Designing an Human Resource Shared Service Center

Research into the suitability of Human Resource activities for an Shared Service Center.

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Title

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I wish the reader of this thesis an interesting experience. I hope that it will reflect my dedication to present an appealing informative report.

Enschede, June 2011

Hinse Hemels
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Abstract

With this research, the suitability of HR activities for Human Resource shared service centers is examined. For this suitability the moderating impact of differentiation in needs of users on the relationship between location of HR provision and HR service performance is studied. After conducting regression analyses the results showed that differentiation in needs has a moderating impact. HR activities with a low differentiation in need showed to be suitable for HR shared service centers. Were other studies discuss the suitability of HR activities for HR service centers based on type of activity, like transactional or transformational. This study provides evidence that the suitability of HR activities for HR shared service center is contingent on the differentiation in needs of users. These findings have important theoretical and managerial implication in the field of designing HR shared service centers.
1. Introduction
In this introductory chapter a brief summary of the case company Stork is given in 1.1. In chapter 1.2 the background of this study will be presented. In chapter 1.3 the problem definition and research questions are given and in chapter 1.4 the relevance of the study. Finally in chapter 1.5 a short summary of the structure of the study will be presented.

1.1 The Human Resource shared service center of Stork
The company Stork consists out of 2000 employees divided over 22 divisions. Stork’s Human Resource (HR) shared service center is located in Utrecht and provides major HR administrative services for several Stork divisions. The HR shared service center of Stork already exists for two years, at the start the HR shared service center only supplied payroll services. In the year 2009 the HR shared service center took over all administrative services from the HR department of selected divisions. The HR shared service center showed large efficiency gains and therefore Stork started to provide this service provision to more Stork divisions.

In 2010 the management of Stork would like to expand the service provision of the HR shared service center, because the already established HR shared service center shows large efficiency gains for provided services. Also uniformity in processes is an important factor. With adding more HR services to the HR shared service center they would like to enlarge the service quality and reduce costs for these services. The management would like the HR shared service center to take over more activities from the HR managers of the different divisions. The HR management of Stork already collected information about which activities the HR managers of divisions would like to have provided by the HR shared service center, but there is no insight in which HR activities are suitable to provide from an HR shared service center. Stork is in need of a method to determine which activities should be suitable to be provided by the HR shared service center.

1.2 HR shared service centers
In the late 1990s the concept Human Resource (HR) shared service centers emerged as a response to growing competition and general cost pressures (Ulrich et al., 2008). HR-managers started to explore new forms of delivering Human Resource Management, like HR shared service centers. In an HR shared service center, selected HR activities are bundled or concentrated in a semi-autonomous business unit (Ulrich, 1995). With sharing HR activities, the basic idea for the HR shared service center is that HR activities provided by one local department can be provided to others with relatively few efforts (Janssen & Joha, 2006). The shared services concept is claimed to be a form of
organizing that combines the benefits of centralization and decentralization structures and even reduces the disadvantages of both (Quinn et al., 2000). The centralized structures are characterized by economies of scale and scope, because of the standardization of activities that can be performed more efficient at one place. Benefits of decentralized structures are flexible and effective alignment with the needs of users and provide the users a degree of ownership over the service delivery (Janssen & Joha, 2006). This combination results in higher efficiency levels and the improvement of service levels. The users of an HR shared service center are all employees in an organization that receive HR services from the HR department. According to Janssen & Wagenaar (2003) the popularity of shared service centers originates from several advantages including increased efficiency and higher service levels, without a decrease in the control of organizational arrangements and expertise. Benefits that are often referred to include cost reduction, improving service quality, process simplification, knowledge transfer and sharing best practice (Redman et al., 2007). Providing HR services from a HR shared service center should result in a higher service performance than when provided from the traditional HR department at the business unit. For this research, service performance is defined as how users value the quality of the HR services related to the overall cost of providing the service (Cronin et al., 2000).

Recent research shows that not all expected benefits of HR shared service centers are realized. The economies of scale that should result in lower costs and improved service quality are some of the not always accomplished benefits (Janssen & Joha, 2006). Not all predicted benefits of HR shared services are accomplished, because they rely on the combined benefits of both centralized and decentralized models, and these benefits are often conflicting (Janssen & Joha, 2006). Offering the economies of scale goes at the expense of customer service and responsiveness (Bergeron, 2003). Companies are used to base the suitability of HR activities for HR shared service centers by focusing on the type of HR activity like transactional and transformational. Benefits of HR shared service centers are not always realized, because not all HR activities are suitable to supply from an HR shared service center. According to Farndale et al. (2009) the HR activities should be aligned with suitable delivery channels and should be placed on a continuum from standardized to highly personalized. According to the research of Lepak et al. (2005) the suitability of HR activities for HR shared service centers is contingent on several factors in a firm like operational issues as the frequency and uniqueness of activities. The uniqueness of activities depends on the diversity in needs that users have for the provision of HR activities. The higher the differentiation in needs, the more unique the provision of an HR activity has to be.
In existing literature no empirical research was found that studies the suitability of HR activities for HR shared service centers. Providing empirical evidence for the suitability of HR activities for HR shared service centers will make it possible for HR managers to determine the suitable location to supply an HR activity from. This could have a positive influence on the overall HR service performance.

The purpose of this study is to research the relation between differentiation in needs of users and the suitability of activities for HR shared service centers. To gain insight in this differentiation in needs the theory of modularity can be used. According to the principles of modularity, standardization of HR activities for an HR shared service center is possible when users have a large degree of same preferences for an HR activity, so low differentiations in need (Voss & Hsuan, 2009). These same preferences is called commonality and refers to the use of the same components across several services (Voss & Hsuan, 2009). For HR activities this commonality refers to users having the same needs. With identifying the commonality in needs of users, it will be possible to determine suitable delivery channels for HR activities. This suitability will be measured by the service performance. With these principles empirical evidence can be provided for the suitability of HR activities for HR shared service centers based on the needs of users.

1.3 Problem definition
The management of Stork would like the HR shared service center to take over more HR activities from the HR departments of the different business divisions. The established HR shared service center shows higher quality levels and efficiency gains for the activities it provides. Now the management would like to know which HR activities it should add to its HR shared service center so these activities can also be provided with the higher service quality level and a more efficient HR service provision.

1.3.1 Research objective
The aim of this study is to gain insight in which HR activities are suitable to provide from the HR shared service center of Stork, based on the differentiation in needs of the users. To accomplish this aim all HR activities of Stork will be investigated and the differentiation in needs of users that exist for the different HR activities will be indentified. Together with researching the corresponding service performance for different HR activities, will enable to indentify suitable HR activities for an HR shared service center. The specific objectives of the study are firstly that insight will be created by researching the service performance of HR activities provided from the HR shared service center or
de-central HR department and to gain insight in the differentiation in needs of users. Secondly an advice will be given to Stork on which HR activities are suitable for its HR shared service center. Therefore, the goal of this research is to gain insight in which HR activities are suitable to be provided by the HR shared service center of Stork.

1.3.2 Central question
The research objective of this research can be achieved by means of answering the following central question:

*Which HR processes should Stork supply from an HR shared service center given the differentiation in needs and service performance from the end-user perspective?*

The following research questions are constructed in such a way, that together they provide an answer to the central question formulated for this research. The research questions are:

1. Does an HR shared service center improve the service performance?
2. What are the principles of modularity?
3. In which way can the principles of modularity be applied to HR processes?
4. In which way are the HR processes of Stork structured?
5. What is the level of differentiation in needs for the HR activities at Stork from a user perspective?
6. What is the service performance of HR activities when provided from an HR shared service center or de-central HR department?
7. What is the effect of the differentiation in needs of users, on the service performance of HR activities provided from an HR shared service center or de-central HR department?

