

# Evaluating the performance of business service providers: Developing a model from multiple case studies<sup>1</sup>

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## Summary

Services have become an increasingly important part of many organizations' expenditures. At the same time, organizational buyers view the purchase of business services to be highly complex. The specific characteristics of services influence the purchasing process in the sense that certain steps in the purchasing process become more important, more difficult, or just different in comparison with purchasing the process for goods.

This paper investigates the phase of ex post evaluation of suppliers of business services. Based on a literature review on supplier evaluation models, we identify three types of quality that are important in evaluating the performance of service suppliers. We then conduct an embedded case study to identify which of these quality types are most important for services for which the buying company pursues a more transactional approach, versus services for which a more relational view is adopted. The results of this embedded case study indicate that functional service quality (i.e. quality of the service process) and relationship quality are less important for services that are bought via a transaction-oriented purchasing strategy than for services bought by a relation-oriented purchasing strategy.

**Keywords:** business services, supplier evaluation, purchasing, case research

**Type of paper:** Working

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### Introduction

Increased specialisation, growth of the knowledge economy and outsourcing of service-related activities, and increasing 'servitization' of goods have made the purchase of business services a substantial element in firms' total acquisition of external resources (Wynstra et al., 2006; Axelsson and Wynstra, 2002). Consequently, business services are obtaining more and more management attention: on the one hand because non product related items (a large part of which consists of services) are seen an area where substantial savings can be obtained; on the other hand because organisations are acknowledging that many of the services they buy (e.g. consultancy, IT, marketing) are actually quite strongly related to their primary processes. Patel (2005) interviewed 30 main board directors of leading companies and observed that 70 percent of them worry about how their companies buy professional services (e.g. consulting, legal, banking and marketing services). They also believed that CPOs and their procurement departments *can* make a difference in service buying and want them to do so.

The potential for increasing profits through more effective purchasing for service buying is substantial (Bales and Fearon, 1995). Stradford and Tiura (2003) show that when cost savings are pursued, the savings on services range from 10 to 29 percent versus an average of 5 to 17 percent for other commodities or materials.

At the same time, realizing this potential is not easy, since various studies have found that organizational buyers deem the purchase of services to be different from or more difficult than the purchase of goods. Wittreich (1966) already stated that 'Unfortunately, the tried and true rules for buying goods do not work when applied to the buying of professional services'. Jackson et al. (1995) find that determination of quality is more difficult for services than for goods and that a higher degree of collaboration between buyer and seller is required. Fitzsimmons et al. (1998) point out that the purchase process for services is more complex because it implies different risks for the buyer with regard to evaluating the vendor, and specification and evaluation of the service. Smeltzer and Ogden (2002) mention risks associated with evaluating performance, writing statements of work, and added establishing target costs and total costs. They furthermore point out that top management perceives services buying as less complex than materials buying, as a result of which they tend to assign new and inexperienced buyers to services buying.

The specific issues mentioned by these authors mostly relate to the initial stages of the purchasing process. What happens after the purchase decision has been made is an area which has been left largely unstudied by Purchasing and Supply Management (PSM) researchers. The topic of supplier evaluation has received substantial attention in the context of goods (Monczka et al., 2001; Simpson et al., 2002), but the evaluation of *service suppliers* is often not specifically considered. An exception is Mitchell (1994), who briefly touches upon problems and risks in the

buying process for consultancy services and includes project management and performance evaluation in addition to the stages comprising the up-front decision-making process. Services marketing literature has extensively investigated the concept of service quality, but mostly in a business-to-consumer setting.

This paper therefore investigates how to evaluate the performance of business service providers *after* the purchase decision has been made. The main objective is to arrive at a model that is practically useful and usable for evaluating providers of services. After conceptualising performance of service providers from a theoretical point of view, the relevance of the dimensions underlying provider performance is investigated for suppliers of different types of services. We do this by means of an embedded case study, which comprises the study of five suppliers providing various services to a single buying company.

