To share or not to share: that’s the question! When does sharing of HR services maximize perceived HR service value?

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Abstract
Nowadays, organizations can rely on a variety of delivery channels for offering HR services to employees, such as HR shared service centres, embedded HR professionals or electronic HRM. However, when should organizations opt for one of the many HR delivery channels that are at their disposal to secure a high-quality and/or low-cost delivery of a specific HR service? This paper gives an answer to this question by applying concepts from the field of operations management to HR service delivery within organizations. We empirically validate the assumption that the selection of an HR delivery channel for respective HR services should be based on the homogeneity of customer needs, or the commonality potential of an HR service. As such, this paper contributes by stressing the importance of taking a contingency view on the design of HR service delivery in organizations, using operations management concepts and the commonality potential framework.

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1. INTRODUCTION

Within organizations, the provision of human resource (HR) services takes place through a variety of intra-organizational HR delivery channels, that is, the actors within an organization which offer HR services to employees and managers. Examples of such delivery channels include HR shared service centres (SSCs), HR business partners, electronic HRM, and line managers (Farndale, Paauwe and Boselie 2010; Ulrich 1997). Essentially, these delivery channels are either shared across multiple business units (e.g. an HR SSC) or perform HR activities for a single business unit (e.g. an embedded HR professional), which are referred to as shared and non-shared HR delivery channels respectively. To secure a high-quality and low-cost service delivery, the scope of HR services offered by the HR delivery channels is often strictly demarcated (Cooke 2006; Cooke and Budhwar 2009; Farndale, Paauwe and Hoeksema 2009). Several scholars have argued that transactional HR services can best be offered using a shared HR delivery channel, for example an HR SSC, in order to achieve maximal effectiveness and efficiency (Reilly 2000; Ulrich 1995; Ulrich, Younger and Brockbank 2008). In contrast, it has been argued that transformational HR services, like on-the-job training and performance appraisal, can be best offered using non-shared delivery channels, in most cases line managers who engage with employees on a daily basis (Bos-Nehles 2010; Whittaker and Marchington 2003). This implies that to maximize service value – that is the trade-off between an HR service’s quality and costs – the use of a specific HR delivery mode hinges upon the type of HR service.

However, despite these ideas, the existing empirical research has not shown that the service value delivered by the HR delivery channels depends upon whether the services they deliver are transactional or transformational. For example, employees are shown to be unsatisfied with transformational HR services as performed by line managers, i.e. a non-
shared delivery channel (Bos-Nehles 2010). In addition, many organizations experience inefficiencies, in the form of shadow-staff or sub-optimal resource allocation, when delivering transactional HR services through shared delivery channels, like HR SSCs (Cooke 2006; Meijerink and Reilly 2010). These empirical findings suggest that the HR delivery channels for an HR service cannot be based on whether that service is a transactional or transformational. Therefore, the purpose of this paper is to empirically validate the assumption that to maximize HR service value, the use of a specific HR delivery mode hinges upon a different criterion than HR service type, namely, the commonality potential of respective HR services. For this study’s purpose we draw on the field of operations management and the concept of platform thinking that explains under which conditions the value of service or product platforms can be maximized (De Blok, Luijkx, Meijboom and Schols 2010). Our findings show that the commonality potential of services increases with more homogeneous customer needs. In other words, when customer needs on HR services are more or less the same, and are relatively stable over time, companies can maximize HR service value when they employ a shared HR delivery channel. In contrast, we found that when customer needs on HR services are very heterogeneous and, rapidly change over time, the type of HR delivery channel used does not significantly influence the service value. However, indications are present that in the latter case HR service value is slightly higher when using non-shared HR delivery channels. This finding stress the importance of taking a contingency view on the organizational design of HR service delivery within organizations. In addition, the research findings demonstrate the utility of applying operation management concepts, in particular the commonality potential framework, to explain the performance of HR service delivery channels.

The remainder of this paper is organized as follows. We start with reducing the variety of HR delivery channels into a categorization of shared versus non-shared HR delivery modes.
This is followed by the development of hypotheses using the commonality potential framework, which are later tested with the use of survey data from a Dutch technical service company. After the presentation of the research findings, we conclude with the theoretical and practical implications of our research.