1.4 Relevance of the research
The relevance of this study is twofold. First practical, it provides knowledge to Stork on with which HR services it may expand the service provision of its HR shared service center. Standard HR activities are more efficient provided through HR shared service centers because of the sharing of resources, as the management of Stork already experienced. The research of Wüllenweber et al. (2008) supports that outsourcing is much more successful with standardized activities. Providing HR activities from single location makes it possible to design a standard procedure for the HR activity for all business divisions. The more activities Stork can provide through the HR shared service center the more activities will make use of the advantages. With this study Stork will receive an instrument to determine which HR activities are suitable to be delivered by an HR shared service center.
Secondly there is theoretical relevance; until now there is no research done on how to determine the suitability of HR activities for HR shared service centers from an end-user perspective. In existing literature is only described that the suitability of HR activities depends on type of HR activity like transactional or transformational. This study provides insight on what the effect of the differentiation in needs of users is on the service performance of HR activities when supplied from an HR shared service center or de-central HR department. This will provide insight on the suitability of HR activities to provide from an HR shared service center.

1.5 Organization of the study
This thesis proceeds as follows. The next chapter presents the theoretical framework. Using literature from different literature streams like HRM, shared services and operations management are explained and integrated. The third chapter explains the research design of the survey research conducted at Stork, followed by the presentation of the research findings in chapter four. In chapter five the findings are discussed and conclusions and recommendations are provided in chapter six.
2. Theoretical framework

2.1 HR Shared Service Centers improve service performance

In the late 1990s, the concept Human Resource (HR) shared service centers emerged as a response to growing competition and general cost pressures (Ulrich et al., 2008). HR-managers started to explore new forms of delivering Human Resource Management, like HR shared service centers. In a divisionalized company, every division or business unit has its own HR service department, HR shared services centers merge these activities into one unit (Ulrich, 1995). With sharing HR activities, the basic idea for the HR shared service center is that HR activities provided by one local department can be provided to others with relatively few efforts (Janssen & Joha, 2006).

An HR shared service center has two distinctive features, first that it offers a common service provision and secondly that users specify the level and nature of the service (Reilly, 2000). Users made, for example, use of Service Level Agreements (quality cost and frequency), to specify the level and nature of the service to be delivered (Farndale et al., 2009). The users of an HR shared service center are all employees in an organization that receive HR services from the HR department. In an HR shared service center, selected HR activities are standardized and bundled in a semi-autonomous business unit. This unit delivers the HR activities to the business by sharing the services of the different organizational users (Maatman et al., 2010). Quinn et al. (2000) describe shared services and argue that the reason to establish such a center is to share a common set of services, rather than to have a series of duplicate staff functions. By sharing these activities, it is expected that organizations can remove redundancies, duplications and overlapping work, because the same work can be performed more efficiently in one place. Costs can be lowered by reducing support staff and cut out duplicate effort (Redman et al., 2007). Productivity may increase, because similar or more work outputs can be delivered by fewer employees (Ulrich, 1995). Janssen & Joha (2006) argue that by bundling the development, maintenance and use of services, the costs of these services can be shared among the agencies. Innovations like service technologies can become feasible and the saved money can be used to improve service levels.

The shared services concept is claimed to be a form of organizing that combines the benefits of centralization and decentralization structures and even reduces both their disadvantages (Quinn et al., 2000). The centralized structures are characterized by economies of scale and scope, because of the standardization of activities that can be performed more efficiently at one place. Characteristics of
the decentralized structure are flexible and effective alignment with the needs of users and giving the users a degree of ownership over the service delivery (Janssen & Joha, 2006). This combination results in efficiency gains and an increase in service quality levels.

Advantages of HR shared service centers are according to Janssen & Wagenaar (2003) increased efficiency and higher service levels, without a decrease in the control of organizational arrangements and expertise. Most often called benefits are cost reduction, improving service quality, process simplification, knowledge transfer and sharing best practice (Redman et al., 2007). Major drivers behind establishing HR shared service centers are: costs, quality and change. Cooke (2006) describes greater efficiency and professional provision of HR because of the simplifying and streamlining of activities. HR shared service centers are also ought to raise customer satisfaction, because of an improved match between customers expectations and service because the user has control over the service (Cooke, 2006). Janssen & Joha (2006) describe that managers could focus more on core business and had more control and transparency of cost, standardization and better performance of staff were also acknowledged. Many standard activities are more efficiently performed at a central location like an HR shared service center (Reilly, 2000). Sharing activities creates economies of scale and scope and avoids duplication and activities are supplied more efficient and at lower cost (Bauer, 2003). Reilly (2000) describes that quality improvements occurs through a better consistency and accuracy, best practice is applied more widely and because HR shared service centers are more customer focused.

HR activities were traditionally supplied from the de-central HR department at the division itself. Looking at the before mentioned benefits supplying HR activities from HR shared services centers are ought to improve the service performance. Where service performance is defined as the service quality levels according to users compared to the total cost of the HR activity (Cronin et al., 2000). Providing HR activities from an HR shared service center compared to the traditional HR department at the business unit is expected to result in a higher service performance. Therefore it is hypothesized that the activities provided from a HR shared service center have a higher service performance than when provided from the decentralized HR department. This leads to the first hypothesis:

*Hypothesis 1: Providing HR activities from an HR shared service center is positively related to service performance.*
Despite all the predicted benefits there is also research with evidence of problems that occurred after introducing HR shared service centers. Problems like lower levels of customer satisfaction, and higher than expected costs (Reilly, 2000; Sparrow et al., 2004). Keep (2001) researched companies setting up HR shared service centers, all these companies had cost as driver, research shows that there is little evidence of cost savings directly realized. The research of Janssen & Joha (2006) shows that, despite the realization of some motives (e.g. standardization, cross-group learning), several benefits like cost reduction and quality improvement were not realized. Not all predicted benefits are accomplished because the benefits rely on the combined benefits of both centralized and decentralized models, and these benefits are often conflicting (Janssen & Joha, 2006). Cost reduction is based on the centralized model and service improvement on decentralized model. An increase in the one area can create a decrease in the other area. Not all HR activities are suitable for both models. Therefore it is important to have an optimal combination of the two models. Companies establishing an HR shared service center need to consider which kind of HR activities are suitable for the HR shared service center.

The suitability of HR services to be bundled into HR shared services is said to be dependent on the type of HR activity. Researchers distinguish different types of activities provided by HR shared service centers (Ulrich, 1995; Reilly, 2000; Farndale et al., 2009). According to Carrig (1997) all HR activities can be divided into two different kinds of activities; transactional and transformational. The transactional activities are those that mostly consist of administrative activities of the HR function, examples of these are activities such as; benefits administration, record keeping, and employee services (Carrig, 1997). Transformational HR activities on the other hand, are more oriented towards contributing to strategic organizational objectives (Carrig, 1997). As described by Carrig (1997) the HR activities, such as acting a strategic partners, insuring that HR activities meet the firm’s strategic needs and serving as a consultants for line managers, are the more transformational activities.