The structure of this paper is as follows. First, we elaborate on the topic of service provider evaluation from a theoretical perspective, including a discussion of the various supplier evaluation models available in extant literature. Then, we turn to an explanation of the research methods used to investigate service provider evaluation empirically. We then show the results of our embedded case studies, and end with conclusions and a discussion of our main findings.

### **Supplier evaluation in business services**

Various authors have studied supplier selection (Kannan and Tan, 2002; Simpson et al., 2002; Monczka et al., 2001). However, the models developed by these authors do not (explicitly) make a distinction between the evaluation of suppliers of services and suppliers of goods. It seems that the evaluation of service providers has so far received little attention in PSM research, Mitchell (1994) being one of few exceptions. Although our focus is on the evaluation of service providers, we will draw on research conducted in the context of suppliers of industrial goods to develop a framework for evaluating service providers.

Furthermore, authors do not always distinguish between *ex ante* and *ex post* supplier evaluation, i.e. for purposes of supplier selection or for purposes of evaluating a supplier's realized performance. Simpson et al. (2002) claim that evaluation is needed for both selection and retention of suppliers. Kannan and Tan (2002) argue for distinguishing between evaluating for these two purposes, i.e. selection and assessment. Note that in this study, we focus on the *ex-post* evaluation of service suppliers, thus on the evaluation of the supplier's realized performance.

Our review of extant literature on supplier evaluation indicates that traditionally, price, quality and delivery have been among the most important evaluation criteria (Simpson et al., 2002). While price and delivery can be evaluated in a quite objective manner (for example: actual price conforms to agreed upon price), quality is much more difficult to evaluate. Here, the subjective interpretation of the people involved is highly important; since differences between people influences their perceptions of things, aggregating the various opinions to an actual assessment can be very complex.

#### *Evaluating service quality*

Various authors, mostly from the services marketing and services management disciplines, have therefore investigated the topic of service quality. Two approaches can be considered dominant (Brady and Cronin, 2001).

The first is the conceptualisation by Grönroos (1982; 2000), who makes a distinction between technical and functional quality. The technical quality relates mostly to the outcome of the service, whereas the functional quality is related to the process of service delivery. Similarly, Edvardsson and Olsson (1996) identify the quality of the service outcome and the quality of the service process.

The second dominant conceptualisation is the one by Parasuraman et al. (1988). They developed a model of service quality which uses terms that describe service encounter characteristics, or determinants of service quality (i.e., reliability, responsiveness, empathy, assurances, and tangibles). In this SERVQUAL model, various gaps are identified in the process of service delivery 'that can be major hurdles in attempting to deliver a service which customers would perceive as being of high quality' (Parasuraman, 1985, p. 44). One of the major drawbacks of this model is that it only captures, in Grönroos' terms, functional or process quality, and not technical or output quality (Cronin and Taylor, 1992; Buttle, 1996).

Other authors generally adopt one of these two conceptualisations to develop their own definition of service quality. For instance, Rust and Oliver (1994) build on Grönroos' model and define three dimensions of service quality: the *service product*, *service delivery*, and the *service*

*environment*. The first two are synonymous to respectively technical and functional quality; the latter adds *where* to *what* and *how*. The quality of the *where* is also mentioned by Bitner (1992, as cited in Grönroos, 2000): she defines Serviscape Quality as the quality of the physical environment in which service delivery takes place.

We propose to select one of the two dominant conceptualisations; consequently, we exclude the *where* dimension from our conceptualisation of service quality. Since the conceptualisation of Grönroos is broader than the one of Parasuraman (encompassing both technical and functional quality rather than only the latter), we select the approach of Grönroos to define service quality. For purposes of clarity, we will refer to technical quality as *service output* quality: this refers to the quality associated with the outcome/result of the service encounter. We refer to functional quality as *service process quality*: this relates to the quality associated with the processes of service delivery and consumption.

More recently, various authors have argued that other factors like the buyer-supplier relationship (Axelsson and Wynstra, 2002; Kannan and Tan, 2002; Carter et al., 2005), and criteria at the company-level (i.e. financial stability of the supplier, the supplier's quality assurance system (Van Weele, 2005) have become important in addition to price, quality and delivery. This development suggests that when evaluating service providers, companies should not only look at the object of exchange, but also at the overall relationship.

