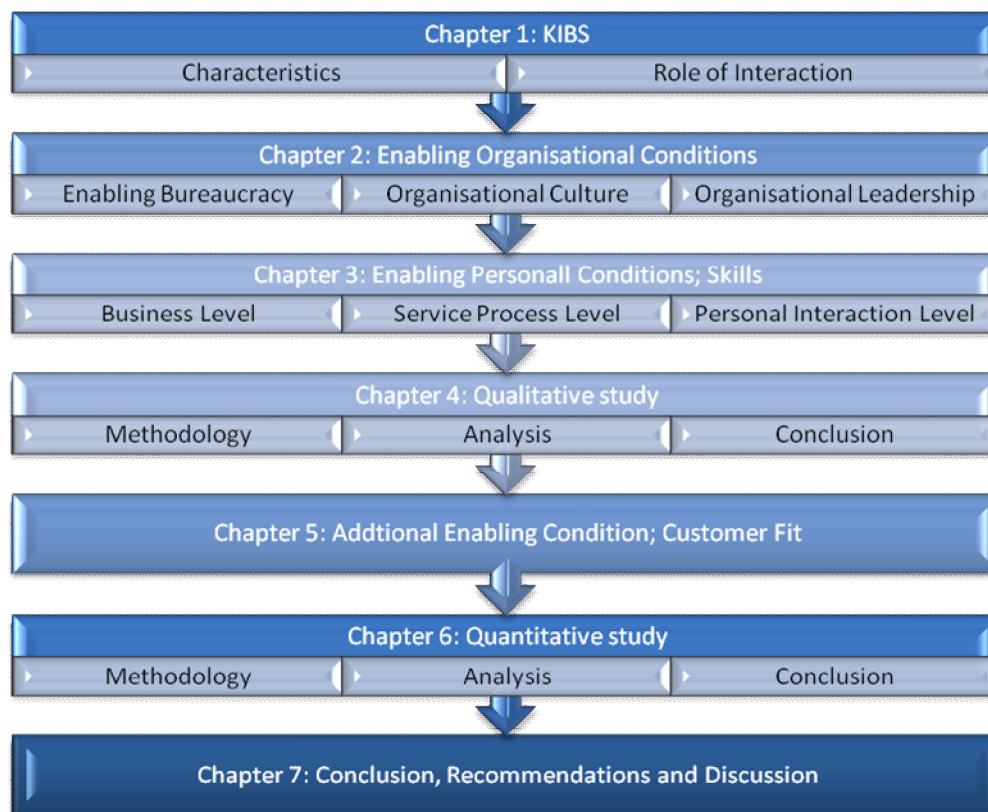
Figure 1: Research model

Chapter One: Knowledge Intensive Business Services

Before answering the main question of this study it is important to gain more insight in the characteristics of KIBS. This introductory chapter provides these insights by discussing the characteristics of KIBS services, the role of interaction and the role of service consultants within this interaction. This chapter highlights the relevance for KIBS to shape their organisation to provide support and enable service consultants during their interaction with customers.

1.1. Characteristics of KIBS

A first defining characteristic of KIBS is that these organisations provide services. The characteristics of services differ from those of physical products. These distinctive characteristics have consequences for the delivery process of services. The most important characteristic of services is their intangibility. This implies that services are provided and consumed simultaneously during a process of interaction between the service consultant and the customer. The degree to which specific service characteristics are present however depends largely on the exact nature of the service (Grönroos, 2007). In some instances services are guided or result in a tangible element. The latter is true for both the ICT and the engineering consulting sector; both services end up in a final product that is (partially) tangible. Despite this acknowledgement the process towards this end product is a highly interactive, knowledge intensive service process which contains all the elements of a service. Furthermore, the knowledge intensive nature of KIBS leads to some additional characteristics. This can be illustrated by a definition of KIBS from Bettencourt et. al. (2002): '*Knowledge-intensive business services (KIBS) are enterprises whose primary value-added activities consist of the accumulation, creation, or dissemination of knowledge for the purpose of developing a customised service*'. Another definition is given by Den Hartog (2000): '*KIBS are private companies or organisations which rely heavily on professional knowledge, i.e., knowledge or expertise related to a specific (technical) discipline or (technical) functional domain, to supply intermediate products and services that are knowledge based.*' Both definitions emphasise the role of knowledge in KIBS services. However, Den Hartog refers more to the specific domain or discipline of this knowledge while Bettencourt et al. place more emphasis on the customisation of services. Both characteristics are crucial for the services of KIBS. Figure 2 provides an overview of the characteristics of KIBS services.

INPUTS/RESOURCES	VALUE ADDING PROCESS	OUTCOME/PRODUCT
- Specific knowledge of the problem or application area - Knowledge and ability of applying methods of solving the problem and fulfilling the need	- Obtaining relevant information and data of the need/problem at hand (diagnosis) - Planning the solution or product (design of solution/product) - Implementing the solution or realizing the product	- Mostly information and increased knowledge - May also include tangible elements, such as documents or equipment, however the core value is based on information - E.g. new marketing plan, new software system, new organizational structure, logistical solution, on-line database solution

Figure 2: The service Process in KIBS (Ojasalo, 2002)

The relevance of KIBS services for their customers lies exactly in their knowledge intensive nature. Customers, which are organisations themselves, are acknowledging that in order to serve their own customers specialised knowledge and innovations are necessary conditions in order to remain competitive (Toivonen, 2004). The knowledge available in KIBS is therefore often regarded as a mean to stimulate innovations within their own organisation (Wong & He, 2002; Lowendahl, 2005). Most KIBS are aware of this goal they serve towards their customers and adjust their business strategy towards this goal. The result is a shift within the strategic perspective of KIBS where emphasis is being put on creating maximum customer value by providing integrated service solutions that support the entire customer organisation (Sivula, 1997; Toivonen, 2004). This strategy challenges KIBS to come with creative customer solutions and implies that latent customer questions will have to be discovered. The result is that attention of the service no longer only goes out to a specific customer problem, but concerns the entire customer organisation. This approach requires intensive interaction between the customer and the service consultant, as only through such interaction service consultants can be aware of the entire customer situation and are able to work towards providing suitable customer solutions (Toivonen, 2002).

Another implication of this strategic approach is that knowledge transfer within KIBS services is a bilateral process. While the specific customer problem requires specialised knowledge provided by KIBS service consultants, the information provided by customers generates knowledge for KIBS about trends in the customer environment which creates possibilities for new services options (Toivonen, 2002; Dawson, 2000; Muller & Zenker, 2001). Hereby knowledge transfer is an iterative, continuous and reciprocal process as displayed in figure 3 (Wong & He, 2002).
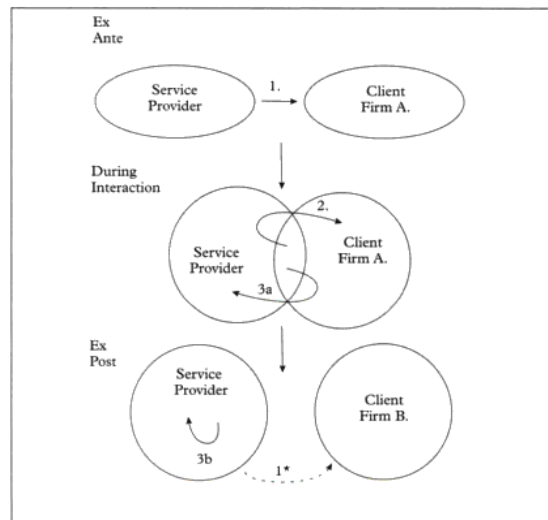
Figure 3: The value creating process (Lowendahl, 2005)

Like all communication, interaction is a two way process. The social exchanges during interactions facilitate the exchange of technical resources which is the actual service (Möller & Wilson, 1995). The interaction process is therefore first and foremost a social process between the service consultant and the customer. The organisation of which a service consultant is part can however either enable or constrain this process by its internal practices. The remainder of the study will aim to discover the enabling conditions for service consultants in this daily process.

A brief summary on the importance of customer-service consultant interactions for KIBS:

1. Services are intangible and simultaneously produced and consumed. This implies that services are always delivered during interaction between the service consultant and the customer.

2. The services of KIBS deal with complex, knowledge intensive problems. Exchange of information and knowledge via interaction is required in order to solve the particular problem.

3. The strategic perspective of KIBS puts more focus on offering an integrated service solution that improves the customer organisation on a higher level. In order to do this, knowledge about the customer situation is required which is accumulated by interaction.

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Chapter two: Enabling Organisational Factors

The underlying theoretical perspective of this study is that of the Resource Based View (RBV) of the firm wherein a firm's unique resources are regarded to create competitive advantage. Resources are herein features of the firm with value creating properties. Although resources can be both tangible and non-tangible a firm's intangible resources are considered to have the greatest potential to lead to competitive advantage (Spender, 1996, Boxall & Purcell, 2003, Wilderom & van den Berg, 2000).

The interactive nature of KIBS implies that human capital is considered one of the most crucial resources within these organisations. However, it is not only important that a firm's human capital has the right skills, service consultants need to be enabled by the organisation to use these skills effectively during interaction (Awuah, 2007). Resources, such as human capital, are merely the inputs into the service process. Only by cooperation and coordination between the firm's organisational resources and the firm's human capital, organisational capability, which can actually create competitive advantage, can be achieved (Grant, 1991).

This chapter theoretically explores the conditions that facilitate the coordination of a firm's organisational resources with its human capital. The focus lies on conditions that impact the daily practices of service consultants who interact with customers. This focus is based on the underlying assumption that it is the daily actions of service consultants that contribute to an organisation's performance. Conditions to be discussed are: enabling bureaucracy, organisational culture and organisational leadership. The following paragraph will explain why these conditions in particular will be discussed.

2.1. The conditions Bureaucracy, Culture and Leadership

It is stated that organisational capability requires careful coordination between resources. Therefore, the conditions that will be explored during this chapter can be considered organisational coordination mechanisms for service consultant's actions. In particular the conditions bureaucracy, culture and leadership will be discussed. The logic for the focus on these conditions instead of other possible conditions will be explained in the following paragraph.

Bureaucracy, with its origins in the work of Weber (1946) is considered one of the traditional means of organisational coordination. It is characterised by its goal-oriented rationality, and can be described as a mean to formalise and standardise organisational practices. It includes organisational structures as it governs behaviour to the extent that roles and role relations are prescribed for individuals who hold certain positions within the structure. Other examples of bureaucracy are formalisation practices (written rules and procedures), and a hierarchy of authority (Kärreman et al, 2002; Borys & Adler, 1996). Bureaucracy can be described as the technical, formal structure that governs service consultant's daily behaviours.

The discussion in the literature about the influence of bureaucracy as a restraining or enabling condition for KIBS service consultants makes it an interesting condition to discuss. Due to their complex and innovative tasks it is stated that KIBS structural elements are often only loosely linked to each other. This loosely coupled structure is described to be characterised by a flat organisation with few organisational layers, hierarchy and administration practices (Hasefeld, Nurmi, 1998; Adler & Borys, 1996, Möller & Halinen, 2001, Alvesson, 2005). Bureaucracy is herein mainly associated with characteristics such as a decrease in creativity, and a general lack of motivation among service consultants (Adler & Borys, 1996, Alvesson, 2005). Empirical findings illustrate however that despite the need for flexibility, elements of bureaucracy have not disappeared from KIBS. Rather the function of bureaucracy has altered (Alvesson, 2005, Kärreman, 2002, Borys & Adler, 1996, Courpasson, 2000, Bernard, 2008). As stated by Adler (1999) there is a need for bureaucracies that support high levels of both performance and employee involvement. This study aims to discover the conditions of bureaucracy that actually coordinate service consultant's actions while achieving a balance in these characteristics.

The second coordination mechanism that will be discussed is organisational culture. Where bureaucracy describes the organisation's technical and formal structure, culture can be regarded as the social structure of the organisation influencing service consultant's daily actions. The trend that describes de-bureaucratisation of organisations within complex business environments frequently mentions organisational culture as an alternative form of control. Robertson and Swan (2003) state that normative control, rather than control based on hierarchy and structure, is regarded as to serve self discipline and integrate individuals within the professional organisation. Ditello (2001) states that ambiguous, complex tasks are best handled by employees with a common history, shared experiences and collective social and organisational frames that are related to common values and beliefs. Also, Alvesson (2000) states: 'W*hen hierarchical or technical means cannot prescribe behaviour in detail due to the complexity and organic nature of the work tasks, the self-image and social group(s) through which the worker defines him/herself becomes of great significance'.* Furthermore, Grant (1991) mentions that for different resources to become actual organisational capabilities the ability of the organisation to motivate and socialise its members is crucial; organisational values are mentioned as an important factor herein.

The third coordination mechanism that will be discussed is organisational leadership. Organisational leaders coordinate service consultant's daily actions as they influence both organisational bureaucracy and culture. Hereby, organisational leadership forms a bridge between the two first conditions. Organisational leaders shape the formal structure and practices of the organisation in large part, e.g. via management control systems. The organisational culture is influenced as in general the organisation founding leaders form the foundations for an organisation's culture (Wilderom & van den Berg, 2000). Also, the organisation will select future leaders that represent the existing or aspired culture. The culture itself will shape managerial perception that will be reflected in the practices as implemented by organisational leaders. This explains the indirect link between leadership behaviour and service consultant's performance. Furthermore, leadership influences service consultant's actions directly by its either enabling, motivating behaviour or acting as a restraining source.

2.2. Enabling Bureaucracy

Despite claims of de-bureaucratisation within KIBS there is a growing amount of literature that questions this trend (Courpasson, 2000; Bernard, 2008). Kärreman et al. (2002) in fact found in their study that KIBS are characterised by many bureaucratic features such as hierarchy standards or formalised work practices. The purpose of these bureaucratic elements is however different to that of the traditional view on bureaucracy. Bureaucracy is herein regarded as a mean to stimulate communication and to reach a reasoned consensus (Bernard, 2008). This view on bureaucracy claims that bureaucratic elements provide guidance to service consultants and clarify responsibilities (Borys & Adler, 1996).

The perspective that is also taken in this study is that bureaucratic elements are not restraining KIBS service consultants per se. It is proposed that it is the manner in which these coordination practices are applied and perceived by service consultants that either constrains, or enables them in their daily interactions. This perspective towards bureaucracy will be clarified by discussing the studies of Adler and Borys (1996) and Kärreman et al. (2002).

Adler and Borys (1996) emphasise one element of bureaucracy; that of formalisation practices. They make a distinction between enabling and coercive formalisation. Enabling formalisation aims to guide employees to master their tasks more effectively and deal with contingencies that occur during the performance of their tasks. Enabling formalisation is directed at providing employees with feedback, assists in identifying problems, revealing improvement opportunities, help prioritizing action, etc. Hereby procedures are regarded by employees as a valuable resource that assists them in meeting customer needs instead of merely a controlling device for management purposes (Wilderom & Wouters, 2008). This type of formalisation thus assists service consultants in the formulation of a mental model of the system they are using. Formalisation practices are based on organisational lessons that are learned by experience; hereby enabling formalisation provides an organisational memory (Adler & Borys, 1996).

Coercive formalisation is quite contrary to enabling formalisation as its primary goal is to act as a control device for senior management. This type of formalisation can thus be characterised as management attempts to coerce employees' effort and to create compliance (Wilderom & Wouters, 2009). The principle behind this type of formalisation is different than that of enabling formalisation. It proposes that service consultants are reluctant and recalcitrant towards achieving organisational goals. Formalisation is herein regarded as a mean to substitute employee's commitment by designing fool proof practices (Adler & Borys, 1996). It can thus be stated that coercive formalisation is aimed as a mean to reduce ambiguity for the organisations management instead of an ambiguity coping element to guide employees. The complex nature of KIBS services however asks for a certain amount of employee discretion and improvisation (Kärreman et al., 2002). When work procedures are rigidly being applied in this situation, the negative consequences of bureaucratisation will certainly overrule any positive elements (Adler & Borys, 1996).

Based on these differences Borys and Adler (1996) propose that only the enabling type of formalisation can lead to positive outcomes. The conditions that are mentioned for work practices to be enabling are: internal and global transparency, and flexibility and repair. Internal transparency means that service consultants have a good understanding of the rationale on why certain practices are in place. Global transparency means that service consultants have information about fields beyond their specific work domain. Practices are thus designed to provide service consultants with a broader understanding. Flexibility means that employees are given room to modify the interface and add functionality to suit their specific work and repair means that service consultants can improve work practices themselves (Borys & Adler, 1996; Wouters & Wilderom, 2008). Furthermore, service consultant's involvement in the development of formalisation practices and employee professionalism are factors that lead to enabling bureaucracy. Adler and Borys (1996) propose that *"employee involvement in the formulation of procedures is likely to have a positive effect on both attitudinal and technical outcomes'.* Wouters & Wilderom (2009) in their study on enabling Performance Measurement Systems support this statement by emphasising that: *Professionalism denotes an orientation toward learning for the purpose of improving work practices. Such an orientation makes it possible to rely on experience and to conduct experiments within a Performance Measurement System development process.* This implies that within the context of KIBS wherein employees are considered professionals, implementation of enabling formalisation seems very viable. Moreover, it creates a situation wherein experiences of service consultants can be formalised while building a shared frame of reference.

Kärreman et al. (2002) also propose that within the context of KIBS bureaucratic elements can be used in a different manner than as a controlling or regulating device. Their statement is that bureaucracy within KIBS can serve a cultural and rhetorical function. Examples are an organisational structure that can provide guidance to service consultants about different disciplines in the organisation. Bureaucratic elements such as procedures can act as a collective mindset and frame of reference, resulting in a shared understanding on organisational practices. Procedures are hereby not merely a protocol for prescribed behaviour but instead, are considered by service consultants as providing support. Acknowledging the need for flexibility in KIBS services it is however crucial that core work processes can be acted out in an organic and flexible manner. It is therefore the symbolic value of procedures that matters. Procedures provide a shared meaning, and assist in the establishment of a common domain of expertise within the organisation. This makes methods not strict guidelines for action but serve the function to communicate a particular point of view. Examples are manuals and work methodologies that often are standardised, but also often include more than one way of doing a particular task. Standardisation is thus not used as a mean to prescribe the most efficient operations, but rather to establish a code that allows organisational members to communicate about the task.

Enabling bureaucracy as described in this paragraph can be helpful in managing routine by a high amount of enabling formalisation and managing non-routine tasks by a lower amount of enabling formalisation, hereby creating a mix of organic and enabling-bureaucratic features (Adler & Borys, 1996). This implies that especially routine tasks in KIBS can indeed be characterised by a high amount of formalisation. However, they are experienced based and redefined when necessary to fit environmental contingencies. In more routine tasks work practices are a guide for

action that facilitates effective and efficient work. In non-routine tasks work practices serve as a mental map and a cultural function. Organisational coordination and control is herein characterised by a pragmatic rationality

2.3. Organisational Culture

Organisational culture is regarded as one of the main factors to influence service consultant's actions (Wilson, 2001). It is described as: *'the glue that holds the organisation together and that stimulates employees to commit and perform'* (Wilderom & van den Berg, 2000; Jung et al., 2008). Wilson (2001) quotes a definition by Kotter and Heskett (1992): *At the deeper and less visible level, culture refers to values that are shared by the people in a group and that tend to persist over time even when group membership changes. At the more visible level, culture represents the behaviour patterns or style of an organisation that new employees are automatically encouraged to follow by their fellow employees. Each level of culture has a tendency to influence the other.'*

This study will focus on the visible aspects of culture that are represented in the daily actions of service consultants. The definition of culture by van den Berg and Wilderom (2004) will be used: *'the shared perceptions of organisational work practices within organisational units',* wherein work practices are considered as the taken for granted way of doing certain tasks. Taking into consideration the definition of Kotter and Heskett (1992) it is implied that underlying values are represented in work practices. The previous paragraph has mentioned furthermore that organisational practices can serve a cultural function by providing a shared meaning.

By taken into account the introductory chapter on KIBS it is assumed that general goals for KIBS are to provide (technical) knowledge intensive services that amongst others contribute to the innovative capacity of their customers. The aim of this chapter is therefore to discover cultural conditions as represented in work practices that stimulate an innovative and service oriented culture, hereby enabling service consultants to act on these values. Van den Berg and Wilderom (2004) have distinguished five dimensions of an organisations culture that relate to an organisation's work practices. These are: autonomy, external orientation, interdepartmental communication, human resource orientation and improvement orientation practices. These dimensions will be discussed taking the context of KIBS into account.

Autonomy: Within a service innovation culture service consultant's possibility to act autonomously will contribute to the flexibility during interaction with customers. Autonomy leads to a sense of ownership and control over the work to be performed. This increases service consultant's creativity which is related to innovation. Perceived control furthermore develops service consultant's intrinsic motivation, which in turn promotes creative behaviours (Jung et. al., 2008). However, it is also noted that a balance should be sought between autonomy and providing structure and control towards service consultants s by defining goals. Especially in the context of high-tech industries with rapidly changing technologies, such as IT organisations, the establishment of guidelines and boundaries is important (Jung et al., 2008).

External orientation: As it is the customer's perception of service quality that determines the success of the service, external orientation is crucial for KIBS. From the introductory chapter on KIBS it has become clear that services are characterised by a reciprocal learning process. Successful KIBS will be able to collect information and knowledge externally and to transform these in combination with internal knowledge into service outputs, hence the need for an external orientation (Liu, 2009).

Interdepartmental communication: Innovation requires collaboration and communication across departments and functional specialties (Liu, 2009). The focus of KIBS to provide integrated services also asks for crossing functional borders (Toivonen, 2004). This will lead to the exchange of ideas and assists in the development of a shared understanding. Furthermore, interdepartmental communication will assist in organisational learning and the detection and correction of errors (Mazutis, 2008).

Improvement orientation: Organisational learning characterised by asking questions, seeking feedback, experimenting and reflecting on results, is considered a characteristic of an organisation's improvement orientation (Mazutis, 2008). Learning is regarded as a driving force in enhancing competitiveness, effectiveness, and innovation. There is a link between interdepartmental communication and improvement orientation as learning is stimulated by interaction with colleagues to share knowledge, ideas and opinions. Learning activities can assist service consultants in dealing with unpredictable work situations or to solve problems creatively.

Human resource orientation: Within KIBS the human capital creates the competitive advantage of the organisation since it is the service consultant who have to create the services. An organisational focus on the enablement and support of human resources is thus crucial. All other factors are related to the human resource orientation of the organisation.

2.4. Organisational Leadership

The concept of organisational culture is closely related to that of organisational leadership style. Leadership is for example noted as one of the most crucial factors in creating an innovative culture or not (Jung et al., 2008). This influence of leadership is proposed as organisational leaders have a great influence on organisational strategy and practices (Jung et al., 2008). The organisational culture itself shapes managerial perceptions and their strategic decisions. The cultural values will thus likely be represented in practices implemented by organisational leaders (van den Berg and Wilderom, 2000).

Different leadership styles have been studied and there are several frameworks to describe a certain style. Examples are leadership styles that are regarded transactional or transformational (Avolio et. al., 2009). A transactional leadership style approaches leadership in terms of exchange relationships. Emphasis is put on aspects such as goal setting, providing directions and support and reinforcement behaviours. This leadership style is mainly focused on maintaining the status quo of organisations practices (Jung et. al., 2008). A transformational leadership style is aimed at an activation of higher order values among employees, transformational leaders are thus aiming to arouse service consultant's emotions in order to work and perform beyond

simple transactions. In order to achieve this goal transformational leaders place emphasis on symbolic leadership behaviour by visionary, inspirational messages, moral values and individualised attention (Avolio et. al., 2009).

This transformational leadership style is often regarded as the most effective style contributing to the overall organisational performance (Wilderom and van den Berg, 2000; Hur, 2009; Avolio et. al., 2009; Jung et. al., 2008). Furthermore, this style is related to the enhancement of organisational innovation (Jung et. al., 2008). Organisational leaders set the standard for communication with service consultants, their goal herein is to clarify the kind of service behaviour that is expected throughout interaction between service consultants and customers. This can be achieved by means of leadership that empowers, inspires and rewards employees and that serves as a role model (Anderson, 2006).

Bass and Avolio (1994) have operationalised the factors that constitute transformational leadership on four dimensions: idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration. Idealized influence occurs when leaders act as a role model and behave in a way that causes service consultants to identify with the leader. Leaders with idealised influence tend to place employee's needs over their own needs, share risks with followers, and exhibit adherence to a set of underlying principles and values. Inspirational motivation refers to a leader's articulation of a vision that is appealing and inspiring to employees. Inspirational motivation thus provides a meaning to service consultant's work (Jung et al., 2008). Intellectual stimulation is the degree to which the leader challenges assumptions and asks for employee's ideas. Intellectual stimulation can facilitate unconventional and creative thinking, hereby increasing the organisation's innovative potential (Jung et. al., 2008). A problem solving orientation of leadership communication also encourages employees to be part of the process (Anderson, 2006). Individualised consideration is the degree to which the leader attends to each service consultant's needs and acts as a mentor or coach to service consultants (Hur, 2009). Here it is crucial to create a culture that supports growth by creating learning opportunities (Jung et. al., 2008).

In the study of Nemanich & Vera (2009) it is stated that transformational leadership also contributes to organisational ambidexterity. KIBS often face a paradox between creativity and innovation on one side and efficiency and productivity on the other side (Chang & Birkett, 2004). When organisations are able to manage this paradox the organisation is regarded as ambidextrous, which means that the organisation is able to manage exploitation activities as well as exploration activities. Transformational leadership is related to this characteristic as it creates commitment to the overall goals of the organisation. Therefore, this type of leadership not only stimulates creativity, it also increases service consultant's effort to perform tasks more effectively. Transformational leadership stimulates both exploitation and exploration. service consultants are encouraged to learn institutionalised knowledge in the form of standard practices that support the vision of the organisation. Herein the environment is regarded as a source of opportunities that stimulated the adoption of new institutionalised routines (Nemanich & Vera, 2009). By involving employees in decision making employee's understanding of how and why best practices are in use is enhanced herby stimulating exploitation. At the same time exploration is stimulated as

participation triggers an aspiration for improvement and increases commitment to explore new ways of doing things (Nemanich & Vera, 2009).

Leadership that stimulates organisational ambidexterity is also described in the complexity leadership theory wherein a balance is sought between organisational dynamics and enabling control structures that coordinates outcomes appropriate to the vision and mission of the organisation (Uhl-Bien et.al, 2007). The enabling leadership style that is described in this framework combines elements that are very similar to the transactional and transformational style. Enabling leadership aims to create policies that still enable organisational dynamics. Enabling leadership manages organisational conditions to be consistent with the strategy and mission of the organisation, however, ensures that such missions are not restricting the organisation's creative process (Uhl-Bien, et.al. 2007). Effective leadership within KIBS thus includes these elements of enabling leadership wherein ambidexterity is stimulated by combining elements of transformational leadership with elements of transactional leadership.

2.5. Summary

Figure 5 shows the enabling factors influencing service consultant's performances within KIBS. This paragraph summarises their effects.
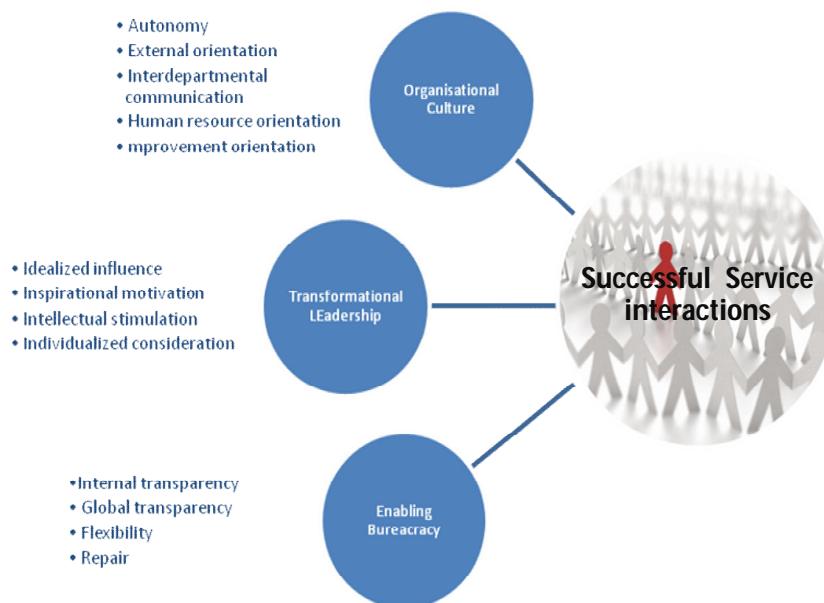
Figure 5: Effect of enabling organisational condition on service consultant's performance

Organisational culture in this study is defined as *the shared perceptions of organisational work practices within organisational units'*, wherein work practices are considered as the way of doing certain tasks and incorporating the values of the organisation. The assumption behind this definition of culture is that service consultants experience organisational values through work practices. Dimensions of an organisational culture

are autonomy, external orientation, interdepartmental communication, human resource orientation and improvement orientation practice. Enabling formalisation guides service consultants in mastering their tasks which work motivating for service consultants in KIBS organisations. The formalisation practices serve as a mental model for service consultants of the system they are using. Formalisation thus serves a cultural and rhetorical function wherein bureaucratic elements act as a collective mindset and frame of reference. Hereby, the elements of enabling bureaucracy contribute to the formation of the organisational culture.