Looking at the literature several different models are found that describe which activities should be provided by HR shared service centers. In the literature there is a wide variety of HR shared service center models with a corresponding variety of types of activities they provide (Quinn et al., 2000; Reilly, 2000; Lepak et al., 2005; Redman et al., 2007; Farndale et al., 2009). Reilly & Williams (2003) found in their study of 15 HR shared service centers no standard model but recognized a few trends. In their result they found that transactional activities were always included and the transformational activities always excluded in the HR shared service centers. The main diversity was caused by the
different provision of advisory services, some shared and others situated at the business unit itself (Reilly & Williams, 2003). Quinn et al. (2000) argues that by centralizing the transactional HR activities in an HR shared service center, this provides space for the transformational HR activities at the business unit level. Farndale et al. (2009) describes the activities provided by the HR shared service center as a development in time. When an HR shared service center is established it typically starts with the consolidation of transactional activities like payroll and employee records (Adler, 2003). The next step is to also include transformational activities, like change management and strategy formation (Farndale et al., 2009). According to Lepak et al. (2005) the choice to provide HR activities from an HR shared service depends on the contingency factors of the organization, like HR or a firm’s strategic orientation or operational factors like frequency and uniqueness of activities.

2.2 Moderating effect of differentiation in needs
The purpose of this research is to look into the contingency on the uniqueness of activities when discussing the suitability of HR activities for HR shared service centers. The uniqueness of an HR activity depends on how standard the needs of users are for the execution of the HR activity. The research of Wüllenweber et al. (2008) argues that a vendor like an HR shared service center needs an certain minimum degree of standardization to operate, because the HR shared service center needs to bundle similar HR activities from different divisions in order to achieve the economies of scale (Wüllenweber et al., 2008). The objective of standardization is to reach uniformity and make business processes transparent across the different divisions. The research of Wüllenweber et al (2008) shows a significant positive direct impact of standardization on the success of outsourcing. The centralized structure of HR shared service centers is characterized by economies of scale and scope. HR activities have to be standardized for HR shared service center, this in turn reduces duplication and redundancy, Ulrich et al. (2008) gives the example of an global oil service. This company had more than ten ways to register for a training, the HR shared service center created one standard procedure that decreased the cost and increased efficiency. The centralized model offers a high degree of corporate control, but this goes at the expense of customer service and responsiveness (Bergeron, 2003). Combining this with a decentralized structure, the HR shared service center can respond faster and more flexible to necessary changes. Characteristics of the decentralized structure are flexible and effective alignment with the needs of users and giving the users a degree of ownership over the service delivery (Janssen & Joha, 2006).

Organizations are dealing with the tension between on the one hand standardizing HR activities for economies of scale and on the other hand differentiating HR activities to satisfy the diverse client
needs (Janssen & Joha, 2006). Combining standardization for efficiency and variety for users can be done by sharing a standard platform with activities combined with modules for variety (Hofman et al., 2009). Baldwin & Clark (1997) explain the principles of modularity by referring to an architecture where certain components are standardized and specified. By breaking up a complex product into smaller parts, the parts will become more manageable because there is more transparency among the components (Salvador et al., 2002).

The modularity principles were first applied to products but they can also be applied to services. There has not been done much research into the application of modularity in services. Some researched the applicability of modularity in services (Meyer & DeToreb, 2001; Pekkarinen & Ulkuniemi, 2008; Voss & Hsuan, 2009). These authors researched modularity for the optimization of for example the service provision in the banking industry. With modularity they could achieve a highly customized service provision at affordable cost. A characteristic of a service is that it can be provided and consumed over a period of time. Voss & Hsuan (2009) give the example of a cruise liner. On their trip passengers can choose which services to use and when to use over the whole trip. This is also partly true for HR shared service centers, they offer services but the user decides which service it wants to use and when to make use of it.

2.2.1 Commonality in needs
The sharing of standard service components is called commonality, this refers to using the same component across several services (Voss & Hsuan, 2009). For HR activities this commonality refers to the same needs of users related to the execution of an HR activity. There will be a high commonality in needs when users have the same preferences for the execution of an HR activity. High commonality makes it possible to deliver an activity in a standardized way. These activities are characterized by economies of scale and scope, because of the standardization the activities can be performed more efficient at one place. And a low commonality in needs exists when users have diverse preferences for the execution of an HR activity. With identifying the commonality in needs, it will be possible to determine suitable delivery channels for HR activities.

An example of the commonality in needs principles is applied in the research of de Blok et al. (2007). In their research the modular design principles are applied to the provision of care and services to independent living elderly. De Blok et al. (2007) proposes a modular architecture from which care and service packages can be assembled for the elderly. With this modular architecture, the authors’ purpose is to come closer to the needs of the users with a minimum of cost increase. This should
result in choice possibilities that would better fit the demand and therefore customer satisfaction would become higher. In their research the authors structure the service and care activities using a three level design. The first layer (platform) consists out of all the activities that can be standardized and are common to all users (figure 2.1). These are the activities were users have a high commonality in needs for.

![Figure 2.1 Three levels of customization (de Blok et al., 2007)](image)

The second level is the customization level, this level consists of standard activities that can be customized according to the needs when users have average commonality in needs. The third level is the personalization level, at this level the modules are composed according to the specific need of the user. For these activities the users have a low commonality in needs. A clear distinction should be made between customization and personalization. Customization occurs when a service has to be configured from available standard services to respond to the user needs (Voss & Hsuan, 2009). Personalization takes place when the service has to be specifically created to respond to the specific user needs (Voss & Hsuan, 2009). With this framework of de Blok et al. (2007) customization for the needs of users and economies of scale can exist simultaneous. Applying the principles of de Blok et al. (2007) to the HR activities, the figure 2.2 below can be expected.

![Figure 2.2 Grouping HR activities](image)
HR shared service centers are ought to have a higher service performance for HR activities than the de-central HR department. The suitability of HR activities for HR shared service centers depend on to which extent the activities can be supplied in a standardized way. This standardization potential depends on the commonality in needs of users. The less commonality in needs the more difficult it will be to standardize.

A centralized organization creates a large distance with customers, and a low response time (Bergeron, 2003). The research of Wüllenweber et al (2008) shows a significant positive direct impact of standardization on the success of outsourcing. Therefore is expected that only HR activities with a high commonality in needs will have a higher performance when provided from an HR shared service center. With a decentralized HR provision from an HR department at the division, the response time is shorter and the HR department can respond faster and more flexible to the different needs of local users (Bauer, 2003). Therefore there can be expected that providing HR activities with a low commonality in needs through an HR shared service, will have a negative impact on the service performance. Taking into account the variable commonality in needs of users will give insight in an optimal location to supply HR activities from with a certain level of commonality in needs. Commonality in needs is measured by the differentiation in needs of users. High differentiation in needs is equal to low commonality and low differentiation in needs to high commonality. The next two hypotheses were constructed:

*Hypothesis 2a: Providing HR activities with a low differentiation in needs from an HR shared service center will have a positive impact on the service performance.*

*Hypothesis 2b: Providing HR activities with a high differentiation in needs from an HR shared service center will have a negative impact on the service performance.*
2.3 Theoretical model

Based on the literature discussed above, the theoretical model is presented in figure 2.3.

![Theoretical model with hypotheses](image)
3. Methodology

This chapter provides information about the methodology of the research. In chapter 3.1 the research design and instruments used will be explained. The research procedure is described in 3.2. The main variables for this research are described in chapter 3.3, and the control variables in chapter 3.4. Finally the procedure of testing the questionnaire is explained in chapter 3.5.

3.1 Research design and instruments

For this study a survey research approach was chosen. With survey research it is possible to research particular relationships between variables and produce models of these relationships (Saunders et al., 2009). Survey research is described by Rea and Parker (1997) as “....the concept of considering information derived from a smaller number of people to be an accurate representation of a significantly larger number of people” (p.1). This type of research was chosen given the explanatory nature of this study, the constructs and the available quantitative instruments for measuring constructs. The additional advantage of such a study is that it can be conducted in a relatively short time period, therefore survey research appeared the most appropriate research design. Some limitations of this type of study method are also recognized, including a questionnaires cross-sectional nature, which means that the study is “based on observations representing a single point in time” (Babbie 2007, p. 102).