Grönroos (2000) however makes a clear distinction between quality at the level of the service and quality at the level of the relationship. He claims that buyer-supplier relationship quality refers to "the dynamics of long-term quality formation in ongoing customer relationships" (Grönroos, 2000, p. 82). While service quality is "basically static", relationship quality is dynamic in the sense that it represents how quality develops over time. Consequently, *service quality* is *short-term oriented* and *relationship quality* is *long-term oriented*: "Perceptions of quality and value of episodes or service encounters following each other accumulate into perceived quality of the relationship" (Grönroos, 2000). Similarly, Liljander and Strandvik (1996) distinguish between episode-level quality (which represents the quality of the service encounter) and relationship level quality. They make clear that *service quality leads to relationship quality*.

We therefore include relationship quality in our conceptualisation of quality in business-to-business service relationships.

### **Segmenting services for the purpose of supplier evaluation**

We thus have identified three elements of service quality: 1) service outcome quality; 2) service process quality; and 3) buyer-supplier relationship quality.

Grönroos (2000) presents a list of criteria for service quality based on a solid body of empirical research, conceptual research and practical experience. However, he also points out that managers should use service quality determinant lists as a starting point; they have to customize the lists for each kind of service. Given the large variety in services, it would be beneficial to come up with a way to segment services into different categories, for which this customization process can take place. Here, one needs to find the balance between the added-value of more fine-tuned and specific lists of criteria for service quality, and the additional effort required to do this fine-tuning.

Our literature review revealed that within the field of service management, the classification of business services has received far less attention than the classification of consumer services (Jackson and Cooper, 1988; Boyt and Harvey (1997)), and this has also been noted in PSM literature (Smeltzer and Ogden, 2002). The classifications of business services that do exist focus on the characteristics of the provider, rather than the characteristics of the buyer or the usage situation (Cunningham et al., 1997; Mills and Margulies, 1980; West, 1997). Such supplier based classifications, though, may not be sufficient in trying to understand the need for specific approaches to supplier evaluation. For this purpose, we deem it more beneficial to look at what purchasing strategy is being pursued for a specific service, since this may influence the degree to which and the aspects on which a supplier is evaluated.

With regard to purchasing strategy, various segmentation approaches can be identified (think for example of different purchasing strategies for different types of suppliers as defined by Kraljic (1983) or collaborative versus competitive strategies). Overall however, these segmentations have in common that they distinguish between relationships that are more transactional in nature, versus relationships that are more relational (Axelsson and Wynstra, 2002). We therefore adopt this

distinction in our study. *Transactional* purchasing strategies focus more strongly on competition in the buyer-supplier relationship, while *relational* strategies are directed at cooperation. It is important to note that a relational purchasing strategy goes further than just having a long-term contract with a supplier: a long-term contract also fits with an arm's-length and adversarial relationship. A purchasing strategy is therefore classified as relational when, in the words of Axelsson and Wynstra (2002), a deal is a part of a relationship and the relationship is part of a network context, the potential of cooperation is exploited, the relationship is long term with tough demands and joint development, and when both parties focus strongly on achieving low total costs of supply and creating value.

Based on the distinction between transactional and relational purchasing strategies, we segment services into two groups: 1) services that benefit from a transactional purchasing strategy (transactional services); and 2) services that benefit from a relational purchasing strategy (relational services). For these two groups of services, we expect that specifications will differ: while for *transactional services*, the buying company will only be interested in obtaining desired quality for a reasonable price, for *relational services* the buying company will put more attention to the process of service delivery and the overall relationship. Building on the analogous situation in marketing, Grönroos (2000) explains, the benefits sought by customers are embedded in the technical solution provided by the product. Therefore, the service output quality (i.e. what the customer gets as an outcome) is the dominant source of quality in transaction marketing. Consequently, this is also what the supplier will be evaluated on. We therefore bring forward the following proposition:

*P1 Suppliers of transactional services will be evaluated on service output quality only.*

The situation is different in relationship marketing. The customer interface is broader, and the firm has opportunities to provide its customers with various types of added value of various types. According to Grönroos (2000), the second quality dimension, i.e. how the interaction process is perceived, grows in importance and often dominates. Thus, for relational services, service process quality will be highly important.