2. THEORETICAL BACKGROUND

2.1. HR delivery mode and HR service value

In the past, several attempts were made to develop a comprehensive model for the categorization of HR delivery channels. For example, Ulrich (1997) suggests that organizations rely on corporate HR departments, HR shared service centres and HR business partners for the delivery of HR services. Later, this model was extended with two other delivery channels: centres of expertise and operational executors (Ulrich et al. 2008). Based on an empirical research into seven organizations, Farndale et al. (2010) present a model that includes five HR delivery channels: electronic HRM, HR shared service centres, HR expertise centres, HR business partners and corporate centres. In addition, other studies have suggested that top management and line managers are also involved in delivering HR services (Renwick 2003; Valverde, Ryan and Soler 2006). What we are left with, is a variety of HR delivery typologies with all having their idiosyncrasies.

At first sight, the variety in HR delivery channels may cause problems to develop a comprehensive model that accounts for all possible internal sourcing arrangement for delivering HR services. However, these problems may be mitigated if we move to a higher aggregation level. We therefore distinguish between HR delivery channels that offer services which are shared across business units and those that deliver services for a single unit. For example, (corporate) HR expertise centres and HR service centres are shared service providers which offer common HR services to employees, managers and decentralized HR
staff in multiple business units (Cooke 2006; Farndale et al. 2010; Ulrich 1995). On the other hand, HR business partners are embedded in a single business unit to deploy HR programs in that business unit and closely partner with a group of line managers who are responsible to offer operational HR services to their subordinates (Farndale et al. 2010; Ulrich et al. 2008). Given that business unit rely on both collective and retained HR delivery channels, we distinguish two HR delivery modes: (1) a \textit{shared HR delivery mode} that reflects the performance of common HR activities by delivery channels which are shared across business units, whereas (2) the \textit{non-shared HR delivery mode} refers to the performance of idiosyncratic HR activities by delivery channels that operate for a single business unit (see table 1 for examples of both delivery modes).

\begin{table}[h]
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\begin{tabular}{|l|l|l|}
\hline
\multicolumn{1}{|c|}{\textit{Shared HR delivery mode}} & \multicolumn{1}{c|}{\textit{Non-shared HR delivery mode}} \\
\hline
\textbf{Definition} & Performance of common HR activities by delivery channels which are \textbf{shared} across business units & Performance of idiosyncratic HR activities by delivery channels that operate for a \textbf{single} business unit \\
\hline
\textbf{Examples of delivery channels} & \begin{itemize} 
HR shared service centers 
Centers of expertise 
Corporate HR department 
Top management 
Electronic HRM
\end{itemize} & \begin{itemize} 
Line managers 
Embedded HR professionals / HR business partners 
Operational executors
\end{itemize} \\
\hline
\end{tabular}
\caption{Examples of HR delivery modes}
\end{table}

In discussing the HR sourcing possibilities for organisations, several studies have made a distinction between transactional and transformational HR services (Carrig 1997; Lepak, Bartol and Erhardt 2005; Ulrich 1995). Here, transactional HR services are understood as HR administration-related activities such as personnel record keeping and payroll, whereas transformational HR services refer to activities which aim to develop or transform the human resources of the organization or the organization itself, and include services like training,
staffing and organizational development (Ulrich 1995). In the literature it is suggested that organizations should offer transactional HR services through the shared HR delivery mode, whereas transformational HR services can be best performed by the non-shared HR delivery mode to maximize HR service value (Cooke 2006; Redman, Snape, Wass and Hamilton 2007; Ulrich et al. 2008). Ulrich et al. (2008: 843) argue that “the embedded HR professional is responsible for selecting and implementing the right development experiences to improve first-line supervision.” Also, Redman et al. (2007: 1503) suggest “that transformational HR might be better provided out with the shared service arrangement” and so make a plea for delivering transformational HR work through a non-shared delivery mode. On the other hand, transactional HR services, which often come in large volumes (Lepak et al. 2005), may be offered inefficiently when organizations decide to decentralize their delivery and so miss out potential economies of scale benefits. (Farndale et al. 2009; Redman et al. 2007). Therefore, transactional HR work likely has the highest HR service value when it is offered through a shared delivery mode.

However, research shows that the value of HR services is low, even when a specific HR service is offered through an HR delivery mode which previous studies considered most appropriate (Cooke 2006; Reilly 2000; Sparrow, Brewster and Harris 2004). For instance, Cooke (2006) reports low levels of HR service quality delivered by a transactional-oriented HR SSC, which was perceived by employees and managers to be wasting resources. For transformational HR delivery, non-shared HR delivery channels do not seem to maximize HR service value either. For instance, several studies report on the accounts of line managers who are unsatisfied with the training and coaching received from embedded HR professionals (Cunningham and Hyman 1999; Renwick 2003; Whittaker and Marchington 2003). Similarly, HR professionals perceive that line managers are ineffective in offering transformational HR services to employees (Hall and Torrington 1998; Harris, Doughty and Kirk 2002). An
important conclusion stemming from these findings is that offering (1) transactional HR services through the shared HR delivery mode and (2) transformational HR services through the non-shared HR delivery mode can still yield low levels of HR service value. This means that whether an HR service is transactional or transformational does not necessarily determine which HR delivery mode to choose in order to reach high-levels of HR service value.