When the organisational culture is supported by transformational leadership all enabling elements will be reinforced. Organisational leaders have great influence on organisational strategy and practices. Transformational leaders activate the higher order values among service consultants and arouse employee's emotions in order to work and perform beyond simple transactions. Transformational leaders tend to place employee's needs over their own needs, share risks with followers, exhibit adherence to a set of underlying principles and values with a vision that is appealing and inspiring to employees. This inspiration provides a meaning to employees work. Furthermore, transformational leaders challenge assumptions, asks for ideas, and support unconventional and creative thinking. Transformational leadership is characterised by individualised consideration by acting as a mentor or coach to e service consultants and creating a culture that supports growth by creating learning opportunities. By involving service consultants they will create a good understanding of the rationale on why certain practices are in place. Interdepartmental communication and external orientation provide service consultants with information about fields beyond their specific work domain. By allowing a proper amount of autonomy employees have flexibility to modify the interface and add functionality to suit their specific work. Through the room and support that employees are given while motivated by an overall vision and focus on improvement exmployees are able to improve work practices themselves. These factors together thus reinforce mutual strong points , creating a balance between a collective frame of reference, an inspiring vision aimed at continuous improvement and autonomy for service consultants in their work field.

Chapter three: Factors on a personal level – Skills and Competences

Apart from factors on the organisational level that can enable service consultants in providing KIBS services, individual service consultants have to deliver services in interaction with the customer. Service consultants will thus have to combine the enabling organisational characteristics with their personal skills and competences to deliver successful services. Individual service consultants that have the necessary skills and competences that are needed during their customer interactions are better able to provide effective customer services. The impact of individual service consultants is even more emphasised when it is considered that KIBS services are often innovative in nature, and innovation processes depend on the provision of good ideas by individuals.

Although it is clear that the intensity of the required skills of KIBS service consultants is very high, the heterogeneity of the sector makes it difficult to define exactly which skills are relevant (Dachs, 2009). This chapter will take a closer look on these relevant skills with an emphasis on required skills in the ICT and engineering sector. Toivonen (2004) has made an attempt to conceptualise the necessary skills for KIBS employees. She made a distinction between skills at the business level, skills at the service process level and skills at the personal interaction level. On an overall business level it is important that service consultants recognise the (contradictory) challenges that KIBS face and are able to anticipate general trends in the organisational environment. The service process level relates to skills that are needed to act out the actual service process. Examples are mastering tools and methods that are necessary to deliver services to customers as well as mastering the content of their field of expertise. The last level refers to skills that are actually necessary during interaction with customers. Service consultants can master the contents and methods that relate to their expertise, but it has already been mentioned that interaction is above all a *social* process. On this level it is thus crucial that service consultants have 'social' skills that complement the 'hard technical' skills. Although Toivonen makes a distinction between these three levels this study proposes that these levels are in fact intertwined. Due to the characteristic of simultaneous production and consumption of services, service consultants are for example only able to participate in changes in the business environment during interaction with customers. Interaction is also a mean through which service consultants can notice trends in the environment. Also, during the interaction with customers, service consultants use their social skills to find out what the exact need of the customer is and use their social abilities to transfer the actual content of the service in an understandable format for the customer. Despite this acknowledgement that the three skills level are in fact overlapping and intertwined, the three levels will be discussed separately to provide a clearer view of all skills and competences that are relevant for KIBS consultants who interact with customers.

3.1. Business level

At the business level KIBS consultants require skills that relate to a general knowledge of the economy and the capability to see the customer organisation as part of a larger environment. Relevant skills are the capability to recognise changes in the business environment and new ways of 'doing business'. These skills contribute to the anticipatory abilities of employees to recognise emerging organisational needs and practices. On the business level it is furthermore important that service consultants are able to combine skills that relate to efficiency and entrepreneurship which are often two opposite orientations. KIBS face contradictory requirements of being both productive and innovative which requires service consultants to be engaged in both exploitation and exploration activities. This requires consultants to do things differently while at the same time doing the same things more efficiently. Doing things differently implies that they need to consider many possible solutions to customer problems, take notice of a wide range of environmental information, and think beyond customer questions This process is quite time consuming. Productivity on the other hand requires logical thinking and the use of organisational routines, focus, and convergent thinking. This paradox for KIBS organisations on the business level can be explained by the need for improvement of human capital through continuous innovation, creative ideas in order to provide distinctive service solutions and the demand to make efficient use of this human capital to ensure profitable economic outcomes for the organisation.

Chang and Burkett (2004) state that to manage this paradox on the organisational level KIBS need to balance these requirements on the individual level for example by making use of competence standards. These competence standards are formalised statements about performance goals, and capabilities expected from professionals. The ability of service consultants to see their actions in a broader business perspective is in large part thus determined by their skills and competences on the service process level and the personal interaction level.

3.2. Service interaction level

At the service process level it is foremost crucial that consultants have mastered the content of their profession as it is the content on which the entire service is based. Both in the ICT and engineering services consultants generally have a long and hard education and training that emphasises issues such as problem solving, working towards the right solution with an attention to detail (Boxall & Steeveld, 1999). However consultants need to master both the functional knowledge in their field of expertise and a broader field of multidisciplinary knowledge in order to offer broader service content. This implies that KIBS consultants must be able to cooperate and interact with other fields of expertise, for example marketing or research and development (Menzel et. al., 2007). Mastering this broader field of knowledge can be achieved by interdepartmental communication as has been described in the previous chapter. Furthermore, to achieve this goal consultants can engage in internal or external interdisciplinary education.

Those consultants who are able to combine their technical expertise with sufficient knowledge about the actual market may be able to judge the potential market demands for new combined service initiatives that lead to a considerable increase in innovative potential (Menzel et. al., 2007). Besides the content service consultants need to master the methods that are used to act out their profession. The high level of education of most KIBS consultants combined with their professional experience results in a strong ability to think conceptually. Methods applied during the service process are therefore often precise and analytic (Toivonen, 2004; Dachs, 2009, Menzel et. al. 2007). However, it is becoming increasingly important that service consultants are able to bear an overflow of information where it is often a challenge to concentrate on the essentials (Toivonen, 2004). ICT has considerably changed issues concerning the handling, storing and moving of information. It is no longer an issue how to transfer and compile information, but more how to focus, find and analyse that part of the information that matters. There is a growing demand for competences that relate to selecting relevant information and using this information efficiently. service consultants need to add a 'human touch' to information, which means that they are able to provide a customised interpretation of data (Toivonen, 2004). Important for the creation of knowledge and innovation is the organisation's ability to combine explicit and codified knowledge with tacit knowledge that is hidden in daily practices and experience. ICT can act as a supporting resource in this process. Through these means KIBS consultants can increase their connectivity to customers and provide customers more easily with information, solutions and contributions to innovation (Toivonen, 2004).

3.3. Personal interaction level

On the personal interaction level KIBS consultants should be able to combine skills that relate to their field of professional expertise with skills that concern more personal and social aspects. During the service delivery they need to be able to cooperate with customers in the delivery of services (Dachs, 2009), and in an increasing amount also with other KIBS on a horizontal level. This increasing need for horizontal cooperation is a consequence of the need to provide more comprehensive services. These personal and social skills are to a large degree based on values, attitudes and behaviour as well as tacit knowledge and know how. Although these skills are hard to develop, over time they can be developed by training. The willingness to learn and to use one's abilities in versatile ways is an indicator that these skills can be developed. These social skills are especially important since KIBS services are often based on teamwork which implies that social skills can sometimes be more important than professional competences. For engineers too, these educational requirements have officially been recognised. These criteria are divided in 'hard' skills and 'soft skills' (Shuman et al., 2005). The exact content of the criteria can be found in appendix B.

This analysis reveals that KIBS consultants are challenged to acquire a broad range of skills and need to be capable to combine both expertise and entrepreneurship, develop broader and deeper knowledge, master both the content and the tools related to one's profession and increase their knowledge of their customer's business (Toivonen,

2004). KIBS organisations have to be aware that not every service consultant will have all the competences that are needed to provide interactive, innovative and efficient services. Maybe only a few individuals will have the full potential of what it takes, but it is crucial to provide these individuals with the resources to develop this potential. Furthermore, these capabilities can be significantly enhanced through training and experience. Thus, individual attention to these skills is quite crucial (Menzel et. al., 2007). As the skills level of professionals develops through their years of experience, the competence profiles and the organisational expectations towards service consultants will change over the years. It is suggested that younger employees will lack experience to be creative towards their technical competences (Chang and Birkett, 2004). For younger service consultants the focus often lies on developing explicit knowledge competences and being productive, when experience rises professionals will use this diverse experience in their creative thinking. This distinction between service consultants competences can lead to ambidexterity of the organisation as a whole, by being both innovative and productive.

Concluding the Theoretical Framework

It is clear that it is the combined effect of organisational conditions and personal skills can enable service consultants in their interactions with customers. Organisational practices, cultures and leadership can stimulate desirable behaviour. This is also referred to as a combination of human capital advantage and human process advantage. Human capital advantage results from employing service consultants with competitively valuable knowledge and skills, while human process advantage can be achieved by the processes and practices of the organisation (Boxall & Steeneveld, 1999). The factors on the organisational and personal level do however influence each other. Conditions on the organisational and personal level that complement each other can enhance each other's results leading to higher organisational performance. On the contrary, the positive effects of one condition can be weakened down by contradictory effects when a condition on the other level is not present. Throughout this theoretical framework many combined effects and relationships between conditions have either explicitly or implicitly been described. Table 1 that is included in appendix C provides an overview of the effects that all conditions have on service consultant's performance and clarifies the relationships between conditions. Figure 6 provides an overview of the conditions that influence service consultant's performance.

Figure 6: Enabling conditions stimulating service consultant's performance

Chapter 4: Explorative Qualitative Study

A qualitative study has been acted out to study the combined effect of these particular organisational conditions on service consultant's performance. This study takes the comment by Dachs (2009) into account wherein it is stated that that there is not much insight yet on the crucial skills for KIBS service consultants. With these considerations in mind and acknowledging the complexity of KIBS, an explorative, qualitative study is a suitable first approach to validate findings from the theoretical framework. The following section will discuss the particular goals of this study as well as the methodology that has been used. Hereafter, research results and conclusions will be provided.

4.1. Methodology

Goals: In general the goal of qualitative research is to explore and understand a social or human problem. The process involves emerging questions and procedures wherein the data is typically collected within the participant setting. The researcher makes interpretations about the meaning of data through which general themes are being built. This implies that qualitative research is often aimed at theory generation (Creswell, 2009). Although this study already discussed a broad field of literature the research field of KIBS is very dynamic and complex to grasp. The goal of this qualitative research is therefore to provide some first empirical insights on the relevance of the enabling conditions for KIBS service consultants that have been described in the theoretical framework. This qualitative research aims to discover multiple issues:

- Are the themes that KIBS face which are described in chapter one considered relevant within the ICT and engineering consultancy sector?

- To what extent are the conditions mentioned in the theoretical framework considered relevant in supporting service consultants during their interaction with customers?

- To what extent are other conditions considered relevant and what are these conditions?

This qualitative study will thus serve as a first validation of the themes relevant for KIBS and the discussed enabling conditions. The explorative and open nature of a qualitative study leads to rich and thick data and provides a mean to discover participants' underlying thoughts and possible additional conditions (Creswell, 2009). The views of the theoretical framework and this explorative, qualitative study will provide input for a second study which will be a quantitative research that explores these conditions among a larger sample of the population.

Selection: Participants are selected within the ICT and engineering consultancy sector. The scope of the study allows participants along a broad range of functions to provide meaningful insights. The challenge for the researcher is therefore to

purposefully select individuals that will best help to understand the problem (Creswell, 2009). In this study participants with the following profiles have been selected.

- Members of an organisation's management board are suitable participants to provide an overall picture of the trends KIBS within the ICT and engineering consultancy sector face and to provide insights on the concerned KIBS management issues.

- Views of service consultants (project manager, account managers etc.) are relevant as the perception that e service consultants have of the organisation influences service consultant's performance.

- HR managers are relevant participants concerning insights on specific service consultants' skills and competences.

In total a number of 9 participants have been interviewed with the following profile:

Function	N
Management function	4
HR function	2
Service consultant	3
Total	9

Table 1: Overview of the interview participants

Data collection: Data will be collected by face to face semi-structured interviews of approximately 1,5 hours. The goals of the interview and the main themes that will be addressed will be communicated towards participants on forehand. The semi-structured approach ensures some consistency and reliability throughout the different interviews while providing room for individual thoughts, comments or additions (Babbie, 2004).

Construction of questionnaires: Interview questions are based on the themes that have been addressed in the theoretical framework. How the questions relate to the different themes will be briefly discussed:

KIBS characteristics: Questions relating to this theme aim to discover whether KIBS characteristics and environmental trends that have been discussed are actually recognised by participating organisations. Examples of questions concerning these themes are[1]:

- What are typical characteristics of the services of this organisation? This question allows to discover whether aspects such as the knowledge intensive nature of services are actually mentioned as a defining characteristic.

- How would you describe the relevance of interaction between service consultants and customers in the service process? This question actually

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[1] Translated from Dutch

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addresses the relevance of the study. Are successful interactions indeed considered crucial for organisational performance?

- Can you elaborate on some developments that influence the role or importance of interaction? This question allows to explore whether aspects such as the strategic focus on total customer value by offering broader service content is recognised.

Enabling organisational conditions: Questions addressing organisational conditions relate to the organisations bureaucratic elements and their underlying logic, the influence of culture and the impact of leadership style characteristics. Some examples of questions are[2]:

- What is the underlying reason for the way the organisations formal elements (structure, practices) are shaped? This question is a follow up on questions that discuss the organisation's structure and formal processes. Hereby, it is possible to determine whether bureaucratic elements are present, their underlying reasons and the manner in which they are applied. The goal is to determine whether the assumption from the theoretical framework is confirmed that states that bureaucratic elements in KIBS aim to provide service consultants support.

- To what extent provides the formal structure of the organisation (bureaucratic elements) a representation of the organisation's values? This question discusses whether formal procedures indeed serve a cultural function.

- To what extend do cultural values influence service consultant's direct actions in interactions with customers? This questions aims to discover whether organisational values are reflected in service consultant's actions and whether it is considered that this influences the actual success of interactions.

- Which leadership behaviour or characteristics are crucial to enable service consultants? This is an example of a question that aims to determine whether leadership is considered a condition that influences service consultant performance and whether characteristics that represent transformational or transactional leadership are considered.

Personal competences and skills: Questions that relate to the theme of service consultant's skills and competences aim to discuss which skills are considered relevant in providing successful interactions and how organisations assure that relevant skills are actually represented among the organisations employees. Examples of questions are[3]:

- Which skills are crucial for service consultants in this organisation to deliver successful services?

- How does the organisation guarantee that these skills are represented among the organisations service consultants?

An overview of the exact interview protocol can be found in appendix D.

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[2] Translated from Dutch

[3] Translated from Dutch

Data analysis: To ensure validity, interviews will be audio taped and transcribed after which a report will be provided to the interview participant to determine the accuracy of the findings. Furthermore, interview transcripts will be cross checked by two additional members. Data will be triangulated for as far possible by document sources available in year reports, web-sites etc. Data derived from the interviews will be coded according to these themes to discover patterns throughout the data (Babbie, 2004). By explicating the contents of a particular theme and transcribing the interviews it is possible to track the number of quotes that are given about a particular theme throughout the interviews. This approach provides a first indication on the impact of specific themes throughout the sectors. The results of the analysis of the data derived from this qualitative study will be presented in the following sections.

4.2. Analysis of the Interview Results

Appendix E provides three tables. Herein the number of quotes that are given throughout the interviews relating to themes addressed in the theoretical framework is indicated.   This provides a first validation for the conditions mentioned in the framework. The following sections will provide insights derived from the interview results by elaborating on some of these quotes and comparing these with the theoretical conditions. The paragraphs will be divided according to the themes discussed throughout chapter 1-3 and will discuss: KIBS characteristics, organisational conditions and personal skills.

4.2.1. KIBS CHARACTERISTICS

Before going into the conditions that enable service consultants in their interactions with customers it is firstly analysed whether the characteristics and trends that have been described in chapter one are indeed recognised by the interview participants. The interview results indicate that this indeed the case. KIBS characteristics, such as their knowledge intensive nature, are widely recognised within the participating organisations and frequently mentioned as a key factor for organisational success. Overall business goals of the participating organisations concentrate on adding value to customers by offering specialised services that enable customers to provide their services or products in a better way. It is also acknowledged that the services include innovative techniques which is sometimes explicitly been mentioned in mission statements.

> 'It is our goal to provide innovative services to our customers by offering high quality, expertise technology. Hereby, our customers are able to achieve better performances and enhance their market positions. In this process we aim to act as a full business partner to our customers in order to achieve this innovation'

To achieve their goals organisations are aiming for long term customer relationships. The reason underlying this goal is the complexity of the services which requires investments from both sides. When the organisation wants to be able to provide high quality services it must be aware of the exact customer requirements which takes time

and trust to develop. The initial development of a service may therefore be a costly process for the delivering party. Costs are often earned back during long term relationships. Within the ICT sector this can be achieved by long term licenses, within the engineering sector this can be achieved by follow up assignment

'Only when a customer is willing to talk face to face with us when determining the service specifications we are willing to give a proposition for our services. Otherwise, how are we able to respond to the customer's needs? There has to be a commitment from the customer as well to make the service a success. Herein we are aiming for long term customer relationships, one time transactions offer no value to our business'

These long term relationships allow organisations to increase their knowledge on the customer's business leading to insights on new service opportunities. Hereby participating organisations aim to anticipate on customer preferences and needs. This consideration is closely related to a strategic perspective that increasingly focuses on providing solutions that support the entire customer organisation.

'It is our ambition to create an organisation wherein service consultants focus on the value they can add to the customer organisation. This implies that our employees need to be able to look beyond the specific customer problem and think actively about additional services they can offer their customers.'

Focusing on total customer value enhances possibilities to create truly innovative customer solution which increases customer's loyalty to KIBS. A particular comment by an interview participant within the engineering consultancy sector raises however another interesting consideration regarding this issue. It is stated that not only KIBS organisations are up scaling their services. Other organisations within the construction sector, such as building contractors, are also actively up-scaling their activities and are increasingly offering services which are formerly acted out by engineering consultants. Hereby the issue of professional jurisdiction becomes relevant to discuss. A major factor distinguishing engineering consultants from building contractors is their reputation of applying exquisite (technical) professional expertise. Maintaining this professional jurisdiction is crucial for KIBS as it legitimises the inequality between KIBS and other organisations in the sector (Malhorta and Morris, 2009). Maintaining the organisation's professional status could thus be an important consideration in up-scaling service activities and providing integrated customer services. This development can be explained by the content of expertise within the ICT and engineering sector which is based on technical (science based) factual knowledge. These characteristics make it quite hard to build professional jurisdiction based on the grounds of expertise as the technical nature of this knowledge makes codification possible. This implies that knowledge becomes available among other organisations within the sector. This issue becomes even more relevant considering the Dutch historical context of engineering consultancy. The roots of the sector are formed as being part of government bodies, hereby securing jurisdictional exclusivity. Nowadays the sector is however privatised to large extend opening boundaries of the sector even more. By up-scaling services it can be argued that engineering consultants are aiming to claim their professional jurisdiction by including more normative aspects in their knowledge base. This implies that not only scientific aspects are taken into account, contexts and

customer preferences are gaining importance. The following paragraph will discuss whether the developments that are identified influence KIBS organisational design.

4.2.2. ORGANISATIONAL CONDITIONS

During the interviews participants acknowledged that the strategic choices that have been described require a need to create congruence between the organisational goals and the organisational conditions in order to enable service consultants in actually performing according to these goals. An illustrating quote:

> 'When you want your service consultants to take a broader role in the interaction with customers it is important to enable them on the organisational level in this process.'

This paragraph will go further into the practical considerations of interview participants concerning enabling organisational conditions. The conditions will be analysed according to the topics enabling bureaucracy, organisational culture and organisational leadership.

Enabling bureaucracy: Interview participants emphasise that it is crucial to have every aspect of the organisation sending out the message of the organisation's values and priorities. Only hereby it can be assured that service consultants pick up on these values and show related behaviour working towards achievement of the organisation's overall goals. Enabling bureaucracy indeed seems a relevant coordinating mechanism in achieving consensus and raise support towards organisational goals and priorities among service consultants. Participating organisations aim to design their formal organisational elements, such as structures and formalisation practices, in order to guide service consultants in actually acting on these priorities. Bureaucratic elements are carefully considered to the degree that they support service consultants in customer interaction and provide service consultants with a larger picture of the organisation and their individual contribution towards the overall goals of the organisation.

> 'Previously the organisation was structured according to a functionalist model. However, we noticed that this approach no longer suited our business objectives. Service consultants only noticed their individual part of the total service package and lost commitment to the overall service quality. Therefore, we are now organised according to a total customer value approach. Therefore, we have analysed all activities that contribute to the total customer service package. Teams are created that include functions on all these activities. This approach significantly enhances communication between people occupying different functions and knowledge between these different fields of expertise can be integrated very easily. Moreover, this approach assures an increase in service consultant's awareness regarding their role in the total service package towards customer which on its turn increases employee's commitment to total customer service.'

The formal structure of this organisation is thus carefully considered to the degree that it supports the overall goal of providing customer value. The goal of this particular organisation was to place every service consultant closer to the customer

operation, hereby increasing awareness and commitment to achieve customer satisfaction. Another advantage of this approach is that it increases employee's awareness on their role in the overall organisation as all processes and functions are connected very closely in customer teams (global transparency). Other organisations also provided examples of how formal structures are considered in achieving underlying goals. There were for example multiple organisations that organised their activities regionally to operate closer to their customer markets.

Participating organisations did acknowledge that these forms of organising create their own challenges. Working in customer teams created the challenge of sharing knowledge between service consultants with the same fields of expertise. A regional oriented structure created challenges concerning centralisation versus decentralisation issues. One organisation illustrated how this challenge is handled by implementing enabling bureaucratic elements. Regional units in this organisation are free to act autonomously in daily work to ensure flexibility to their specific customers. It was however recognised that innovative projects were often postponed in order to handle daily business issues. An innovation budget on the organisational level enables employees to work a certain amount of hours on innovative projects. A key group is formed of service consultants who find a particular field interesting and that is relevant for the business activities. When an idea is profitable, 'hot spots' are systematically created within units wherein service consultants are supported by the key group. This central approach towards innovation results in a balance between formalisation and flexibility wherein units are given considerable freedom while at the same time stimulating uniform, overall organisation innovation. This centralised approach thus actually enables employees to work on innovations. Organisations furthermore explain that centralised formalisation (e.g. planning, administration) is preferable to support the organisations core functions. By increasing efficiency on these matters employees are supported to focus on their core tasks.

Concerning daily practices all organisations are characterised by formalisation in the form of procedures. Typical examples are periodic meetings, key performance indicators or annual targets. However, in all the organisations these elements are in place to provide guidance to employees. The underlying goal of periodic meetings is for example often to exchange knowledge between service consultants and to learn from each other's practices or to provide feedback. Targets and performance indicators are used to clarify priorities and sent a message about the overall goals of the organisation. When service consultant's awareness of the organisation's goals increases the logic behind these practices is also clearer, therefore it can be stated that these practices are mostly aimed to increase internal transparency. It is broadly acknowledged that practices are not to be used as strict guidelines.

'As the organisations management we aim to provide service consultants with as much as freedom during their daily actions. Employees all have academic education and we think that our employee's in general act in the best interest of the organisation. However, we do try to shape to organisation in such a manner that employees are aware of each other's activities. This increases service consultant's awareness and commitment and hereby also stimulates employee performance.'

'We believe that it is desirable to standardise practices that are in fact standard. By this I do not imply that practices are to be used according to the tight assembly line model. Instead practices can be used as a toolbox which individuals can apply according to the situation. This approach can be compared with the Lego toys. People can follow the user guide exactly or make variations with the available building blocks. There are only a few people who are able to create something new with the given blocks and even fewer people are able to create new blocks. By dividing work practices in these blocks that individuals can apply according to the situation we are able to create a situation wherein professionals perceive autonomy and non-standardised work while in fact the service is an assemblage of standard practices.'

This last quote illustrates quite well that the work practices are standardised to some extent as to offer service consultants with a common base of expertise. It is however emphasised that there is still a high amount of autonomy. Service consultants can use practices as a 'toolbox' while still being stimulated to create new ways of working. By standardising routine practices this organisation is aiming to provide room for creative processes that are non-routine. Hereby, a mix of organic and enabling bureaucratic features is achieved. Another important consideration mentioned by many organisations is that this approach prevents professionals from re-inventing the wheel over again. This analysis has also showed that while bureaucratic elements are indeed present, they are carefully considered to the degree that they enable service consultants in their daily actions and are not just implemented to serve management control purposes.

Organisational culture: The impact of organisational values on service consultant's behaviour and how these values are represented in practices is illustrated by the following quote:

'When you want your service consultants to take this broader consultancy approach this has to be reflected in the organisational culture which stimulates a different mindset among service consultants. By implementing organisational practices that reflect this message employees are stimulated to show behaviour that suits this new

The following quote illustrates that organisations indeed consider how organisation practices represent the values of the organisation. Hereby stimulating and enabling service consultants to internalise and act on these values:

'Keeping the knowledge base of employees up to date is key to our organisation. Therefore, we work with annual targets wherein knowledge transfer is included to assure internal knowledge transfer. Although this is a quite formal practice service consultants have considerable freedom in how to act on their target. Some people organise internal presentations or 'courses' around a specific subject. Other senior employees chose to guide junior employees during their daily customer interaction. Responsibility for documenting the knowledge that results out of these presentations and courses is in the hands of a particular employee. The underlying goal of these formal practises is in fact to shape a culture wherein the creation and transfer of knowledge is taken for granted by employees. The emphasis on knowledge in our organisational culture is furthermore represented in practices by an obligation for employees to improve their skills by means of training each year. This sends out the message that continues improvement is a key point in our organisation.'

The management of this organisation is very much aware of the fact that organisational practices contribute to a common mindset and sent a message about the key priorities within the organisation and contribute hereby to the organisational culture. The goal of these practices is to create a culture in which e service consultants feel responsible for the achieved customer results.

To enhance this feeling of responsibility service consultants are given a considerable amount of autonomy in daily practices or how to act on targets while at the same time stimulating a culture of improvement orientation and interdepartmental communication.

External orientation is a value that frequently is described as to be represented in practices:

'In new product or service developments there is a close collaboration between marketing and the product development team. In these developments there is also panel board of customers established on which requirements of the end product are based. After every phase of the development process these customers provide us with feedback or improvement issues. By this close cooperation with customers we ensure that our products fit to the actual market demands.'

The high amount of customer involvement in this process shows that external orientation plays a large role in this organisation. This focus on the external environment by the inclusion of customers in development processes is often mentioned as a key factor for organisational success. By representing this orientation in practices service consultants actually act on these practices. The urgency to represent organisational values in practices becomes even clearer after one organisation describes the consequences when external orientation is not represented in practices. Herein it becomes clear that a lack of formalised practices can actually lead to a restriction of service consultant's external orientation.

> 'It is very important that the person who communicates with the customer is aware of the customer situation and has taken notice on the latest information. At the moment we are figuring out how to achieve this. Formalisation on this issue is still quite low which makes it hard to exchange information. This leads to a situation wherein employees are not facilitated in their communication towards customers. At the moment employees rely on each other for customer information, the will to help each other on this point is quite high, but still, this issue definitely needs to be professionalised.

External orientation seems to be considered an important value for this organisation, but as this focus is not represented within the organisational practices employees are actually restricted to act on this external focus. Overall it can thus be stated that it is considered crucial that organisational values are represented in practices, hereby enabling and stimulating service consultants to act on these values during interactions with customers.