Grönroos (2000) however notes that service process quality becomes important in addition to service output quality: service output quality is a prerequisite for good total quality, but it is no longer the only quality dimension to be considered. Because the relationship comes into focus, we argue that suppliers of relational services will also be evaluated on relationship quality. We thus bring forward the following proposition:

*P2 Suppliers of relational services will be evaluated on service output, service process and relationship quality.*

However, since the process (service process quality) is a means to achieve a certain outcome (service output quality), for relational services, it is perhaps even more important to have a good process than to have a good outcome (Bolton and Drew, 1992; Matthyssens, 1998; Zeithaml et al., 1996). We therefore propose:

*P3 In the evaluation of suppliers of relational services, service process and relationship quality will be more important than service output quality.*

We will now investigate these three propositions by means of case research. We first explain our research methods in the next section, after which we will present our results.

## **Methods**

For the purpose of investigating how service providers are evaluated in practice and how this may differ for services that are purchased in a transactional versus a relational manner, we opt for studying the service provider evaluation process by means of case studies.

The reasons for opting for case studies are twofold. Firstly, the case study approach takes the contextual conditions into account (Yin, 2003). As such, it provides a richer understanding of the situation than for example survey research. Secondly, this study tries to determine *how* purchasing

managers currently evaluate the performance of service suppliers; Yin (2003) argues that case studies are particularly suitable for this type of research question.

Since we intend to study transactionally purchased services and relationally purchased services at one and the same company, this case study has an embedded design. For each type of service purchase, we study at least two services: as a result, we hope to be able to replicate our findings across different cases, which will enhance confidence in the findings. As Yin (2003, p. 46) states: "The evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust".

We decide to limit ourselves to a single case company to be able to control for contextual factors that may influence how service providers are evaluated. The buying company at which the case study is conducted is the Dutch Railways (DR). DR is the leading public train transport provider in the Netherlands. DR transports over 1 million passengers between 390 train stations in the Netherlands. The resources used comprise 2,500 kilometres of railway track and about 5,000 trains. Furthermore, DR has the task to manage, maintain and develop the various train stations. About 60-70% of their spend is devoted to buying various kinds of services, like cleaning services, financial services, and communications and print.

Although we tried to purposefully select providers of services that are bought in a transactional or a relational manner (i.e. theoretical sampling, Yin, 2003), it is hardly possible to determine what purchasing strategy is used beforehand. Asking the managers who buy the services does not necessarily help, since the purchasing strategy may not be explicit. Therefore, we decided to select a set of services which we expected to differ with regard to the purchase strategy. For example: we assumed that services that are very critical and highly complex would best be handled through a relational strategy. Radkevitch and Van der Valk (2005) state that more complex, creative and non-standardised services can better be pursued through a relation-oriented approach. Services that have a large product-component would best be handled by a transactional strategy. The latter are easier to understand and evaluate, and will thus be more easily viewed as a series of individual transactions rather than a continuous relationship. Whether the expected strategy would indeed be the actual strategy could however only be determined after data collection. Table 1 lists the services selected and their associated purchasing strategies as derived from our assumptions. The Table also lists some of the dominant features of each service.