The external validity has been taken into account, but the purpose of this research is not to produce research findings that are generalizable to other populations. The study is only applicable on the population of the case company and because it is based on only one case the external validity is low. This study contributes to literature by providing empirical evidence for the influence of differentiation in needs on the suitability of HR activities. The purpose of the study was to determine for Stork which activities could be supplied by the HR shared service center based on the differentiation in needs of users.

3.2 Research procedure

To be able to research the differentiation need of employees for HR activities, there is a need to have insight in all HR activities that are performed at Stork. Insight was gained by reviewing HR process descriptions of different HR activity groups. The HR function is subdivided in the following groups, Shared Service center, Recruitment, Academy, Management & Expert development, Lease and International mobility. From the process descriptions flowcharts were designed that would provide an overview of all HR activities at Stork.
After finishing the overview of HR activities the managers of every HR department were interviewed. These persons were chosen to interview, because they have insight in all HR activities that are performed within their department. The purpose of these interviews was to check if the HR activities overviews made would cover all HR activities. The interviews were used in addition to the process descriptions, because the HR managers could explain the rationale behind the descriptions. This helped to better understand why the processes are structured like in the descriptions and if there were activities not described. Seven of these interviews were conducted. During the interviews the managers were asked to check completeness of the flowchart. Semi-structured interview method is chosen because of the freedom in asking questions and there was exactly known what information was needed from the HR managers. With this method there is a focus on a certain objective but during the interview it is still possible to ask additional questions when more information is needed about a particular situation (King, 2004). After the interviews the information of the managers was analyzed and incorporated in the flowcharts. After the adjustments the flowcharts were send to the interviewee to be checked. The flowcharts were used to select HR activities that would be part of the questionnaire for the divisional HR managers.

3.2.1 Research population sample
To gain insight in differentiation in needs of users and the service performance of provided HR services, two questionnaires were send to the divisional HR managers. The research population consisted out of 22 divisional HR managers of Stork. A questionnaire was chosen to collect the data, because of the amount of repetitive construct questions that were asked. These standard questions are most suitable for a questionnaire (Robson, 2002).

The HR managers were selected to administer both questionnaires, because they have insight in the differentiation in needs of users and the service performance of delivered HR activities. The actual end users were excluded from the survey, because of the large amount of users and because respondents were needed, who have an overview in the overall differentiation in needs and service performance. The users do not have insight in the needs of other users and therefore cannot determine the differentiation in needs and service performance of HR activities.

3.2.2 Designing the questionnaire
To gain insight in the commonality in needs of users for HR activities and the service performance of HR activities, two questionnaires were designed. The first questionnaire was used to gain insight in the differentiation in needs of users and the second questionnaire to measure the service
performance of provided HR activities. The second questionnaire was sent four weeks after receiving the first questionnaires to control for common method bias. When respondents would rate both variables in the same questionnaire there is chance that respondents would see a certain covariation between the two variables (Podsakoff et al., 2003). This could result in data that is not based on the real relationship of the variables, but on the covariation based on the implicit theories of the respondents (Podsakoff et al., 2003). Dividing the data collection in two questionnaires and sending the second questionnaire with a delay of four weeks may reduce the possibility for this bias.

For the questionnaires a sample of 52 HR activities was made from the HR activities overview made in phase one. The questionnaires had to be restricted to 52 activities, because of time availability of the respondents. For the selection a purposive sampling strategy was used, because of several reasons. Firstly the management of Stork requested that certain activities were used in the questionnaire for own purposes. Secondly it was important that there was a right distribution of transactional and transformational activities. To compare this research to other theories there was a need for a full range of HR activities. 26 Processes were selected from each type of HR activities, transactional and transformational. For both questionnaires the same HR activities were used so the questionnaires could be linked for data analysis purposes.

### 3.3 Variables

This study includes one dependent variable (service performance) and two dependent variables; location of HR provision and differentiation in needs of users. Also control variables were included to control for possible confounding effects.

#### 3.3.1 Independent variable: Location of HR provision

Earlier research has suggested that companies have two different options regarding the location to provide HR services from. Firstly the HR departments can perform the HR activities internally, so at the business unit itself. Secondly the HR departments can rely on an external vendor, like an HR shared service center that can provide certain activities (Lepak & Snell, 1999). To determine the location of present HR provision, documentary secondary data was used. The HR department provided an overview with the location from where HR activities are provided. This is different for every division. Secondary data was used, because this information was recently collected for company purposes and was up to date. A dummy variable was used to measure the location of HR provision, where 0 = De-central HR department and 1= HR shared service center.
3.3.2 Dependent variable: Service performance
Service performance for HR activities is the service quality levels according to users compared to the total cost of the HR activity. These two measures were chosen, because the economies of scale that should result in lower costs and improved service quality are expected benefits of HR shared service centers (Janssen & Joha, 2006). To gain insight in the service performance of the HR provision, there was need for a construct to measure the service performance of HR activities. After examining the literature, the construct used in Cronin et al. (2000) was the most suitable construct, because in their research they use a two measure construct to evaluate service exchanges under users. They describe service value as “the consumers’ overall assessment of a service based on perceptions what is received and what is given” (Zeithaml, 1988, p. 14). This construct was chosen because of its high resemblance with service performance that was needed to measure for this research and the satisfying construct reliability of 0.88. Two indicators were adapted to measure the service performance of HR service provision. This construct is represented with a set of indicators which are measured on a five point Likert scale (from “strongly disagree” to “strongly agree”). The indicators were slightly adapted for this research to make them suitable for measuring HR service performance. The higher the ratings, the higher the service performance of service provision of the HR activity is according to the users.

Service performance indicators

Sp 01 Overall, the users value the execution of this service as very high.

Sp 02 In relation to the overall cost, time and effort, the execution of this service satisfies the needs of the users very well.

3.3.3 Independent variable: Differentiation in needs of users
For the moderating variable the differentiation in needs of users for HR activities had to be measured for every HR activity. In prior research an existing scale could not be found to measure differentiation in needs of users, therefore a scale was needed that could be slightly adapted to measure this variable. For this variable a construct was adapted from a former study that measures customer turbulence (Joshi & Sharma, 2004). This construct was selected, because differentiation in needs of users is a form of customer turbulence, where customer turbulence is defined as the variety (number of different customer types) in customer preferences (Joshi & Sharma, 2004). For this research a corresponding variety needed to be measured; the variety in the needs of users for HR activities. The construct had a satisfying construct reliability of 0.81. This construct is represented with a set of indicators which are measured on a five point Likert scale (from “strongly disagree” to “strongly
agree”. Two indicators were slightly adapted for this research, the higher the ratings, the higher the differentiation in needs there is under users.

**User differentiation in needs**

**Diff 01** The needs of users change frequently for this service.

**Diff 02** Users have very diverse preferences for this service.

### 3.4 Control variables

In the analysis several variables were included to control for possible confounding effects. The control variables are the type of HR activity, experience with services from the HR Shared service center, time in organization of respondent and the size of the division.

#### 3.4.1 Type of HR activity

According to Lepak et al. (2005), a direct relationship can be expected between type of HR activity and location of delivery of the HR activity. Farndale et al. (2009) argue that separating transformational and transactional activities has an positive influence on the quality and cost-effectiveness. In order to control for the before mentioned effects the control variable, type of HR activity was included. Measuring this variable was done by determining for all 52 activities from the questionnaire if an activity is transformational or transactional. This was done separately by three HR experts of the University of Twente to increase reliability. First the definition of transactional and transformational HR activities was given to the experts. Consequently the respondents were asked to score all 52 HR activities that were part of the questionnaire on type of HR activity. After comparing the results, the intercoder reliability resulted in 90.4% and this is satisfactory. Generally speaking, intercoder reliability should be above 0.70% in order to be acceptable (Miles & Huberman, 1994). A dummy variable was used to measure the type of HR activity, where 0= Transactional activity and 1= Transformational activity.