Organisational Leadership: Throughout the interviews it is emphasised that as a manager it is crucial to have a clear picture of the image you want your service consultants to send out on the market. It is also recognised that management decisions influences whether service consultants actually act according to this image. Examples of management decisions that influence this behaviour concern a broad range of fields, as can be illustrated by the effect of a particular choice for a building.

> 'As an organisation we want to send out the message that we are very transparent. This is represented by our building that is very transparent with many glass elements'

This impact of management decisions on the image that service consultants send out on the market implies that it is a precondition to have an awareness of the values you want the organisation to send out. Hereafter it is crucial to think actively on how service consultants can be motivated to act according to these values. Examples relate to a large extend to the impact of management control systems. Decisions concerning evaluation and performance criteria are an important indicator for the management's priorities and related values. As management control systems are in fact formalisation practices the impact of an organisations formal elements is again emphasised. Organisational managers perceive that financial results and customer satisfaction often go hand in hand and management control systems that do not represent organisational values work contra productive. An example is given of a former management control system that focused on employee's billable hours as an indicator of performances. It was noticed that this focus did not lead to commitment towards adding value to customers business and looking for opportunities achieve a situation wherein optimal value is achieved for all parties. There were however also examples of organisations that use Key Performance Indicators to track overall performances while explicating the organisations values. An example of the use of Key Performance Indicators that emphasise the focus on customer interaction is provided in one of the interviews:

'Customer interaction is a must in our business, therefore we work with targets that track the amount of customer visits. This target serves as a guideline for employee's priorities. However, it is an employee's individual responsibility how to fill in the required this customer contact time. The organisation has to stay profitable and by using this approach service consultants are challenged to think actively on the customer interactions that will lead to an increase in turnover. Key Performance Indicators are thus not used as a strict guideline for action. They do however send a message on the philosophy of the organisation: Quality customer interactions are the key to organisational profits. By activating employee's responsibility to think about customer interaction opportunities that increase customer turnover we try to stimulate employee's entrepreneurial spirit. The KPI's are not a goal on itself but support a higher organisational goal. Moreover, it is crucial to ask employees for inputs in organisational decisions regarding priorities to assure commitment to the overall goals'.

The management of this particular organisation combines elements of transactional and transformational leadership. Performance goals are given, but the manager assures that the underlying vision is clear to service consultants. Employees are encouraged to deviate from the target when it serves the overall vision and goals of the organisation and the manager asks actively for service consultant's inputs. To achieve performance that is congruent with the organisational goals elements that relate to transformational leadership are emphasised throughout the interviews. Besides managers awareness of the values to send out is it is also mentioned that it is crucial for the management to display this message to service consultants by actions that represent this message which is an example of idealised influence.

'We have a clear view on the values we want to send out to our customers, professionalism is one of them. This implies that as the management we have to send out this message as well by our behaviour. This doesn't necessarily need to be very complicated. It starts by working with a clean desk yourself when you also ask that of your employees. By this example behaviour service consultants s are more inclined and motivated to act on the values of the organisation.'

Furthermore, in some organisations service consultants are asked for input regarding management decisions. Examples are organisations service consultants are engaged in future business plans or a strategy game in which employees competed in teams to set up a strategic business plan. These are examples of intellectual stimulation. Individualised consideration is emphasised in organisations by quotes that state that it is increasingly becoming important for managers to act as a coach for employees stimulating employee's skills. Direct contact, providing feedback, and connecting service consultants in networks are given as examples. It is important to provide employees with tools to come up with solutions themselves while not guiding actions too much It is mentioned that since the work is performed by professionals who all have very strong opinions it is crucial to stay in touch with these professionals and know their line of reasoning.

4.2.3. SERVICE CONSULTANT'S SKILLS

 The success of interactions is based on a 'click' between the service consultant and the customer. The differences in the customer base in the ICT and engineering consulting sector however result in differences in the determinants of this click among both sectors. These differences have consequences for the skills development between these sectors.

Skill development in the engineering sector: Customers in the engineering sector are often knowledgeable themselves. Technical expertise is therefore one of the main determinants that lead to a click between the service consultant and the customer:

> 'Our customers are in fact intellectual counter partners; customers are often engineers themselves or at least act in environment wherein engineering issues are relevant. The relationship with customers is therefore based on a professional recognition towards each other.'

This recognition of each other's expertise regarding a specific subject has resulted in a situation where in the established routines are taken for granted in the delivery of the service. Service consultants have familiarised themselves with applying routines which are the taken for granted way of approaching a problem.

> 'Engineers work with a mental model wherein it is determined how to approach a problem, for a specific problem they turn to method A, B or C. Employees are characterised by an aversion towards new ways of working methods, products or services which makes the implementation of new introductions or innovations very challenging.

This way of approaching problems is a result of the traditional nature of problems that engineering consultants are hired for. Originally these were quite clear cut, technical problems. However, as problems within the engineering consultancy sector or becoming broader and more complex service consultants are in increasing amount being challenged to become less reactive towards the customers demand. Flexible reactions to the environment and actively thinking about the customers business are becoming more urgent matters.

> 'In an increasing amount of cases we are not only asked to give a particular solution for a customer problem, but are we also asked to place the contents in a broader context and gain insights on the consequences and conditions regarding particular solutions. However, also in these cases it is the professional content that constitutes the relationship between the service consultant and the customer. For these reason we also do not work with a sales department.'

> 'Our technical expertise is the only reason we are able to provide insights on broader issues regarding customer problems.'

What this quote illustrated quite well is that although the problem field is becoming broader, professional content still forms the basis for successful interactions within the engineering consulting sector. While technical expertise thus forms the basis of engineering consultant's competence this focus also creates some problematic issues

in actually providing broader services. Their technical insights allow service consultants to oversee the entire customer problems as well as the consequences of taking a particular approach to tackle a specific part of the problem. Professional service consultants often include these consequences in the proposition offered to the customer. However, this leads to a much higher price when compared to competitors who only offer to tackle only a particular part of the problem. service consultant's enthusiasm to help customers on a broader level can thus lead to contradictory results. Only when service consultants are capable to communicate effectively with customers about the real nature of their problems customers will settle for this higher price that actually leads to more added value. These behaviour skills are however regarded challenging by the interview participants:

> We notice that we score very high on delivering a solid solution, however, the actual interaction with customer can considerably be improved. The underlying reason is based on the focus on employee's professional content. For example: Professional service consultants tend to believe that customers will not understand particular problems and therefore often do not involve customers in the process. When problems arise a first reaction of the service consultant is often to work harder and solve the problem, instead of calling a customer. After solving 95% of the problems the customer will complain about the remaining 5% because he is not aware of any problems, and moreover the bill is much higher than expected! Employees feel unmotivated on their turn because after all, they have delivered hard work! When a service consultants instead decides to call a customer and informs him about the issues nothing actually happens, but the customer feels involved. By not taking this approach the customer perceives employees as not actively thinking about their problems.

Soft skills are thus increasingly becoming relevant in the engineering sector. It is mentioned that a change in mentality of the sector is desirable, the sector has to become more active towards customers, and the participants see solutions for this change in a cultural change of the organisation.

Skill development in the ICT sector: As opposed to the engineering consultancy sector customers within the ICT sector are often not knowledgeable concerning the delivered service. As services in this sector particularly aim to improve customer's processes a 'click' between the service consultant the customer is based on the perception that a particular service consultant actually understands the customer business. This emphasis on knowledge about customer's business is especially emphasised in one participating organisation.

> 'The services we deliver often change the customer organisation radically. Increasing customer's trust in our organisation is therefore crucial which can be enhanced when there is a 'fit' between our service consultants and the customer organisation. Our selection protocol is therefore aimed at recruiting our employees directly out of the customer's business. These employees can identify themselves with the customer market very well. Furthermore, our customers are typically small or medium enterprises, therefore we organise our organisation according to this model. We are organised according to separate business units who can speak the customer's language.'

There is however also another trend noticeable among multiple organisations in the ICT sector, that of a specific focus on the specialised technical knowledge that leads to service packages that can be applied universally. These organisations in particular emphasise their external environmental focus wherein new customer needs are incorporated in standard packages.

> 'Our experiences lead to the conclusion that it is far easier to adapt the customer organisation to our service package than the service package to the organisation. It is however crucial to have a severe external focus in the development of our service packages.'

This increasing focus on standardisation of output does however imply that employees also in this sector need to acquire additional skills to those concerning their technical expertise. Service consultants increasingly need to develop skills that relate to the field of change management. In this context it can thus be proposed that a standardisation regarding the service output in fact enables service consultants to develop skills that relate to the actual customer interaction and to developments in their larger business context that enables service consultants to remain highly external focused. In addition, organisations in this sector notice that also in this sector employee's technical knowledge usually stays up to date, employees often read about their field of expertise as a hobby. On the organisational level emphasis is therefore put on the development of these social and creative skills.

Although the underlying causes for focusing on these skills are thus different for the ICT and engineering consultancy sector there is an overlap in organisational focus on the development of 'soft skills' and innovative potential. How these skills can actually be stimulated will be discussed next.

Social skills and innovative potential: Within organisations wherein technical expertise forms the basis for professionalism interview participants mention that it is crucial that service consultants are committed towards a certain environmental trend for innovations to develop:

> 'Professional service consultants will only act on a certain trend when they are motivated, touched or inspired by a certain subject; so this is the only way to come to new services. In addition, it is crucial that service consultants feel inspired by an idea that is strongly relevant in the customer market as innovations are established in co-creation with the customer. Thirdly, when there is a match in service consultant's interests and customer needs and we see a broader market in a particular idea we need to act very fast on this trend. We refer to this as radical opportunism.'

To achieve this radical opportunism a mix of organisational conditions as described in the previous paragraph are mentioned that enables and motivates service consultants to act on opportunities that support the organisational values. However, it is mentioned that it is maybe more crucial that to recruit employees that fit into the organisation and its values and that are actually inspired to act on these values. The organisations characteristics can facilitate employees in their interaction, but assuring

that selected employees 'fit' the organisation is considered a crucial condition for skills to actually flourish. Only then, service consultants with the desirable mindset can apply their skills according to the organisational values.

> ´Yes, individual competences are very relevant in successful service interactions. However, it is far more important whether a service consultant fits into the organisation. You can hire employees with all the right skills and competences, but when someone does not fit into the club this will undoubtedly be reflected in poor service performances. However, I find it regrettable to notice that individuals with all the desired skills and competences but who don't fit into the organisation quite well tend to leave after some time. It can be considered a challenge to inspire these employees to become part of the organisation the values it stands for.'

However, most organisations do acknowledge that service consultant's skills can be developed by organisational practices such as training. An emphasis on improvement orientation in an organisations culture, management's individual consideration towards development issues and intellectual stimulation that challenges employees to develop themselves illustrates how organisational practices can contribute to employee skills development. When the goal is to challenge employees to take on the desired broader look towards services it is considered important to keep them involved, give them responsibility and combine this with financial stimulation

> 'The selection process is crucial for our organisation. The strength of our organisation lies in the quality of our people with a high entrepreneurial spirit. Service consultants need to be able to deal with our organisational culture that focuses on high results, quality, external orientation and employee autonomy. People need to understand and be committed to these values, only hereby it can be assured that management focus goes out to positive elements instead of employees that fit on an average level in our organisation.'

Although not everyone will have all required skills and an entrepreneurial spirit immediately it is also stated by an interview participant that the effect of service consultant's professional motivation and direct recognition by customers should not be underestimated: Although experience is an important factor, it is not the only factor.

Service consultant's mentality to contribute to the customer and the organisation is thus considered crucial. Experience is an important factor, but not the only factor. Success to a large extend seems to be facilitated by service consultant's mentality to solve problems. This crucial. This mentality is enhanced by a fit between the service consultants and the organisations values, a fit between the organisation and its customers and enabling organisational conditions regarding organisational culture, leadership and formal structures.

4.3. Conclusions

Both the ICT sector and the engineering consulting sector have grounded their professional expertise in scientific, technical knowledge. However, their strategic focus shifts towards integrated customer solutions; hereby these KIBS are in fact up scaling their services. Approaching customer problems on a higher level implies that there is more room for interpretation of the consequences of a particular approach by service consultants. This trend influences organisational design of these KIBS within these sectors extensively and moreover influences the required skills of their service consultants. Interview participants affirm this by acknowledging the relevance of the subject of this study. Although the quality of the delivered services is regarded as to determine organisational success it is acknowledged that this quality can only be assured by a process of intense interactions. This interaction is also regarded a main contributor in building long term, trustworthy relationships which is a general goal of involved KIBS. Their original technical knowledge base implies that KIBS within both the engineering consulting sector and the ICT sector are characterised by their relatively bureaucratic organisational design when compared to other professional organisations. In the engineering consultancy it is moreover mentioned that innovation brings risks for customers and customers are dominantly seeking for a robust solution with low risks. In the ICT sector it is mentioned that tailored solutions can be less preferable than standard packages considering the high implementation risks of tailored solutions with a high change that the end products is not exactly what the customer expected. The trend of modularisation of service contents is also identified by Toivonen (2004) who states that modularisation of service contents is increasingly becoming important in the KIBS sector while the need for individual service will continue to play a key role in services. She states that new possibilities of combining standardisation and individual customer care through modularisation of services will be particularly important. While this approach enhances efficiency and coordination of service consultants with diverse expertise in multidiscipline projects, flexibility is required in order to meet variable customer requirements. This is acknowledged in this qualitative study wherein it is emphasised that a focus on the flexibility in the customer interaction is a main selling point. However, to achieve this it is important that the internal organisation provides service consultants with sufficient support. The concepts of enabling bureaucracy, culture and enabling transformational leadership that combines transactional elements as described in the theoretical framework seem to apply for KIBS in creating the desired balance between autonomy and control.

Although autonomy is considerable within participating organisations and identified as a key point that enables and motivates service consultants, this autonomy is governed by organisational key points which are embedded in the organisational culture and practices. Hereby, organisations are aiming to succeed is establishing clarity and awareness of overall business goals and underlying values. Only hereby the overall organisation can to build consciously on these values internally. As service consultants are motivated and stimulated to act on these goals a match between the internal perception of overall goals and an external perception of these goals is stimulated.

Although there are differences in how these conditions are applied there are similarities in the underlying thoughts. Awareness of the values is increased when service consultants act close to the customer operation and are provided with insights on customer demands and the influence of their work on the actual customer result. These considerations are often underlying the design of organisational structures (e.g. customer teams, decentralised SBU's etc.). Structures are therefore specifically implemented to increase service consultant's awareness on organisational goals and moreover, to assist them in actually acting according to these goals. The organisations formal structures thus influence the values represented in the culture.

The technical context of professionalism caused organisations to have a predominantly internal focus. However, as the importance of customer context is increasing service consultants are forced to take a broader look towards their customers problems. Hence, the need for a culture which emphasis aspects mentioned in the theoretical framework such as interdepartmental communication and external orientation is rising which sometimes means a true culture shift for organisations. At the same time there are boundaries recognised. While theory proposes that professional organisations with relatively low jurisdiction are inclined to incorporate multiple specialisations outside their core profession and become a multidisciplinary organisations (Malhorata and Morris, 2009), interview participants indicate very clearly that although organisation expand their activities they are very careful to build on their core competences. Additional disciplines need to fit the goal of providing enhanced customer value while relating to the field of expertise of the organisation. This expertise basis forms the values that drive professionals and it is recognised that only motivated service consultants will act on new developments within the market and innovation opportunities. This does form a challenge as service consultants are very content and expertise focused. However by attracting employees who feel committed to contribute to the overall values and by supporting formalisation practices, a service oriented culture and transformational leadership organisations do recognise that they are able to succeed in this challenge.

As a first indication the qualitative study thus confirms the relevance of the conditions in our framework. It is confirmed that KIBS that have participated recognise the trends of broadening their service content and an increase in the required skills of employees. The enabling conditions described in the theoretical framework contribute to achieving a balance between autonomy and providing guidance by values represented in organisational practices. Insights of this study can however purely be regarded as a first indicator of the relevance of the conditions. Moreover, a characteristic of qualitative research is that results are dependent on interpretation of the researcher. Insights on the specific impact of each condition can thus not empirically be given. Therefore, a subsequent quantitative study has been carried out to validate the findings. Before going into this follow up study it is however first necessary to discuss an additional enabling condition that has been recognised during this qualitative study more thoroughly. In almost every interview it is mentioned explicitly that it is crucial to create a fit between the organisation, with its service consultants as representatives, and the customer in order to establish successful customer interactions. Therefore this condition will be separately discussed as an additional enabling condition.

Chapter five: Additional enabling condition

MARKET ORIENTATION

In order to provide added customer value, it seems crucial to establish a fit between the organisation and its customers. Throughout the data there are multiple manners identified on how KIBS handle this condition. The fit can be created based on a common expertise which is often the case in the engineering consulting sector. Within the ICT sector a fit is created based on customer expertise or to specialise in a specific field of service content. In order to provide more insights on this additional enabling the reasons to create this fit between the organisation and its customers will be briefly discusses in the light of available theory. This elaboration will provide a mean to include this additional condition in the second, quantitative study.

Although the Resource Based View of the firm states that competitive advantage is based on factors within the firm, these resources can only add value within the context in which the firm is operating. Due to the interactive nature of services customers are partially integrated within the boundaries of the firm during the service process. The customer can thus be regarded as to form the bridge between the firm and its context. Managing the customer base and the roles of customers during the service interaction can actually contribute to achieving competitive advantage (Gouthier & Schmid, 2003).

Within both the ICT and the engineering consulting sector, customer involvement during interaction can take several forms. Standardisation of service packages within the ICT sector might indicate that customer involvement is moderate as customer inputs are used to customise a standard service. It can also be argued that customer involvement is quite high despite this standardisation as close collaboration is necessary to fit the package to the customer environment indicating a process of co-creation (Bitner et. al., 2007). In the engineering consulting sector knowledgeable customers can engage in a co-creation process with service consultants to work on innovative techniques and services. It is however also possible that services in the engineering sector require moderate customer involvement when customers deliberately outsource a particular assignment to the service provider in order to focus on other activities themselves. Managing the fit between the organisation and customers can thus be dependent on the role that a customer has within a particular service process.

The role that customers take on can either enable or constrain successful service interaction. Constraining for KIBS services are passive customers who are characterised by a low intrinsic motivation to participate in the service process (Chervonnaya, 2003). This is illustrated in the qualitative study by an interview participant: KIBS services require at least some information about the customer's individual situation and preferences which can only be assessed by a motivation by the customer to interact with the service consultant. Customers can enable the service process by informing the service consultant about their expectations and perceptions of the service and the service process, help in identifying improvement opportunities or evaluating service quality, participate in producing the service in question, motivate the business attitude towards the service process. Hereby customers engage in a co-

designer or co-producer role during the service process (Gouthier and Schmid, 2003, Chervonnaya, 2003).

It may however not be desirable that customers fulfil these roles in every situation. Co-designer roles may not be necessary during every interaction and might be time consuming. Customer acquisition which includes all activities that lead to having service customers who later on fulfil their roles accurately should therefore be considered a careful process as it influences the further interaction process. If customers and customer relationships are seen as resources, a sophisticated segmentation strategy can be helpful. Skaates and Seppannen (2002) developed a matrix wherein customers can distinguished as either focused buyers or broad co-operators and as developers or exploiters. Focused buyers seek a specific, pre-defined, and fixed functional competence whereas broad co-operators look for a relationship with the service consultant to achieve improved value creation in multiple areas based on his or her preferences for competence accumulation. Developers prefer to co-develop their competence together with the service provider, whereas exploiters outsource the competence development to their service providers. The service firm has to develop appropriate service offers for specific customers or customer segments (Gouthier & Schmid, 2003) and the type of customer affects the interaction process. Customers that are developers and broad co-operators for example often work as partners with the organisation whereas focused buyers and exploiters are more interested in rather transactional provision of specific solutions. The management of customers and customer relationships should be seen as a basic element of organisation. Designing the organisation's structure around the customer and the customer relationship is important, however, customer relationships alone do not automatically lead to competitive advantage. Enabling conditions by a bundle of resources, including customer contributions lead to superior service quality. This implies an effective integration of the service customer in the service process and within the organisation in general (Gouthier & Schmid, 2003).

Chapter 6: Quantitative study

Chapter six elaborates on the second study that has been acted out as a follow up study on chapter four. The qualitative study gave room for personal thoughts and insights from interview participants as a first empirical indicator of the relevance of the study and the conditions derived from theory. This quantitative study will provide further validation of these conditions among a broader field of the population.

6.1. Methodology

Goals: The study is conducted by using a survey design. A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. From these sample results the researcher aims to conduct generalisation or claims about the population (Creswell, 2009). The survey design method is suitable for different reasons. An economic reason is that surveys are a rather inexpensive approach to collect a larger amount of data. It allows respondents to provide much information in a rather short amount of time and data can be analysed rather fast. The numeric approach allows not only to determine whether conditions are perceived as enabling, it makes it also possible to determine to what extent conditions are enabling. Furthermore, survey designs allow controlling for different variables such as sectors, size or functions. The ability to control for differences between sectors is relevant considering arguments by Malhorta and Morris (2009). They state that while literature on KIBS tends to generalise across sectors there is a need to gain insights on differences between sectors within the professional context and their implications for organisational design.

Selection of survey participants: The target population for the survey are managers and service consultants within the ICT and engineering consulting sector. Among the survey sample are organisations who participated in the qualitative study, this sample is complemented by respondents from several other organisations within the two sectors. The characteristics of the target population and the goals of the study are communicated to interview participants and participants are encouraged to target further participants suitable for the study. This approach implies that the exact sample size is hard to determine which makes it also hard to determine an exact response rate. Survey questionnaires have been distributed by an online survey instrument (www.thesistools.com). After one week the target sample received a reminder.

Questionnaire design: Items will be measured by using a five point Likert scale. Respondents are asked to indicate to what extent they perceive conditions to enable service consultants in their interaction with customers. In addition participants are asked to evaluate to what extent they perceive the particular condition to be present in their organisation. [4] A small pilot study among four participants is acted out to assure that questions are interpreted as intended. The questionnaire itself can be found in

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[4] 1= characteristic is not present/relevant, 2= characteristic present/relevant to a low extend, 3= characteristics is moderately present/relevant, 4 = characteristics is highly present/relevant, 5= characteristics is present/relevant to a very high extend

appendix F. The following table shows the operationalisation process for the questionnaire.

Condition:	Based on:	Characteristics and example question:
Enabling Bureaucracy	Adler & Borys (1996) Adler (1999 Uhl-Bien, et. al. (2007) Wouters and Wilderom (2008)	**Internal transparency:** Practices are based on underlying goals
		Global transparency: Practices provide insights on broader organisational activities
		Flexibility: service consultants have the ability to apply practices flexible according to the situation
		Repair: service consultants have the ability to make improvement suggestions regarding work practices
		Effects: Practices contribute to achievement of a balance between standardisation and flexibility

Table 2: Operationalisation of enabling bureaucracy

Condition:	Based on:	Characteristics and example question:
Organisational culture	Wilson (2001) Wilderom & van den Berg (2000) Van den Berg & Wilderom (2004)	**service consultants autonomy:** service consultants have influence on formal decisions regarding their work
		Improvement orientation: service consultants are stimulated to look for improvements regarding their work
		Interdepartmental communication: Departments support each other in the solution of problems
		HR orientation: During the selection process the degree to which service consultant's fit organisational goals is taken into account
		Organisational glue: Underlying values motivate service consultants to perform during daily activities

Table 3: Operationalisation of Organisational culture

Condition:	Based on:	Characteristics and example question:
Organisational Leadership	Bass & Aviolo Uhl-Bien et. al. (2007 Carless et. al. (2000)	**Inspirational motivation:** Leaders are able to communicate their underlying vision
		Idealised influence: Leaders act as a role model
		Intellectual stimulation: Leaders asks employees for things that can be improved
		Individual consideration: Leaders spent time on individual coaching
		Transactional: Leaders make goals and responsibilities clear
		Outcomes: Leaders are able to achieve a balance between standardisation and flexibility

Table 4: Operationalisation of Organisational leadership

Condition:	Based on:	Characteristics and example question:
Customer fit	Gouthier & Schmidt (2003) Skaates & Seppannen (2002) Chervonnaya (2003)	**Careful acquisition process:** Acquisition is a careful process
		Adaption of customer roles: Knowledgeable customers are involved in the design of innovative services
		Regard customers as important sources of information: Customers from different segments provide insights on customer needs and market developments
		Structures adapted to customers: The structure allows to find a close fit with customer segments

Table 5: Operationalisation of Customer fit

Condition:	Based on:	Characteristics and example question:
Employee skills	Toivonen (2004) Chang & Birkett (2004) Menzel et. al. (2007)	What is the presence/relevance of employee's: Technical skills
		....knowledge on project methodologies and information systems
		...Insights on broader value that can be offered
		...Innovative skills
		...Insights on the customer situation
		...Social skills

Table 6: Operationalisation employee skills

Data analysis: Data will be analysed by the conditions as identified within the theoretical framework which describe the organisational level (leadership, bureaucracy, culture), the individual level (skills) and the organisation's market orientation. To assure that characteristics which measure these conditions are actually reliable Cronbach's alpha for each condition has been determined:

Condition	Current situation α=	relevance α=
Culture	0,73	0,70
Bureaucracy	0,87	0,73
Leadership	0,89	0,90
Market orientation	0,70	0,70
service consultant skills	0,72	0,85

Table 7: Cronbach's alpha

A minimum alpha of 0,70 considered reliable, the above table thus shows that all scales that are used in this study can be considered reliable. The analysis aims to answer the following questions:

1. Do organisations that are characterised by the enabling conditions indeed support service consultant's during customer interactions?

2. To what extent are enabling conditions perceived to be present among organisations within the ICT and engineering consulting sector? Are there differences according to firm sizes, sectors or functions?

3. To what extent are the enabling conditions indeed perceived as enabling within the ICT and engineering consulting sector? Are there differences according to firm sizes, sectors or functions?

4. What are the main gaps between conditions that are perceived as enabling but that are not present within organisations? Are there differences according to firm sizes, sectors or functions?

5. Are enabling conditions correlated to each other?

The first question is included to validate the framework of this study. This question will be answered by means of regression analysis. In order to gain insights on the perceived presence and relevance of enabling conditions a t-test will be conducted. All variables relating to enabling conditions are included in this analysis in order to gain insights on the results for each variable relating to a specific condition. A split case analysis of an independent sample t-test will be conducted to compare outcomes between sectors, sizes and functions. A paired sample t-test makes it possible to determine whether there exist significant gaps between the presence of conditions and their relevance. Results are controlled for sector, size and function ($\alpha= 0,05$). Any correlations between conditions will be determined by a Pearson's correlation test. Both bivariate as partial correlation analysis will be conducted.

Results regarding the perceived presence and relevance of conditions are analysed by applying the following guidelines: ($\alpha=0,05$).

Significant deviation:	Presence of characteristic:
$\mu < 3$	Low
$\mu = 3$	Moderate
$3 > \mu < 4$	Considerable
$\mu = 4$	High
$\mu > 4$	Very high

Table 8: Critical values for the presence of characteristics

The strength of correlations is determined by the following guidelines: ($\alpha= 0,01$): (Huizingh, 2004).

Correlation:	Strength of relationship:
0,0-0,3	Weak
0,3-0,6	Considerable
0,7-1	Strong

Table 9: Strength of correlations

Data description:. In total a number of 154 people have made an attempt to participate in the questionnaire. 101 of these people did actually complete the entire questionnaire. In order to keep the analysis as unbiased as possible only these 101 response sets are included in the analysis. Table 10 summarises the description of the data. The relatively large percentage of service consultants in the sample is regarded a consequence of the fact that the number of service consultants normally outweighs the number of people with management functions.

From these 101 respondents:	%

49 respondents are part of the ICT sector	48,5%
52 respondents are part of the engineering consulting sector	51,5%
27 respondents are part of a small-medium sized organisation < 150	27%
74 respondents are a member of an organisation with > 150 employees	73%
28 respondents have an internal function (management or HR)	28%
73 respondents are service consultants	72%

Table 10: Overview of the questionnaire respondents

6.2. Data Analysis

Before going into a more thorough analysis of the results from this quantitative study a regression analysis is conducted. Hereby it is possible to determine whether the combination of conditions included in this study indeed lead to an enabling organisation, supporting service consultants in their interaction with customers. This procedure validates the framework of this study that describes an enabling organisation. It is important to mention that regression analysis does not necessarily reveals a causal relationship, rather the independent variable is a predictor for the dependent variable (Moore & McCabe, 2005). Cronbach's alpha on the overall variable 'enabling organisation' is 0,73 indicating a reliable measure for 'the enabling organisation'.