2.2. Platform thinking and HR service delivery

To maximize the value of HR services, organizations have to select the appropriate HR delivery mode for each of their HR services. But what condition determines the appropriate delivery mode for an HR service, given that the distinction between transactional versus transformational HR services is not a useful guide for companies in their decision making? To address this question, we depart from the platform thinking principle and the related concept of commonality potential, which originally was applied to operations and product innovation management (Halman, Hofer and Van Vuuren 2003; Robertson and Ulrich 1998). Key to platform thinking is “the sharing of components, modules and other assets across a family of services” into a service platform (Halman et al., 2003: 149, italics are ours). A service platform can be defined as the collection of service components that are shared by a set of services (Robertson and Ulrich 1998). Previous research has shown that sharing service components across a family of services results in multiple benefits, including economies of scale and scope, accumulated learning, shorter lead times and increases in service quality (Pekkarinen and Ulkuniemi 2008; Voss and Hsuan 2009). As such, installing a service platform provides the opportunity to offer better services at a lower price, and hence, allows organizations to maximize service value.

However, how does a platform look like for HR service delivery and what are the components of HR services? For HR service delivery, one may think of service components
as HR activities that are part of HR processes, like conducting a face-to-face interview or screening resumes which together are part of staffing HR processes. Hence, for HR delivery a service platform involves the sharing of HR activities across a family of HR processes. For example, the resume screening or application request administration can be the same for an engineer within the R&D department as for a representative in the sales department (see figure 1). The HR process steps that are common across multiple business units can form a service platform and therefore, the delivery of this platform can be easily done by means of a shared HR delivery mode. As such, whereas an HR activity resembles a service component that may be put into a service platform, the shared HR delivery mode is akin to a service platform (see figure 1). Given this consideration, choosing the shared delivery mode for an HR activity will be appropriate when this activity can be put in a platform. The concept of platform thinking explains that the commonality potential of service components, which is higher when user-needs are homogeneous, is a key criteria for developing service platforms (Robertson and Ulrich 1998).
Figure 1: Example of a platform for the delivery of recruitment and selection services

Non-platform components with:
- high differentiation in needs and therefore,
- low commonality potential, and therefore,
- delivery through non-shared HR delivery mode

Platform components with:
- low differentiation in needs and therefore,
- high commonality potential, and therefore,
- delivery through shared HR delivery mode
2.3. Relationship between the level of differentiation in needs and sharing services

Consistent with general systems theory which holds that the design of a system is affected by inputs put into and demands placed on the system (Schilling 2000; Simon 1962), platform scholars identified two related conditions which determine whether it is appropriate to put a service component into a platform: commonality potential and the level of differentiation in user-needs (Halman et al. 2003; Hofer and Halman 2004; Robertson and Ulrich 1998; Voss and Hsuan 2009). Commonality potential refers to the replicability of service components. Product and service components can easily be replicated across multiple services when these products or services rely on standard interfaces between components and similar assets like knowledge, information technologies, or operating standards (Halman et al. 2003; Voss and Hsuan 2009). A derivate of commonality potential is differentiation in needs that reflect the variety of demands placed upon the system and refers to the extent to which the needs for a service differ across clients (Halman et al. 2003; Hofer and Halman 2004). As such, this concept concerns the heterogeneity of client needs which may differ both across individual clients and over time (Martin and Ishii 2002; Schilling 2000). A service component is said to be eligible for putting in a platform, when differentiation in needs is low, because this increases its commonality potential (see figure 1). According to Hofer and Halman (2004), ‘differentiation needs have to be served by non-platform components’ (p. 55, italics are ours) in order to secure that the service meets the unique client needs. The other way around, when following the economies of scale logic, a service component can be best put into a platform when commonality potential is high, because dispersing assets throughout the organization for meeting similar needs leads to a suboptimal and inefficient allocation of assets (Hofer and Halman 2004; Pekkarinen and Ulkuniemi 2008; Voss and Hsuan 2009). Therefore, to increase the efficiency and quality of service components for which customers have low differentiation in needs should be part of the service platform (Robertson and Ulrich 1998).
If decision makers do not behave in accordance with what platform thinking predicts, this is likely to lead to suboptimal levels of service value. For instance, when HR services with high commonality potential are not shared, organizations may miss out economies of scale benefits, resulting in a relatively high price to be paid by clients to obtain these services. On the other hand, when differentiation in needs is high, sharing of those activities likely results in over-standardization and a low quality of HR services. When applied normatively, platform thinking therefore predicts that HR services will maximize HR service value when HR activities with high commonality potential (i.e. low differentiation in needs) are shared, and HR activities with low commonality potential (i.e. high differentiation in needs) are non-shared. In other words, we envision a direct relationship between HR delivery mode and HR service value which is contingent upon the level of differentiation in end-user needs (see figure 2). More formally, we propose the following:

Hypothesis 1a: delivering HR activities through a shared HR delivery mode results in higher levels of HR service value when differentiation in needs are low.

Hypothesis 1b: delivering HR activities through a non-shared HR delivery mode results in higher levels of HR service value when differentiation in needs are high.

**Figure 2: Research model**

- Differentiation in needs
- HR delivery mode: shared versus non-shared
- HR Service value
3. METHODS

3.1. Participants and procedures

The criteria against we selected a company to participate in this research were that it performs a variety of HR activities in-house, relies on both shared and non-shared HR delivery channels, and consists of multiple business units. Against these criteria, a Dutch technical services company was selected, for anonymity reasons we refer to this company as TechCom. TechCom consists of twenty-two business units which are offered HR services through an HR shared service centre, embedded HR advisors and line managers.

Our unit of analysis is the HR activity. We selected HR activities from an overview, provided by TechCom, of all transactional and transformational HR processes within the company. To guarantee the inclusion of all possible HR activities in the sample frame, we started with interviewing seven HR managers and asked them to describe the entire flow of HR processes, which allowed us to triangulate the overview of HR processes. For this study we selected HR activities through stratified random sampling to guarantee an equal distribution of transactional and transformational HR services. In total, 28 transactional and 24 transformational HR activities were selected.

The data was collected through document analysis and two mail surveys. First, we relied on the HR process overviews to indicate the HR delivery mode of each HR activity studied, which is either shared or non-shared. The HR process overviews were also used to indicate the type of each HR activity, which is either transactional or transformational. Second, to measure the variety in needs of users across business units, we surveyed the HR directors of twenty-two business units. These HR directors are together responsible for the HR function of the entire technical services company and were therefore able to provide an overview of the HR needs within and across business units. Because service value represents the trade-off between service quality and costs (Cronin, Brady and Hult 2000; Grewal, Monroe and
krishan 1998), we also surveyed the HR directors as they have full insight in both the quality
and price of HR services. To minimize the possibility of common method variance stemming
from relying on HR directors as a single source, we introduced a time lag of two months
between the measurement of the differentiation in needs and HR service value variables
(Podsakoff, MacKenzie, Lee and Podsakoff 2003). Of the 22 targeted HR directors, 19
responded during the first wave, whereas 13 returned the second questionnaire yielding
response rates of 86% and 60% respectively.

3.2. Main variables
Whenever possible, we used existing multi-item scales to measure the constructs of interest in
our questionnaire. Answers could be given by selecting among a binary variable or were
statements on a five-point Likert scale (ranging from ‘strongly disagree’ to ‘strongly agree’).

HR delivery mode. HR delivery mode was assessed by making use of a dummy variable
(1 = shared HR delivery mode, 0 = non-shared HR delivery mode). The only shared form of
HR delivery within TechCom is the HR SSC. Therefore, all but the HR activities provided by
the HR SSC, were coded as non-shared.

Differentiation in needs. For each HR activity the differentiation in needs is determined
by two dimensions. Dimension one is the extent to which user-needs differ among end-users
at the same moment in time. Dimension two is the degree to which user-needs change over
time (Joshi and Sharma 2004; Martin and Ishii 2002). We decided to adapt the customer
turbulence scale of Joshi and Sharma (2004) that includes two measures for need variation
across both users and time (see Appendix A). We first described each HR activity individually and
then asked the HR directors to assess the differentiation in needs for that HR activity. The rating
scale ranged from 1 = “strongly disagree” to 5 = “strongly agree”.

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**HR activity type.** HR activity type is defined as the category to which an HR activity belongs, which depends on the HR activity’s objective (Lepak et al. 2005). As such, an HR activity is transactional when its aim is to fulfill the administrative needs of the organization and transformational when it aims to transform human resource base of the organization or the organization itself (Lepak et al. 2005; Ulrich 1995). We developed a dummy variable (1 = transformational HR activity, 0 = transactional HR activity). To measure the type of HR activity, three HR scholars independently coded the 52 selected HR activities as either transactional or transformational based on the definitions as presented above. The inter-coder reliability for the HR activity type was 90.4% which is sufficient to be confident that the data is trustworthy (Miles and Huberman 1994).