**Table 1 Services selected and their associated purchasing strategies**

<b>Service being offered</b>	<b>Characteristics of buying situation</b>	<b>Expected purchasing strategy</b>
<i>Temporary labour recruitment services</i>	Buyer-seller integration takes place (supplier should be knowledgeable about DR), supplier builds up knowledge about DR, collaborative atmosphere	Relational
<i>Computer workplace services with helpdesk</i>	Strong buyer-seller integration (supplier has employees working at DR), joint improvement activities	Relational
<i>Mobile and traditional telephony services</i>	Quality focus, few substitutes, some buyer-seller integration, but no joint development or collaboration	Transactional
<i>Transportation services (busses, taxi)</i>	Price focus, many substitutes available, no joint development or collaboration	Transactional
<i>Beverage machine services (filling, cleaning, maintenance and administration)</i>	Quality focus, few substitutes, some buyer-seller integration, but no joint development or collaboration	Transactional

Our main data collection methods are in-depth interviews and analyses of existing evaluation methods and systems at both the buyer and the supplier. Contracts and service level agreements were also studied. In total, fourteen in-depth interviews have been executed. With the exception of the transportation services, three interviews were held per case selected: one interview with a purchasing manager, one interview with an internal customer representative (such as a contract owner) and one interview with a supplier representative (such as a key account manager).

The interviews addressed whether the quality of the services purchased and the relationship with the service provider were measured, and if so, how and by whom. Each interview lasted over one hour, and was taped and then transcribed to prevent loss of information. The transcriptions were then fed back to the interviewee to verify that the information had been recorded as desired (sometimes, seeing a statement on paper is very different from saying it) and could be used as such.

We then conducted within-case analysis, followed by a cross-case analysis (Eisenhardt, 1989). *Within-case analyses* consider cases *in isolation* and “typically involves detailed case study write-ups for each site. These write-ups are often simply pure descriptions, but they are central to the generation of insight, because they help researchers to cope with the often enormous volume of data” (Eisenhardt, 1989). *Cross-case analyses* on the other hand considers cases *in relation* with each other, and looks for within-group similarities coupled with intergroup differences. In our study, this would concern differences between the services bought in a relational manner on the one, and services bought in a transactional manner on the other hand, while looking for similarities within these groups.

### **Within-case analyses**

We will now present the results of our within-case analyses. For purposes of readability, we will not discuss all five service providers, but two. More specifically, we discuss a provider whose service is bought in a transactional manner (the provider of transportation services) versus a provider whose service is bought in a relational manner (the provider of temporary labour recruitment services).

The within-case analyses sequentially elaborate on the following topics:

- *The service characteristics and the buyer-supplier relationship*: to determine whether the utilized purchasing strategy is more transaction or more relationship oriented.
- *The utilized performance evaluation methods and criteria*: to determine for each case whether service output service quality, service process service quality and/or relationship quality items are used to evaluate the supplier’s performance.

### **Transportation services**

DR sources transportation services (other than by train) from third party providers. This transportation comprises taxi and bus transport. The use of either transportation modes can be planned or unplanned. Planned transportation by taxi occurs for example when DR employees make arrangements to be transported; unplanned transportation relates to for example to train substitution for individual passengers. Planned bus transportation occurs in case of railworks, when DR knows when to transport passengers by bus. Unplanned bus transportation occurs for example when trains break down or collide.

Bus transportation is sourced from a small number of sizeable transportation providers: each provider is responsible for a given area in the Netherlands. Taxi transportation is obtained from a main contractor, who is responsible for the management of the relationship with a number of subcontractors delivering the service.

### **Service characteristics and buyer-supplier relationship**

The services provided concern transportation from A to B. End-customers can be DR passengers or employees.

The employee transportation by *taxi* can be planned well. The service is critical: taxi’s deliver train drivers and conductors to the locations of their trains. Thus, if these employees do not arrive, DR cannot operate its trains and the primary process is interrupted. The contact with the taxi providers is handled via the contractor. If the taxi provider does not perform, DR instructs the contractor to switch from taxi provider. Switching from taxi provider is easy since the service is standard and many parties can deliver the service. Switching from contractor is a bit more difficult, since DR has to start a new tender procedure. However, there are sufficient suppliers in the market which can take over the contractor’s role. In general, the length of the relationship is 3 years (European tender legislation). Switching from contractor is not that difficult. “It only costs a little bit time and energy in the beginning.” – contract owner.