Regression analysis indicates that the characteristics of an enabling organisation indeed contribute to the manner in which service consultant's perceive to be supported in their interaction with customers.[5] A higher support to service consultant's in their interaction contributes to both service consultant satisfaction[6] and customer satisfaction.[7] This supports the underlying assumption that service consultant's feel motivated when they are actually enabled and supported by the organisation to make valuable contributions during their interactions with customers. Characteristics of an enabling organisation encourage service consultant's to provide services that fit specific customer needs, hence the effect that an enabling organisations has on customer satisfaction. Lastly, service consultant's satisfaction on itself contributes to customer satisfaction.[8] The interactive nature of services implies that service consultant's motivation and attitude influences customer's quality perceptions.

The overall framework thus indeed seems to be relevant in order to support service consultant's during customer interactions. An extensive analysis will provide more insights on the extent to which enabling conditions are perceived to be relevant and where possibilities for improvement are identified. In addition, the characteristics of

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[5] $R^2= 0,22$. $B=0,91$. $\alpha = 0,05$

[6] $R^2= 0,12$. $B=0,29$. $\alpha = 0,05$

[7] $R^2= 0,17$. $B=0,31$. $\alpha = 0,05$

[8] $R^2= 0,18$. $B=0,36$. $\alpha = 0,05$

enabling conditions and the relationships between conditions will be analysed for both sectors.

6.2.1. OVERALL OUTCOMES

Appendix G includes the tables with the scores on each item included in the questionnaire. Results are provided for different sectors, sizes and functions. Table 11 below this text shows the degree to which enabling conditions are currently present as well as their perceived relevance according to respondents. This table includes the overall scores as well as scores for the two separate sectors. Furthermore, it is indicated whether the gap between the current situation and the perceived relevance of enabling conditions is significant ($\alpha = 0,05$). For a more detailed overview of the overall results of enabling conditions appendix H provides the outcomes controlling both for sizes and functions. During the analysis some significant differences between the ICT sector and engineering sector will be mentioned. Appendix I provides these differences into detail. This table also indicates whether differences stem from management perceptions or service consultant's perceptions.

A quick view at table 11 shows that service consultant's skills are perceived to be most relevant. It is also striking that the gap between service consultant's current skills level and its perceived relevance is the smallest of all enabling conditions. Within the ICT sector the gap is even perceived to be insignificant, however within the engineering sector respondents do indicate that service consultant's skills level can be significantly improved. Furthermore it is striking that the largest gap is perceived on the condition that is regarded to be least relevant; namely enabling bureaucracy. Especially respondents from the ICT sector indicate that their formal coordination structures require significant improvements. On the contrary, respondents from the engineering sector are more content about their formal coordination and actually perceive the smallest gap on this condition. Respondents within this sector regard it more challenging to increase their market orientation.

Specific outcomes are analysed more thoroughly in the following paragraphs wherein each condition and its related characteristics will be discussed separately. Conditions will be discussed in order of their perceived relevance (skills, culture, leadership, market orientation, enabling bureaucracy). Analysis includes the outcomes on an overall level, and in addition differences between the two sectors are highlighted. A detailed overview of perceived significant improvement areas that controls between different sizes, sectors and functions can be found in appendix J.

Group	Condition	Current	Relevance	Gap	Sig. ($\alpha = 0,05$).
Overall	Skills	3,73	4,3	0,39	Y
	Culture	3,53	4	0,47	Y
	Leadership	3,42	3,92	0,50	Y
	Customer	3,36	3,88	0,52	Y
	Structure	3,02	3,56	0,54	Y
ICT	Skills	4,04	4,26	0,22	N
	Culture	3,42	3,92	0,50	Y
	Leadership	3,32	3,84	0,52	Y
	Customer	3,43	3,83	0,40	Y
	Structure	2,89	3,61	0,72	Y
Eng.	Skills	3,79	4,34	0,55	Y
	Culture	3,60	4,07	0,47	Y
	Leadership	3,55	3,99	0,45	Y
	Customer	3,30	3,92	0,62	Y
	Structure	3,13	3,51	0,38	Y

Table 11: Overall scores on enabling conditions

6.2.2. SERVICE CONSULTANT'S SKILLS

Tables 12 provides an overview of the mean scores on items relating to service consultant's skills on an overall level, as well as for the two separate sectors. In addition the table indicates whether the gap between the current level and the perceived relevance of a particular skill is considered significant ($\alpha= 0,05$).[9] Table 13 provides these outcomes for both managers and service consultants within the two sectors.

Although the gap between service consultant's current skills level and its perceived relevance is the smallest of all enabling conditions, on an overall level respondents perceive that service consultant's skills can be significantly improved. This does however not account for the ICT sector, on an overall level respondents from this sector regard the overall gap between the current skill level and its relevance to be insignificant. However, a closer look at the score of individual skills provides more insights and reveals more insights on the outcomes for both sectors.

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[9] C= Current level; R= Relevance; I= need for Improvement? ($\alpha =0,05$)

Skill	ICT			Eng.			Total		
	C.	R.	I.	C.	R.	I.	C.	R.	I.
Technical exp.	4,38	4,21	N	4,31	4,24	N	4,34	4,22	N
Project meth.	4,17	4,21	N	3,98	4,08	N	4,07	4,14	N
Cust.. knowledge	4,00	4,29	N	3,80	4,61	Y	3,90	4,45	Y
Broader value	3,76	4,24	Y	3,45	4,41	Y	3,60	4,33	Y
Social skills	3,96	4,45	Y	3,69	4,51	Y	3,83	4,48	Y
Innovative skills	3,90	4,20	N	3,52	4,22	Y	3,71	4,21	Y
Total	**4,04**	**4,26**	**N**	**3,79**	**4,34**	**Y**	**3,73**	**4,3**	**Y**

Table 12: Scores on variables measuring: service consultant skills

Managers as well as service consultants form both sectors indicate that service consultant's technical, expertise is perceived to be high.[10] Also, both sectors do not perceive a significant gap between the current situation and the relevance of technical expertise which indicates that respondents perceive these skills to be up to date. The same outcomes hold for skills relating to knowledge on project methodologies and information systems. Both these skill areas can be identified as rather factual related skills. Compared to other more 'softer' skills these factual related skills are however perceived to be least relevant. Respondents from both sectors perceive service consultant's social skills, knowledge about the specific customer situation and insights on the broader value the organisation can offer its customers to be most relevant in order to deliver added value. [11]

When taking a closer look it is however striking that within the ICT sector managers perceive significant more gaps concerning service consultant's skills when compared to service consultants themselves. While managers perceive significant gaps concerning service consultant's social skills, knowledge about the specific customer situation and their ability oversee the broader value that can be offered to customer, service consultants only perceive a significant gap concerning this last item. Within the engineering sector there is more consensus regarding the skills that require improvement. The gaps that are identified hold for both managers as service consultants. Furthermore, it is striking that ICT service consultants perceive that knowledge on the customer situation is less relevant when compared to service consultants from the engineering sector.[12] Another significant difference between the two sectors is that the engineering sector would like to improve their innovative potential while the overall ICT sector indicates these skills to be already highly present.[13]

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[10] $\mu = 4.$ ($\alpha = 0,05$)

[11] $\mu > 4.$ ($\alpha = 0,05$)

[12] ($\alpha = 0,05$)

[13] ($\alpha = 0,05$)

Respondents from both sectors indicate that service consultants are least capable to oversee the broader value that the organisation can offer their customers. It is however also indicated that these skills require significant improvement. It can be argued that this scarce ability of service consultants to oversee the broader value that can actually be offered to customers leads to difficulties in achieving the strategic goals of KIBS which were emphasised during interviews: Creating long term customer relationships wherein total customer value is achieved by offering integrated services.

The overall results on this enabling condition indicate that respondents acknowledge that it is important to have service consultants with a solid expertise based background. However, in addition service consultants need to understand and sense the customer situation, know the exact expertise the organisation can offer and are able to apply this expertise suitable to the customer situation. Within this process social skills are regarded as crucial. Although the overall perception of service consultant's current skills is quite high it is also acknowledged that mainly regarding these 'softer' skills require significant improvements. In addition, especially within the ICT sector there are significant gaps identified between management perceptions and the perceptions of service consultants regarding their skills level. This could indicate a lack of communication between these two groups. These outcomes can however also be seen in the light of the interviews of the qualitative study. Within the ICT sector it was frequently mentioned by ICT managers that especially softer skills require more attention and that awareness on the consultant level regarding these skills still has to increase.

Skill	ICT IM			ICT IM SC			ENG IM			ENG SC		
	C.	R.	I.	C.	R.	I.	C.	R.	I.	C.	R.	I.
Technical exp.	4,50	4,25	N	4,33	4,19	N	4,44	4,31	N	4,26	4,20	N
Project meth.	3,83	4,17	N	4,27	4,22	N	3,87	4,00	N	4,03	4,11	N
Cust. knowledge	3,67	4,58	Y	4,11	4,19	N	3,75	4,56	Y	3,83	4,63	Y
Broader value	3,67	4,25	Y	3,78	4,25	Y	3,37	4,50	Y	3,49	4,37	Y
Social skills	3,42	4,67	Y	4,14	3,38	N	3,62	4,50	Y	3,71	4,50	Y
Innovative skills	3,75	4,08	N	3,95	4,25	N	3,56	4,31	Y	3,50	4,17	Y
Total	**3,80**	**4,33**	**Y**	**4,10**	**4,08**	**N**	**3,77**	**4,36**	**Y**	**3,80**	**4,33**	**Y**

Table 13: Scores on variables measuring: service consultant skills per function

6.2.3. ORGANISATIONAL CULTURE

An enabling culture is perceived the second most relevant enabling conditions. Again, the table below provides specific scores on the items related to an enabling culture. Although respondents indicate that characteristics of an enabling culture are considerable present it is also indicated that significant improvements can be achieved.

Culture	ICT			Eng.			Total		
	C.	R.	I	C.	R.	I	C.	R.	I
'Org. glue'	3,13	3,71	Y	3,76	3,84	N	3,44	3,77	Y
Autonomy	4,08	3,88	N	4,20	4,04	N	4,14	3,96	N
Impr. Orientation	3,87	3,94	N	3,90	4,18	Y	3,83	4,06	N
Interd. Com.	3,14	4,05	Y	3,13	4,27	Y	3,13	4,16	Y
HR orientation	3,64	4,04	Y	3,83	4,04	N	3,74	4,04	Y
Total	3,42	3,92	Y	3,60	4,07	Y	3,53	4,00	Y

Table 14: Scores on variables measuring: Organisational culture

On an overall level it is striking that while other characteristics are perceived to be considerable or highly present,[14] interdepartmental communication is only stimulated on a moderate level. Respondents from both sectors however indicate that this characteristic requires significant improvement, especially service consultants evaluate it as the most relevant characteristics of an enabling culture. Respondents within both sectors indicate quite high scores on the degree of autonomy and an improvement orientation that is stimulated by organisational cultures. Moreover, respondents from both sectors are actually quite content regarding these characteristics as gaps between their current presence and the relevance of these characteristics are insignificant..

On an overall level respondents perceive organisational values as being the glue that holds the organisation together, stimulating service consultants to commit and perform to a considerable extent. However, results from the engineering sector deviate significant from the ICT sector.[15] Within the engineering sector both managers and service consultants perceive these characteristics to be considerable present, moreover respondents indicate no significant improvements are required. Within the ICT sector however, both function groups perceive this characteristic to be only moderately present and indicate that more emphasis could be given to the underlying goals and values of the organisation. Especially managers perceive quite a large gap on this item. These outcomes are reflected in the focus on a HR orientation. Respondents from the engineering sector perceive to a higher degree that the selection process takes into account whether people fit into the organisation's goals values and the manner in which goals are being achieved when compared to the ICT sector. Especially managers within the ICT sector managers would like to raise the influence of organisational values as a collective motivator. Also, in their opinion significant

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[14] $\mu > 3$ ($\alpha = 0,05$)

[15] ($\alpha = 0,05$)

more emphasis should be given to the degree to which the organisation focuses on service consultants that are inspired by and actually fit into these values. Within the engineering sector it is not the management but service consultants themselves who indicate that more emphasis can be put on this last characteristic.

Culture	ICT IM			ICT SC			ENG IM			ENG SC		
	C.	R.	I	C.	R.	I	C.	R.	I	C.	R.	I
'Org. glue'	3,25	4,17	Y	3,09	3,57	Y	3,65	3,66	N	3,75	3,88	N
Autonomy	3,70	3,87	N	3,80	3,74	N	3,72	3,87	N	4,02	4,07	N
Impr.orientation	3,58	4,00	N	3,84	3,92	N	4,13	4,46	N	3,78	4,05	N
Interd. Com.	3,28	3,94	Y	3,09	4,09	Y	3,08	4,26	Y	3,17	4,27	Y
HR orientation	3,58	4,22	Y	3,66	3,99	N	4,00	4,03	N	3,73	4,04	Y
Total	**3,45**	**4,06**	**Y**	**3,42**	**3,87**	**Y**	**3,63**	**4,02**	**Y**	**3,63**	**4,08**	**Y**

Table 15: Scores on variables measuring: Organisational culture per function

6.2.4. ORGANISATIONAL LEADERSHIP

An enabling leadership style is regarded relevant to a high extend. Also for this condition tables are provided which indicate the overall scores as well as scores for both function groups within the two sectors. When one looks at these first results it is firstly striking that within both sectors all characteristics of enabling leadership, except for idealised influence, can be significantly improved.

Leadership	ICT			Eng.			Total		
	C.	R.	I	C.	R.	I	C.	R.	I
Inspirational motivation	3,39	4,08	Y	3,64	4,25	Y	3,51	4,17	Y
Idealised influence	3,35	3,74	N	3,65	3,79	N	3,50	3,76	N
Intellectual stimulation	3,39	3,82	Y	3,67	4,00	Y	3,53	3,91	Y
Individual Consideration	3,07	3,82	Y	3,52	4,03	Y	3,30	3,93	Y
Transactional	3,44	3,91	Y	3,32	3,77	Y	3,38	3,84	Y
Balanced leadership	3,12	3,63	Y	3,24	3,62	Y	3,18	3,63	Y
Total	**3,32**	**3,84**	**Y**	**3,55**	**3,99**	**Y**	**3,42**	**3,92**	**Y**

TABLE 16: Scores on variables measuring: Enabling leadership

On an overall level respondents indicate that characteristics of enabling leaderships are considerable present within their organisation.[16] Exceptions are leader's individual consideration as well as the manner in which leaders are able to create a balance between flexibility and standardisation which are perceived to be only moderately present.[17] When one looks at the outcomes of both service consultants and managers it is however striking that within both sectors service consultants perceive quite some characteristics that require improvement when compared to managers themselves. This accounts especially in the ICT sector where gaps between management perceptions and those of service consultants are quite high on specific items. Illustrating examples are leader's individualised consideration and the degree to which leaders able to actually achieve the desired balance between control and flexibility. Although service consultants within the engineering sector also perceive that most characteristics can be improved, gaps between management perceptions and those of service consultants are smaller.

On an overall level leaders score the highest on their intellectual stimulation of service consultants. However, also for this characteristic it becomes clear that service consultants, especially in the ICT sector, desire more emphasis on this aspect. This focus on intellectual stimulation can be related to the organisational focus on an improvement orientation as intellectual stimulation challenges service consultants to improve their work and critically review ways of doing things.

Both sectors indicate inspirational motivation as the most relevant leadership characteristic. Although leaders actually score quite reasonable on this item all groups agree that this characteristic should actually be more emphasised. In addition, all groups agree that the transactional elements of leadership require more emphasis.

Leadership	ICT IM			ICT SC			ENG IM			ENG SC		
	C.	R.	I	C.	R.	I	C.	R.	I	C.	R.	I
Insp. Mot.	3,78	4,29	Y	3,26	4,00	Y	3,60	4,17	Y	3,65	4,27	Y
Id. influence	3,54	3,88	N	3,27	3,69	N	3,63	3,71	N	3,66	3,82	N
Int. stimulation	3,92	4,00	N	3,21	3,76	Y	3,69	3,90	N	3,66	4,05	Y
Ind. Cons.	3,75	3,83	N	2,84	3,81	Y	3,69	4,06	N	3,44	4,01	Y
Transactional	3,75	4,16	Y	3,32	3,82	Y	3,19	3,88	Y	3,39	3,79	Y
Bal. leadership	3,50	4,00	N	3,00	3,51	Y	3,31	3,61	N	3,21	3,59	Y
Total	3,81	4,07	N	3,12	3,82	Y	3,55	3,94	Y	3,51	4,01	Y

Table 17: Scores on variables measuring: Enabling Leadership per function

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[16] $\mu > 3$ ($\alpha = 0,05$)

[17] $\mu = 3$ ($\alpha = 0,05$)

It can thus be argued that within KIBS value related and visionary behaviour is regarded as crucial by both managers themselves and service consultants. It is appreciated when leaders are able to inspire service consultants to act on underlying goals and values of the organisation. Especially service consultants in the ICT sector indicate that large improvements can be made and perceive this only to be achieved to a moderate degree. This is striking as previous outcomes already revealed that organisational goals and values only moderately lead to a collective understanding and motivating among ICT service consultants to work for the overall goals. Also within the engineering sector where these characteristics are present to a higher extend respondents indicate the need to emphasis leader's inspirational motivation even more. However, it becomes also clear that only this visionary behaviour on itself is not a sufficient characteristic. Respondents indicate that this behaviour should be complemented by coordination in the form of more transactional elements. Also in this area leadership characteristics can be improved. This balance between visionary, motivating leadership characteristics and actual task coordination both motivates and enables service consultants in their work. It is therefore a reasonable outcomes that mainly service consultants perceive that at the moment this balance is only moderately achieved.

The combined need from service consultants to increase the amount of intellectual stimulation and individual consideration shows the willingness of service consultants to actively increase their individual contributions to deliver qualitative services. Service consultants thus feel the need to be triggered to a higher extend while developing their individual potential and needs. For managers it is necessary to increase their awareness of service consultants perceptions as mangers themselves do not perceive significant areas of improvement regarding these characteristics.

6.2.5. MARKET ORIENTATION

The table below shows that although a market orientation is perceived to be highly relevant, respondents perceive that they are only moderately achieving this market focus. On an overall level all characteristics that relate to this orientation can significantly be improved. Especially in the engineering sector respondents indicate a large gap between their current market orientation and its relevance. Moreover, within this sector this gap is perceived to be highest of all enabling conditions.

In order to achieve a market orientation organisations are currently mainly focusing on the involvement of knowledgeable customers in a process of service co-creation. Although both sectors indicate this characteristics as highly relevant especially respondents from the engineering sector emphasise the urgency of the involvement of knowledgeable customers. Respondents from this sector perceive this condition to be significantly more relevant when compared to the ICT sector. On an overall level respondents from the ICT sector indicate that they are already quite content on their efforts to involve knowledgeable customers in the process of co-creation. However, this positive outcome on this item is mainly contributed to the perceptions of ICT service consultants. According to ICT managers improvements can be made on the degree to which knowledgeable customers are approached as actual intellectual partners. However, this group of respondents finds it even more relevant to involve customers from different service segments in the idea generating process in order to

gain insights in customer need and trends. ICT service consultants themselves evaluate that the current level of both types of customer involvement is actually up to date. Results do indicate that consultants in the ICT sector are currently more capable in both these forms of customer involvement when compared to the engineering sector.[18]

Market orientation	ICT			Eng.			Total		
	C.	R.	I	C.	R.	I	C.	R.	I
Market Structure	3,20	3,76	Y	3,74	4,04	Y	3,47	3,90	Y
Careful Acquisition	3,28	4,00	Y	3,31	4,20	Y	3,30	4,10	Y
Adapt customer roles	3,56	3,83	N	3,59	4,02	Y	3,58	3,93	Y
Customer involvement	3,53	4,02	Y	2,92	3,86	Y	3,22	3,94	Y
Customer as partner	3,83	3,98	N	3,55	4,37	Y	3,69	4,18	Y
Service modularisation	3,14	3,37	N	2,82	3,06	Y	2,98	3,21	Y
Total	3,43	3,82	Y	3,29	3,92	Y	3,36	3,88	Y

TABLE 18: Scores on variables measuring: Market orientation

On the other side, a significant difference between the two sectors exists in the degree to which organisational structures are designed in order to find a close fit with customers.[19] ICT organisations are only moderately capable herein while engineers perceive this characteristics to be considerable present. A possible explanation for this could be the often regional orientation of engineering organisations and their specific focus on customer markets e.g. railway. Large ICT organisations can have a variety of customer business segments which makes it harder to structure around the specific type of customer. Especially managers within this sector indicate that this aspect requires improvement.

A striking overall outcome is that during the acquisition process it is only moderately considered what the added value of specific customer relationships actually is. On an overall level respondents perceive the highest gap between the current situation and its perceived relevance on this item. It is thus indicated that KIBS should consider to a higher extent what the underlying value of the services delivered to customers actually entails and how this value relates to the organisation's underlying goals. In addition, a careful acquisition process entails considering how specific customers characteristics can be exploited to the organisation's benefit. That means, not only considering the value the organisation can offer their customers, but also the value the customer can add to the organisation.

Although the role of customers within the interaction process is adapted according to the type of customer, the influence of standard services herein is only moderate. This trend is however slightly more observed within the ICT sector than within the engineering sector. The relevance of service modularisation is also perceived to be

[18] $\alpha = 0,05$

[19] $\alpha = 0,05$

moderate. However, ICT managers do indicate that service modularisation is relevant to a considerable extend. These outcome relate to the results from the qualitative study. Interview participants emphasised that professionals like to perceive their work to be innovative and challenging. Working with standard solutions is not part of the mental frame of professional and most professionals dislike the idea to work on standard services. Disadvantages that were indicated throughout interviews are professionals who reinvent the same things over and over which decreases efficiency which on its turn increases the risk of unsatisfied customers. Especially within the ICT sector managers indicates that service modularisation can have substantial benefits and is even often mentioned as a distinctive capability. Working with standard, modularised solutions thus requires a mental shift from professional service consultants, however, could result in substantial benefits. Not all customers are looking for innovative projects, some are just requiring a fast solutions for their problem. By offering standard services time can be saved to focus on other, more innovative tasks.

Respondents thus agree that considerable improvements can be made in the degree to which the characteristics of a market orientation are achieved. Especially, a more conscious approach in the acquisition process is desired wherein the value that is offered vice versa becomes clear. The ICT sector is slightly more focused on the involvement of a broader range of customer types in the service process than the engineering sector. By involving different customer segments in the service design process insight on different customer preferences can be gained which could be useful when applying service modularisation, herein the ICT sector is a bit more developed. The engineering sector is more interested in knowledgeable customers that can actually contribute as intellectual partners.

Market orientation	ICT IM			ICT SC			ENG IM			ENG SC		
	C.	R.	I	C.	R.	I	C.	R.	I	C.	R.	I
Market Structure	3,33	4,33	Y	3,16	3,57	N	3,81	4,31	Y	3,71	3,91	N
Careful Acquisition	3,17	4,17	Y	3,32	3,94	Y	3,00	4,06	Y	3,46	4,26	Y
Adapt customer roles	4,00	4,42	N	3,42	3,64	N	3,56	4,06	Y	3,60	4,00	Y
Customer involvement	3,58	4,50	Y	3,51	3,86	N	2,88	3,62	Y	2,94	3,97	Y
Customer as partner	3,58	4,17	Y	3,92	3,92	N	3,56	4,38	Y	3,54	4,37	Y
Service modularisation	3,17	3,58	N	3,14	3,30	N	2,75	3,12	N	2,85	3,03	N
Total	3,47	4,19	Y	3,41	3,70	Y	3,26	3,92	Y	3,31	3,91	Y

Table 19: Scores on variables measuring: Market orientation per function

6.2.6. ENABLING BUREAUCRACY

Although enabling bureaucracy is regarded as a relevant condition, its relevance is perceived to be the lowest of all enabling conditions. It is however also indicated that the characteristics relating to enabling bureaucracy can be significantly improved. The overall gap between its perceived relevance and the current situation is the highest of all the enabling conditions. Especially respondents from the ICT sector indicate a large gap between their formal structures and its relevance.

Bureaucracy	ICT			Engineering			Total		
	C.	R.	I	C.	R.	I	C.	R.	I
Int. transparency	2,96	3,68	Y	3,14	3,63	Y	3,16	3,65	Y
Gl. transparency	2,74	3,29	Y	2,86	3,18	Y	2,80	3,24	Y
Flexibility	3,27	3,73	Y	3,54	3,84	N	3,40	3,79	Y
Repair	3,61	4,02	N	4,12	3,80	N	3,88	3,91	N
Outcomes	2,79	3,51	Y	2,98	3,50	Y	2.88	3,50	Y
Total	2,89	3,61	Y	3,13	3,51	Y	3,02	3,56	Y

Table 20: Scores on variables measuring: Enabling Bureaucracy

Respondents from both sectors indicate that the degree to which service consultants have the ability to repair work practices is quite high, which accounts especially for the engineering sector. [20] Both sectors are also indicate that no significant improvements are required regarding this characteristic. Besides a fair amount of possibilities to repair practices service consultants within both sectors have a considerable amount of flexibility in order to apply practices according to the situation. However, ICT service consultants would prefer more flexibility regarding their daily work.

On an overall level service consultants perceive that work practices do not contribute to a broader understanding of the organisations activities (global transparency). This characteristics could lead to a situation wherein service consultants do not take optimal advantage of all the 'in house' as it increases the risk that service consultant's only notice their part of total services. Risks of a general lack of understanding on broader organisational goals are even higher when it is considered that global transparency is regarded as the least relevant characteristic of an enabling bureaucracy. In addition to the outcome that practices do not provide service consultant's with an broader view of the organisation and their individual role herein, respondents indicate that in general practices do not represent overall organisational values and goals to a high extent. An illustrating comment is given by one respondent within the questionnaire. '*As formal practices often serve the goal to provide management control or accounting purposes they often do not serve as a mean to enable employee's to act on organisational values or provide employee support'.* This comment also clarifies the outcome of a moderate internal transparency implying that underlying logics and goals of practices are not necessarily clear to service consultants. Moreover, the positive effects of enabling bureaucracy (e.g. a mean to collect best practices, achieving a balance between

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[20]. $\mu = 4(\alpha = 0,05)$

standardisation and flexibility, supporting service consultants in their daily works, practices represent underlying values and stimulate value related behaviour) are not present within the ICT sector and only on a moderate level within the engineering sector. Both sectors however also indicate that significant improvements can be achieved regarding these outcomes of enabling bureaucracy.

These outcomes regarding enabling bureaucracy imply that formal structures do not necessarily fit with organisational underlying goals and values. Moreover, it seems that formal coordination is often not approached as a mean to provide service consultants support during customer interactions, stimulating them to act on organisational goals. Although the engineering sector scores a bit higher on the condition enabling bureaucracy and perceives a smaller gap than the ICT sector on enabling bureaucracy, the main improvement areas also hold for the engineering sector.

Bureaucracy	ICT IM			ICT SC			ENG IM			ENG SC		
	C.	R.	I	C.	R.	I	C.	R.	I	C.	R.	I
Int. transparency	2,93	3,93	Y	2,96	3,64	Y	3,09	3,50	N	3,16	3,70	Y
Gl. transparency	2,79	3,33	Y	2,65	3,29	Y	2,90	3,22	Y	2,84	3,16	Y
Flexibility	3,50	3,92	N	3,19	3,68	Y	3,88	4,06	N	3,38	3,74	N
Repair	4,22	4,11	N	3,46	4,00	N	4,00	3,62	N	4,18	3,88	N
Outcomes	2,68	3,70	Y	2,79	3,45	Y	2,99	3,47	Y	2,98	3,51	Y
Total	**2,93**	**3,97**	**Y**	**2,89**	**3,54**	**Y**	**3,17**	**3,50**	**N**	**3,11**	**3,52**	**Y**

Table 21: Scores on variables measuring: Enabling bureaucracy per function

6.2.7. ADDITIONAL COMMENTS

Additional comments that have not been included yet discuss the role of technology as an enabling condition. The different comments reveal both the enabling as the restraining abilities of technology. Customer Relationship Management systems are frequently mentioned as a key source of information to stay up to date on the customer situation. With the use of 'tools' such as smart phones and laptops with UMTS technology service consultants are able to share information at any place, any time. Moreover, technology can be used in service consultant's training (e.g. video role plays). On the other side, comments emphasise that these technologies should be seen as tools that support service consultants in their interaction, while being very careful that technology does not *replace* face to face interaction. Comments emphasise the importance of 'real life' contact instead of e-mail or telephone and the urgency to create real social bonds between the customer and service consultants.