**HR service value.** HR service value is defined as the trade-off between an HR service’s benefits and the costs of its acquisition (Cronin et al. 2000; Grewal et al. 1998). We decided to adapt the service value scale of Cronin et al. (2000) that includes two measures for the trade-off between service benefits and costs (see Appendix A). As before, we first described each HR activity individually and then asked the HR directors to assess the service value of that HR activity using a rating scale that ranged from 1 = “strongly disagree” to 5 = “strongly agree”.

3.3. Control variables
In our analysis we included three variables to control for confounding effects: experience with shared service delivery, job tenure and division size.

**Experience with shared service delivery.** Prior experience with a delivery channel can positively influence quality perceptions of customers (Bettman and Park 1980). HR delivery through shared services is one of the latest developments in HR sourcing (Maatman, Bondarouk and Looise 2010) and therefore, several business units may have no previous experience with shared service delivery. To measure experience with shared service delivery,
we made created a dummy variable (1 = prior experience with service delivery an SSC, 0 = no prior experience with service delivery by an SSC).

*Job tenure of HR director.* Client self-efficacy increases with job tenure and is known to positively impact on service value (McKee, Simmers and Licata 2006). HR directors with longer tenures are potentially better able to co-produce HR services and/or collaborate with other HR delivery channels and, hence experience higher levels of service value. Job tenure was measured as the number of years worked within TechCom.

*Business unit size.* Previous research shows that firm size can be negatively related to perceived benefits of HR outsourcing (Klaas, McClendon and Gainey 1999). To control for this we measured business unit size as the number of individuals employed the focal business unit.

### 3.4. Data analysis

Before testing our hypotheses, we first checked the agreement and consensus among the 19 HR directors for the value of differentiation in needs. We did so, examining the within-group agreement or $r_{wg(J)}$ (James, Demaree and Wolf 1984), intraclass correlation (ICC[1]), and reliability of the mean (ICC[2]). Later, we tested our contingency model using hierarchical regression analysis. Before the analysis we mean-centered the terms of the differentiation needs variable because this facilitates the interpretation of our results (Hofmann and Gaving 1998).

### 4. RESULTS

#### 4.1. Viability of differentiation needs construct

We first checked the viability of the differentiation in needs construct. The $r_{wg(J)}$, which was adjusted for a slight positive skew, had a value of .87. We further obtained values for ICC(1)
and ICC(2) of .17 and .80 respectively. Altogether, the values of these indices are above suggested cut-offs reported in the literature (LeBreton and Senter 2008) and hence show a strong consistency and agreement among the respondents on the extent to which user needs differ across end-users, and over time. Given the high levels of interrater agreement and reliability, we did not see the need to aggregate the data on differentiation needs to the HR activity level as this will reduce the richness of the data and ignores within-business unit variation in end-user needs.

4.2. Descriptive statistics and correlations

The means, standard deviations and correlations among the variables are shown in table 2. The level of HR service value of an HR activity varies according to business unit size and tenure of the HR director. The larger the business unit and the longer an HR director works for an organization, the higher levels of HR service value become. With regard to differentiation in needs, we find no significant correlation between differentiation in needs and HR service value.

Table 2: Descriptive statistics and correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<td>1  HR service value</td>
<td>3.32</td>
<td>0.85</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>2  Job tenure of HR director</td>
<td>8.58</td>
<td>9.57</td>
<td>.35**</td>
<td></td>
<td></td>
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<tr>
<td>3  Business unit size</td>
<td>295.24</td>
<td>201.65</td>
<td>.17**</td>
<td>.28**</td>
<td></td>
<td></td>
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<tr>
<td>4  Differentiation in needs</td>
<td>2.63</td>
<td>1.17</td>
<td>-.18</td>
<td>.06</td>
<td>-.03</td>
<td></td>
</tr>
</tbody>
</table>

*Logarithm
* \( p < 0.05 \)
** \( p < 0.01 \)
One-tailed tests. \( n = 649 \)

4.3. Regression analyses
Four series of regression analysis were conducted to test our hypotheses. The results of these analyses are presented in table 3.
Table 3: Results of the regression models of HR service value