Transportation by *bus* is aimed at passengers and is considered critical. The train substitution is part of DR’s core service: transportation of travellers. In the case of an incident, DR is obliged to

help the passengers to arrive at their destinations. Planning for the bus services is consequently more difficult, since the service provider must respond to specific incidents. For example: because of delays in railway works, the timetable cannot be resumed in time, as a result of which DR has to use busses in stead of trains. DR selects its bus suppliers via a European tender. To ensure quality, DR only deals with large bus service providers. "We don't want to call a large number of sub contractors in the case of a calamity. That requires us to monitor the complete process. Instead, we've chosen for one large bus transportation supplier. They know how the process works. They get it." – purchasing manager.

There is no intensive contact between DR and the transportation providers; furthermore, substitutes are available for both types of transportation. When asking the interviewees about whether joint development or improvement take place in these relationships, the answer was negative. Based on this, we conclude that the purchase strategy for these services is indeed transactional.

#### Utilized performance evaluation methods and criteria

Currently, DR does not have one system to periodically evaluate the performance of its transportation providers. Several methods are used to obtain an idea of the suppliers' performances. These methods are:

- *Management reports*  
Every month, the taxi contractor delivers a management report to DR. The bus providers deliver a management report to DR on a quarterly basis. The management reports contain printouts from the providers' information systems and include suggestions for improvement.
- *Suppliers' online information systems*  
The taxi contractor's online ordering system contains a reporting function, which provides the following information: a list of taxi rides, total costs and cost per kilometre, and complaints (DR registers the complaints via this information system). The bus providers' online information systems can generate the following output: the number of busses delivered versus requested, improvement suggestions, reasons for low delivery performance, communication. This information is also provided via an evaluation form which the transportation provider has to fill out after every service delivery.
- *LECI*  
DR has an internal information system (LECI) that provides information about calamities, such as the amount and duration of train blocks.
- *Bus transportation registration form*  
After every transportation order, a bus provider fills in a form containing various performance indicators and delivers this to NS. The indicators are the number of busses (requested versus delivered), the number of bus coordinators (requested versus delivered), percentage of busses present, and the number of busses that are too late at the requested point of departure.

#### **Temporary labour services**

DR hires a large variety of temporary labour, both specialized (i.e. consultants, managers and information system architects), but also less specialized personnel for jobs that are more basic.

#### Service characteristics and buyer-supplier relationship

The service offered consists of two important elements. The first element is the service that the employment agency delivers to DR, namely arranging that a temporary employee is placed at DR (responding to a request, sending out resumes that match the requested job profile, et cetera). The second element is the service delivered by these temporary employees: the actual execution of the job.

Although each job request may be rather unique (as the contract owner commented: "You're dealing with people"), the process of service delivery is fairly standardized. Furthermore, as the contract owner pointed out, temp labour providers "...[They] have to be creative in order to respond to the ever changing demand. For each situation, they must be able to determine what DR desires." Since DR has many different temp labour suppliers, and requires a large variety of job profiles, the service is quite complex. Furthermore, there are many different customers and they are dispersed throughout the organisation. Demand for temporary labour fluctuates quite strongly, since the



number of people hired depends on the number of projects DR is working on. The purchasing manager noted: "Project managers claim that when they ask for someone, they need that person immediately. This may result in high peaks."

DR has contracted the suppliers using an European tender. This implies that the contract duration is three to five years. However, each half year, DR has the ability to disqualify a supplier: by changing its status from preferred to approved, temp labour will be obtained from other agencies before going to this supplier. In complex projects, which is the majority of projects, DR seeks partnership relationships, thereby decreasing the chance that they need to switch suppliers during the contract period. Switching suppliers in this case is highly undesirable, since DR may lose critical knowledge and insights. The purchasing manager pointed out that a relationship with the supplier is desirable since the supplier can be seen as an extension of DR's human resources department: "They should have knowledge about our organisation and know what the current issues are." (contract owner).

