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19th IPSERA Conference

Supply Management - Missing Link in Strategic Management?

[16 - 19 May 2010 Lappeenranta, Finland]

Proceedings of the 19th Annual IPSERA Conference

16 – 19 May 2010
Lappeenranta, Finland

Editors
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ISBN 978-952-214-929-9

Quality Management Practices for Business Services: A Research Agenda from a Buyer's Perspective

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Summary

This paper is part of a larger research project investigating how buying companies apply practices of quality management for their externally sourced business services. Based upon a literature review in the areas of service quality and quality management, the paper will present a research framework, preliminary propositions and a potential research methodology. The insights obtained can assist purchasers to decide on quality management practices to best suit certain types of business services. Service providers will benefit by better understanding which practices of quality management buying companies use and thus become able to adjust their service offerings to better match requirements.

Keywords: Services purchasing, quality management, service quality

Introduction

The importance of services for economies and companies is significant and still increasing (Axelsson & Wynstra, 2002; Jackson, Neidell, & Lunsford, 1995; OECD, 2000; Schneider & White, 2004). However, despite their significance, most purchasing departments have focused on the optimization of the supply of goods during the last years (Axelsson & Wynstra, 2002; Ellram, Tate, & Billington, 2007; van der Valk, 2008; van der Valk, 2007). Similarly, the academic literature predominantly has been focusing on the supply of goods (Bals, Hartmann, & Ritter, 2009; Cox, Chicksand, Ireland, & Davies, 2005; Ellram et al., 2007; Smeltzer & Ogden, 2002; van der Valk & Rozemeijer, 2009; van der Valk, 2008; Wynstra, Axelsson, & van der Valk, 2006) and on the purchasing activities before the actual purchase is completed Day & Barksdale, Jr., 1994; van der Valk, 2008; van der Valk & Rozemeijer, 2009).

In particular, the activities after the actual purchase and thus quality management of externally purchased business services from the perspective of a buying company have received little attention so far by academics (Hemsworth, Sánchez-Rodríguez, & Bidgood, 2008; Hemsworth, Sánchez-Rodríguez, & Bidgood, 2005; Sánchez-Rodríguez & Martínez-Lorente, 2004). Rather, the literature on service quality in most cases has been written from a business-to-consumer (B2C) perspective (Bienstock, Mentzer, & Bird, 1997; Fitzsimmons, Noh, & Thies, 1998; Hernon, 2002; Jackson et al., 1995; Kong & Mayo, 1993; Niranjana & Metri, 2008; Patterson & Spreng, 1997; Woo & Ennew, 2005). The few existing studies on service quality in a business-to-business (B2B) setting mostly set an objective to analyze the dimensions according to which customers evaluate service quality for distinct types of services but not which practices they use for this evaluation (see, for example, Bienstock et al., 1997; Fehl, 2006; Patterson & Spreng, 1997).

In addition, the literature on quality management predominantly has been adopting the viewpoint of a provider of goods or services, and tried to answer the question how they can improve the quality of the products or services offered to their consumers (Flynn, Schroeder, & Sakakibara, 1994; Rönnbäck & Witell, 2008). However research on the question, how companies receiving goods or services manage the quality of them is scarce (Fynes, 1999; Fynes & Voss, 2002; Molina-Azorín, Tarí, Claver-Cortés,

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& López-Gamero, 2009; Stanley & Wisner, 2001). In general, the relative disregard of quality management from a buyer's perspective is surprising as it is estimated that approximately 50% of quality problems result from defects in the materials purchased (Crosby, 1984; Dowst, 1987). Thus, the quality of a company's output is highly dependent on the quality of its input (Forker, Mendez, & Hershauer, 1997). Therefore, this paper presents an approach for further research on the following basic questions:

How do buying companies manage the quality of externally sourced business services?

and

How is the usage of quality management practices for business services by buying companies related to service quality and business performance?

In doing so, it is divided into five sections: The first part defines business services, the scope of work and introduces a service classification proposed by Wynstra et al. (2006) to handle the heterogeneity of business services. In the second section, it draws upon relevant literature in two areas of research: service quality and quality management. On basis of the service classification and the literature review, the authors formulate the problem in the fourth part. The fifth section introduces some preliminary propositions and a conceptual framework for the further examination of the design of quality management practices and their impact on performance for different types of business services. Finally, the authors introduce a potential methodology for the research project.