6.3. Correlations between enabling conditions

In previous chapters it has been indicated that the enabling conditions included in this study are in fact intertwined, a careful coordination between conditions is required in order to reach the capability of successful interaction between service consultants and

customers. As conditions are likely to influence each other vice versa it is not possible to meet the criteria of causal relationships wherein one condition precedes the other in time (cause-effect). However, it is useful to determine which conditions seem to affect one another. These insights can contribute to a better understanding on how a balance between enabling conditions can be achieved. Conducting a correlation analysis is therefore a useful approach in this study. As a first step a bivariate correlation analysis on the outcomes of both sectors combined has been conducted. The results of this analysis can be seen in table 22.[21] The high amount of considerable (and significant) correlations between conditions shows that enabling conditions are indeed intertwined to a high extent. In fact, the only condition that is not correlated to all other conditions is service consultant's skill level. However, a considerable correlation between this condition and a market orientation is found. In addition, a weaker correlation is identified between service consultant's skills and an enabling bureaucracy. The effects of all conditions on an organisational level (enabling culture, leadership and bureaucracy) and a market orientation thus seem to enhance each other.

	Culture	Leadership	Bureaucracy	Market or.	Skills
Culture	1				
Leadership	,59**	1			
Bureaucracy	,56**	,43**	1		
Market or.	,41**	,27**	,46**	1	
Skills	,19	,05	,24*	,39**	1

Table 22: Bivariate correlations on an overall level

In order to determine whether differences between the two sectors can be identified regarding the degree to which conditions enhance each other, a bivariate correlation analysis is conducted for separate sectors. The results of this analysis are provided in tables 23 and 24. Within the ICT sector quite some similarities with the overall outcomes are identified. Although relationships between organisational conditions as well as the degree to which they correlate with a market orientation are stronger, the main difference with the overall outcomes is that ICT service consultant's skills are perceived to stand rather on themselves as no correlations with other conditions are discovered. Within the engineering sector the outcomes are quite different. Within this sector organisational conditions relate to a far lesser extend to each other. In fact, the only correlation that is found on this level exist between an enabling culture and an enabling leadership style. Furthermore, the correlations between a market orientation and organisational conditions (an enabling culture and bureaucracy) are weaker when compared to the ICT sector. However, as opposed to the ICT sector considerable correlations are found between service consultant's skills and other conditions such as an enabling culture, bureaucracy and a market orientation.

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[21] ** significant correlation with α= 0,01; * significant correlation with α= 0,05.

Within the ICT sector the outcomes of organisational conditions thus seem to enhance each other, and in addition organisational conditions and a market orientation enhance each other. Within the engineering sector it seems that organisational conditions enhance each other to a lesser extent. However, an enabling culture and enabling bureaucracy both separately relate to service consultant's skills and a market orientation.

	Culture	Leadershi	Bureaucra	Market or.	Skills
Culture	1				
Leadership	,64**	1			
Bureaucracy	,72**	,59**	1		
Market or.	,49**	,30*	,58**	1	
Skills	,13	,02	,20	,25	1

Table 23: Bivariate correlations ICT sector

	Culture	Leadership	Bureaucracy	Market or.	Skills
Culture	1				
Leadership	,44**	1			
Bureaucracy	,23	,10	1		
Market ori.	,37**	,26	,37**	1	
Skills	,44**	,18	,40**	,55**	1

Table 24: Bivariate correlations engineering sector

Although bivariate correlation analysis provides some first insights in the relationships between enabling conditions, the effect of other related conditions on the found relationship can lead to biased results. In order to reveal the robustness of relationships a partial correlation analysis is therefore conducted. Hereby, the effect of related conditions on the original relationship will be removed. This procedure thus in fact removes the part of the original correlation that can be explained by the relationships that original conditions have with other conditions (Howitt & Cramer, 2007). Only after conducting this partial correlation analysis it is possible to determine the direct relationships between enabling conditions within each sector. Hereafter, it will also be possible to analyse differences or similarities regarding the relationships between enabling conditions for the two sectors.

Appendix K includes the partial correlation tables for the overall results as well as for the two sectors. These results show that while some of the initial relationships hold after they are controlled for additional conditions, others do not. For the relationships that do not hold after partial correlation analysis it is possible to search for conditions

that mediate the original relationship. A mediation effect occurs when conditions that relate to each on in the bivariate analysis both also correlate to the same third condition. When the original relationship does not hold after controlling for this third condition it can be concluded that this condition mediates the original relationship (Howitt & Cramer, 2007).

For example: The bivariate analysis in table 22 found a significant correlation of 0,41 between an enabling culture and market orientation. Partial correlation analysis (Appendix J) however shows that the relationship between these conditions is no longer significant. In table 22 it can be seen that both an enabling culture and a market orientation correlate with an enabling leadership style and enabling bureaucracy. After controlling the original relationship for the condition enabling bureaucracy the correlation drops to 0,20, which is no longer a significant relationship. When the original relationship is controlled for the condition enabling leadership the relationship is however still significant. It can thus be concluded that the relationship between an enabling culture and a market orientation is mediated by an enabling bureaucracy. This analysis is conducted for all relationships that do not hold after partial correlation analysis. Both direct and indirect relationships are indicated in table 23. In the case of an indirect relationship the mediating condition is indicated.

	C	B	L	M	S		C	B	L	M	S		C	B	L	M	S
C	-						-						-				
B	√	-					√	-					×	-			
L	√	C	-				√	C	-				√	×	-		
M	B	√	×	-			B	√	×	-			S	S	×	-	
S	×	M	×	√	-		×	×	×	×	-		√	M	×	√	-
	Overall						**ICT**						**Engineering**				

Table 25: Direct and indirect correlations on an overall level and for separate sectors

Again, results between the ICT and engineering sector are quite different. In order to determine what these relationships exactly imply for both sectors they are discussed in the light of the outcomes that have been discussed throughout paragraph 6.2.2 till 6.2.6.

6.3.1. RELATIONSHIPS WITHIN THE ICT SECTOR

When the outcomes of table 11 are taken into account it is striking that the conditions wherefore the main improvement possibilities are identified; an enabling bureaucracy, culture and leadership style, are in fact correlated to each other. The correlation between these conditions implies that a positive or negative effect of one condition is likely to stimulate a similar effect on the other. Awareness on this issue is crucial as enabling bureaucracy is regarded as the least relevant enabling condition. However, it is thus likely that the rather low score on enabling bureaucracy results in suboptimal outcomes regarding the characteristics of an enabling culture or leadership style.

The relationships between conditions become more clear when the characteristics of conditions in this sector are taken into consideration. The emphasis within organisational cultures on autonomy and an improvement orientation is for example represented in work practices that mainly focus on flexibility and repair. The rather low extend to which cultural values are perceived to lead to a collective frame of reference e.g. culture as: *'the glue that holds the organisation together and that stimulates employees to commit and perform'* combined with a moderate focus on interdepartmental communication is on its turn represented by the relative low amount of internal and global transparency that practices provide to service consultant's. These relationships can also be seen vice versa. It is imaginable that a rather low amount of internal and global transparency leads to a situation wherein service consultant's are not stimulated to oversee the broader picture of the organisation, this decreases service consultant's abilities to build up such a collective frame of reference regarding organisational goals and activities. However, as practice do stimulate a considerable amount of flexibility during daily interaction and service consultant's are stimulated to make improvement suggestion regarding work practices it is a logical consequence that over time autonomy and an improvement orientation are regarded as important organisational values.

Another striking relationship is the influence that the characteristics of an enabling bureaucracy and a market orientation have on each other. The moderate degree to which characteristics of an enabling bureaucracy are present is reflected in the moderate degree to which organisational structures provide support to service consultant's in creating a fit with their customers. In addition, rather low scores on global and internal transparency correspond with the perceived challenge to approach customer acquisition as a more careful process. Thus, considering both the value the organisation can offer their customers and the value the customer can add to the organisation. When practices neither provide a clear understanding of service consultant's individual role in organisational core activities, nor are based on clear organisational goals, it will be hard to create a common frame of reference among service consultant's towards organisational goals. This might create a challenge for service consultants to is select customer profiles that fit the underlying vision, or future direction of the organisation. In addition, a lack of understanding on the future intentions of the organisation will make it hard for service consultant's to determine which knowledge (interaction as a two way learning process) is valuable to incorporate into the organisation as 'best practices' for future services. A lack of broader understanding on organisational activities may cause service consultant's to over- or underestimate the value of experience gained during interaction. This relationship between a market orientation and an enabling bureaucracy is important to acknowledge as also a market orientation can still be significantly improved within the ICT sector. However, the need for improvements is perceived to be smaller when compared to organisational conditions. In fact, ICT organisations score relative well on their ability to involve different customer segments within the idea generation of new service developments. In addition, knowledgeable customers are often involved in a process of service co-creation.

These outcomes can be explained by the characteristics of the ICT sector. The ICT sector is a rather young sector which developed itself within an environment that faces rapid changes in technologies and customer preferences. Moreover, it is argued that

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within ICT services new developments are rapidly imitated by competitors, forcing ICT organisation to stay concentrated on innovative service developments that meet customer demands (Salmi et. al., 2008). This focus on new developments is also represented in the rather high score on ICT service consultant's innovative skills. The simultaneous consumption and production of services however implies that customers are in fact often involved in this process of service development. Moreover, it is argued that the need for rapid service developments leads to a situation wherein new service developments are not strategically planned activities wherein organisational competences are taken into consideration, but in fact often take form during customer interactions (Salmi et. al., 2008). It can thus be argued that the due to the dynamic character of their environment, ICT organisations are forced to take focus on customer preferences and involve customers in the process of new service development. Hereby, these organisations are quite capable in adapting their services to different customer needs, however are less oriented towards their internal distinctive values and capabilities.

During interviews it was frequently emphasised that ICT sector is rather young and still developing itself in terms of internal organisation issues. For this reason it is likely that characteristics of more traditional 'professions', often contributing to a feeling of pride and commitment to the values of the profession, are less present within this sector. The ICT sector is thus more competitive and less value driven when compared to other KIBS, resulting in rather low scores on organisational characteristics that relate to organisational values.

The combination of a high amount of autonomy without a collective frame of reference might result in the challenges that are identified on the organisational level. In addition to challenges illustrated above gaps between leadership perceptions and that of service consultant's on enabling conditions. Gaps between these two functions groups are for example identified on conditions that relate to the characteristics of an enabling leadership style and service consultant's skills in terms of their presence as well as their relevance. This is relevant as transformational leadership style encourages individuals to develop collective interests and goals. During interviews ICT managers mentioned justly that besides the required skills and competences it is crucial to have service consultant's who can identify themselves with organisational goals in order to create maximum value during customer interactions. In addition, there is an agreement that a broader view of the organisation is necessary in order to provide integrated service solutions. In order to achieve this goal, improvements and congruence regarding organisational characteristics that contribute to a collective understanding and motivation towards organisational goals and expertise will be necessary. Hereby, service consultants will be better capable of developing a broader view towards their services, which stimulated abilities to oversee new service opportunities on an organisational level. It can be argued that these characteristics are a prerequisite to achieve the optimal benefits of service consultant's autonomy and drive for service improvements.

6.3.2. RELATIONSHIPS WITHIN THE ENGINEERING SECTOR

A striking difference with the ICT sector is that engineering service consultant's skills do not stand on themselves, but are related to quite some other enabling conditions. It is however also indicated that service consultant's overall skill level can be significantly

improved. In fact, the main possibilities for improvement are identified on service consultant's skills and a market orientation. Also within the engineering sector these two conditions that are perceived to require most improvement are actually directly correlated to each other. A focus on each of these conditions is thus likely to enhance the effect of the other in order to achieve these desired improvements. This makes sense as service consultants which both have the technical capabilities combined with the skills to transform these skills services that meet specific customer demands (e.g. by means of social, innovative capabilities, understanding of the customer situation and a clear overview of the exact range of possibilities the organisation has to offer), will be able to target these skills in order to achieve an optimal fit with the customer during interactions. Vice versa, service consultants which are focused to achieve this fit with the customer and involve customers to a high extend are likely to develop skills regarding customers insights. Intensive customer contact allows social bonds between the actors to develop which on its turn contribute to increased social skills and moreover, reveals opportunities for innovation ect. (Moller & Wilson, 1995).

In addition, the relationship between service consultant's skills and a market orientation has a twofold indirect relationship with the characteristics of an enabling bureaucracy. While the relationship between service consultant's skills and enabling bureaucracy is mediated by a market orientation, this market orientation on its turn mediates the relationship between service consultant's skills and an enabling bureaucracy. These indirect relationships imply that rather skilled engineering service consultant's, which stimulates a market orientation (or vice versa a market orientation which allows service consultant's skills to develop), will be better capable to incorporate their knowledge gained during interactions into formal organisational work practices. However, as enabling formal practices are designed to actually support service consultant's during daily interaction, it can also be argued that engineering organisations wherein formal practices have the characteristics of an enabling bureaucracy allow service consultant's to achieve this market orientation and stimulates engineering service consultant's skills development.

Conditions in the engineering sector are even more intertwined as service consultant's skills relate directly to an enabling culture. Furthermore, an indirect relationship is observed between an enabling culture and a market orientation, which is mediated by service consultant's skills. An enabling culture as described in this study thus stimulates the development of service consultant's skills of which the relationship with a market orientation is already discussed. In addition, it seems that skilful service consultants incorporate this market orientation into organisational values.

The relationship between enabling conditions in the engineering sector can also be analysed more thoroughly when the characteristics of conditions are taken into consideration. Similar to the ICT sector organisational cultures within the engineering sector emphasise service consultant's autonomy and an improvement orientation. However, in addition to these characteristics engineering consultants do perceive a considerable value based collective frame of reference which motivates individual service consultants during daily activities. It can thus be argued that engineering consultants have an internalised cognitive structure of what the firm represents. Alvesson et. al. (2001) describe this characteristic as organisational identity: '*An individual's knowledge that he belongs to a certain social group (the organisation), together with some*

emotional and value significance of this group membership.' These authors state that organisational identity can serve as a form of normative control in loosely coupled environments. The logic behind this reasoning is that individuals will attempt to conform their behaviour according to the established norms. Moreover, when individuals perceive to be part of an elite (prestigious) organisation this raises service consultant's self esteem which stimulates service consultant's self-discipline and will to perform exceptionally. Therefore, social identity based on elitism may regulate and coordinate behaviours around autonomous work processes. Compared to the ICT sector the engineering sector is a more traditional 'profession' which may be ground for such a perception of an elite identity. Moreover, beliefs of this elite status are confirmed by significant others as customer relationships within the engineering sector are often based on a recognition of each other's valuable expertise. Rather high scores on service consultant's technical skills and the considerable extent to which knowledgeable customers are regarded as intellectual counter-partners during service interactions explain the indirect relationship between cultural characteristics and a market orientation via service consultant's skills.

Within the engineering sector being part of an 'elite' expertise focused organisation is thus likely to create a common frame of reference and commitment towards organisational performances. However, in their own field of expertise service consultants act quite autonomous during customer interactions. Rather low scores on interdepartmental communication make it is questionable whether this normative control actually stimulates collaborative behaviour across multiple disciplines throughout the organisation. In addition, as formal practices do not contribute to a broader understanding of the organisation and the role that individuals take herein service consultants might create a lack of understanding concerning the broader field of expertise the organisation can offer. However, the qualitative study already indicated that engineering organisations are more and more forced to take a broader look towards their services and the value that can be offered to customers. Neither the current normative control focused on autonomy and individual expertise nor structural control system however stimulates behaviour that is directed to this strategic focus. The focus that engineering consultants have on their own field of expertise is affirmed by an additional comment that is given by a respondent of the questionnaire: *'In essence we are still a group technicians focused on our own knowledge, we are not recognising needs from our environment. A more customer orientated approach needs to be developed wherein we realise that our individual thoughts may not always be what customers really need.'* This need for a more customer oriented approach targeted at the creation of maximum customer values is combined with the need for a collective understanding of the organisational profile and future direction beyond the expertise of individual service consultants: *'We should create a higher awareness regarding the reasons behind customer relationships. Why do customers approach us and how do their question relate to our organisational goals? In addition we should be more aware of how our acquisition activities fit our organisational profile and future directions. What are development for which we feel responsibility as an organisation in the light of our mission and goals, and how do we act on these developments by means of customer interactions?'* Although the characteristics of the engineering sector are different than the ICT sector, engineering KIBS thus also face the challenge to increase the broader picture that service consultant's have of the organisation in order to oversee the integrated value that can be offered to customers.

6.4. Conclusions

Outcomes of this quantitative study contribute to broader insights on the extent to which enabling conditions are present within organisation as well as their perceived relevance. In addition, relationships between conditions for both sectors and their implications have been identified. This paragraph aims to combine these outcomes in order to describe the main insights of this quantitative analysis.

Successful service interactions are perceived to be the result of skilful service consultants, indicating that interaction is foremost regarded a social process. Additional comments throughout the questionnaire also emphasise the social aspect of service interactions: *'Customer satisfaction is for a large part determined by the social skills of an employee'* and *'Successful service interactions are often the results of the social bonds between a service consultant and the customer which are often determined by previous contacts between the involved actors.*

Both sectors emphasise that the knowledge intensive nature of their services combined with the unique requirements of specific customer requests, requires flexible and autonomous service consultant's. In addition, organisations perceive it to be crucial to be on top of the latest developments regarding their field of expertise. These values are also represented within formal practices wherein the main focus is put on service consultant's flexibility and possibilities to improve work practices. As respondents themselves are part of their organisational culture it is a natural consequence that respondents emphasise practices which relate to these cultural values. This also explains why flexibility and repair are regarded the most relevant aspects of an enabling bureaucracy.

Both sectors however also indicate that service consultants can improve their abilities to oversee the broader value the organisation can offer their customers during service interactions. When these skills are not up to date this will hinder KIBS in achieving their goals to deliver integrated, value enhancing services to their customers. Organisational conditions contribute to this situation wherein service consultant's skills are not fully able to oversee the broader organisational expertise. Within both sectors it is identified that organisational cultures only moderately stimulate behaviour that is related to interdepartmental communication. This moderate degree to which organisational cultures stimulate interdepartmental communication is reflected in formal practices. Practices do not highly stimulate service consultants to create an understanding of broader organisational activities and individual service consultant's role herein. In addition, respondents perceive that organisational practices do not necessarily reflect organisational goals and values. The lack of congruence between normative and formal coordination mechanisms indicates that bureaucratic coordination is likely to be approached with a coercive mindset. Additional comments in the questionnaire illustrate this situation by stating that work practices mainly serve accounting purposes and often work restraining. Changing this situation requires a change in mindset among both managers as service consultants. Not only is enabling bureaucracy regarded to be least relevant of all enabling conditions, characteristics that lead to a congruence between cultural coordination and formal coordination are regarded to be least relevant aspects of formal coordination mechanisms. This attitude

actually sends out a message that it is not highly relevant to have actual work practices stimulate behaviour that is coupled to organisational goals. These outcomes are on its turn reflected in the perceived difficulties to achieve a market oriented service culture. A lack of insights on the in house expertise and future direction of the organisation creates challenges regarding service consultant's acquisition activities. Not only will it be difficult to determine the exact value that can be offered to customers, a lack of understanding on the organisational future directions makes it hard to determine which knowledge is valuable to incorporate into the organisation as organisational 'best practices'.

Organisational leaders take an important role in these illustrated challenges. Visionary leaders who are able to create a feeling to work collectively on important underlying goals and values are regarded to be very relevant. Within both sectors it is indicated that current leadership behaviour can improve on this matter. A balance should however be sought between transformational and transactional elements of leadership behaviour. At the moment it is perceived that KIBS within both sector can improve their abilities to achieve balanced approach towards standardisation and flexibility during services interactions. Neither current formal practices nor leadership behaviour stimulate service consultants to achieve this balance to a high extent yet. The lack of relevance that both service consultants as managers indicate to enabling bureaucracy could contribute to this challenge as this conditions in fact serves as a mean to achieve this balance between flexibility and standardisation. As long as the relevance of the fit between these two coordination mechanisms is not acknowledged KIBS will fall in the trap of implementing restraining, coercive formalisation practices

Although the challenges within both sectors are quite similar, they result from quite different developments. The engineering sector is characterised by a traditional focus on expertise knowledge. This focus on individual expertise is stimulated by engaging in flexible, content based customer relationships wherein service consultants act in their own field of expertise. Although there is a high commitment towards the organisation among service consultants, in the light of increasing competition wherein organisations from the industry chain are up-scaling their knowledge, engineering consultants are forced to take a broader look towards their service. A more customer oriented approach wherein multiple expertises are combined and individual customer requirements are taken into account even more is required. The dynamic environment of ICT organisations forces these organisations to stay on top of customer preferences and innovative service developments. ICT organisations are more skilful in using information from different customer segments to their benefit, involve knowledgeable customers and apply modularised services which can be adapted to the customer situation. However, awareness on distinctive organisational profiles, future directions and values that serve as a common frame of reference motivating service consultant's during their interactions are less present. It is however crucial to recruit people who can identify themselves with the organisation's goals, as for different resources to become actual organisational capabilities the ability of the organisation to motivate and socialise its members is crucial. It is very true that flexibility and repair are important characteristics of enabling bureaucracy. However it seems reasonable that the benefits of these characteristics can only be achieved when service consultants are fully aware, motivated and stimulated to act according to organisational goals and values.

Chapter 7: Conclusions, Discussion and Recommendations

This last concluding chapter will provide the overall conclusions by merging insights from the theoretical framework, qualitative and quantitative study. The discussion will critically review both weak and strong points of the study. Furthermore recommendations for further research are provided.

7.1. Conclusions

As the economy becomes more knowledge driven the impact of KIBS is increasing. Not only are their services characterised by their specialised field of knowledge, exchanges in business to business markets commonly take place within interactive customer relationships. The high degree of customisation that is often required due to (technical) specifications and individual customer situations intensives this co-creation aspect of services. The impact of interaction on organisational performances is becoming even more crucial as KIBS' focus shifts to an integrated service approach that support customer's business on a broader level. This strategy challenges KIBS to come with creative customer solutions and implies that latent customer questions will have to be discovered. With this focus KIBS are aiming to maintain their expertise status, which legitimises the inequality between KIBS and other organisations in the business chain that are also up-scaling their services. This more customer oriented service approach causes that KIBS are no longer only based on technical, factual knowledge, service consultant's take more and more an advisory role wherein normative aspects (what is appropriate in the light of this specific situation) are gaining importance.

Within this context the goal of this study was to determine the main enabling conditions for KIBS service consultants within the ICT and engineering sector in their in their interaction with customers.

The underlying theory of this study is that of the Resource Based View of the firm wherein a firm's unique resources are regarded to create competitive advantage. Due to the interactive nature of KIBS an organisations human capital is considered one of the most crucial resources within these organisations. However, the organisation of which a service consultant is part can either enable or constrain the process of service interaction. Therefore, the main enabling conditions are regarded to be a combination of organisational conditions and personal skills (human process advantage and human capital advantage). After conducting an explorative qualitative study customers themselves are included as a third coordinating resource for successful customer interactions. While human process advantage and human capital advantage are generally considered internal resources of the firm, customers are generally considered part of the firm's external context. The interactive nature of services however implies that customers, at least for some time, become part of the organisation and can have significant contributions to the organisation. By including the organisation's customers as an enabling condition a link between the inside-out perspective of the Resource

Based View of the firm and the more market oriented outside-in perspective towards strategic advantage is created.

In respect to the main question of this study three levels of enabling conditions are identified thus that support service consultants in their interaction with customers; the organisational level, the personal level and the customer level (figure 7).
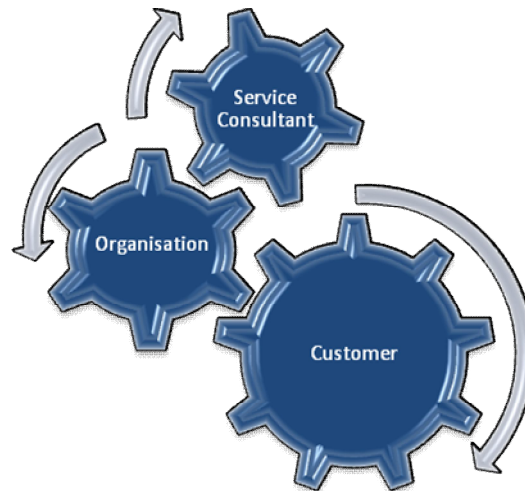
Figure 7: Three intertwined levels of enabling conditions

Individual level: KIBS require highly interactive customer relationships, which are often facilitated by a personal 'click' between the involved actors, moreover the interactive nature of services implies that customer's quality perceptions are often influenced by service consultant's actions. Traditionally, both ICT and engineering services consultants have an education that wherein service consultants have familiarised themselves with applying routines in order to work towards the right solution with an attention to detail. Although this approach fits the more technical, clear cut problems, as problems becoming broader and more complex a less reactive approach towards customer problems is required. At the same time KIBS service consultants face contradictory requirements of being both productive and innovative which requires them to be engaged in both exploitation and exploration activities. High productivity reduces costs and makes quality management easier, while customisation is needed to solve unique problems of customers when no standard solutions are available. Service consultants are actually challenged to to acquire a broad range of skills allowing them to anticipate on general trends in the organisational environment, master service content related skills (e.g. technical expertise, IT tool, project methodologies) and skills that relate to successful interactions. This asks for service consultants that are able to combine both expertise and entrepreneurship, develop broader and deeper knowledge, master both the content and the tools related to one's profession and increase their knowledge of their customer's business

Customer level: Due to the interactive nature of services customers, are partially integrated within the boundaries of the firm during the service process. Within these relationships customers can enable the service process by informing the service provider about their expectations and perceptions of the service and the service

process, help in identifying improvement opportunities, evaluate service quality or by participating in producing the service in question. Hereby customers engage in a co-designer or co-producer role during the service process. Successful KIBS will be able to approach customer interaction as a bilateral process of knowledge transfer. Service consultants that combine their technical expertise with sufficient knowledge about the actual market will be capable to discover potential market demands that fit the organisation's future directions. Customer acquisition should therefore be considered a careful process wherein a sophisticated segmentation strategy can be helpful. Customers that are developers and broad co-operators often work as partners with the organisation whereas focused buyers and exploiters are more interested in rather transactional provision of specific solutions.

Organisational Conditions: Organisational conditions shape service consultants reactions towards external contact and can thus actually restrain or enable successful service interactions. The management of knowledge worker asks for a delicate balance between co-ordinated action and predictable goal achievement, while allowing room for creative processes, innovation and flexibility. This study has made an attempt to provide insights on how a balance between these two orientations is to be achieved. It is argued that a congruence between the organisation's social structure and formal structure supports high levels of both performance and service consultant's involvement. Although autonomy is a key factor that enables and motivates service consultants, it is crucial to govern this autonomy by values incorporated in organisational cultures and practices. In addition to a focus on autonomy, an organisational culture that stimulates interdepartmental communication, an improvement orientation and a HR orientation seems to enable service consultants to provide added value during customer interactions. However, only by congruence between social coordination and structural coordination service consultant's are actually enabled and stimulated to act on these values. Practices that are designed to provide service consultants with a fair amount of internal transparency, global transparency, flexibility and repair aim to support service consultants during daily works by serving as a mental model and means of communication. Enabling formal practices thus serve a cultural and rhetorical function wherein bureaucratic elements actually contribute to the creation of a collective mindset regarding organisational priorities. Enabling formalisation allows flexibility within ambiguous situations while routine tasks can be acted out standardised. In practice it is illustrated that the conflict between customisation and standardisation may be tackled by standardising the working methods and procedures of a customised service. Work practices can be used as a 'toolbox' which service consultants can adjust to the situation. These building blocks prevents professionals from re-inventing the wheel over again and enhance predictable levels of quality. Moreover, it is mentioned that innovative approaches are not always desired by customers that are dominantly seeking for a robust solution. Organisational leadership takes an important role in achieving this balance between standardisation to enhance efficiency and flexibility which is required to meet variable customer requirements. Transformational leadership aims to activate employee's motivation for higher order values, arousing employee's emotions in order to work and perform beyond simple transactions. Leadership characterised by idealised influence, inspirational motivation, individual consideration and intellectual stimulation combined with transactional elements not only stimulates service

consultant's creativity, it also increases employee's effort to perform tasks more effectively. A balance is thus sought between organisational dynamics and enabling control structures that coordinate outcomes appropriate to the organisation's vision and mission.