**Utilized performance evaluation methods and criteria**

The following evaluation methods and criteria have been identified:

- *Management reports*  
Each month, the supplier provides management reports to DR. The report presents a list of all temporary labour employees. The total amount of work hours with including price is specified per employee.
- *Employee evaluation form DR*  
At the end of a job assignment, the principle is supposed to fill in an employee evaluation form. The form contains criteria regarding the overall price / quality ratio of an employee, quality of the employee's work, satisfaction about the employee's characteristics, and quality of the supplier.
- *Supplier scorecard*  
In the contract, DR mentions the use of a supplier scorecard. The scorecard consists of three key performance indicators: 1) administration (billing and supplier management report); 2) price versus quality (evaluation of employees, and match between demand and offer); and 3) delivery reliability.
- *Time registration*  
Each employee records time spent on a daily basis, including a specification of the activities. Each week, this time registration is delivered to DR.
- *Purchase order*  
The purchase order contains a job description. At the end of a project, the project principal verifies whether a temporary labour employee has performed according to what is specified in the job description.
- *Employee evaluation form supplier*  
Some suppliers use their own employee evaluation form.

**Cross-case analyses**

This section presents the results of our cross-case analysis, which is based on the results of the within-case analysis of the five services studied.

The cross-case analysis focuses on the relationship between the independent (type of purchasing strategy) and the dependent variable (supplier evaluation criteria). Table 2 displays for each service studied the type of purchasing strategy pursued and the criteria on which the supplier was evaluated.

**Table 2 Purchasing strategies and supplier evaluation criteria**

Service being offered	Purchasing strategy	Supplier evaluation criteria
<i>Temporary labour recruitment services</i>	Relational	<ul style="list-style-type: none"> <li>- service output, a.o.                             <ul style="list-style-type: none"> <li>o delivery reliability</li> <li>o match between desired and received profile</li> </ul> </li> <li>- service process, a.o.                             <ul style="list-style-type: none"> <li>o administration</li> </ul> </li> <li>- relationship, a.o.</li> </ul>

		<ul style="list-style-type: none"> <li>○ overall quality of the supplier, and vice versa</li> </ul>
<i>Computer workplace services with helpdesk</i>	Relational	<ul style="list-style-type: none"> <li>- service output, a.o. <ul style="list-style-type: none"> <li>○ capacity</li> <li>○ recovery time</li> </ul> </li> <li>- service process, a.o. <ul style="list-style-type: none"> <li>○ customer friendliness</li> <li>○ accessibility of helpdesk</li> </ul> </li> <li>- relationship, a.o. <ul style="list-style-type: none"> <li>○ competitive advantage resulting from the relationship</li> <li>○ value of the relationship</li> </ul> </li> </ul>
<i>Mobile and traditional telephony services</i>	Transactional	<ul style="list-style-type: none"> <li>- service output, a.o. <ul style="list-style-type: none"> <li>○ service level of the helpdesk</li> <li>○ call set-up success rate and call completion rate</li> </ul> </li> </ul>
<i>Transportation services (busses, taxi)</i>	Transactional	<ul style="list-style-type: none"> <li>- service output, a.o. <ul style="list-style-type: none"> <li>○ number of rides</li> <li>○ number of busses/ taxis that were available on the requested time</li> </ul> </li> </ul>
<i>Beverage machine services (filling, cleaning, maintenance and administration)</i>	Transactional	<ul style="list-style-type: none"> <li>- service output, a.o. <ul style="list-style-type: none"> <li>○ on time delivery of machine refills</li> <li>○ availability of machine</li> </ul> </li> </ul>

When comparing the actual purchasing strategy with the purchasing strategy we expected before the empirical study, we see that our expectations have been confirmed. Two of the five services (computer workplace services and temporary labour services) are best handled by a relational strategy. The other three services are all handled by a transactional strategy.

For temporary labour, DR utilizes a relational strategy for two dominant reasons. Firstly, during the time that DR has a relationship with the service temporary labour provider, the temporary labour forces increasingly record knowledge that is valuable to DR. A switch from supplier would mean that DR loses a valuable knowledge source. Secondly, a temporary labour provider is seen as an extension of DR's human resources department. The provider must have extensive knowledge about DR's internal organization. Thus, DR pursues a strategy that treats the temporary labour provider as if it were part of DR's internal organization. Also for the computer workplace services, a relational strategy is pursued. Since, the information technology market is highly turbulent, both the technology and customer demand change rapidly. For these reasons, DR seeks a partner that continuously thinks along with them and is flexible.