#### 3.4.2 Experience with HR shared service center

The control variable experience with HR shared service center measures if the users in the division, already have experience with the HR activities provided from an HR shared service center. According to Bettman & Park (1980) prior experience has a great deal of influence on positive feedback of users. When users have a great deal of experience with a choice, there will more information available in their memory. Users that have no experience with a product of service will have great difficulty evaluating it. Not all divisions make use of the services already provided by the HR shared
service center. To control for this effect, this control variable was included. This data for this variable was gained through secondary data received from the management of the HR shared service center. Experience with the HR shared service center was measured with a dummy variable, 0=No experience with services supplied by the HR shared service center and 1=Prior experience with services supplied by the HR shared service center.

3.4.3 Job tenure
The relation between time in job (tenure) and openness to new strategy was researched by Boeker (1997). In their research they studied for how long a chief executive had been in the job and the effect this has on that he or she will initiate change. Executives that had been in long a time in their job were less likely to initiate changes. HR shared service centers is also new way of supplying HR activities. To control for the effect that job tenure has on how the respondent judges the service performance of services provided by the HR shared service center, this variable was added. This variable was measured by an additional question in the first questionnaire. Job tenure was measured as the number of years that a person worked in an HR function at Stork.

3.4.4 Division size
Division size is the number of users an HR department delivers HR services to. Looking at the research of Klaas et al. (1999). The amount of outsourcing and benefits of outsourcing were influenced by the size of the firm. In smaller firms outsourcing of HR activities could result in more benefits than for larger firm. This can be caused by the fact that small firms have to share the cost over a small amount of employees, these small firms can have a larger necessity to outsource HR activities. To control for this effect, this variable was added to the control variables. This item was measured with an additional question in the first questionnaire. Division size was measured as the number of individuals in the division.

3.5 Pre-testing the questionnaire
The questionnaires were pretested using the think aloud method (Van Someren et al., 1994). With this method you can make sure that respondents understand your questions like one would like them to understand it. For every 52 questions the two construct indicators were the same, so for the pretesting the emphasize was more on the understandability of the described activities.

Prior to pretesting a description was made for every activity included in the questionnaire. These descriptions were used to compare if the respondents understand what was meant with the described HR activity. To make sure the respondent would understand how to fill in the
questionnaire, an instruction was made. To motivate the respondents they were explained what the purpose was of the questionnaire and the importance of the respondent's contribution. The questionnaire was pretested with 2 PhD students in HRM of the University of Twente, because these persons have deep knowledge in HR activities. Also 5 HR experts of Stork pretested the questionnaire, because these persons have insight in the HR activities within Stork. At the start of every pretest session, instructions were given to the interviewee to think out loud when filling in the questionnaires. The interviewee was asked to say whatever he or she thought when filling in the questionnaire. With the think aloud method one can determine what the respondent thinks when answering a certain question. Notes were taken during these sessions and compared to the initial list of activity descriptions. Adjustments were made to the activity descriptions in the questionnaire to make sure the interviewees would understand the described HR activities in a consistent way. After each pretest session the questionnaire was revised before the next session would take place, so the improvements could be directly tested. After pretesting, the questionnaires were pilot tested with 2 divisional HR managers. The questionnaires were send to the respondents by e-mail. Next to questionnaire also an extra form with questions about the clarity of instructions and understandability of the questions was send (Bell, 2005). Time of filling in the questionnaire was kept track of, to be sure there would not be requested too much time of the respondents.

Prior to sending the questionnaires by e-mail a letter was send to advice the respondents to expect a survey and explained the purpose of the survey. A week later the survey was send by e-mail. The questionnaire was send by email, because of the wide dispersion in locations of the respondents through the Netherlands. Sending the questionnaire to a personal e-mail address increases the probability that the selected respondent would fill in the questionnaire personally.
4. Analysis and results

This chapter will discuss the results of the study. In chapter 4.1 the response is presented together with the construct reliability. In chapter 4.2 the regression model is explained. In chapter 4.3 the hypotheses tested with the model will be discussed. Finally in chapter 4.4 the different HR activities with differentiation in needs are discussed.

4.1 Response

Two weeks after sending the questionnaire there was a response rate of 45%. Consequently a reminder was send by e-mail to the respondents who did not had returned the questionnaire. This increased the response rate to 60%. According to procedure all respondents were finally phone called, who did not respond to the mailing (Witmer et al., 1999). These follow up calls resulted in a final response of 86%. Four weeks after the first questionnaire a second questionnaire was send to measure the service performance of provided HR activities. This survey was also send by e-mail, after sending a reminder for the second questionnaire the final response rate was 60%.

4.1.1 Construct reliability

The questionnaires that were used in this research contained several scales which have been proved to be reliable in earlier publications. To determine the reliability of the scales for internal consistency, the inter-item correlation for both scales were calculated. The item correlation of the scales are 0.79 for the differentiation in needs construct and 0.86 for the service performance construct. This was sufficient since the satisfactory level is 0.70.

4.2 Regression model

Table 4.1 gives an overview of the most important descriptive statistics. The variables are shown with their means, standard deviations and correlations. From the table can be seen that the correlation between the dependent variable service performance and independent variable differentiation in needs is significant.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Service performance</td>
<td>3,32</td>
<td>0,85</td>
<td>1</td>
</tr>
<tr>
<td>2 Differentiation in needs</td>
<td>2,63</td>
<td>1,17</td>
<td>-0,18 **</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).  

n=649
In order to test the hypotheses, a multiple regression model analysis was used. This analysis was used to the test the effect of location of service provisions on service performance. The influence of the moderating variable differentiation in needs for HR activities is also included. For the variable location a dummy variable was created. Subsequently the two-way-interaction analysis with both interaction variables was computed. The following blocks were introduced in the regression model: control variables, main variables and the two-way interaction term.

**4.3 Hypotheses testing with multiple regression**

Before examining the relationships between the variables, the three models shown in table 4.2 are discussed. The regression model shows that including the main variables improves the overall model $R^2$ with 0.05 and the two-way-interaction improve the $R^2$ with 0.01. This improvement makes it appropriate to examine the two-way-interaction relationships in model 3.

Examine the results displayed in table 4.2, model 3 reveals positive regression coefficients for providing HR activities from an HR shared service center. For the dummy variable location of HR provision 0=De-central and 1= HR shared service center. Providing HR activities from an HR shared
service center is positively related to service performance. This means that the service provision of HR activities from an HR shared service center has a higher service performance than when HR activities are provided from a de-central HR department.

Additionally from table 4.2 can be seen that the control variable prior experience of users with an HR shared service centers has a significant positive coefficient (p<0.01). Prior experience of users with receiving HR services from an HR shared service center is positively related to the overall service performance of HR activities. The control variable Job tenure is also positively related to service performance. This means that the longer the HR manager is with the company, the higher the evaluations of service performance for end-users as reported by that HR manager. The main variable differentiation in needs shows a negative coefficient for the service performance. The more differentiation in needs there is for an activity the lower the service performance is of this HR activity is. The activities with a low need for differentiation have a higher service performance than the activities with a high need for differentiation.