As can be seen in figure 7 these three levels of enabling conditions are in fact intertwined. Only by careful coordination between resources on different levels distinctive organisational capabilities regarding customer interactions can be achieved. Although successful service interactions are foremost regarded a social process between service consultants and customers, organisational conditions determine whether skilled, flexible service consultants are capable to deliver qualitative services within individual customer situations. Organisational conditions can thus be regarded as an accelerator between the enabling characteristics on the individual and customer level. Outcomes of the study however illustrate that an optimal coordination on these three levels is still a challenge for most KIBS. The focus of this study on the engineering and ICT sector (KIBS II) has made it possible to see these outcomes in the light of different sector characteristics.

The ICT sector is a rather young sector which developed itself within an environment that faces rapid changes in technologies and customer preferences. New service developments are rapidly imitated by competitors, forcing ICT organisation to stay concentrated on innovative service developments that meet customer demands. This dynamic environment leads to a situation wherein new service developments are not strategically planned activities wherein organisational competences are taken into consideration, but in fact often take form during customer interactions. ICT organisations are therefore quite capable in using information from different customer segments to their benefit, involve knowledgeable customers and apply modularised services which can be adapted to the customer situation. However, compared to other KIBS characteristics of more traditional 'professions' that contribute to a feeling of pride and commitment to the values of the profession, are less present. ICT managers mention however that it is crucial to recruit service consultant's who can identify themselves with organisational goals.

The engineering sector is perceived as a more traditional 'profession' which grounds perceptions of an elite identity among service consultants. This internalised cognitive structure serves as a frame of reference which motivates and creates commitment towards service performances among individual service consultants. This elite identity is affirmed during customer relationships which are often based on a recognition of each other's valuable expertise. Within these autonomous and flexible customer relationships service consultants focus on the technical content of their own field of expertise services. However, in the light of increasing competition engineering consultants are forced to take a broader look towards their services. A more customer oriented approach wherein multiple expertises are combined is required.

Although the environments between the two included sectors are quite different the challenges that are identified are in fact rather similar. Within both sectors the lack of interdepartmental communication as an organisational value is reflected in formal practices that do not contribute to a broader understanding of the organisation's activities, or individual service consultant's role herein. In addition, organisational practices do not necessarily reflect organisational goals and values. It are mainly these

characteristics that contributes to service consultant's active understanding on the future direction of the organisation, and enables service consultants to act according to this organisational perspective. Moreover, they contribute to service consultant's abilities to derive at valuable improvement suggestions regarding services and practices. In addition, a lack of insights on the in house expertise and future direction of the organisation creates challenges regarding service consultant's acquisition activities. Not only will it be difficult to determine the exact value that can be offered to customers, a lack of understanding on the organisational future directions makes it hard to determine which knowledge is valuable to incorporate into the organisation as organisational 'best practices'. Within both sectors it is thus crucial to increase the awareness that organisational conditions in fact have on these outcomes. Within the ICT sector the lack of frame of reference that both formal and normative coordination provides results in sub-optimal outcomes on the customer and individual level. Within the engineering sector sub-optimal outcomes are created due to a lack of common frame of reference beyond individual service consultant's expertise.

Currently, neither formal practices nor organisational leadership behaviour is capable of achieving a desired balanced approach between standardisation and flexibility during services interactions. The lack of relevance that is given to congruence between cultural and structural can contribute to this situation as these conditions in fact serves as a mean to overcome this challenge. Congruence between these elements encourage service consultants to act on institutionalised knowledge in the form of standard practices that support the vision of the organisation, regarding the environment as source of opportunities to adopt new routines while maintaining flexibility and commitment to explore new ways of doing things. These organisational conditions contribute to the situation wherein a market orientated approach towards services is achieved wherein service consultants are enabled to apply their insights and skills successfully during service interactions in order to create both customer and organisational value.

7.2. Discussion

Most of the literature on KIBS is based on qualitative case study material. This study is one of the first wherein qualitative research is complemented by a quantitative component in order to gain insights among a broader field of KIBS. Hereby it has been possible to validate insights gained from theory and qualitative data in a larger KIBS context. This makes this one of the few studies wherein enabling conditions are identified that can be generalised to a broader context. The specific focus on the engineering and ICT sector herein however contributes to the need for insights across professions on the impact of various external market as well as differences at the organisational level. It is recognised that indeed different sector characteristics are of influence on the characteristics of enabling conditions in terms of their perceived presence, relevance and relationships. These insights are valuable as they illustrate how specific challenges have developed themselves within a particular sector, insights on the relationships between conditions provide insights on how to tackle improvement areas and the effect that characteristics have on each other. Both sectors however indicate the need for a broader approach towards services wherein service consultant's

are able to evaluate value enhancing service opportunities within individual customer situations. Hereby both customer value as the organisational value of service interactions is increased. These insights contribute to the need for more insights on the required skills of KIBS service consultants. Although service consultants need a solid expertise based background, soft skills that support service consultants in their ability to develop insights on customer situations as well as the ability to combine insights from multiple expertises, anticipatory capabilities and innovative potential are regarded more crucial. This study however also identified that KIBS do not recognise the influence that organisational conditions have on these capabilities of service consultants to its full extend. Only when service interactions are approached as a bilateral process of knowledge transfer wherein service consultants are able to incorporate broader organisational capabilities and the intended future direction of the organisation both customer value as organisational value can be achieved. A broader organisational awareness is thus required in order to achieve to full benefits of service interaction in terms of efficiency and quality from both involved perspectives.

The study contributes to insights on performance coordination within knowledge intensive organisations it is the first to combine elements of normative and structural control within a KIBS context. A new function towards bureaucracy is regarded to provide opportunities as the need for flexibility and autonomy is recognised, however this autonomy needs to be governed in order to overcome issues such as role conflicts and a lack of organisational coordination and communication. Hereby it is possible to implement a flexible empowerment approach while assuring service consultants to work effectively and efficiently on common goals. Results should however carefully be interpreted against the background of the methodology that is applied within the study. The sampling approach wherein respondents are stimulated to distribute the questionnaire among interested colleagues makes it hard to determine an exact response rate as well as to control for particular characteristics among the sample (e.g. motivation to answer in the questionnaire). Although a stratified sample would be more desirable the timing (summer break) and resources made it hard to apply this approach in practice. In the construction of the questionnaire a balance between scientific methods and practical requirements has been made. The length and timeframe of the questionnaire are taken into account in the consideration on the number of items to be included in the measurement of characteristics. Furthermore, on line questionnaires make it hard to determine whether respondents interpret questions as intended. This risk if however controlled for as much as possible by means of pre-test. In addition, the study is conducted with these considerations in mind and several attempts have been made to reach a sample as diverse as possible within the target population. All in all, the combined insights from the qualitative and the quantitative study have led to useful insights concerning conditions that impact and enable the interactions between service consultants and their customers within the ICT and engineering sector.

7.3. Research Recommendations

As research within different KIBS sectors is still scarce further research within these contexts is desired. It has already been mentioned that especially the engineering and ICT sector are among the least represented within academic literature on KIBS as most research concentrates on KIBS I type of organisations e.g. law, accounting or management consulting firms. Moreover, most literature on KIBS describe organisations within different sectors under the same denominator, not taking environmental or organisational differences into account. This study has concentrated on two sectors both fall within the KIBS II category. Although they share quite some characteristics regarding their services, environmental differences have been revealed to influence current organisational designs. Additional insights on the consequences of sector characteristics will be useful for further insights on service performances.

Although management control is amongst the most addressed issues within KIBS literature, this is the first study that combines both the possibilities of cultural and structural control as to provide support to rather autonomous service consultants within their interactions. An attempt to validate the framework has been made by including a quantitative study among a broader field of the target population, however additional studies that build on the framework are desired. It would for example be desirable to have a post test among participant of the qualitative study to validate research findings to a larger extent. In addition, in depth case studies within particular organisations would be beneficial to gain examples on how organisations are actually able to overcome the challenges that are identified in the study in practice. These studies would furthermore be useful to explore the enabling conditions on a deeper level. An example concerns service consultant's relevant skills which are all build up out of many individual characteristics and abilities which could not be explored into full detail within this study.

This research has mainly focused on the coordination mechanisms that enable interactions. However, for interactions to be truly successful additional insights from other research fields will be very valuable. Möller and Wilson (1995) and Möller and Halinen (2001) for example discuss the interaction process itself within several stages. Issues such as reputation and inter-organisational trust are key aspects that are herein taken into account. These aspects influence customers quality perceptions as well as customer willingness to participate in the service process. Therefore, insights from these field may lead to valuable insights regarding customer participation in successful service interactions. In order to combine the opportunities of competence development and a more careful acquisition process, insights on different customer interactions within professional sectors is preferable. Customer classifications within a knowledge intensive context are however hard to find. Although earlier literature has made attempts to provide service typologies (e.g. Wemmerlov, 1989; Mills & Marguiles, 1980; Silvestro, 1999), customer interaction in these classifications is often coupled to the complexity of services. Standard services are proposed to require minimal customer interaction and customisation whereas complex services are stated to require extensive customer interaction and customisation. Within this study it is however recognised that while knowledge intensive services require extensive

customer interaction, the nature of customer roles during interaction as well as the level of customisation versus standardisation differs among customers. A segmentation strategy among professional services would thus be helpful to combine the insights of this study in the development of a more conscious approach towards customer interaction. In this context further research on the trend identified by Toivonen (2004) of service modularisation and its impact on customer roles and the process of interaction would also be preferable.

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Appendix A: Operational Dimensions of Organisational Culture

Autonomy:

- o room for non-managerial employees to make their own decisions

- o freedom for employees to depart from rules

- o freedom for employees to implement decisions according to their own views

- o employees influence important decisions concerning work

- o freedom for employees to plan their own work

- o The opportunity for employees to bring forward ideas before decisions are made

External orientation:

- o active canvassing of new customers

- o investigation of the wishes and needs for customers

- o working to improve the local market position

- o quick reaction to developments in the market

- o thorough training of employees in systematically gathering information on what customers want to see improved

- o having an edge of local competitors

Interdepartmental orientation:

- o exchange of useful information between departments

- o useful cooperation between departments

- o departments support one another in the resolution of problems

- o mutual communication between heads of departments

Human resource orientation

- o performance appraisals are taken seriously

- o employees obtain useful information about their own functioning

- o careful selection of new personnel

Improvement orientation

- o employees closely monitor their own way of working

- o employees search for possibilities to improve the organisation

- o initiatives taken by employees to improve the way in which the work is done

Appendix B: educational skills requirements for engineers (Schuman et. al., 2005)

- An ability to apply knowledge of mathematics, science, and engineering;

- An ability to design and conduct experiments, as well as to analyze and interpret data;

- an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;

- An ability to identify, formulate, and solve engineering problems

- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

- An ability to function on multi-disciplinary teams;

- An understanding of professional and ethical responsibility;

- An ability to communicate effectively;

- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;

- A recognition of the need for, and an ability to engage in lifelong learning

- A knowledge of contemporary issues.

Appendix C: Effects and conditions of factors and relationships between factors

Enabling bureaucracy

Stated effects:

- Guide employees in mastering their tasks

- Reduced role conflict and ambiguity

- Facilitates and motivates employees

- Forms a mental model and frame of reference, collective mindset, frame of reference

- Organisational memory

Effects achieved by:

- Procedures serving a rhetorical and cultural function

- Providing feedback

- Assisting in prioritising

- Assisting in identifying problems

- Revealing improvement opportunities

- Including organisational lessons based on experience

Necessary conditions:

- Internal transparency (understanding of rationale behind practices)

- Global transparency (understanding of the broader context of work)

- Flexibility (possibility to modify the interface)

- Repair (employee possibility to improve work practices)

- Employee professionalism and employee involvement

Organisational culture

Stated effects:

- Glue that holds the organisation together and that stimulates employees to commit and perform

Effect achieved by

- A shared meaning by a shared perception of work practices

Necessary conditions:

- Autonomy

- External orientation

- Interdepartmental communication

- Human resource orientation

- Improvement orientation

Transformational leadership

Effect:

- Activation of higher order values among employees, arouse employee's emotions in order to work and perform beyond simple transactions

- Enhancement of organisational innovation

- Higher rates of employee satisfaction

- Ambidexterity

Effect achieved by:

- emphasis on symbolic leadership behaviour by visionary, inspirational messages, moral values and individualised attention

Necessary conditions:

- Leadership that is viewed by employees as visionary as well as competent achieved by:

- Idealized influence: Serve as a role model, place employee's needs over own needs, share risks and exhibit adherence to a set of underlying principles and values.

- Inspirational motivation: Vision that is appealing and inspiring

- Intellectual stimulation: Challenge assumptions, asks for ideas, facilitate unconventional and creative thinking)

- Individualised consideration: Act as a mentor or coach , supports growth by creating learning opportunities

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Personal Skills and Competences

Effect

- Employees with relevant skills and competences are able to exploit enabling organisational conditions hereby increasing effective interactions

- Individual skills and competences lead to innovative ideas which are crucial for KIBS

Effect achieved by

- Recognise contradictory business needs, anticipate on business environment

- Mastering content of their field of expertise and deepening the content of expertise

- Gaining knowledge on additional fields of expertise, thus broadening content of expertise

- Mastering tools and methods

- Gaining knowledge on customers situation

- Mastering social skills

Necessary conditions

- Strong education, with more emphasis on multidisciplinary skills

- Competence standards that state expected performance goals and capabilities that change with professionals experience

- Supporting ICT facilities

- Supporting organisational conditions that have been described above

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Relation between **Culture and Enabling bureaucracy**

- An autonomous culture leads to flexibility during interaction and is connected to the possibility to modify procedures

- Enabling formalisation provides the balance between autonomy and control

- A culture characterised by interdepartmental communication contributes to an understanding of the broader work context and hereby increases global transparency

- A culture that is characterised by improvement orientation stimulates professionalism

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Relationship between **Transformational Leadership and Culture**

- Transformational leaders are inclined to emphasis a culture that is characterised by mentioned best practices

- An explicit and inspiring vision provides a meaning for employees on practices that relate to an organisations culture

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Relationship between Transformational Leadership and Enabling bureaucracy

- Employees are encouraged to learn institutionalized knowledge in the form of new standard practices and routines that support the vision of the organisation. These routines are examples of bureaucracy

- Simultaneously employees are encouraged to see the environment as a source of opportunity to adopt new institutionalized routines which relates to flexibility. By involving team members in decision making, leaders can explain the need for change and increase commitment to explore new ways of doing things

- Transformational leaders give individual consideration towards employee's growth and development which increases employee's awareness on the significance of their work outcomes. This increases global transparency and professionalism

- Global transparency is furthermore supported as receiving information from the management and communication will help the employee see how his or her role fits into the larger picture of the organisation.

- Transformational leadership that is known to involve employees in decision making stimulates exploitation of practices and increases internal transparency

Relationship between Enabling bureaucracy and Employee skills/competences

- Skills and competence standards are in fact formalised statements about performance goals, and capabilities expected from professionals and hereby an element of bureaucracy. These standards provide clarification about expectations and priorities

- Enabling bureaucracy provides a mean to effectively guide routine tasks while exploring more non-routine tasks hereby stimulating both creativity as well as productivity. Flexibility and repair encourage employee to do things differently. While internal and global transparency encourages logical thinking, transparency focus, and convergent thinking

- Enabling formalisation provides information about individual improvement possibilities. During this process employee learn how to handle problems. Also, receives information concerning work to be completed will increase employee's confidence in his ability to perform the task

- The more clearly an employee perceives the responsibilities they are expected to accomplish, the more likely they will put forth the effort to perform.

- ICT is in fact a form of formalisation and support employees in gathering, sharing and processing information hereby increasing effective interaction

Relationship between **Organisational Culture and Employee skills/competences**

- A human resource orientation emphasises employees growth and development

- Autonomy creates a sense of ownership and control which increases motivation and creativity

- Organisational communication and improvement orientation stimulate the development of broader multidisciplinary knowledge and increasing functional knowledge

- An external orientation stimulates employees possibilities to combine technical expertise with knowledge about the actual market leading to new service initiatives and innovative potential

- External orientation and improvement orientation stimulates creativity considering many possible solutions to customer problems, take notice of a wide range of environmental information, and think divergently

- Important for the creation of knowledge and innovations is the ability to combine explicit and codified knowledge with implicit knowledge that are hidden in daily practices

Relationship between **Transformational Leadership and Employee skills/competences**

- Transformational leadership stimulates employee's growth and learning opportunities, the willingness to learn and to use ones abilities in versatile ways are indicators that social skills can be developed.

- Individual attention for employees skills and providing employees with supporting resources for example by training and ICT enhances employee's motivation and skill development

- Transformational leaders enhance employee's motivation to contribute to the overall goals of the organisation. Hereby stimulating the motivation to enhance skills and competences

Appendix D: Interview Protocol

Inleiding:

Aanleiding tot het onderzoek is het boek de Gedreven organisatie waarin de volgende visie wordt beschreven:

Met het toegroeien naar een servicegerichte kenniseconomie komt de toegevoegde waarde van organisaties tot stand in de interactie tussen klant en medewerker. Een kenmerk van een dienst is dat deze geleverd wordt aan mensen door mensen. Met name binnen complexe, kennisintensieve projecten zijn organisaties niet langer geïsoleerd van hun klanten, maar komt de dienst tot stand in een wisselwerking tussen klant en medewerker. Klanten verwachten hierbij steeds meer dat de organisatie in staat is in te spelen op de vragen van de klant, maar zijn tegelijkertijd afhankelijk van de kennis en kunde van de werknemer waarmee hij in contact staat. Organisaties die succesvol zijn zullen hierop inspelen via een optimale ondersteuning van de werknemer die in contact staat met de klant. Oftewel, organiseren vanuit de interactie tussen klant en medewerker. Hoe kunnen organisatie worden ingericht dat klantcontact medewerkers de interactie succesvol tot stand kunnen brengen?

Hoofdvraag: Wat zijn organisatorische succesfactoren voor kennisintensieve dienstverleners om de interactie tussen medewerker en klant effectief vorm te geven? Het onderzoek richt zich met name op ingenieursbureaus en ICT dienstverleners.

Het interview wordt in principe anoniem afgenomen. Zijn er bezwaren dat het gesprek wordt opgenomen? Een gespreksverslag wordt ter controle toegestuurd. Het eindverslag wordt tevens opgestuurd.

De structuur van het gesprek is redelijk open, we willen graag weten welke aspecten door organisaties zelf als cruciaal worden ervaren. Wel zal het gesprek lang drie centrale lijnen worden gestuurd.

- Kenmerken van deze sector, de rol van interactie en trends die worden waargenomen in de kennisintensieve dienstverlening

- Organisatiekenmerken die de dagelijkse werkzaamheden van klantcontact medewerkers beïnvloeden (formele structuren/procedures, cultuur en leiderschap)

- Welke persoonlijke aspecten zijn van belang: kennis, motivatie en vaardigheden

Kenmerken van de sector en de rol van interactie:

- Wat is kenmerkend voor de diensten die deze organisatie levert?

- Wat is hierbij de rol van interactie tussen de klant en de individuele medewerker?

- Merken jullie een toenemend belang van deze interactie, kunnen jullie een aantal ontwikkelingen aangeven?

Organisatie condities:

- Wat is de formele structuur van deze organisatie in termen van functies en verantwoordelijkheden?

- Wordt er gebruik gemaakt van procedures of protocollen tijdens het serviceproces. Zijn deze sterk leidend of flexibel toe te passen?

- Wat is de achterliggende reden van voor deze manier van organiseren? In hoeverre werken deze procedures en organisatie indeling ondersteunend voor medewerkers?

- Draagt deze manier van organiseren bij aan de vormgeving van de waarden van de organisatiecultuur?

- Wat is kenmerkend voor deze cultuur?

- Wat is de invloed van deze cultuur op het gedrag van werknemers en hoe werkt dit door in de interactie met klanten?

- Wat is de rol van het management in de totstandkoming van deze cultuur?

- Welke elementen zijn van belang om als manager werknemers optimaal te ondersteunen?

- Waar wordt door het management de nadruk op gelegd in prestatiemeting en beloningssystemen? (winst, succes van het project, klanttevredenheid, anders?)

- Een kenmerkende paradox binnen de kennisintensieve dienstverlening is het managen van innovatie en productiviteit tegelijkertijd. Hoe gaat deze organisatie hiermee om. Wat is hierbij de invloed van de behandelde onderwerpen: management, organisatieprocessen, cultuur en structuur?

Persoonlijke vaardigheden:

- Welke vaardigheden zijn voor een werknemer van belang om de dienst tot een succes te maken?

- Wat is hierbij de rol van sociale factoren en in hoeverre spelen kennis en kunde een rol in een succesvolle interactie?

- Hoe worden deze vaardigheden door de organisatie gewaarborgd?

Appendix E: Interview quotes relating to theoretical themes

The tables in this appendix illustrate the number of quotes that are given throughout the interviews that relate to the themes discussed in the theoretical framework. Hereby, a first validation of the conditions has been provided.

Theme	#
Organisations rely heavily on professional knowledge to provide knowledge based value added customer services that stimulate customer's innovative capacity	16
Strategic focus emphasising creating maximum customer value by providing integrated service solutions that support the entire customer organisation.	17
Intensive customer interactions are becoming more urgent as only through such interaction employees can be aware of the entire customer situation and are able to provide suitable customer solutions	15
Knowledge transfer is a bilateral process. The specific customer problem requires specialised knowledge provided by KIBS employees and the information provided by customers generates knowledge for KIBS about trends in the customer environment which creates possibilities new (innovative) services options	5

Table 26: Number of quotes that relate to KIBS characteristics

Theme	#
Service provider employee's perceptions of the organisation influences customer perception of the service quality during interaction. Therefore, it is crucial to create an organisation that provides an optimal support for these employees	9
KIBS are in fact characterised by many bureaucratic features, the goal of this bureaucracy is however to provide employees with a mental model and a collective mindset instead of being used as a controlling device. Role conflicts and ambiguity can be overcome by elements of an enabling bureaucracy that is characterised by internal transparency, global transparency, flexibility and repair.	28
Routine tasks can be guided by a high amount of enabling formalisation practices while more-non routine tasks can be managed by a lower degree of enabling formalisation practices hereby creating a mix of organic and enabling-bureaucratic features	9
Organisational culture is perceived as *the glue that holds the organisation together and that stimulates employees to commit and perform'* wherein organisational values are expressed through organisational practices. An optimal KIBS culture is characterised by autonomy, interdepartmental communication, human resource orientation, improvement orientation and external orientation	31
Transformational leadership characterised by idealized influence, inspirational motivation, intellectual stimulation and individualised consideration which aims to arouse employee's emotions in order to	22

work and perform beyond simple transactions is most effective in KIBS. Transformational enabling leaders stimulate cultural 'best practices' and organisational ambidexterity

Theme	#
Service provider employees will have to combine the enabling organisational characteristics with their personal skills and competences to deliver successful services	17
Employees need to be capable to combine both expertise and entrepreneurship, develop broader and deeper knowledge, master both the content and the tools related to ones profession and increase their knowledge on their customers business	22
Not every employee will have all these competences that are needed to provide interactive, innovative and efficient services. However, capabilities can significantly be improved through training and experience wherein individual attention for these skills is crucial	8
The skills level of professionals develops through their years of experience. Often the competences for younger employees focus on productivity, experiences employees will use this experience to enhance creativity	5

Table 28: Number of quotes that relate to employee skills

Appendix F: Questionnaire

Geachte heer/mevrouw,

Binnen de kennisintensieve dienstverlening komt toegevoegde waarde tot stand tijdens de interactie die plaatsvindt tussen de klant en de klantcontact medewerker. Deze enquête is opgezet om meer inzicht te verkrijgen in de factoren die klantcontact medewerkers ondersteunen in het leveren van maximale toegevoegde waarde aan de klant en zal worden uitgevoerd bij zowel managers als klantcontact medewerkers. In de analysefase zullen deze diverse inzichten met elkaar worden vergeleken.

Resultaten van de enquête zullen gedurende de analyse en de rapportering volledig anoniem blijven en zijn niet herleidbaar tot een persoon of organisatie. Het beantwoorden van de vragen zal ongeveer 10 minuten in beslag nemen.

Alvast hartelijk dank voor uw medewerking!

Mirthe van de Belt

N.B. Met een klantcontact medewerker wordt een medewerker bedoeld die een aanzienlijk gedeelte van zijn/haar tijd in direct contact staat met klanten om te zorgen dat het eindproduct optimaal aansluit bij de wensen van de klant. Het woord medewerker slaat op iedereen die voor de organisatie werkt, dus zowel klantcontact medewerkers als mensen op kantoor en manager.

De volgende 3 vragen gaan in op de algemene gegevens van uw organisatie

1. Wat is de grootte van uw organisatie?

- o   < 50 medewerkers
- o   50-150 medewerkers
- o   >150 medewerkers

2. Onder welke categorie valt uw organisatie?

- o   ICT
- o   Ingenieursbureau/vastgoed

3. Onder welke categorie valt uw functie?

- o   Interne functie (Bijv. HR, management, back office)
- o   Klantcontact medewerker/ uitvoerende werkzaamheden

4. De volgende stellingen gaan in op de waarden die centraal staan in de organisatiecultuur en in hoeverre deze terugkomen in dagelijkse handelingen.

Er wordt een aantal condities genoemd die ondersteuning kunnen bieden in het uitvoeren van werkzaamheden en het leveren van toegevoegde waarde.

Geef a.u.b. voor de volgende stellingen aan in een schaal van 1 tot 5:

In de linkerkolom: In hoeverre is deze conditie volgens u aanwezig in uw organisatie?

In de rechterkolom: Hoe relevant is deze conditie in de ondersteuning van klantcontact medewerkers om toegevoegde waarde te leveren aan de klant?

1	2	3	4	5
Niet aanwezig/relevant	In lage mate aanwezig relevant	Matig Aanwezig/relevant	In hoge mate aanwezig/relevant	In zeer hoge mate aanwezig/relevant

	Huidige situatie	Relevantie klantcontact ondersteuning
…De centrale organisatie waarden leiden tot een collectieve waarneming onder medewerkers over de fundamenten van de organisatie		
…De centrale waarden van de organisatie motiveren mij in de uitvoering van dagelijkse werkzaamheden		
…Klantcontact medewerkers hebben een hoge mate van autonomie in de uitvoering van dagelijkse werkzaamheden		
…Klantcontact medewerkers hebben invloed op formele besluiten die het directe werk aangaan		
…Medewerkers worden gestimuleerd actief te zoeken naar verbetermogelijkheden ten aanzien van eigen werk		
…Medewerkers worden gestimuleerd actief te zoeken naar verbetermogelijkheden op organisatieniveau		
…Tussen verschillende afdelingen wordt nuttige informatie uitgewisseld		
…Verschillende afdelingen ondersteunen elkaar in het oplossen van problemen		
…Er wordt op een constructieve wijze samengewerkt tussen afdelingen		
…Bij de selectie wordt rekening gehouden met de mate waarin mensen passen bij de doelen die de organisatie wil bereiken		
…Bij de selectie van nieuw personeel wordt gekeken naar de mate waarin mensen passen bij de manier waarop er invulling wordt gegeven aan deze doelen		

5. De volgende stellingen gaan in op de formele structuur en procedures van de organisatie. Onder procedures vallen alle vormen van controle op dagelijkse werkzaamheden. Denk hierbij naast handleidingen of voorschriften ook aan (wekelijkse) teamvergaderingen of KPI's (prestatie indicatoren / targets).

Geeft a.u.b. uw mening aan in een schaal van 1 tot 5:
In de linkerkolom: In hoeverre is deze conditie volgens u aanwezig in uw organisatie?
In de rechterkolom: Hoe relevant is deze conditie in de ondersteuning van klantcontact medewerkers om toegevoegde waarde te leveren aan de klant?