Regarding the evaluation criteria used for the three types of services, Table 2 shows that for all services, the service providers are being evaluated on service output quality criteria. Examples are the availability of technical systems (for the information technology and communication provider), the number of management improvements (for the beverage machine handling provider), the percentage of busses too late (for the transportation provider) and the percentage of correct CV's sent out (for the temporary labour provider). Furthermore, the services that are bought using a transactional purchasing strategy are being evaluated on service output quality only, thereby providing support for P1.

For the two relational services, both service process quality criteria and relationship quality criteria are incorporated. For instance, a customer survey for the information technology provider contains items like commitment and customer orientation (similar to empathy). Multiple interviewees of this case confirm that they do consider 'soft factors' as important. Additionally, the supplier uses a periodical survey to determine the strength of the relationship. The employee evaluation form that is used in the evaluation of the temporary labour service provider contains service process quality elements like communication (keeping customers informed). One respondent named commitment and trust (relationship quality aspects) as important supplier evaluation criteria. Additionally, the supplier's evaluation form (that is also used at DR) contains both service process quality and

relationship quality sample criteria. Thus, we find that service process quality and relationship quality criteria are only evaluated for the relational services. This provides support for P2.

Lastly, we found that service output quality criteria were dominant in the supplier evaluation methods used for all services studied. For the transactional services, criteria that evaluate *how* the service is delivered are not included in supplier evaluation. Neither does DR use, or consider to use, relationship quality factors for these services. Based on this finding, we find that P3 is not supported.

To summarize: we find support for two of the three propositions. Service output quality is important (and dominates) in each service supplier evaluation model and service process quality and relationship quality criteria are only important in supply evaluation models for services that are handled by a relational purchasing strategy.

## Conclusion and discussion

This paper addressed the topic of ex-post service provider evaluation. We focused on a specific step of the purchasing process as denoted by Van Weele (2005), namely follow-up and evaluation. We deemed this phase to be highly important since those aspects on which suppliers will be evaluated should be documented in the contract and included in the service specification and supplier selection criteria. Thus, we argue that it is important to first think about how buyer and seller will work together in the operational phase of the contract and how they jointly determine performance, and to subsequently take this into account when specifying the service, selecting the supplier and setting up the contract.

We developed three propositions relating the type of service purchasing strategy to supplier evaluation criteria used. Our empirical study showed that transactionally purchased services are only being evaluated on service output quality, whereas relationally purchased services are also being evaluated on service process and relationship quality. Service output quality however prevails for both service purchasing strategies. This implies that the determination of service output quality criteria is important for every service or recovery process. However, when buying services through a relational purchasing strategy, the determination of service process and relationship quality criteria are also important.

Our results imply that purchasing managers should work together with both suppliers and internal customers to determine which quality criteria are most important for a given service purchased. Hereby, both purchasing and the business stakeholders should take into account that service process quality and relationship quality are important to evaluate for services that are purchased using a relational purchasing strategy. These considerations can also be used in ex ante evaluation for the purpose of supplier selection. In addition, companies should ensure a follow-up on the evaluation results. As one of the interviewees stated: "You can't oblige a supplier to deliver information if you don't do something with this information".

Finally, companies have to pay attention to their own contribution to service quality. The case studies at DR showed that in some situations a performance deficiency is caused by failure of the internal processes at DR. In these cases, the supplier cannot be held fully responsible!

Extant literature on purchasing and supply management so far insufficiently addresses the evaluation of service suppliers, while at the same time, purchasing managers are struggling with the service provider evaluation. This study has addressed these topics, but only within the context of a single organisation and for a limited number of very different services. Future research should therefore seek to further validate these findings in different settings and for other kinds of services.

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