This paper is part of a larger research project with the objective to contribute to the development of theory in the area of quality management by examining its applicability from a purchasing perspective focusing on externally sourced business services. For purchasing practitioners the study wants to provide recommendations for the design and utilization of quality management practices in the previously mentioned context. For service providers, the project may give insights into how their business customers manage the quality of their services offered. Thus, it may offer them an opportunity to better adjust their services to their customers' needs.

Background

Services, business services, and scope of work

Although the discussion about what services actually are had started already in the 1960s (Fisk, Brown, & Bitner, 1993) until today no agreement on a universal definition has been achieved (Seth, Deshmukh, & Vrat, 2006b). Authors agree, nonetheless that services possess several characteristics which differentiate them from goods (Schneider & White, 2004; Svensson, 2006). Among these are their heterogeneity, intangibility and inseparability of production and consumption (Parasuraman, Zeithaml, & Berry, 1985) as well as the fact that service production normally, but not necessarily always, involves some interaction between customer and provider (Grönroos, 2007; Meffert & Bruhn, 2000). These characteristics can all be considered continua on which different service types vary (Jackson & Cooper, 1988; Schneider & White, 2004). Business or B2B services in this context are understood as services which are delivered by firms or organizations and bought by other firms or organizations (Axelsson & Wynstra, 2002; van der Valk & Rozemeijer, 2009).

It is important to note that the characteristics of services have some implications on the design of quality management for business services from a buying company's perspective which may differentiate it from quality management for goods (cf. Ellram et al., 2007; Jackson et al., 1995; Rönnbäck & Witell, 2008; Schneider & White, 2004; van der Valk & Rozemeijer, 2009):

- Heterogeneity of services makes it difficult to design a quality management that fits to all types of business services. In contrast, it may be necessary for a buying company to decide which combinations of quality management practices are best suited for a specific type of business

service. Intangibility results in difficulties in the evaluation and comparison of business services as a customer cannot see, hear, feel, smell or taste them (Haller, 2002; Jackson & Cooper, 1988). As a result, business customers may put greater emphasis on personal (and thus subjective) information sources to substitute more objective measurements and/or include criteria to measure the results and outcomes of services into their quality management (Schneider & Bowen, 1995).

- The inseparability of production and consumption of services implies that the services do not yet exist when the buying company purchases it. This stresses the need for clarifying the content of the service as requested by the customer and suggests that quality management of business services may already start before the purchase contract is signed. Furthermore, it means that business services cannot be stored. Consequently, a buying company may put particular emphasis on the availability of business services.
- As service production often involves interaction between service provider and customer, this interaction is an essential ingredient to the service experience. Therefore, buying organizations may include an assessment of the interaction process into their quality management of business services. Furthermore, the variability of (internal or external) customers of a buying company as input may result in different demands. Thus, it may be necessary for a buying company to adjust their quality management practices to the usage of the business service by their customers in order to meet their expectations.

Due to the heterogeneity of business services it is vital to define which business services are in scope of this paper and which ones are not. To achieve this, the business services examined by two benchmarking studies on indirect spend management (CAPS Research, 2003; BME, 2005) and a service classification proposed by the Organisation for Economic Co-operation and Development (OECD, 2000) were compared with regard to their classification of business services. The business services used by these three studies as well as those in scope of this paper are depicted in Appendix 1.

Classification of business services

In order to handle the heterogeneity of the business services in scope, the research project will use a classification. The services management and marketing literature offers various examples of service classifications for consumer services (see, for example, Grönroos, 2007; Lovelock, 1983; Schneider & White, 2004). However, Boyt & Harvey (1997) and Smeltzer & Ogden (2002) emphasize that less attention has been given to the classification of business services. Furthermore, most of the systematizations of business services hinge on the characteristics of the provider rather than on the ones of the buyer (van der Valk & Rozemeijer, 2009). These classifications may not be sufficient in the attempt to understand how professional procurement manages the quality of purchased business services. Jackson et al. (1995) suggest that usage of a business service affects the classification. Wynstra et al. (2006) share this view and conclude that the application of a business service by a buying organization affects the buyer-supplier interaction patterns. They suggest a classification consisting of four different types of services (Wynstra et al., 2006; van der Valk, Wynstra, & Axelsson, 2009):

- Component services become a rather unaltered part of the offer to the end customer
- Semi-manufactured services are offered to the end customer as well but only after being changed by the buying company
- Instrumental services are used as tools or instruments by the buying company in order to produce their own product or service
- Consumption services are completely used within the buying organization and not part of the final offer to the end customer

This classification scheme is used for the research project as it is rather independent from the characteristics of the service and may thus allow industry specific answers regarding quality management. Furthermore, this classification will still allow companies to provide information even if they have not implemented quality management practices for the full range of their externally sourced

business services as is suggested by the focus on purchasing of goods of many companies (BME, 2007).