1	2	3	4	5
Niet aanwezig/relevant	In lage mate aanwezig relevant	Matig Aanwezig/relevant	In hoge mate aanwezig/relevant	In zeer hoge mate aanwezig/relevant

	Huidige situatie	Relevantie voor klantcontact ondersteuning
… De organisatie structuur geeft helderheid in wie waarvoor verantwoordelijk is in de organisatie		
… Procedures zijn gebaseerd op achterliggende doelstellingen		
… Procedures geven medewerkers inzicht in de totale organisatieactiviteiten		
… Procedures geven medewerkers inzicht in de individuele rol die zij innemen in de organisatie		
… Medewerkers hebben de mogelijkheid waar nodig procedures flexibel toe te passen wanneer de situatie daarom vraagt		
… De aanwezige procedures geven helderheid over de prioriteiten van de organisatie		
… Procedures ondersteunen medewerkers in werkzaamheden; bijvoorbeeld door inzicht te verschaffen in prioriteiten, feedback of verbeterkansen		
… De organisatie-inrichting en aanwezige procedures representeren de waarden waar de organisatie voor staat		
… De organisatie-inrichting en aanwezige procedures stimuleren gedrag dat kan worden gekoppeld aan de organisatiewaarden		
… Procedures maken het mogelijk geleerde lessen op organisatieniveau op te slaan waardoor medewerkers leren om te gaan met afwijkende situaties		

… De aanwezige procedures leiden tot een balans in efficiëntie en flexibiliteit		

6. De volgende vragen gaan over het management van de organisatie.

Geef a.u.b. voor de volgende stellingen aan in een schaal van 1 tot 5:

In de linkerkolom: In hoeverre is deze conditie volgens u aanwezig in uw organisatie?

In de rechterkolom: Hoe relevant is deze conditie in de ondersteuning van klantcontact medewerkers om toegevoegde waarde te leveren aan de klant?

1	2	3	4	5
Niet aanwezig/relevant	In lage mate aanwezig relevant	Matig Aanwezig/relevant	In hoge mate aanwezig/relevant	In zeer hoge mate aanwezig/relevant

Een leidinggevende:	Huidige situatie	Relevantie voor klantcontact ondersteuning
… Heeft een duidelijke visie		
… Communiceert zijn/haar visie helder		
… Acteert als een rolmodel		
… Betrekt werknemers in het maken van beslissingen die van belang zijn voor hun werk		
… Kijkt kritisch naar de huidige manieren van aanpak		
… Stelt vragen over dingen die verbeterd kunnen worden		
… Stimuleert medewerkers problemen vanuit verschillende hoeken te benaderen		
… Spendeert tijd aan individuele coaching en leeractiviteiten		
…Ondersteunt de ontwikkeling van medewerkers door hen uitdagende taken te geven		

… Maakt duidelijk wie verantwoordelijk is voor het bereiken van doelen		
… Maakt duidelijk wat men kan verwachten indien de doelen worden behaald		
…Bereikt een goede balans tussen dynamiek en efficiëntie		

7. De volgende vragen gaan over de aansluiting van organisatie op haar klanten.

Er wordt een aantal condities genoemd die ondersteuning kunnen bieden in het uitvoeren van werkzaamheden en het leveren van toegevoegde waarde.

Geef a.u.b. voor de volgende stellingen aan in een schaal van 1 tot 5:

In de linkerkolom: In hoeverre is deze conditie volgens u van toepassing op uw organisatie?

In de rechterkolom: Hoe relevant is deze conditie in de ondersteuning van klantcontact medewerkers om toegevoegde waarde te leveren aan de klant?

1	2	3	4	5
Niet aanwezig/relevant	In lage mate aanwezig relevant	Matig Aanwezig/relevant	In hoge mate aanwezig/relevant	In zeer hoge mate aanwezig/relevant

	Huidige situatie	Relevantie voor klantcontact ondersteuning
… De organisatiestructuur stelt medewerkers in staat optimale aansluiting te vinden op klanten		
… Klanten worden gezien als de brug tussen de organisatie en haar context		
… Acquisitie van klanten is een zorgvuldig proces waarbij rekening wordt gehouden met de waarde die de organisatie de klant kan bieden		
… De rol die klanten invullen tijdens het interactieproces wordt aangepast op het type klant.		
… Om producten aan te kunnen passen op target segmenten worden klanten betrokken die inzicht kunnen geven in marktontwikkelingen en klantbehoeften		
… Klanten met kennis worden gezien als sparringpartner waarmee gezamenlijk aan een innovatief product/idee gewerkt kan worden		
… Bij klanten zonder inhoudelijke kennis wordt met standaardoplossingen gewerkt waarbij de klantcontact medewerker fungeert als verandermanager in de klantorganisatie		

8. De volgende vragen gaan in op de benodigde vaardigheden van klantcontact medewerkers

Geef a.u.b. voor de volgende stellingen aan in een schaal van 1 tot 5:

In de linkerkolom: In hoeverre zijn deze vaardigheden aanwezig onder klantcontact medewerkers

In de rechterkolom: Hoe relevant is deze conditie in de ondersteuning van klantcontact medewerkers om toegevoegde waarde te leveren aan de klant?

1	2	3	4	5
Niet aanwezig/relevant	In lage mate aanwezig relevant	Matig Aanwezig/relevant	In hoge mate aanwezig/relevant	In zeer hoge mate aanwezig/relevant

	Huidige situatie	Relevantie voor klantcontact ondersteuning
… Technische inhoudelijke expertise		
… Kennis van (project) methodieken en informatie systemen		
… Kennis van de klantsituatie/sector		
… Inzicht in het bredere gebied van diensten die de organisatie kan leveren om zo tot een totaal oplossing te komen		
… Sociale vaardigheden		
… Innovatieve, creatieve vaardigheden		

Enkele afsluitende vragen:

1	2	3	4	5
Geen ondersteuning/zeer ontevreden	Lage mate ondersteunend/ontevreden	neutraal	Hoge mate van ondersteuning/tevreden	Zeer goede ondersteuning/zeer tevreden

	1-5
9. In welke mate ondersteunt de organisatie klantcontact medewerkers in het leveren van toegevoegde waarde aan de klant?	
10. Hoe tevreden bent u binnen deze organisatie?	
11. Hoe tevreden zijn klanten van de organisatie volgens u?	

12. Zijn er condities die ondersteunend werken om de interactie tussen klant en klantcontact medewerkers te optimaliseren die niet in deze vragenlijst zijn opgenomen?

Dit is het einde van de vragenlijst: Heel hartelijk dank voor uw medewerking en voor uw tijd.

Mocht u geïnteresseerd zijn in de eindresultaten dan kunt u contact opnemen via: xmb@tg.nl

Appendix G: Questionnaire responses

Vraag:		Huidige situatie %					Relevantie%					Gem. + St.dev.			
	Keuze	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**	**Huidig**		**Relevantie**	
De centrale organisatie waarden leiden tot een collectieve waarneming onder medewerkers over de fundamenten van de organisatie	Geheel	4	13	26	45	12	0	11	16	48	25	3,48	1	3,86	.91
	ICT	8	20	35	25	12	0	12	20	45	23	3,12	1,13	3,78	.94
	Ing.	0	6	17	65	12	0	10	12	51	27	3,82	.73	3,94	.9
	Kl.	11	26	26	30	7	0	7	22	41	30	2,96	1,16	3,93	.92
	Gr.	1	8	26	51	13	0	13	14	51	23	3,67	.87	3,83	.93
	Intern	4	7	32	53	4	0	11	15	41	33	3,46	.84	3,96	.98
	Kl. C.	4	15	24	42	25	0	11	17	51	21	3,49	1,06	3,82	.9
De centrale waarden van de organisatie motiveren mij in de uitvoering van dagelijkse werkzaamheden	Geheel	7	13	26	40	14	3	8	30	38	21	3,41	1,09	3,66	1
	ICT	10	20	25	35	10	4	6	31	39	20	3,14	1,17	3,65	1,01
	Ing.	4	6	29	44	17	2	10	30	36	22	3,65	.97	3,66	1
	Kl.	11	19	22	30	19	4	7	18	41	30	3,26	1,29	3,85	1,06
	Gr.	5	11	28	43	12	3	8	34	36	18	3,46	1,02	3,58	.98
	Intern	0	11	15	59	15	3	4	30	33	30	3,5	1,17	3,81	1,04
	Kl. C.	0	13	28	44	15	3	10	30	39	18	3,37	.99	3,6	.91
Klantcontact medewerkers hebben een hoge mate van autonomie in de uitvoering van dagelijkse werkzaamheden	Geheel	1	6	14	36	43	2	7	15	44	32	4,14	.94	3,96	.97
	ICT	2	8	12	35	43	2	12	14	39	33	4,08	1,04	3,88	1,07
	Ing.	0	4	15	39	42	2	2	16	50	30	4,19	.84	4,04	.86
	Kl.	0	11	15	30	44	0	15	11	48	26	4,07	1,04	3,85	.99
	Gr.	1	4	14	39	42	3	4	17	43	33	4,16	.91	4	.96
	Intern	0	11	21	39	29	4	7	19	48	22	3,86	.97	3,78	1,01
	Kl. C.	1	4	11	36	48	1	7	13	43	34	4,25	.91	4,03	.95
Klantcontact medewerkers hebben invloed op formele besluiten die het directe werk aangaan	Geheel	1	15	24	46	14	2	3	24	52	19	3,57	.94	3,83	.85
	ICT	2	20	18	47	12	4	6	25	49	16	3,47	1,02	3,67	.97
	Ing.	0	10	29	46	15	0	0	24	54	22	3,67	.86	3,98	.69
	Kl.	0	11	11	59	19	3	0	19	52	26	3,85	.87	3,96	.9
	Gr.	1	16	28	42	12	1	4	26	51	17	3,47	.95	3,78	.83
	Intern	0	14	25	50	11	0	0	26	51	22	3,57	.88	3,96	.7
	Kl. C.	1	15	23	45	15	3	4	23	51	18	3,58	.97	3,78	.89
Medewerkers worden gestimuleerd actief te zoeken naar verbetermogelijkheden ten aanzien van eigen werk	Geheel	2	10	19	40	29	0	5	20	40	36	3,83	1,02	4,06	.87
	ICT	4	8	24	33	31	0	8	22	37	33	3,78	1,1	3,94	.94
	Ing.	0	12	15	46	27	0	2	16	44	38	3,88	.94	4,18	.77
	Kl.	4	11	19	37	30	0	7	26	37	30	3,78	1,12	3,89	.93
	Gr.	1	10	20	41	28	0	4	17	42	38	3,85	.99	3,12	.84
	Intern	0	7	14	61	18	0	4	11	41	44	3,89	.79	4,26	.81
	Kl. C.	3	11	22	32	33	0	6	22	40	32	3,81	1,1	3,99	.88
Tussen verschillende afdelingen wordt nuttige informatie uitgewisseld	Geheel	5	26	40	23	6	1	2	10	39	48	2,99	.96	4,3	.81
	ICT	8	20	39	25	8	8	20	39	24	8	3,04	1,06	4,27	.86
	Ing.	2	31	43	21	4	0	4	6	42	48	2,94	.87	4,34	.77
	Kl.	11	19	41	22	7	3	7	22	33	33	2,96	1,09	3,85	1,1
	Gr.	3	28	41	23	5	0	0	6	42	38	3	.92	4,47	.6
	Intern	4	21	39	32	3	0	4	7	52	37	3,11	,92	4,22	.75

	Keuze	1	2	3	4	5	1	2	3	4	5	Huidig		Relevantie	
	Kl. C.	6	27	41	19	7	1	1	11	35	51	2,95	.98	4,33	.84
Verschillende afdelingen ondersteunen elkaar in het oplossen van problemen	Geheel	4	21	33	33	9	1	2	15	51	31	3,23	1	4	.8
	ICT	8	14	29	43	6	2	2	16	55	25	3,24	1,05	3,98	.83
	Ing.	0	27	37	25	11	0	2	14	46	38	3,21	.98	4,20	.76
	Kl.	7	11	37	41	4	4	7	22	56	11	3,22	.97	3,63	.93
	Gr.	3	24	31	31	11	0	0	13	49	39	3,23	1,03	4,26	.67
	Intern	0	21	36	36	7	0	0	7	67	26	3,29	.9	4,19	.56
	Kl. C.	5	20	31	33	7	1	3	18	44	33	3,21	1,05	4,06	.87
Er wordt op een constructieve wijze samengewerkt tussen afdelingen	Geheel	2	21	39	31	7	1	5	16	39	39	3,2	.92	4,09	.92
	ICT	4	20	39	33	4	2	4	24	39	31	3,12	.93	3,92	.96
	Ing.	0	21	40	29	10	0	6	8	40	46	3,27	.91	4,26	.85
	Kl.	4	30	37	30	0	4	15	29	44	8	2,92	.87	3,37	.97
	Gr.	1	18	41	31	10	0	1	11	38	50	3,3,	.92	4,36	.74
	Intern	0	29	36	32	4	0	11	19	33	37	3,11	.88	3,96	1
	Kl. C.	3	18	41	30	8	1	3	15	42	39	3,23	.94	4,14	.88
Bij de selectie wordt rekening gehouden met de mate waarin mensen passen bij de doelen die de organisatie wil bereiken	Geheel	1	13	19	40	27	0	5	10	52	33	3,79	1,01	4,12	.79
	ICT	2	20	12	39	27	0	6	8	56	29	3,67	1,14	4,08	.79
	Ing.	0	6	25	42	27	0	4	12	48	36	3,9	.87	4,16	.79
	Kl.	4	14	15	33	33	0	7	11	41	41	3,78	1,19	4,15	.9
	Gr.	0	12	20	43	24	0	4	10	56	30	3,8	.95	4,11	.75
	Intern	4	7	18	46	25	0	3	3	62	31	3,82	1,02	4,19	.69
	Kl. C.	0	15	19	38	27	0	6	13	49	33	3,78	1,01	4,1	.83
Bij de selectie van nieuw personeel wordt gekeken naar de mate waarin mensen passen bij de manier waarop er invulling wordt gegeven aan deze doelen	Geheel	0	12	24	47	15	0	5	18	51	26	3,67	.88	3,97	.81
	ICT	0	20	14	49	16	0	6	19	44	31	3,61	1	4	.88
	Ing.	0	4	34	48	14	0	4	18	57	21	3,72	.76	3,94	.74
	Kl.	0	15	12	54	19	0	7	15	39	39	4,77	.95	4,08	.94
	Gr.	0	11	29	46	14	0	4	30	55	21	3,63	.86	3,93	.76
	Intern	0	11	15	59	15	0	4	11	62	23	3,78	.84	4,04	.72
	Kl. C.	0	13	28	44	15	0	6	21	47	27	3,63	.89	3,94	.84

Table 29: Scores on items relating to: Enabling Culture

Vraag:		Huidige situatie %					Relevantie%					Gem. + St.dev.			
	Keuze	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**	**Huidig**		**Relevantie**	
De organisatie structuur geeft helderheid in wie waarvoor verantwoordelijk is in de organisatie	Geheel	5	15	19	37	14	0	11	25	42	22	3,4	1,06	3.75	.93
	ICT	8	25	45	6	0	12	22	41	25	61	3,24	1,07	3,78	.96
	Ing.	2	14	33	30	22	0	10	28	42	20	3,55	1,04	3,72	.9
	Kl.	15	7	26	48	4	0	11	30	40	19	3,19	1,14	3,67	.92
	Gr.	1	18	30	33	18	0	11	24	42	24	3,48	.96	3,78	.84
	Intern	0	25	14	50	11	0	7	21	54	18	3,46	.99	3,82	.82
	Kl. C.	7	11	35	32	15	0	12	27	36	24	3,38	1,09	3,72	.97
Procedures zijn gebaseerd op achterliggende	Geheel	7	20	36	33	4	0	12	31	45	12	3.07	.99	3,57	.86
	ICT	12	16	41	27	4	0	13	33	42	13	2,94	1,05	3,54	.87
	Ing.	2	24	31	39	4	0	12	28	48	28	3,2	.92	3,6	.86
	Kl.	15	18	37	30	0	0	19	31	42	8	2,82	1,04	3,38	.89
	Gr.	4	21	36	34	6	0	19	31	46	14	3,16	.94	3,64	.83

doelstellingen	Intern	0	25	36	39	0	0	15	30	48	7	3,14	.8	3,48	.85
	Kl. C.	10	18	36	31	6	0	11	31	44	14	3.04	1,05	3,61	.87
Achterliggende doelstellingen zijn helder en logisch	Geheel	5	24	40	24	7	0	8	27	47	18	3,04	.99	3,74	.85
	ICT	8	22	42	19	9	0	11	20	46	24	2,98	1,06	3,83	.93
	Ing.	2	26	39	28	6	0	6	34	48	12	3,1	.92	3,66	.77
	Kl.	17	8	50	17	8	0	12	21	50	17	2,92	1,14	3,71	.9
	Gr.	1	29	37	26	7	0	7	29	46	18	3,08	.88	3,75	.78
	Intern	0	32	44	24	0	0	4	28	52	16	2,92	.76	3,8	.76
	Kl. C.	7	21	39	23	10	0	10	27	45	18	3,08	1,06	3,72	.88
Procedures geven medewerkers inzicht in de totale organisatieactiviteiten	Geheel	8	30	43	17	2	4	19	34	36	7	2,75	.9	3,22	.98
	ICT	12	35	37	12	4	4	20	27	39	10	2,61	.99	3,31	1,05
	Ing.	4	26	49	22	0	4	18	42	32	4	2,88	.79	3,14	.9
	Kl.	22	22	41	15	0	7	19	33	30	11	2,48	1,1,	3,19	1,1
	Gr.	2	33	43	18	2	3	19	35	38	6	2,85	.84	3,24	.93
	Intern	3	29	54	14	0	3	18	43	29	7	2,79	.74	3,18	.95
	Kl. C.	10	31	39	18	3	4	20	31	38	7	2,74	.96	3,24	.99
Procedures geven medewerkers inzicht in de individuele rol die zij innemen in de organisatie	Geheel	9	27	39	20	5	3	16	38	39	4	2,85	1	3,26	.88
	ICT	13	25	35	19	8	4	15	36	36	9	2,85	1,13	3,3	.98
	Ing.	6	29	41	22	2	2	16	40	42	0	2,84	.9	3,22	.79
	Kl.	22	15	41	18	4	4	19	30	41	7	2,67	1,1	3,3	.99
	Gr.	4	32	38	21	6	3	14	41	39	3	2,92	.96	3,24	.84
	Intern	4	32	32	32	0	0	14	36	50	0	2,93	.9	3,36	.73
	Kl. C.	4	16	39	25	6	4	16	39	35	6	2,82	1,06	3,22	.94
Medewerkers hebben de mogelijkheid waar nodig procedures flexibel toe te passen wanneer de situatie daarom vraagt	Geheel	6	22	16	37	19	0	14	19	41	26	3,41	1,19	3,79	.99
	ICT	10	22	18	29	20	0	16	20	37	27	3,27	1,3	3,73	1,03
	Ing.	2	22	14	45	18	0	12	18	44	26	3,55	1,08	3,84	.95
	Kl.	7	7	15	41	30	0	19	15	41	26	3,78	1,1	3,74	1,06
	Gr.	6	27	16	36	15	0	13	21	40	26	3,27	1,1	3,81	.97
	Intern	0	14	14	57	14	0	4	14	61	21	3,71	.89	4	.72
	Kl. C.	8	25	17	29	21	0	18	21	32	28	3,29	1,3	3,7	1.07
Medewerkers hebben de mogelijkheid suggesties aan te dragen voor de verbetering van procedures	Geheel	5	10	11	41	33	0	8	21	48	28	3,88	1,13	3,91	.9
	ICT	7	17	13	35	28	0	7	17	44	32	3,61	1,25	4,02	.88
	Ing.	4	2	10	47	37	0	10	24	42	24	4,12	.95	3,8	.93
	Kl.	8	4	13	21	54	0	8	8	50	33	4,08	1,28	4,08	.88
	Gr.	4	11	11	48	26	0	8	25	40	26	4,08	1,28	4,08	.88
	Intern	4	0	12	52	32	0	8	28	40	24	4,08	.9	3,8	.91
	Kl. C.	6	13	11	38	33	0	9	18	44	30	3,81	1,19	3,94	.9
De aanwezige procedures geven helderheid over de prioriteiten van de organisatie	Geheel	6	34	36	19	5	3	12	42	32	10	2,83	.98	3,34	.93
	ICT	10	29	39	14	8	2	16	39	31	12	2,82	1,07	3,35	.97
	Ing.	2	39	33	23	2	4	8	46	34	8	2,84	.88	3,34	.9
	Kl.	15	22	37	15	11	3	15	41	30	11	2,85	1,1	3,3	.99
	Gr.	3	38	36	21	2	3	11	43	33	10	2,82	.88	3,36	.9
	Intern	4	28	43	21	4	4	3	54	25	14	2,93	.9	3,43	.92
	Kl. C.	7	36	33	18	6	3	16	38	35	8	2,79	1	3,31	.94
Procedures	Geheel	9	24	37	24	6	3	10	33	43	11	2,94	1	3,49	.93
	ICT	14	22	31	22	10	6	12	31	39	12	2,92	1,2	3,93	1,05

		1	2	3	4	5	1	2	3	4	5	Huidig		Relevantie	
ondersteunen medewerkers in werkzaamheden; bijvoorbeeld door inzicht te verschaffen in prioriteiten, feedback of verbeterkansen	Ing.	4	26	42	26	2	0	8	35	47	10	2,96	.88	3,59	.78
	Kl.	19	22	22	26	11	4	7	41	41	7	2,89	1,3	3,41	.88
	Gr.	6	25	42	24	4	4	11	30	43	13	2,96	.94	3,52	.95
	Intern	7	25	39	29	0	0	4	36	50	10	2,89	.92	3,68	.72
	Kl. C.	10	24	35	23	9	4	13	31	40	11	2,96	1,1	3,41	1
De organisatie-inrichting en aanwezige procedures representeren de waarden waar de organisatie voor staat	Geheel	8	21	40	26	5	3	8	37	44	8	2,98	1	3,46	.88
	ICT	14	29	33	18	6	6	10	37	35	12	2,73	1,1	3,37	1,03
	Ing.	2	14	47	33	4	0	6	36	53	4	3,22	.82	3,55	.62
	Kl.	7	15	52	22	4	7	30	52	11	0	2,63	1,04	3	.82
	Gr.	1	6	30	52	10	4	19	41	30	6	3,11	.96	3,65	.8
	Intern	7	18	50	21	4	3	4	39	54	0	2,96	.92	3,43	.74
	Kl. C.	8	23	36	27	6	3	10	35	40	12	2,99	.94	3,47	.97
De organisatie-inrichting en aanwezige procedures stimuleren gedrag dat kan worden gekoppeld aan deze organisatie waarden	Geheel	5	22	44	25	4	2	10	39	36	13	3,01	.92	3,49	.91
	ICT	8	25	39	25	4	4	8	31	33	23	2,92	.99	3,63	1,06
	Ing.	2	20	49	26	4	0	10	47	39	4	3,1	.83	3,37	.73
	Kl.	7	30	52	11	0	4	15	41	26	15	2,67	.78	3,33	1,03
	Gr.	4	19	41	30	6	1	7	39	40	13	3,14	.93	3,56	.86
	Intern	4	18	64	11	4	4	8	42	31	15	2,93	.77	3,46	.98
	Kl. C.	6	24	36	31	4	1	10	38	38	13	3,04	.97	3,51	.89
Procedures maken het mogelijk geleerde lessen op organisatieniveau op te slaan waardoor medewerkers leren om te gaan met afwijkende situaties	Geheel	25	29	27	18	2	4	10	29	39	18	2,69	1,08	3,57	.99
	ICT	6	31	33	24	6	2	12	28	44	14	2,45	1,1	3,57	1,04
	Ing.	26	33	19	22	0	0	22	22	44	11	2,92	1,01	3,56	.95
	Kl.	11	29	34	21	6	4	7	31	40	18	2,37	1,1	3,44	.97
	Gr.	4	43	29	25	0	4	11	25	46	14	2,81	1,06	3,61	1
	Intern	19	25	31	19	6	3	11	30	39	17	2,75	.88	3,57	.99
	Kl. C.	25	29	27	18	2	4	10	29	39	18	2,67	1,1	3,56	.99
De aanwezige procedures leiden tot een balans in efficiëntie en flexibiliteit	Geheel	6	28	40	20	6	3	9	30	39	19	2,92	.98	3,62	1
	ICT	12	25	33	18	12	2	10	29	31	27	2,94	1,1	3,71	1,05
	Ing.	0	31	47	22	0	4	8	30	46	12	2,9	.73	3.54	.95
	Kl.	11	19	37	26	7	0	15	41	30	15	3	1,1	3,44	.93
	Gr.	4	32	41	18	6	4	7	25	42	21	2,92	.94	3,62	1,02
	Intern	0	21	54	21	4	0	7	29	39	25	3,07	.77	,3,82	.9
	Kl. C.	8	31	35	19	7	4	10	30	39	17	2,86	1,05	3,54	1,03

Table 30 Scores on items relating to: Enabling Bureaucracy

Vraag:		Huidige situatie %					Relevantie%					Gem. + St.dev.			
	Keuze	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**	**Huidig**		**Relevantie**	
Heeft een duidelijke visie	Geheel	4	10	25	42	19	2	6	8	41	42	3,62	1,03	4,16	.95
	ICT	8	10	31	35	16	2	8	10	38	42	3,41	1,1	4,08	1,03
	Ing.	0	10	20	49	22	2	4	6	45	43	3,82	.88	4,24	.88
	Kl.	7	7	30	33	22	0	11	11	41	37	3,56	1,15	4,04	.98

	Gr.	3	11	23	45	18	2	4	7	42	44	3,64	.99	4,21	.95
	Intern	0	0	25	61	14	0	4	7	53	36	3.89	.63	4,21	.74
	Kl. C.	6	14	25	35	21	3	7	8	37	45	3,51	1,03	4,14	.95
Communiceert zijn/haar visie helder	Geheel	1	20	28	38	13	1	4	13	41	41	3,42	.99	4,17	.88
	ICT	2	20	31	31	16	2	4	16	39	39	3,39	1,06	4,08	.95
	Ing.	0	20	26	44	10	0	4	10	43	43	3,45	.93	4,25	.79
	Kl.	0	15	37	30	19	0	7	22	41	30	3,53	.98	3,92	.92
	Gr.	1	22	25	41	11	1	3	10	41	45	3,38	.99	4,26	.85
	Intern	0	14	36	43	7	0	0	18	43	39	3,43	.84	4,21	.74
	Kl. C.	1	22	25	36	15	1	6	11	40	42	3,42	.99	4,15	.88
Creëert een gemeenschappelijk gevoel aan een belangrijke opdracht/missie te werken	Geheel	4	16	25	40	15	1	4	10	56	29	3,47	1,06	4,07	.8
	ICT	8	17	24	35	15	2	8	9	57	24	3,30	1,19	3,91	.94
	Ing.	0	14	25	45	16	0	0	12	55	33	3,63	.91	4,22	.64
	Kl.	4	8	33	38	17	0	13	4	63	21	3,54	1,02	3,92	.88
	Gr.	4	18	22	41	15	1	1	13	53	32	3,45	1,08	4,12	.75
	Intern	0	20	20	44	16	0	0	16	68	16	3,56	1	4	.58
	Kl. C.	16	14	27	39	15	1	6	8	51	33	3,44	1,06	4,1	.81
Acteert als een rolmodel	Geheel	3	16	32	38	11	3	10	25	43	19	3,37	.99	3,65	.99
	ICT	4	23	31	27	15	6	12	18	35	29	3,25	1,1	3,67	1,19
	Ing.	2	10	33	47	8	0	8	31	51	10	3,49	.86	3,63	.77
	Kl.	0	15	33	33	19	4	11	26	33	26	3,56	.97	3,47	1,05
	Gr.	4	17	32	39	8	3	10	29	41	18	3,31	.98	3,62	.98
	Intern	0	14	32	39	14	0	4	29	50	18	3,54	.92	3,82	.77
	Kl. C.	4	17	32	37	10	4	13	24	40	18	3,37	.99	3,58	.99
Betrekt werknemers in het maken van beslissingen die van belang zijn voor hun werk	Geheel	6	7	21	49	17	3	4	20	47	26	3,63	1,04	3,89	.94
	ICT	10	10	25	35	20	6	4	18	46	25	3,45	1,22	3,8	1,06
	Ing.	2	4	18	62	14	0	4	22	47	28	3,82	.8	3,98	.81
	Kl.	4	11	26	33	26	4	4	22	52	19	3,67	1,1	3,78	.93
	Gr.	7	6	19	54	14	3	4	19	45	29	3,62	1,02	3,93	.95
	Intern	0	7	28	57	7	0	0	39	46	14	3,64	.73	3,75	.7
	Kl. C.	9	7	18	45	21	4	6	13	47	31	3,63	1,04	3,94	.94
Kijkt kritisch naar de huidige manieren van aanpak	Geheel	2	17	27	33	21	1	8	14	57	20	3,55	1,07	3,87	.86
	ICT	4	22	31	31	12	2	12	12	55	18	3,24	1,07	3,76	.97
	Ing.	0	12	22	36	30	0	4	16	59	22	3,84	1	3,98	.74
	Kl.	0	22	30	37	11	0	11	19	52	19	3,37	.97	3,78	.89
	Gr.	3	15	25	32	25	1	7	12	59	21	3,63	1,1	4,07	.85
	Intern	0	7	32	36	25	0	4	25	50	21	3,79	.91	3,89	.79
	Kl. C.	3	21	24	32	20	1	10	10	60	19	3,45	1,07	3,86	.86
Stelt vragen over dingen die verbeterd kunnen worden	Geheel	2	10	25	47	17	1	2	13	57	27	3,66	.94	4,06	.75
	ICT	4	10	27	39	20	2	4	17	52	25	3,61	1,05	3,74	.88
	Ing.	0	10	24	52	13	0	0	10	62	28	3,71	.83	4,18	.6
	Kl.	0	15	22	37	26	0	4	11	63	22	3,74	1,02	4,04	.7
	Gr.	3	8	26	49	14	1	1	14	55	28	3,61	.92	3,9	.78
	Intern	0	7	18	57	18	0	0	11	68	21	3,86	.8	4,11	.57
	Kl. C.	3	11	28	42	17	1	3	14	53	29	3,58	.94	4,04	.76