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>s.e.</th>
<th>Model 2</th>
<th>s.e.</th>
<th>Model 3</th>
<th>s.e.</th>
<th>Model 4</th>
<th>s.e.</th>
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<td>Constant</td>
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<td>2.12</td>
<td>**</td>
<td>2.12</td>
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<td>2.11</td>
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<td>Control variables</td>
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<tr>
<td>Experience with shared service delivery</td>
<td>0.19</td>
<td>0.29</td>
<td>0.70</td>
<td>*</td>
<td>0.70</td>
<td>*</td>
<td>0.74</td>
<td>*</td>
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<td>Job tenure of HR director</td>
<td>0.04</td>
<td>**</td>
<td>0.06</td>
<td>**</td>
<td>0.06</td>
<td>**</td>
<td>0.06</td>
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<tr>
<td>Business unit size</td>
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<td>HR activity type</td>
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<td>HR delivery mode</td>
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<td>0.08</td>
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<tr>
<td>Differentiation in needs</td>
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<td>-0.17</td>
<td>**</td>
<td>0.03</td>
<td></td>
<td>-0.11</td>
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<tr>
<td>Two way interactions</td>
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<tr>
<td>HR delivery mode X HR activity type</td>
<td>-0.00</td>
<td></td>
<td>0.12</td>
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<td>0.11</td>
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<tr>
<td>HR delivery mode X Differentation in needs</td>
<td>-0.13</td>
<td>*</td>
<td></td>
<td></td>
<td>0.06</td>
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<tr>
<td>Model F</td>
<td>32.59</td>
<td>**</td>
<td>23.20</td>
<td>**</td>
<td>19.86</td>
<td>**</td>
<td>18.10</td>
<td>**</td>
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<tr>
<td>R²</td>
<td>0.13</td>
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<td>0.18</td>
<td></td>
<td>0.18</td>
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<td>0.19</td>
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<tr>
<td>Adjusted R²</td>
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<td>0.17</td>
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<td>ΔR²</td>
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<td>0.00</td>
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<td>0.01</td>
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<tr>
<td>F change</td>
<td>12.59</td>
<td>**</td>
<td>0.00</td>
<td>**</td>
<td>4.97</td>
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* Unstandardized coefficients are given, with s.e. meaning standard errors. n = 649.

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<tr>
<td>*p &lt; .05</td>
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</table>

Model 1 is confined to the inclusion of the control variables. Only job tenure of the HR director is significantly related with HR service value (p < .01) such that HR service value increases with the years an HR director has worked for a company.

In model 2, we included the variables HR activity type, HR delivery mode and differentiation in needs. Including these variables increased the model fit to 18%. The results indicate a significant, negative relationship between differentiation in needs and HR service value (p < .01). In other words, HR service value decreases when the needs of end-users become more heterogeneous or more variable across time. On the other hand, HR delivery mode does not have a significant impact on HR service value (p = .49), meaning that none of the two HR delivery modes is consistently delivering higher levels of service value.
In model 3, we introduced a two-way interaction between HR delivery mode and HR activity type. Although not hypothesized, we tested this interaction because extant literature considers the relationship between HR delivery mode and HR service value to be contingent on whether an HR service is transactional or transformational. However, in comparison to model 2, including this interaction term does not improve the fit of the model (i.e. $\Delta F(3)(2) = 0.00, p < 0.01$). Also, the interaction is shown to be non-significant ($p = .98$), meaning that the relationship between HR delivery mode and HR service value is not significantly different for transactional or transformational HR services.

In model 4, we included the two-way interaction between HR delivery mode and differentiation in needs, which improved the explanatory power of model 4 over model 2/3 (i.e. $\Delta F(4)(2) = 4.97, p < 0.05$). The two-way interaction effect showed to be significant ($p < 0.05$), meaning that the relationship between HR delivery mode and HR service value is contingent on differentiation in needs. To gain a further insight in the two-way interaction effect, we plotted the two-way interaction and performed a slope difference test (Aiken and West 1991; Dawson and Richter 2006). The interaction effect between HR delivery mode and differentiation in needs is plotted in figure 3 and was done against ±2 standard deviations from the means of both variables for illustrative reasons. However, different values of the moderator variable (i.e. differentiation in needs) may yield different slopes of the regression line that represents the HR delivery mode – HR service value relationship. Therefore, we calculated the region of significance to assess against which values of differentiation in needs the interaction effect is significant. The region of significance is also included in figure 3.
Figure 3 shows that HR service value decreases when end-user needs become more heterogeneous, irrespectively of the HR delivery that is employed. Nonetheless, the highest level of HR service value is reached when HR services for which homogenous end-user needs exists are offered through a shared HR delivery mode. At first sight, relying on a shared HR delivery mode also yields the lowest HR service value when it offers HR services for which end-users have heterogeneous needs. However, the region of significance shows that the HR service value of non-shared and shared HR delivery modes only significantly differs (at \( p < 0.1 \)) for the values of differentiation in needs that lie between 1.00 and 1.94 (for an overview of the region of significance, we refer to Appendix B).