Literature Review

The following chapter will present two areas of literature which promise to have the potential of providing further insights into the question how buying companies manage the quality of externally sourced business services: a) service quality which is part of the wider domain of service marketing and b) quality management which constitutes a section of operations management. These streams of literature are presented and shortly discussed regarding their contribution to the aforementioned questions.

Relevant literature on service quality

Within the field of service quality, research on service quality models and dimensions predominantly debates what, i.e. which dimensions, are evaluated when quality of a service is assessed by customers (Lehtinen & Lehtinen, 1991). Two schools have emerged from this literature (Brady & Cronin, Jr., 2001; Woo & Ennew, 2005):

- a) the “Nordic” school which is based upon ideas of Grönroos (1984; 2007) who suggested that a technical (i.e. the “what”) and a functional (i.e. the “how”) dimension determine what customers perceive as service quality;
- b) the “American” school with its widely used model of service quality proposed by Parasuraman et al. (1985; 1988; 1991) which uses dimensions that conceptualize service quality in terms of characteristics as to how the service is delivered (i.e., reliability, responsiveness, empathy, assurances, and tangibles) (Shonk, 2006).

The Nordic school as well as the early conceptualizations of the American school are both based on the disconfirmation paradigm which posits that perceived quality is a result of a comparison between customer service expectations and perceived service performance (Brady & Cronin, Jr., 2001; Churchill & Surprenant, 1982; Oliver, 1980; Oliver, 1981; Rust & Oliver, 1994b).¹ In Appendix 2, major models of both camps are shortly described in terms of the quality dimensions used. The aim is to illustrate which dimensions of service quality should be covered by a buying company’s quality management practices. Although this review of service quality models does not pretend to be a comprehensive scrutiny, we argue that – in spite of some conceptual differences – the dimensions used in the various models represent the potential service quality dimensions of business services. Moreover, we propose that they can be assigned to three overall categories of service quality dimensions (see also Chelladurai & Chang, 2000; Shonk, 2006): Physical appearance (appearance of facilities, uniforms, documents etc. of the service provider), interaction (process of service delivery, interpersonal relations etc. between service provider and customer) and outcome quality (the result of the service). Appendix 2 assigns the service quality dimensions of the models to these three categories to visualize this notion.

As noted before, comparably little research exists, which examines the service quality dimensions of business services. Some of the available studies are depicted in Appendix 3. The heterogeneity of the dimensions identified for B2B services led some authors to suggest that they have to be defined for each B2B service individually (see, for example, Bienstock et al., 1997; Durvasula, Lysonski, & Mehta, 1999; Van Dyke, Kappelman, & Prybutok, 1997). This may be true and will be an interesting question to answer by the future research method proposed later in this paper. For the purposes of this paper, however, we also regard the dimensions depicted in Appendix 2 as belonging to the physical appearance, interaction, and outcome quality since this granularity may be sufficient for our study.

¹ It has to be noted, however, that the disconfirmation paradigm has been subject to debate as, for example, it may be difficult for customers to clearly define expectations and for providers to interpret these expectations (cf. Laesser (2008); Tian-Cole & Crompton (2003); Schneider & White (2004)).

The results of Lehtinen and Lehtinen's (1991) empirical findings suggest that customers use these dimensions for their service quality assessment but assign them different weights.

Although the studies described above provide valuable insights into the dimensionality of service quality in a B2B environment, they do not examine which quality management practices buying companies use for managing the quality of their purchased business services.

Nevertheless, for quality management practices for business services from a buyer's perspective the literature on service quality models and dimensions elucidated above has several ramifications. First, the practices used should be able to establish the evaluation of quality along the axes of physical appearance, interaction and outcome quality. Second, they should be flexible enough to define the dimensions within these axes according to the business service in focus and to assign different weights to different dimensions in alignment with the subjective estimation of significance of a single dimension by the buying company. It follows that quality management practices cannot be used for all business services in the same way. Rather their design is subject to the quality dimensions and must be adjustable to them. Thus, the service quality dimensions may represent an important determinant of the usage of quality management practices for business services by buying companies.

Relevant literature on Quality Management

Two streams within the research on quality management may provide insights for the questions asked in this paper and are presented and discussed shortly below: a) literature on quality management practices, and b) literature on the relationship between quality management practices and firm performance.