Stimuleert medewerkers problemen vanuit verschillende hoeken te benaderen	Geheel	4	18	27	33	18	1	6	26	48	19	3,43	1,1	3,78	.86
	ICT	8	14	29	31	18	2	8	23	44	23	3,37	1,1	3,77	.97
	Ing.	0	22	25	35	18	0	4	29	51	16	3,49	1,03	3,78	.76
	Kl.	4	11	19	44	22	0	4	22	48	26	3,7	1,06	3,96	.8
	Gr.	4	21	30	29	16	1	7	28	47	17	3,33	1,1	3,71	.88
	Intern	0	11	32	32	25	0	0	32	54	14	3,71	.98	3,82	.67
	Kl. C.	6	21	25	33	15	1	9	24	45	21	3,32	1,1	3,76	.87
Spendeert tijd aan individuele coaching en leeractiviteiten	Geheel	15	14	26	25	20	3	6	23	44	24	3,21	1,32	3,79	.98
	ICT	25	18	20	16	20	4	8	27	42	19	2,9	1,47	3,62	1,02
	Ing.	6	10	31	33	20	2	4	20	46	28	3,51	1,1	3,94	.91
	Kl.	11	26	26	19	19	0	4	41	33	22	3,07	1,3	3,74	.86
	Gr.	16	10	26	27	21	4	7	17	48	24	3,28	1,3	3,8	1
	Intern	0	21	25	32	21	4	11	21	46	18	3,54	1,07	3,64	1,02
	Kl. C.	21	11	26	22	19	3	4	24	43	26	3,08	1,4	3,84	.96
Ondersteunt de ontwikkeling van medewerkers door hen uitdagende taken te geven	Geheel	5	20	19	38	18	1	3	18	44	34	3,44	1,14	4,07	.86
	ICT	8	31	4	37	20	2	4	18	41	35	3,31	1,03	4,02	.95
	Ing.	2	10	33	39	16	0	2	18	47	33	3,57	.94	4,112	.77
	Kl.	0	30	15	33	22	0	4	22	52	22	3,48	1,15	3,98	.78
	Gr.	7	16	21	40	16	1	3	16	41	38	3,42	1,15	4,12	.88
	Intern	0	11	18	43	29	0	0	11	50	39	3,89	.96	4,29	.66
	Kl. C.	7	24	19	36	14	1	4	21	42	32	3,26	1,1	3,99	.91
Maakt duidelijk wie verantwoordelijk is voor het bereiken van doelen	Geheel	2	13	25	47	13	1	5	24	44	26	3,56	.95	3,89	.89
	ICT	2	12	19	50	17	2	4	21	38	35	3,67	.98	4	.97
	Ing.	2	14	31	43	10	0	6	28	49	18	3,45	.92	3,78	.8
	Kl.	0	15	12	62	11	0	4	22	41	33	3,69	.88	4,04	.85
	Gr.	3	12	30	41	14	1	6	25	44	24	3,51	.97	3,83	.9
	Intern	0	25	11	46	18	0	4	14	43	39	3,57	1,07	4,18	.82
	Kl. C.	3	8	31	41	11	1	6	28	44	21	3,55	.9	3,77	.9
Maakt duidelijk wat men kan verwachten indien de doelen worden behaald	Geheel	4	25	27	33	11	2	5	31	38	24	3,22	1,6	3,77	.94
	ICT	4	27	24	31	14	4	6	27	35	29	3,24	1,1	3,78	1,07
	Ing.	4	24	29	35	8	0	4	35	41	20	3,2	1	3,76	.81
	Kl.	4	26	33	22	15	0	7	41	30	22	3,19	1,11	3,67	.92
	Gr.	4	25	25	36	10	3	4	27	41	25	3,23	1,06	3,81	.95
	Intern	3	18	36	32	11	0	0	47	25	29	3,29	1,01	3,82	.86
	Kl. C.	4	28	24	33	11	3	7	25	43	22	3,19	1	3,75	.98
Bereikt een goede balans tussen standaardisatie en dynamiek	Geheel	4	18	41	30	7	3	5	31	48	13	3,18	.95	3,63	.88
	ICT	8	18	39	22	12	6	6	27	41	20	3,12	1,1	3,62	1,07
	Ing.	0	18	42	38	2	0	4	36	54	6	3,24	.77	3,62	.67
	Kl.	0	15	48	26	11	3	3	41	37	15	3,33	.87	3,56	.93
	Gr.	6	19	37	32	5	3	5	28	51	13	3,12	.97	3,65	.87
	Intern	0	14	46	25	14	0	4	32	43	21	3,39	.92	3,82	.82
	Kl. C.	6	20	38	32	4	4	6	31	49	10	3,1	.96	3,55	,9

Table 31: Scores on items relating to: Enabling Leadership

Vraag:	Keuze	Huidige situatie %					Relevantie%					Gem. + St.dev. Huidig		Relevantie	
		1	2	3	4	5	1	2	3	4	5				
De organisatiestructuur stelt medewerkers in staat optimale aansluiting te vinden op klanten	Geheel	4	13	28	40	15	4	7	13	47	29	3,49	1,03	3,9	1,03
	ICT	8	20	29	29	14	8	10	8	45	29	3,2	1,17	3,76	1,21
	Ing.	0	6	28	51	16	0	4	18	48	30	3,76	.79	4,04	.8
	Kl.	14	7	26	37	15	11	7	11	44	26	3,3	1,26	3,67	1,27
	Gr.	0	15	29	41	15	1	7	14	47	31	3,56	.93	3,99	.93
	Intern	0	7	32	54	7	0	0	11	46	42	3,61	.74	4,32	.67
	Kl. C.	6	15	26	35	18	6	10	14	47	24	3,44	1,12	3,73	1,1
Acquisitie van klanten is een zorgvuldig proces waarbij rekening wordt gehouden met de waarde die de organisatie de klant kan bieden	Geheel	5	18	25	45	7	0	4	15	47	34	3,3	1,01	4,1	.8
	ICT	6	19	23	44	8	0	6	17	47	30	3,29	1,07	4	.86
	Ing.	4	17	28	45	6	0	2	14	47	37	3,31	.97	4,2	.75
	Kl.	4	22	22	37	15	0	7	11	44	37	3,37	1,1	4,11	.89
	Gr.	6	17	26	47	4	0	3	17	48	32	3,28	.98	4,1	.77
	Intern	7	29	21	36	7	0	3	18	43	35	3,07	1,1	4,11	.83
	Kl. C.	4	14	27	48	7	0	4	14	49	33	3,39	.96	4,1	.8
Klanten worden gezien als de brug tussen de organisatie en haar context	Geheel	10	18	44	21	7	8	11	28	38	15	2,97	1	3,41	1,12
	ICT	16	14	41	27	2	12	12	29	33	14	2,84	1,06	3,24	1,21
	Ing.	4	21	47	15	12	4	10	27	43	15	3,1	1	3,57	1
	Kl.	18	15	41	19	7	15	11	37	19	19	2,81	1,1	3,15	1,2
	Gr.	7	19	45	22	7	5	11	25	45	13	3,03	.98	3,51	1
	Intern	11	18	46	18	7	4	7	29	46	14	2,93	1,05	3,61	.96
	Kl. C.	10	18	43	22	7	10	12	28	35	15	2,99	1,05	3,33	1,18
De rol die klanten invullen tijdens het interactieproces wordt aangepast op het type klant.	Geheel	5	11	25	39	20	4	4	15	49	28	3,38	1,08	3,93	.98
	ICT	8	4	27	46	17	6	4	17	46	27	3,57	1,08	3,83	1,07
	Ing.	2	18	23	33	24	2	4	14	51	29	3,59	1,09	4,02	.88
	Kl.	11	4	26	33	26	8	8	8	50	27	3,59	1,2	3,81	1,1
	Gr.	2	13	25	41	18	2	2	18	48	29	3,58	1,02	3,97	.91
	Intern	4	11	14	50	21	0	4	7	53	36	3,75	1,04	4,21	.74
	Kl. C.	6	11	29	34	19	6	4	18	47	25	3,51	1,1	3,82	1,04
Om producten aan te kunnen passen op target segmenten worden klanten betrokken die inzicht geven in marktontwikkelingen en klantbehoeften	Geheel	5	25	27	30	13	2	5	18	47	28	3,21	1,11	3,94	.93
	ICT	4	16	22	39	18	4	6	13	36	40	3,51	1,1	4,02	1,09
	Ing.	6	33	33	20	8	0	4	22	57	16	2,92	1,05	3,86	.74
	Kl.	0	22	26	26	26	4	11	11	41	33	3,56	1,16	3,89	1,12
	Gr.	7	26	28	31	8	1	3	20	49	26	3,08	1,01	3,96	.84
	Intern	4	25	32	29	11	0	4	25	39	32	3,18	1,05	4	.86
	Kl. C.	6	24	26	30	14	3	6	15	50	27	3,23	1,14	3,91	.96
Klanten met kennis worden gezien als sparringpartner waarmee gezamenlijk aan een innovatief	Geheel	4	11	21	40	24	1	4	12	41	42	3,69	1,08	4,18	.87
	ICT	4	4	24	39	29	2	8	17	35	37	3,84	1,02	3,98	1,04
	Ing.	4	18	18	41	20	0	0	8	47	45	3,55	1,1	4,37	.063
	Kl.	7	7	22	33	30	4	11	18	37	30	3,7	1,12	3,78	1,2
	Gr.	3	12	21	43	22	0	1	10	43	46	3,86	1,03	4,33	.71
	Intern	7	14	11	50	18	0	4	14	32	50	3,57	1,17	4,29	.85

	Keuze	1	2	3	4	5	1	2	3	4	5	Huidig		Relevantie	
product/idee kan worden gewerkt	Kl. C.	3	10	25	36	26	1	4	11	45	38	3,74	1,04	4,14	.88
Bij klanten zonder inhoudelijke kennis wordt met standaardoplossingen gewerkt	Geheel	10	23	33	27	7	10	11	40	26	13	2,98	1,09	3,21	1,1
	ICT	12	16	27	35	10	12	12	24	29	22	3,14	1,1	3,37	1,3
	Ing.	8	30	38	20	4	8	10	54	24	4	2,82	.98	3,06	.91
	Kl.	19	11	26	33	11	15	15	22	30	18	3,07	1,29	3,22	1,34
	Gr.	7	28	34	25	6	8	10	46	25	11	2,94	1,01	3,21	1.04
	Intern	4	36	36	14	11	4	11	50	21	14	2,93	1,05	3,32	.98
	Kl. C.	13	18	31	32	6	13	11	35	28	13	3	1,12	3,17	1,18

Table 32: Scores on items relating to: Market orientation

Vraag:		Huidige situatie %					Relevantie%					Gem. + St.dev.			
	Keuze	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**	**Huidig**		**Relevantie**	
Technische inhoudelijke expertise	Geheel	0	2	12	35	51	1	3	10	45	41	4,34	.77	4,22	.82
	ICT	0	2	15	27	56	2	2	8	49	39	4,38	.82	4,2	.84
	Ing.	0	2	10	43	445	0	4	12	41	43	4,31	.73	4,24	.82
	Kl.	0	0	15	22	63	4	0	7	52	37	4,48	.75	4,19	.88
	Gr.	0	3	11	40	46	0	4	11	43	43	4,29	.77	4,23	.8
	Intern	0	4	7	46	43	0	4	7	46	43	4,46	.64	4,29	.76
	Kl. C.	0	3	14	34	49	1	3	11	44	40	4,3	.82	4,19	.85
Kennis van (project) methodieken en informatie systemen	Geheel	0	3	19	46	32	1	1	12	55	31	4,07	.08	4,14	.74
	ICT	0	6	16	33	45	2	0	8	54	35	4,16	.92	4,21	.77
	Ing.	0	0	22	59	20	0	2	16	55	28	3,98	.65	4,08	.71
	Kl.	0	4	15	30	52	4	0	15	48	33	4,3	.87	4,07	.92
	Gr.	0	3	21	52	25	0	1	11	57	31	3,99	.75	4,17	.67
	Intern	0	4	25	54	18	0	0	18	57	25	3,86	.75	4,07	.66
	Kl. C.	1	3	11	44	40	0	3	17	43	38	4,15	.8	4,17	.77
Kennis van de klantsituatie/sector	Geheel	0	8	22	42	28	1	2	3	39	55	3,9	.9	4.45	.74
	ICT	0	10	18	33	39	2	4	6	39	49	4	1	4,29	.91
	Ing.	0	6	25	51	18	0	0	0	39	61	3,8	.8	4,61	.49
	Kl.	0	7	19	44	30	4	4	7	48	37	3,96	.89	4,11	.97
	Gr.	0	8	23	41	27	0	1	1	35	62	3,88	.91	4,58	.6
	Intern	0	11	32	32	25	0	0	3	36	61	3,71	.98	4,57	.57
	Kl. C.	0	7	18	46	29	1	3	3	40	53	3,97	.87	4,4	.8
Inzicht in het bredere gebied van diensten die de organisatie kan leveren om zo tot een totaal oplossing te komen	Geheel	0	14	18	42	16	1	2	5	47	45	3,6	.92	4,33	.75
	ICT	0	8	31	39	22	2	2	6	49	41	3,76	.9	4,24	.83
	Ing.	0	20	25	45	10	0	2	4	45	49	3,35	.93	4,41	.67
	Kl.	0	11	30	44	15	4	7	7	52	30	3,63	.88	3,96	1,01
	Gr.	0	15	27	41	16	0	0	4	45	51	3,59	.94	4,47	.58
	Intern	0	18	25	46	11	0	4	4	43	50	3,5	.92	4,39	.74
	Kl. C.	0	13	29	40	18	1	1	6	48	43	3,64	.92	4,31	.76
Sociale vaardigheden	Geheel	0	8	26	42	24	1	2	4	34	59	3.82	.89	4,48	.76
	ICT	0	8	25	30	37	2	2	6	29	61	3,96	.98	4,45	.87
	Ing.	0	7	27	53	12	0	2	2	39	57	3,69	.64	4,51	.86
	Kl.	0	7	22	37	33	4	4	7	37	48	3,96	.94	4,22	1,01
	Gr.	0	8	27	44	21	0	1	3	33	63	3,77	.87	4,58	.62

												Mean	SD	Mean	SD
	Intern	0	11	43	28	18	0	4	0	32	64	3,54	.92	4,47	.69
	Kl. C.	0	8	26	42	24	1	1	6	35	57	3,93	.86	4,44	.78
Innovatieve, creatieve vaardigheden	Geheel	0	7	32	43	17	1	4	10	43	42	3,71	.84	4,21	.86
	ICT	0	2	29	47	22	2	4	10	39	45	3,9	.77	4,2	.94
	Ing.	0	12	36	40	12	0	4	10	47	39	3,52	.86	4,22	.78
	Kl.	0	0	30	52	19	4	7	11	41	37	3,89	.7	4	1,07
	Gr.	0	10	33	40	17	0	3	9	44	44	3,64	.87	4,29	.75
	Intern	0	11	29	46	14	0	4	7	54	36	3,64	.87	4,24	.74
	Kl. C.	0	6	34	42	18	1	4	10	43	42	3,73	.83	4,21	.9

Table 33: Scores on items relating to: Service consultant's skills

Appendix H: Scores and Gaps of enabling conditions per Group:

Group		Current	Relevance	Gap
Overall	Skills	3,73	4,3	0,39
	Culture	3,53	4	0,47
	Leadership	3,42	3,92	0,50
	Customer fit	3,36	3,88	0,52
	Structure	3,02	3,56	0,54
ICT	Skills	4,04	4,26	0,22
	Culture	3,42	3,92	0,50
	Leadership	3,32	3,84	0,52
	Customer fit	3,43	3,83	0,40
	Structure	2,89	3,61	0,72
Engineering	Skills	3,79	4,34	0,55
	Culture	3,60	4,07	0,47
	Leadership	3,55	3,99	0,45
	Customer fit	3,30	3,92	0,62
	Structure	3,13	3,51	0,38
SME	Skills	4,04	4,09	0,05
	Culture	3,45	3,86	0,41
	Leadership	3,65	3,86	0,21
	Customer fit	3,34	3,69	0,35
	Structure	2,92	3,48	0,56
Large	Skills	3,86	4,38	0,52
	Culture	3,55	4,05	0,5
	Leadership	3,35	3,94	0,59
	Customer fit	3,27	3,86	0,59
	Structure	3,10	3,61	0,51

Internal management	Skills	3,79	4,35	0,56
	Culture	3,55	4,05	0,5
	Leadership	3,65	3,98	0,33
	Customer fit	3,29	3,98	0,69
	Structure	3.11	3,66	0,55
Service Consultants	Skills	3,96	4,28	0,32
	Culture	3,52	3,98	0,46
	Leadership	3,34	3,89	0,54
	Customer fit	3,32	3,74	0,42
	Structure	3,03	3,54	0,51
S. ICT. IM	Skills	3,87	4,19	0,34
	Culture	3,27	4,04	0,67
	Leadership	3,10	4,00	0,9
	Customer fit	3,30	3,95	0,65
	Structure	3,77	3,87	0,1
S. ICT. SC	Skills	4,09	3,88	-0,21
	Culture	3,30	3,76	0,46
	Leadership	3,33	3,70	0,37
	Customer fit	3,20	3,46	0,26
	Structure	2,81	3,39	0,6
S. Eng. SC	Skills	4,18	4,6	0,42
	Culture	3,86	4,06	0,2
	Leadership	4,33	3,96	-0,37
	Customer fit	3,90	3,96	0,06
	Structure	2,81	3,19	0,38
L. ICT. IM	Skills	3,70	4,60	0,9
	Culture	3,77	4,23	0,46
	Leadership	3,60	4,17	0,57
	Customer fit	3,50	4,10	0,6
	Structure	2,80	4,00	1,2

L. ICT. SC	Skills	3,56	3,99	0,43
	Culture	3,18	3,80	0,68
	Leadership	3,40	3,76	0,36
	Customer fit	3,03	3,66	0,63
	Structure	2,79	3,46	0,67
L. Eng. IM	Skills	3,87	4,39	0,52
	Culture	3,62	4,05	0,43
	Leadership	3,12	3,93	0,81
	Customer fit	3,20	3,92	0,72
	Structure	3,12	3,50	0,38
L. Eng. SC	Skills	3,73	4,29	0,56
	Culture	3,57	4,09	0,52
	Leadership	3,20	3,81	0,61
	Customer fit	3,20	3,57	0,37
	Structure	3,20	3,57	0,37

Table 34: Scores on conditions per group

Appendix I: Significant differences between sector per function

S= Small organisation/ L= Large organisation

ICT= ICT organisation/ENG= Engineering organisation

IM= Internal manager/SC= Service Consultant

	ICT	Eng	IM	SC
Current situation				
Values as organisational glue	3,13	3,76		x
Structure around customer	3,20	3,74		x
Involve different customers	3,53	2,92		x
Social skills	3,96	3,69		x
Innovative skills	3,90	3,52		x
Individualised consideration	3,07	3,52		x
Relevance				
Involve different customers	4,02	3,86	x	
Customers as partners	3,98	4,37		x
Knowledge about customer	4,29	4,61		x

Table 35: Significant gaps between the ICT and Engineering sector

Appendix J: Significant Gaps on items per Group (α =0,05):

S= Small organisation/ L= Large organisation

ICT= ICT organisation/ENG= Engineering organisation

IM= Internal manager/SC= Service Consultant

Group:	Cultural Conditions	Mean P.	Mean R.	Gap:
S. ICT IM	Departments exchange useful information	3,25	4,12	0,87
S. ICT SC	Departments exchange useful information	2,86	3,96	1,1
S. ICT IM	Employee selection takes into account whether people fit into the manner goals are achieved	3,62	4,50	0,88
L. ICT SC	Organisational values motivate during daily activities	3,22	3,57	0,35
L. ICT SC	Exchange of useful information between departments is stimulated	3	4,52	1,52
L. ICT SC	Departments support each other in solving problems	3,13	4,26	1,13
L. ICT SC	Departments cooperate constructively	3,26	4,30	1,14
L.ICT SC	People are recruited who fit the organisation	3,78	4,22	0,64
L. Eng. SC	Employees influence decisions regarding daily works	3,62	4,0	0,38
L. Eng. SC	Exchange of useful information between departments	2,94	4,48	1,54
L. Eng. IM	Exchange of useful information between departments	3,00	4,43	1,43
L. Eng. IM	Departments support in other in solving problems	3,34	4,24	0,9
L. Eng. SC	Departments support in other in solving problems	3,00	4,43	1,43
L. Eng. IM	Constructive cooperation between departments	3,31	4,45	1,14
L. Eng. SC	Constructive cooperation between departments	3,33	4,29	0,96
L. Eng. IM	Employee selection takes into account whether people fit into the manner goals are achieved	3,53	3,93	0,4

Table 36: Gaps between the current situation and relevance of items relating to enabling cultures

Group:	Conditions Enabling Bureaucracy	Mean P.	Mean R.	Gap:
S. ICT SC	Procedures provide employees insights in organisations acivities	2,75	3,38	0,63
S. ICT SC	Procedures stimulate employees to act on organizational values	2,87	3,38	0,51
S. ICT SC	Procedures make capture organizational best practices	2,88	3,88	1
S. ICT IM	Procedures make capture organizational best practices	2,14	3,43	1,29
L. ICT SC	The organizational structure makes responsibilities throughout the organisation clear	3,39	3,91	0,52
L. ICT SC	Procedures are based on underlying goals and values	3,09	3,74	0,65
L. ICT SC	Underlying goals of procedures are clear and logical	3,17	3,78	0,61
L.ICT SC	The organizational structure makes activities throughout the organisation clear	2,83	3,43	0,6
L.ICT SC	Employees have the possibility to apply procedures flexible	2,78	3,7	0,92
L.ICT SC	Employees have the possibility to make improvement suggestions for procedures	3,13	3,91	0,78
L.ICT SC	Procedures represent organizational values	2,81	3,7	0,89
L.ICT SC	Procedures make capture organizational best practices	2,52	3,52	1
L.ICT SC	Procedures help in achieving a balance between flexibility and standardisation	3,04	3,83	0,79
L. Eng. SC	Procedures are based on underlying goals and values	3,29	3,73	0,44
L. Eng. SC	Underlying goals of procedures are clear and logical	3,13	3,80	0,67
L. Eng. SC	Procedures clarify organizational values	2,87	3,40	0,53
L. Eng. SC	Procedures provide support to employees in daily activities	3,17	3,59	0,42
L. Eng. IM	Procedures provide support to employees in daily	2,67	3,73	1,06

	activities			
L. Eng. SC	Procedures represent organizational values	3,28	3,63	0,41
L. Eng. IM	Procedures make capture organisational best practices	2,87	3,47	0,6

Table 37: Gaps between the current situation and relevance of items relating to enabling bureaucracy

Group:	Conditions Enabling Leadership	Mean P.	Mean R.	Gap:
L. ICT SC	Has a clear vision	3,39	4,18	0,79
L. ICT SC	Is able to communicate this vision well	3,35	4,22	0,87
L ICT SC	Creates a common feeling to work on an important mission	3,22	3,96	0,74
L. ICT SC	Acts as a role model	3,52	2,91	-0,39
L. ICT SC	Stimulates employees to approach problems from different angles	2,91	3,55	0,64
L. ICT SC	Spends time on individual coaching	2,57	3,59	1,02
L. ICT SC	Support employee development by delegating challenging tasks	2,87	3,91	1,04
L.ICT SC	Makes clear what to expect when goals are achieved	3,30	3,81	0,51
L.ICT SC	Creates a balance between standardization and flexibility	2,91	3,65	0,73
L.Eng SC	Has a clear vision	3,61	4,16	0,55
L.Eng SC	Is able to communicate this vision well	3,35	4,19	0,84
L.Eng SC	Creates a common feeling to work on an important mission	3,65	4,29	0,64
L.Eng SC	Asks question on things that can be improved	3,71	4,27	0,55
L.Eng SC	Spends time on individual coaching	3,58	4,03	0,45
L. Eng. SC	Support employee development by delegating challenging tasks	3,52	4,10	0,58
L. Eng. SC	Makes clear what to expect when goals are achieved	3,16	3,74	0,58
L. Eng. SC	Creates a balance between standardization and flexibility	3,13	3,57	0,44
L. Eng. IM	Makes clear what to expect when goals are achieved	3,13	3,87	0,74

L. Eng. IM	Makes responsibilities clear	3,20	3,87	0,67
L. Eng IM	Is able to communicate this vision well	3,4	4,33	0,93
L.Eng IM	Creates a common feeling to work on an important mission	3,4	4	0,6

Table 38: Gaps between the current situation and relevance of items relating to enabling leadership

Group:	Conditions Market Orientation	Mean P.	Mean R.	Gap:
S. ICT SC	Customer acquisition is a careful process	3,21	3,86	0,65
S. ICT IM	Customer acquisition is a careful process	3,12	4,13	1,01
L ICT SC	Customer acquisition is a careful process	3,41	4	0,59
L. ICT SC	Customers are involved in the design process as a source of information	3,39	3,95	0,56
L. Eng SC	Customer acquisition is a careful process	3,35	4,19	0,84
L. Eng IM	Customer acquisition is a careful process	2,93	4	1,07
L. Eng SC	Knowledgeable customers are involved as a partner	3,45	4,39	0,94
L. Eng IM	Knowledgeable customers are involved as a partner	3,6	4,47	0,87

Table 39: Gaps between the current situation and relevance of items relating to market orientation

Group:	Condition Skills	Mean P.	Mean R.	Gap:
L. ICT SC	Insights in the broader field of services	3,87	4,48	0,61
L. ICT SC	Social skills	4,13	4,70	0,57
L. ICT SC	Innovative skills	3,96	4,48	0,52
L. Eng. SC	Knowledge about the customer situation	3,77	4,61	0,84
L. Eng IM	Knowledge about the customer situation	3,73	4,6	0,87
L. Eng IM	Insights in the broader field of services	3,42	4,39	0,97
L. Eng SC	Insights in the broader field of services	3,47	4,67	1,2

L.Eng IM	Social skills	3,68	4,52	0,84
L.Eng sc	Social skills	3,60	4,47	0,87
L.Eng IM	Innovative skills	3,47	4,1	0,63
L.Eng SC	Innovative skills	3,53	4,27	0,74

Table 40: Gaps between the current situation and relevance of items relating to skills

Appendix K: Partial Correlation Matrices

	Culture	Leadership	Bureaucracy	Market orientation	Skills
Culture	1				
Leadership	,46**	1			
Bureaucracy	,32**	,15	1		
Market orientation	,17	-,01	,31**	1	
Skills	,08	,00	,05	,32**	1

Table 41: Overall partial correlations

	Culture	Leadership	Bureaucracy	Market orientation	Skills
Culture	1				
Leadership	,36*	1			
Bureaucracy	,43**	,30	1		
Market orientation	,14	-,09	,37*	1	
Skills	,05	-,04	,07	,16	1

Table 42: Partial correlations ICT sector

	Culture	Leadership	Bureaucracy	Market orientation	Skills
Culture	1				
Leadership	,43**	1			
Bureaucracy	,05	-,01	1		
Market orientation	,12	,04	,19	1	
Skills	,31*	-,08	,25	,41**	1

Table 43: Partial correlations engineering sector