In figure 4.1 the two-way-interaction term in relation to service performance is plotted. Here is shown that differentiation in needs has influence on the relation of location of service provision on the service performance. It shows that there is a difference in performance between high and low differentiation in needs activities, in relation to the location of HR provision. The plot shows that the service performance of activities with a differentiation in needs of 1 till 3 is higher when provided from an HR shared service center. For the activities that have higher differentiation (3-5) the service performance is higher when provided from a de-central HR department. The activities that have a differentiation in needs of 3,0 have the same service performance from both locations.
4.3.1. HR shared service center service improvement
Hypothesis 1 proposes that providing HR activities from an HR shared service center is positively related to service performance. Table 4.2 model 3 does show that providing HR activities from an HR shared service centers has a positive impact on the service performance ($p<0.05$). Meaning that providing HR activities from an HR shared service center has an overall higher service performance than providing activities from a de-centralized HR service location. This leads us to accept hypothesis 1.

4.3.2 Contingency on differentiation in needs
Hypothesis 2a proposes that providing HR activities with a low need for differentiation from an HR shared service center will have a positive impact on the service performance.

For analyzing the effect of the moderating variable differentiation in needs, the Johnson-Neyman technique was used (Hayes & Matthes, 2009). This technique was used to “indentify regions in the range of the moderator variable where the effect of the focal predictor on the outcome is statistically significant and not significant” (Hayes & Matthes 2009, pp. 924-925). The table in appendix 1 gives an overview of the significance regions of the interaction related to the service performance. Appendix 1 shows that there is only a small region that is statically significant. The effect of the focal predictor in the outcome is statically significant for a range of 1.00 to 1.94 differentiation in needs. This means
that there is positive interaction between the location of HR provision and differentiation in needs on the service performance when the differentiation in needs is between 1.00 and 1.94. This region of significance is displayed in figure 4.1.

These results show that the service performance of HR activities provided by an HR shared service center and with differentiation in needs up to 1.94 is significantly higher than similar HR activities which are provided from a de-central location. This leads to accept hypothesis 2a.

Further hypothesis 2b proposes that by providing HR activities with a high need for differentiation from an HR shared service center, will have a negative impact on the service performance. The graph in figure 4.1 does suggest this negative impact, but when examining the region of significance the higher differentiation in need activities are beyond the region of significance line of 1.94. Therefore hypothesis 2b is not supported by the data and is rejected.

**Figure 4.2 Service performance ranking for differentiation in needs**

<table>
<thead>
<tr>
<th>Differentiation in needs</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR shared service center</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>De-central HR department</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

The effect of the different variables and their interaction on service performance is summarized in figure 4.2. This figure shows the different impacts on service performance. The two supported combinations are shown with their effect on the service performance, where 1 is the high service performance and 2 is the low service performance.
4.4 Differentiation in needs for HR activities

In this chapter the differentiation in needs for every HR activity will be given. The activities are categorized according to how they are structured at the case company. Looking at the results in figure 4.1 shows that HR activities with differentiation in needs can be divided into two groups. The activities with a mean of differentiation in needs of 1,0 till 1,94 have a higher service performance when provided from an HR shared service center. The data shows that for the HR activities with a differentiation in needs level higher than 1,94 there is no preferred location to provide the HR activity from.

Administration activities

The activities in this department are all administrative activities. The first three activities show a low need for differentiation and have a higher service performance from an HR shared service than when supplied from a de-central location. For the rest of the activities the differentiation in needs in higher than 1,94 and therefore an advice cannot be supported by the data.

![Figure 4.3 Administration activities](image-url)
Recruitment & Selection activities

For this group of activities the majority are HR activities with a high need for differentiation. The figure shows two lower differentiation in needs activities, like setting up a contract and creating an employee file. These activities are according to the analysis more suitable to supply from an HR shared service center. For the rest of the activities the differentiation in needs is higher than 1.94 and therefore an advice cannot be supported by the data.

![Figure 4.4 Recruitment and Selection activities](chart)

Academy activities

For these HR activities two different levels of needs for differentiation can be recognized from the analysis. The activities with a low need for differentiation are attendance registration and applying for subsidies. These activities have a higher performance when provided from an HR shared service center. For the rest of the activities the differentiation in needs is higher than 1.94 and therefore an advice cannot be supported by the data.
Management and Expert development

These HR activities range from medium to high need for differentiation, but all activities have a differentiation in needs higher than 1.94 and therefore an advice cannot be supported by the data. Therefore these activities will be less suitable for an HR shared service center.
Lease car activities

On request of the management of Stork the HR activities that are provided for users with a lease car were also included. The activities, process offence notifications and check overviews are activities with a low need for differentiation. The low differentiation in needs makes them suitable to provide from an HR shared service center.

![Figure 4.8 Lease car activities]

Expatriate activities

The expatriate activities are within Stork of growing importance. Therefore the management of Stork requested to make these activities part of the research. Looking at the results for these activities there is high need for differentiation. Therefore these activities are not supported by the data.
These three selected HR activities all have a large impact on all other HR activities. Looking at the result, the activities show high need for differentiation. According to the research of Ulrich (1995), developing a pay for performance structure has to be executed by combining individuals and teams who have deep knowledge and expertise in such HR activities. All these activities have a differentiation in needs higher than 1.94 and therefore an advice cannot be supported by the data.

**Figure 4.9 Expatriate activities**

**Strategic Decision making**

These three selected HR activities all have a large impact on all other HR activities. Looking at the result, the activities show high need for differentiation. According to the research of Ulrich (1995), developing a pay for performance structure has to be executed by combining individuals and teams who have deep knowledge and expertise in such HR activities. All these activities have a differentiation in needs higher than 1.94 and therefore an advice cannot be supported by the data.

**Figure 4.10 Strategic activities**
5. Discussion
In this section the main findings will be presented and discussed. The findings have implications for management and theory. First in chapter 5.1 the main findings will be presented. The implications for theory are discussed in chapter 5.2. And implications and recommendations for management are given in chapter 5.3.

5.1 Main findings
This study provides insight in the suitability of HR activities for an HR shared service center. Based on major studies like (Ulrich, 1995; Reilly, 2000; Cooke, 2006; Janssen & Joha, 2006), a hypothesis was formulated stating that providing HR activities from an HR shared service center is positively related to service performance (H1). This first hypothesis has been confirmed, the overall service performance of HR activities is higher when activities are provided from an HR shared service center. It seems that this new way of providing activities through an HR shared service center has a positive influence on the service performance according to the users. According to Quinn et al. (2000) this is, because with this concept the benefits of the centralization and decentralization structures are combined and their disadvantages even reduced. This combination results in efficiency gains and an increase in service quality levels and this increase has a positive influence on the service performance.

Following contingency theory, the choice to provide HR activities from an HR shared service depends on the contingency factors of the organization like uniqueness of needs (Lepak et al., 2005). Combining this with the theory as described in Voss and Hsuan (2009) about the sharing of standard components, an influence was expected of the differentiation in needs of users for HR activities. Based on this theory hypotheses were formulated that state that differentiation in needs of users influences the relationship of the location of HR provision and the corresponding HR service performance. The research of Wullenweber (2008) showed a positive effect of standardization on success of outsourcing. Therefore the second hypothesis stated that, providing HR activities that have a low differentiation in needs from an HR shared service centers would positively influence the service performance (H2a). This hypothesis was supported by the analyzed data. This positive influence could be caused by the fact that with low differentiation in needs it is possible to bundle standard services from different divisions. From a central location these HR activities can be supplied with fewer employees and this results in economies of scale and centralizing the knowledge results in
higher service quality. These scale advantages make it possible to provide the HR activities at lower cost and higher service quality and this contributes to a higher service performance.