Regarding research on quality management (2002; Sousa & Voss recommend that it should deal with the level of practices – in contrast to more general principles and too detailed techniques – since 'principles are too general for empirical research and techniques are too detailed to obtain reliable results' (Sousa & Voss, 2002: 92). This paper concedes their view.

Saraph, Benson, & Schroeder (1989) were the first who identified a core set of eight quality management practices. Later, Flynn et al. (1994) categorized quality management practices into seven dimensions: top management support, quality information, process management, product (or service) design, workforce management, supplier involvement and customer involvement. According to Fynes (1999), these practices mirror the dimensions used in quality award schemes such as the Baldrige and the European Foundation for Quality Management (EFQM) Award and are therefore the ones most commonly examined (see also Molina-Azorín et al., 2009; Zu, 2009). Thus, they will form the constructs, along which quality management for business services by buying companies is to be examined. Their definitions and examples for potential techniques are shortly illustrated in Appendix 4.

Another important area of research with regard to quality management practices is the examination to which extent they have an impact on firm performance (Sousa & Voss, 2002). Advocates of quality management propose quality management practices can have a positive impact on a manufacturer's firm profitability either by the manufacturing or the market route (Deming, 1982; Garvin, 1984; Garvin, 1988; Molina-Azorín et al., 2009; Sousa & Voss, 2002; White, 1996).

In the market route, improvements of the product or service quality lead to higher reputation for quality. This may result in more sales and thus larger market share or alternatively, to less elastic demand and higher prices. Increased market share, however, results in higher economies of scales which lowers costs. Decreased cost result in higher profits. In the manufacturing route, enhanced product or service quality leads to increased productivity and fewer defects, less rework, scrap cost, or lower warranty and product liability costs. Increased productivity and lower rework and scrap cost result in lower manufacturing and service cost whereas lower warranty and product liability cost causes a decrease of service costs. Lower manufacturing and service cost raise profits. In both cases

profits can be achieved if the costs of the quality management practices are outweighed by the higher gains.

Ample amount of research has been conducted on the relationship between quality management practices and operational, as well as (financial) business performance. Sometimes these studies provide mixed results (Nair, 2006; Rönnbäck & Witell, 2008). However, most authors now agree that the use of quality management practices has a positive, significant and strong effect on operational performance (Dow, Samson, & Ford, 1999; Maani, Putterill, & Sluti, 1994; Sluti, Maani, & Putterill, 1995; Sousa & Voss, 2002; White, 1996). The impact of quality management practices on financial business performance is seen as positive and significant, but in some cases less strong than on operational performance (Capon, Farley, & Hoenig, 1990; Hendricks & Singhal, 1997; Nilsson, Johnson, & Gustafsson, 2001; Powell, 1995; Rönnbäck & Witell, 2008).

The aforementioned passages provide the potential rationale for the adoption of quality management practices for business services by a buying company. First, quality management practices may have positive effects on the quality of component and semi-manufactured services. Increasing quality of these services may result in higher customer satisfaction and ultimately in higher sales revenues. Second, quality management practices may positively impact the quality of instrumental or consumption services and thus raise internal operational performance. In addition to potentially higher employee satisfaction, this may also result in increased productivity, process efficiency and thus decreased cost.

Some studies compared the utilization of quality management practices in different industries. The mostly discovered that differences between service and manufacturing companies regarding the adoption of quality management practices exist (Benson, Saraph, & Schroeder, 1991; Powell, 1995; Rönnbäck & Witell, 2008; Singh, Feng, & Smith, 2006) and that the level of quality management practice is not as high in service as in manufacturing companies (Benson et al., 1991; Quazi, Jemangin, Kit, & Kian, 1998; Woon, 2000). These findings underline the impact of the industry on the design of quality management. Therefore, the type of industry may be a major determinant of the use of quality management practices for business services by buying companies.

The studies cited above all adopted the perspective of a goods or service provider. Only recently, researchers examined the use of quality management practices from a buying company's viewpoint (Sánchez-Rodríguez & Martínez-Lorente, 2004; Hemsworth et al., 2005; Hemsworth et al., 2008). Sánchez-Rodríguez & Martínez-Lorente (2004) investigated the usage of a subset of quality management practices in purchasing departments of Spanish manufacturing companies and their relationship to perceived purchasing and business performance as well as internal customer satisfaction. They concluded that the quality management practices studied were positively and significantly related to perceived purchasing performance and internal customer satisfaction but only the practices "commitment of purchasing management", "coordination with other functional areas" and "employee management" were positively correlated to perceived overall business performance (Sánchez-Rodríguez & Martínez-Lorente, 2004). Later, Hemsworth et al. (2008) confirmed these findings using the same sample and data set (Hemsworth et al., 2008; Hemsworth et al., 2005). Furthermore, they discovered that quality management practices in purchasing have a positive impact on purchasing performance mediated through the effect of information systems.