Hypothesis 1a states that delivering HR activities through a shared HR delivery mode results in higher levels of HR service value when differentiation in needs are low. Further, hypothesis 1b states that delivering HR activities through a non-shared HR delivery mode results in higher levels of HR service value when differentiation in needs are high. The significant regression coefficient for the interaction effect in model 4 and the regression lines
in figure 3 indicate that both hypotheses should be accepted. However, this conclusion does not entirely hold when considering the region of significance. As said before, the HR service value of both HR delivery modes only significantly differs for HR activities with a differentiation in needs score lying between 1.00 and 1.94. This means that a shared HR delivery mode indeed generates higher levels of service value than a non-shared HR delivery mode under the condition that differentiation in needs are low (i.e. < 1.94). However, for HR activities with a high differentiation in needs (i.e. > 1.94), utilizing a non-shared HR delivery mode does not yield significantly higher levels of service value than does a shared-HR delivery mode. Therefore, we accept hypothesis 1a and reject hypothesis 1b.

5. DISCUSSION

In this paper, we set out to examine whether the selection of a shared or non-shared HR delivery mode for maximizing HR service value should depend on the commonality potential of respective HR services. We found that the impact of utilizing one of the two HR delivery modes on HR service value is contingent upon the differentiation in needs, yet unconditional on the type of HR service that is delivered. These findings have important implications for theory and practice, which are discussed below.

5.1. Theoretical contribution and implications

This study makes several contributions to platform thinking and human resource management literature. First, although platform thinking is often applied as a descriptive ideology (Martin and Ishii 2002; Pekkarinen and Ulkuniemi 2008), we extended the commonality potential concept by treating it normatively to explain which delivery channels will maximize the value of specific services. Second, we contribute to literature on HR evaluation. This stream of literature has given much attention to how HR service value is affected by the HR
competencies, roles or capabilities of HR professionals (Boselie and Paauwe 2005; Buyens and De Vos 2001; Maatman et al. 2010; Ulrich 1997); in other words, the supply side of HR service delivery. We found that the differentiation in user needs negatively impacts on HR service value. This implies that future research may also benefit from focusing on the demand side of HR service delivery to explain why the value of HR services differs. Third, we contributed to HRM literature by empirically demonstrating the utility of applying operations management concepts, such as platform thinking to HR service delivery. Namely, we found that shared HR delivery channels yield higher levels of service value than non-shared HR delivery channels when the commonality potential of a specific HR service is high.

Existing studies into HR delivery have suggested that transactional HR services should be shared across business units, whereas transformational HR services can be best retained with individual business units in order to maximize HR service value (Cooke 2006; Redman et al. 2007; Ulrich 1995; Ulrich et al. 2008). However, our findings challenge this assumption as they show that the impact of using an HR delivery mode on HR service value is not affected by whether it delivers transactional or transformational HR services. Instead, a better criterion is the extent of differentiation in needs for HR services. We found that the extent to which using an HR delivery mode results in high-level value of an HR services depends on the differentiation in needs. However, differentiation in needs has a contingent effect only when end-user needs are relatively homogeneous; although shared HR delivery channels outperform non-shared HR delivery channels for delivering HR services with homogeneous needs, we found that a non-shared HR delivery mode is not superior when it comes to offering services for which end-user needs are heterogeneous.

An explanation for why the shared HR delivery mode performs as good as the non-shared HR delivery mode when differentiation in needs is high comes from resource-based and configuration theories. Together, these theories argue that value follows from intra-
organizational resources and the synergies among them (Barney 1991; Doty, Glick and Huber 1993). Shared HR delivery channels, such as HR SSCs, bring together resources like human capital and organizational capabilities that would otherwise be left unbundled when utilized for non-shared HR delivery (Maatman et al. 2010; Meijerink and Bondarouk 2010). This situation provides shared HR delivery channels with more possibilities for creating resource synergies in comparison to non-shared HR delivery channels (Cooke 2006). Making use of these synergies increases the ability of shared HR delivery channels to deal with the complexities associated with meeting many heterogeneous needs and so create HR service value (Skaggs and Youndt 2004). Therefore, although non-shared HR delivery channels can benefit from possibilities to tailor their services more easily to meet the diverse needs within a single business unit, shared HR delivery channels may serve multiple business units equally well, because they have the advanced resources to do so.