Hypotheses 2b stated that providing HR activities that have a high need for differentiation through an HR shared service center would negatively influence the service performance (H2b). Although the slopes of the lines suggest confirmation of this third hypothesis, the region of significance shows that there is not enough data to support this hypothesis. The high differentiation in need activities do not fall within the region of significance. When the differentiation in needs becomes too high, it will be difficult to satisfy the diverse needs of the users. With the diverse needs it will be difficult to indentify common service components that can be provided in a standardized way. Therefore was expected that providing these activities from a de-central HR department would show a significant higher service performance. This can be caused by the fact that at the de-central HR department the service provision is positioned closer to the customer and can therefore respond faster and more flexible to local user needs.

The data does give evidence that differentiation in needs has influence on the relation of location of HR provision on service performance. The primary relation of providing HR activities through an HR shared service showed a positive influence on service performance. When adding the variable differentiation in needs to this relation, different service performance results appear for low and high need for differentiation activities. This provides evidence that the suitability of HR activities for an HR shared service center is contingent on the differentiation in needs of the users. According to Farndale et al. (2009) the different nature of activities should be aligned with suitable delivery channels and should be placed on a continuum from standardized to highly personalized. This research supports this and shows that for the highest service performance the activities should be placed on a continuum from low differentiation in needs to high differentiation in needs. The low differentiation activities should be provided in a different way than activities with high need for differentiation.

Another finding is that from the controlling factors that were taken into account in this study, there is a positive relationship of experience with an HR shared service centers on the service performance. Persons that have prior experience with the services provided by the HR shared service center are more positive about its service performance. This is in line with the research of Bettman & Park (1980) who found that prior experience has a great deal of influence on positive feedback of users. When users have a great deal of experience with a choice, there will more information available in their memory. Users that have no experience with a product of service will have great difficulty
evaluating it. For the users of an HR shared service center this means that users have positive service experiences with the delivery of HR activities from an HR shared service center.

Job tenure of users also has a positive influence on the service performance. This suggest that persons who have been long time in their function are more positive towards the HR service performance than users with a short job tenure. This suggests that persons with more experience in the HR field are more positive about the HR service performance. This could also mean that users with a short job tenure see more opportunities for improvement and are therefore less positive about the service performance of HR delivery now.

Providing HR activities with a high differentiation in needs from an HR shared service could be done by dividing an HR activity in smaller components. Baldwin & Clark (1997) explain the principles of modularity by referring to an architecture were certain components are standardized and specified. By breaking up a complex product into smaller parts, the parts will become more manageable because there is more transparency among the components (Salvador et al., 2002). Dividing each HR activity in smaller components makes it possible to indentify components that are the same for multiple users and therefore have a lower differentiation in needs. These parts will be more suitable to supply from an HR shared service center. For example the HR activity; “answering question about organization of training”, can exist out of low differentiation in need components (standard questions) combined with high differentiation (customized questions) in need components. Indentifying the low differentiation in need components of this HR activity can make this activity partly suitable for the HR shared service center (de Blok et al., 2007).

An important finding was the region of significance found for the variable differentiation in needs. By using the Johnson-Neyman technique (Hayes & Matthes, 2009). It was found that the interaction effect of location of HR service provision and differentiation in needs is only significant when the differentiation in needs between 1 and 1.94. Therefore providing HR activities from HR shared service centers is only significantly higher for HR activities with a differentiation in need between 1 and 1.94. Examples of activities that fall within this region these are creating an employee file, set up a contract and attendance registration. These are all administrative transactional activities. These results show that the positive impact of standardization on success of outsourcing as described by Wüllenweber et al (2008), is only applicable on a small part of the HR activities. And therefore a significant increase in service performance of providing HR activities from an HR shared service center can only be expected for activities with very low differentiation in needs.
For HR activities with a differentiation in needs larger than 1,94 the service improvement is not significant when provided from an HR shared service center according to the data. This would mean that for all HR activities with a differentiation in needs larger than 1,94, there would be no difference when supplied from an HR shared service center or de-central HR department. For the HR activities with a differentiation in needs of 3,0 the graph in figure 4.1 does suggest there is no difference in service performance from both locations. However, examining the HR activities with a differentiation in needs around 4,0 and higher, the graph suggests that service provision from a de-central location has a higher service performance than provided from the HR shared service center. The data shows that these HR activities are the transformational type of activities. This is supported by the research of Redman et al. (2007) who found in their study that the HR shared services center had difficulty supplying transformational HR activities. HR management had deep concerns about being able to meet the transformational needs of several divisions. The HR staff acknowledged that transformational HR activities were not effectively provided from the HR shared service center and that transformational activities were provided more effective outside the HR shared service center (Redman et al., 2007). Although these HR activities with a higher differentiation in need are not within the region of significance, the lines in figure 4.1 strongly suggest that these activities will have a higher service performance when provided from a de-central HR department.

The HR activities with a differentiation in needs higher than 1,94 did not show significant service performance improvement from supplied from either locations. A possible explanation for this could be that the more divers the needs of users are, the more divers the HR activities are executed at the different divisions. Resulting in a service performance judgment by the users that is highly divers. HR specialists in divisions often settle themselves into silos that distinct them from other divisions and this results in divers HR policies and procedures (Ulrich et al., 2008). This variation could explain the fact why users do not have the same preferences for from which location it is best to provide the HR activity from. The activities that do fall within the region of significance are administrative activities. These activities are easier to control by setting up procedures for the execution. This could explain why for these activities, users show to have a more uniform service performance judgment, which results in significant data.
5.2 Implications for theory
Examinig existing literature shows that not all expected benefits of HR shared service centers are realized (Janssen & Joha, 2006). Organizations are dealing with the tension between on the one hand standardizing HR activities for economies of scale and on the other hand differentiating HR activities to satisfy the diverse client needs (Janssen & Joha, 2006). Therefore there are an increased number of papers that describe the suitability of HR activities for HR shared service centers. In the literature there is a wide variety of HR shared service center models with a corresponding variety of types of activities they provide (Quinn et al., 2000; Reilly, 2000; Lepak et al., 2005; Redman et al., 2007; Farndale et al., 2009). All these studies have mixed findings about the supplied or suitable activities. In this study a method is developed and tested to gain insight in the suitability of HR activities for HR shared service centers. This study contributes to the HR shared services literature in several ways.

Evidence of suitability is contingent on differentiation in needs.
Researchers distinguish different types of activities provided by HR shared service centers (Ulrich, 1995; Reilly, 2000; Farndale et al., 2009). Companies are used to base the suitability of HR activities for HR shared service centers by solely focusing on the type of HR activity like transactional and transformational. Using the principles of commonality in needs, this research suggests to take into account the variable differentiation in needs, when determining the suitability of HR activities for an HR shared service center. It gives evidence that differentiation in needs has influence on the relation of location of HR provision on service performance. This instead of solely focusing on the type of HR activity. Reilly & Williams (2003) found in their study that transactional activities were always included in HR shared service Centers. Farndale et al. (2009) argue that transactional and transformational activities have to be separated what will improve quality and cost-effectiveness. In this research is found that there is a low differentiation in needs for the transactional activities that are based on administrative transactions, but there are also transactional activities found with a higher need for differentiation. Activities like pension calculation for employees and setting up management reports are examples of transactional activities, but these activities show to have a high need for differentiation and therefore will have lower service performance when supplied from an HR shared service center. Solely focusing on type of HR activity will result in supplying HR activities from an HR shared service center that are not suitable for this service provision. This study contributes to the literature by providing evidence on the contingency on the differentiation in needs of the users for the suitability of HR activities.
HR shared service center service performance contingent on suitability of HR activities

Much is written about problems that occurred after introducing an HR shared service centers. Problems that occurred were lower levels of customer satisfaction, and higher than expected costs (Reilly, 2000; Sparrow et al., 2004). This service provision is expected to provide benefits for all HR activities that are supplied from the HR shared service center. Some even describe the activities provided by the HR shared service center as a development in time (Farndale et al., 2009). In the first stage transactional activities and later on also transformation activities can be provided through the shared service center (Farndale et al., 2009). This research provides evidence that not all service performance of HR activities will be improved by supplying from an HR shared service center. All transactional activities were ought to be suitable for HR shared service centers, even though there could exist a high differentiation in need for these activities. By providing HR activities from an HR shared service center that are not suitable, problems will occur with service performance. This can create lower levels of customer satisfaction and higher cost, because of delivering not suitable activities from an HR shared service center. This research contributes to the literature by providing evidence that the service performance and therefore benefits of HR shared service centers could be contingent on the suitability of HR activities.