These authors provide valuable first insights into the utilization of quality management practices in purchasing. However, they do not include the quality of incoming business services into their work and their sample does not entail service companies. Furthermore, they rely completely on subjective perceptions of purchasing managers in the evaluation of purchasing and business performance. This approach ignores the peculiar characteristics of services and their potential impact on the usage of quality management practices as well as the differences in the adoption of quality management practices between manufacturing and service companies examined by previous studies. In addition, the individual perceptions of just one group of respondents may have led to 'socially desirable' (Fontana & Frey, 2005: 702) answers. These gaps underscore the need for the proposed research project.

Problem formulation

Following the literature review above, we conclude that a number of gaps remain regarding how buying companies manage the quality of business services. Researchers in the field of service quality pointed out that studies on service quality were predominantly conducted in a B2C rather than a B2B context. They attempted to answer the question, according to which dimensions consumers evaluate service quality of service providers. The studies which exist in a B2B setting, however, focus on a single service rather than a comprehensive set of business services often bought by buying companies. Therefore, the literature on service quality does not answer the question how buying companies manage the service quality of their externally sourced business services.

The quality management literature predominantly takes the perspective of a goods or service provider. It aims at answering questions regarding which quality management principles are used by manufacturing or service companies in order to improve the quality of their offerings. Furthermore, they answer the question how the utilization of these relates to operational or financial business performance. So far, little attention has been given, however, to the question whether the practices of quality management are also used by customers (i.e. buying companies) to manage the quality of externally sourced business services.

Hence, the objective of this paper is to identify – while using Wynstra et al.'s (2006) classification of business services – patterns in the usage of quality management practices of buying companies. Thus, it wants to make a contribution to the academic literature by discovering how quality management practices are implemented by buying companies for their externally sourced business services.

Initial propositions and preliminary research framework

As elucidated before, the dimensions according to which a service customer evaluates service quality as well as the weights assigned to them may vary (see section on service quality). Thus, we argue that the service quality dimensions may influence the design and adoption of quality management practices for business services by buying companies. This means that the intensity of practice utilization may alternate regarding to the quality dimensions to better evaluate the required service quality. This consideration leads us to our first proposition:

P 1: The service quality dimensions are one major determinant of the design and adoption of quality management practices for business services by buying companies.

For example, a buying company may regard the “outcome” dimension of a technical maintenance and repairs service more crucial than the physical context or interaction quality. For professional services, by contrast, “physical context” and “interaction” quality may play a far more important role for the buying company. This varying emphasis of certain dimensions for certain business services may impact the quality management practices used as some quality management practices may better represent particular dimensions than others.

As shown before, Wynstra et al. (2006) argue that the usage of a business service by the buying company influences the buyer-seller interaction. It may also be true that the usage of an externally sourced business service by the buying company influences the design and adoption of its quality management practices. Therefore, we propose:

P 2: The usage of a business service by the buying company is one major determinant of the design and adoption of quality management practices for business services by buying companies.

This means that a buying company may either use different quality management practices for component, semi-manufactured, instrumental or consumption business services or that the intensity of their adoption may vary. For example, a real estate agent lending managed apartments to its customers and therefore purchasing facility services and passing them unaltered through to its customers may use either more practices to manage their quality or more intensively. By contrast, a real estate agent

purchasing facility services only for maintaining its own offices may use quality management practices only sporadically, for example, by checking cleanliness irregularly.

Some research has shown that the utilization of quality management practices of goods or service providers varies according to industry (see, for example, Rönnbäck & Witell, 2008; Singh et al., 2006; Woon, 2000). This may also be the case for quality management practices for business services. Therefore, we bring forward the following proposition:

- P 3: The industry of which a buying company is part is one major determinant of the design and adoption of quality management practices for business services by buying companies.

This means that buying companies in some industries may just use more or more advanced quality management practices for business services than others. In line with some previous studies among providers in manufacturing and service industries (see, for example, Benson et al., 1991; Quazi et al., 1998; Singh et al., 2006; Woon, 2000), we expect manufacturing companies to score higher in terms of number and sophistication of quality management practices applied for their business services.