Nevertheless, the question remains whether HR activities for which diverse needs exist should be shared or not. Although our findings suggest that the non-shared HR delivery mode is slightly preferable in such occasions, they do not give a definitive answer. However, future research could do so by relying on the commonality potential framework. For this paper, we operationalized commonality potential as the differentiation in needs or in other words, the demands placed upon HR service delivery. However, the commonality potential of services is also affected by the inputs used for service delivery, such that service components can be put in a platform when their production relies on similar inputs (Schilling 2000; Simon 1962). For HR service delivery, such inputs can be thought of in terms of resources like HR competencies, HR information technologies or HR polices (Farndale et al. 2009; Meijerink and Bondarouk 2010). Therefore, we encourage future research to examine whether differentiation in resources may explain whether HR services with heterogeneous needs should be shared or non-shared to maximize HR service value.
5.2. Practical contributions and implications

As a practical contribution, this study offers measurement scales that practitioners can use as an instrument for deciding how to source HR activities. Also, the empirical findings show that companies should take into account the differentiation in end-user needs during such decision processes. For business decision makers, our findings have two important implications. First, when aiming to maximize the value of HR services for which homogenous and stable needs exist, companies should go for shared HR service delivery. If the needs for specific HR services are different across end-users and time, then choosing either a shared or non-shared HR service delivery makes practically no difference. Despite that companies can influence HR service value levels by distributing HR services across delivery modes, a second implication of our findings is that service value will always be lower for HR services for which heterogeneous user needs exists, or when user needs rapidly change over time. Therefore, companies can improve HR service quality by standardizing end-user needs, which can be effectuated for example, by hiring employees who have similar backgrounds (Paauwe and Boselie 2003).

5.4. Limitations and future research

This study is not without limitations. First, the cross-sectional findings inhibit drawing conclusions on the causality of our findings. For example, HR service value may also affect the choice of an HR service delivery mode when past experiences of organizations with one of the two HR delivery modes were unsatisfactory. Therefore, we encourage future research to examine the causal direction of the HR delivery mode – HR service value relationship. Second, the data for this study were obtained from a single group of respondents, the HR directors, which may raise the concern of single source bias. However, relying on single
respondents is less problematic here because we introduced a time lag between the measurement of the independent and dependent variables, which mitigates single source bias (Podsakoff et al. 2003). Third, relying on the HR directors to assess levels of HR service value increases the likelihood of self-appraisal bias. However, no other actors within TechCom had an overview of the costs and quality of both shared and non-shared HR delivery, which is needed to assess the trade-off between the quality and costs of shared and non-shared HR delivery. Therefore, surveying HR directors was the only option in order to measure HR service value. Nevertheless, we asked the HR directors to assess levels of HR service quality as seen by the collective of end-users within respective business units, which may mitigate problems of self-appraisal bias. Future research could circumvent these problems, by selecting organizations which have actors who can independently assess levels of HR service value, such as contract managers who act as end-user representatives.

6. CONCLUSION

Despite the limitations of this study, we have successfully addressed a gap in the literature on HR sourcing. Our results show that the impact of using an HR delivery mode on HR service value is not affected by whether it delivers transactional or transformational HR services. Instead, they show that HR service value is higher when HR services for which homogeneous needs exits are delivered through a shared HR delivery mode. This supports the assumption that the effect of using an HR delivery mode for delivering an HR services on HR service value is contingent upon the commonality potential of that service. We hope that our research findings lead to an increase in the application of operation management concepts and the commonality potential framework in particular, in HR delivery research.
Appendix A: Multi-item scales used for the research

For all items we used a five-point response scale ranging 1 = “strongly disagree” to 5 = “strongly agree”. Before presenting the items, we first described the HR activity of interest. The items presented below had to be administrated for all 52 selected HR services separately.

**Differentiation in needs** *(the extent to which user-needs for an HR service differ across end-users and across time (Joshi and Sharma 2004)).*

**DIFF 01** “Users have very diverse preferences for this service.”

**DIFF 02** “The needs of users change frequently for this service.”

**HR service quality** *(trade-off between an HR service’s benefits and the costs of its acquisition (Cronin et al. 2000; Grewal et al. 1998)).*

**SERVAL 01** “Overall, the users value the execution of this service as very high.”

**SERVAL 02** “In relation to the overall costs, time and effort, the execution of this service satisfies the needs of the users very well.”
## Appendix B: Region of significance for HR delivery mode x differentiation in needs

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