5.3 Implications for management

The matrix in figure 4.2 summarizes the effect of the different variables and their interaction on service performance. The findings make clear that the suitability of HR activities for HR shared centers does not only depend on the type of HR activity (Reilly & Williams, 2003). This research provides evidence that management should focus on differentiation in needs instead only focusing on the type of HR activity. The findings can help management choose in which way they should design their HR activities service provision. It helps management to evaluate what the expected service performance is for an HR activity when provided from different locations. Including the variable differentiation in need shows to moderate the original relationship between location of HR provision and service performance. The region of significance shows that only a selection of HR activities is expected to have a significant service performance increase, when provided from the HR shared service center. A practical implication that follows from the research is that companies must first evaluate what the differentiation in needs for an activity is, before deciding from which location to provide the HR activity.
6. Conclusions and recommendations
In this chapter conclusions en recommendations will be drawn based on the results of this study. In chapter 6.1 conclusions regarding the service performance from HR shared service centers will be discussed. The limitations and recommendations for future research are given in chapter 6.2.

6.1 Conclusion
The results suggest that service performance of HR activities is contingent upon the location of HR provision and the differentiation in needs of users. Existing literature discusses suitability of HR activities for HR service centers based on type of activity, like transactional or transformational. With testing the formulated hypotheses the results show that activities with a low need for differentiation have the highest service performance when provided from an HR shared service center. The results show that providing HR activities with a low need for differentiation from an HR shared service center, results in a significant increased service performance. With these results the main question of this research can be answered:

*Which HR processes should Stork supply from an HR shared service center given the differentiation in needs and service performance from the end-user perspective?*

The activities with low differentiation in needs are the activities that have the highest service performance when provided from an HR shared service center. Stork should supply the activities with a low differentiation in needs from the HR shared service center in order deliver them with a high service performance, but need to consider that only a selection of HR activities will have an significant service performance increase.

6.2 Limitations and recommendations for future research
This thesis is a balanced reflection of theory and practical application, because of the constraints on time and size for this thesis, it has its limitations.

First the purpose of the research is not to produce findings that are generalizable to other populations and therefore the external validity has to be taken into account. This research was conducted for this company, only with the aim to develop a company-specific research instrument in order to get insight into the suitability of HR activities for the HR shared service center. The results can only be applied to the population and HR activities of the case company. Future research is needed in other settings to generalize these findings to a broader perspective.
The second limitation is concerned with the common rater bias for the dependent and independent variable. The data for both variables were gained by two questionnaires filled in by the same respondent. When respondents rate both variables in the same questionnaire there is chance that respondents would see a certain covariation between the two variables (Podsakoff et al., 2003). This could result in data that is not based on the real relationship of the variables, but on the covariation based on the implicit theories of the respondents (Podsakoff et al., 2003). Dividing the data collection of the variables in two questionnaires and sending the second questionnaire with a delay of four weeks controlled for this bias.

The third limitation is the self-appraisal bias that could have played a role for the second questionnaire. Here the HR managers had to judge the service performance of the HR activities according to users of their division. Some of these activities that had to be judged could have been delivered from their own department. Although the HR managers were asked to objectively judge the service performance, self-appraisal bias could have played a role. The HR managers could have filled in the questionnaires for their own good. For future research is suggested to inform the respondent that the data is not used to judge the performance of the respondent’s division, but is used to research the relation between several variables.

The final limitation is the operationalization of our variable “service performance”. The second measure of this construct measured the overall cost, time and effort. This is a subjective measure and for future research is suggested to measure this variable with objective measures. This will give an improved and more precise insight in the cost versus performance of the service delivery. Cost and time savings can then be objectively expressed.

Also a possible topic for future research is to perform a case study to measure these objective measures before and after implementing an HR shared service. In this way the objective difference can be measured in cost and time savings of providing HR activities from an HR shared service center.

Despite these limitations, this research has provided interesting insight in the field of the suitability of HR activities for HR shared service centers. This study can provide managers a method to determine which HR activities to provide from their HR shared service center in order maximize the overall service performance. Hopefully the suggestions for future research will alert scholars to further examine the suitability of HR activities for HR shared service centers.
References


Miles, M. B. and A. M. Huberman (1994). Qualitative data analysis: An expanded sourcebook, Sage.


Appendix 1: Region of significance

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Appendix 2: Questions used in the questionnaires

For questionnaire 1

User differentiation in needs

Diff 01 The needs of users change frequently for this service.

Diff 02 Users have very diverse preferences for this service.

For questionnaire 2

Service performance indicators

Sp 01 Overall, the users value the execution of this service as very high.

Sp 02 In relation to the overall cost, time and effort, the execution of this service satisfies the needs of the users very well.
Appendix 3: Overview of HR activities in the questionnaires

**Administration**
1. Attendance registration
2. Inform authorities about workplace absenteeism.
3. Create jubilees overview.
4. Early pension calculation
5. Perform Payroll process
6. Management report, (a.e. workplace absenteeism and overturn)

**Recruitment & Selection**
7. Construct a recruitment profile
8. Contact with recruitment agency for candidates
9. Select candidates for interviews
10. First job interview with candidate
11. Terms and conditions interview with candidate
12. Set up a contract for new employee
13. Creating an employee file
14. Setting up an introduction plan for new employee
15. Developing strategy to increase Stork image on labor market
16. Change HR strategy to trends and developments in labor market

**Academy**
17. Answers question about organisation of training
18. Send information about training to employee
19. Process an application for a training
20. Sending invitations for a training.
21. Organizing an internal training
22. Process invoices of external trainers
23. Send evaluation forms to training participants.
25. Selecting an external training for organization needs.
26. Developing an internal training.
27. Process an attendance list for a training.
28. Apply for training subsidy at institutes.
Management & Expert Development
29. Coordinate yearly performance reviews.
30. Performance and training meeting with employee.
31. Formulate a training and development plan for an employee.
32. Selecting a coach for an employee.
33. Organising an assessment.
34. Develop an organization wide succession plan.
35. Inventorise needed competencies in organization.
36. Judge function for function classification structure

Lease
37. Process an application for lease car.
38. Set up an employee agreement for a lease car.
39. Order lease car at lease company
40. Check fuel and kilometers overviews on deviations.
41. Process offence notifications of lease cars
42. Arranging acquisitions of leasing cars within the organization.

Expatriate
43. Create a file for an expatriate.
44. Orientation meeting with an expatriate (+ partner).
45. Coordinating all activities for the broadcast of an expatriate.
46. Income calculation for an expatriate during the broadcast.
47. Cost calculation for the transmission of an expatriate.
48. Set up an expatriate agreement.
49. Apply for a visa for an employee.

Strategy
50. Formulate HR vision/strategy.
51. Developing a pay for performance structure.
52. Translate organization strategy in HR-policy