The major goal of the implementation of quality management in companies is to improve the quality of the goods or services bought or offered. The utilization of quality management practices for externally sourced business services may result in an improved level of quality of these services delivered by the providers. We therefore suggest:

- P 4: The design and adoption of quality management practices for business services by buying companies is positively related to the perceived service quality of externally sourced business services.

Such a relationship may result from various effects of quality management. For example, the utilization of quality information may provide the responsible purchaser with the required data to better evaluate a provider's long-term service quality. This may allow him to add efficient quality incentives complementing existing price stipulations into contractual agreements.

Ample amount of research indicates that quality management is positively related to business performance (see, for example, Molina-Azorín et al., 2009; Nair, 2006; Sousa & Voss, 2002). These studies show that quality management can have positive effects on either sales revenues (i.e., the market route) or cost (i.e., the manufacturing route) (cf. Deming, 1982; Garvin, 1984; Garvin, 1988; Molina-Azorín et al., 2009; Sousa & Voss, 2002; White, 1996). Consequently, we presume that such a positive relationship also exists between service quality enhanced by quality management practices for business services and business performance. However, the strength of this relationship may vary according to the application of the business service by the buying company. These considerations yield our next proposition:

- P 5: There is a perceived positive relationship between service quality of externally sourced business services and sales revenues and/or cost mediated by the usage of the business service by the buying company.

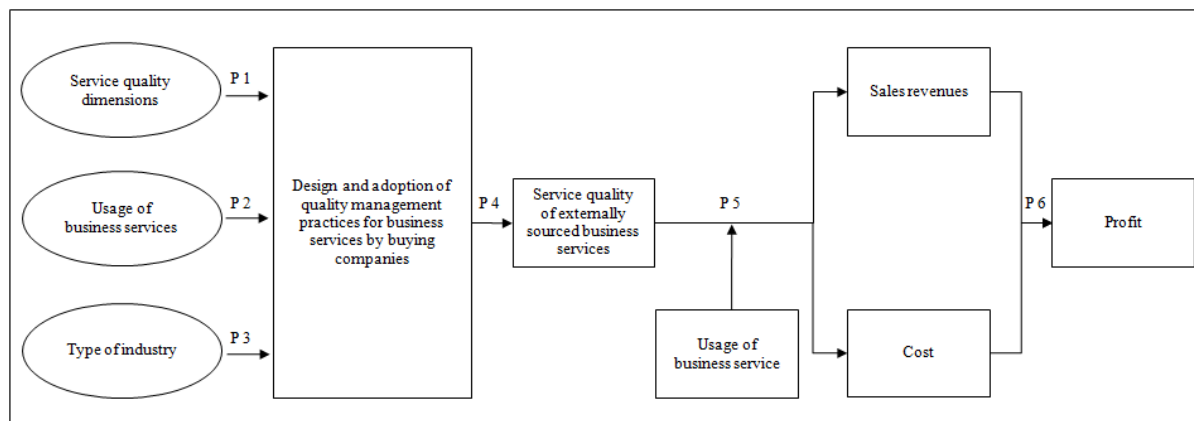
For example, ameliorated service quality of component and semi-manufactured business services may have a stronger positive effect on sales revenues than on cost as they are passed-through to the final consumer. Improved service quality of instrumental and consumption services, by contrast, may positively influence (internal) cost more than sales revenues by raising internal efficiency as these are partially or completely consumed by the buying company.

Some authors emphasize that quality management can only have positive effects on a firm's profitability if the cost of implementing and maintaining quality management is outweighed by its performance contributions (Crosby, 1984; Deming, 1982; Garvin, 1984; Garvin, 1988). Hence, a buying company may only utilize quality management practices for externally sourced business services if the benefits exceed the cost. We would like to reflect this implication by the following proposition:

P 6: The sales revenues raised or cost decreased by improved service quality of externally sourced business services outweigh the cost for implementation and maintenance of the quality management practices used and thus increase the company's profits.

These initial propositions outline the preliminary research framework depicted in Figure 1. We are aware that these propositions need further development. Potential variations within the four groups of business services should be better defined as the intensity of the usage of quality management practices may vary within the two groups of business services.

Figure 1: Preliminary research framework



Source: Own depiction

Methodology

The research project can be divided into a first phase which aims to develop theory from case studies and a second during which hypotheses will be tested by using a quantitative approach. It thus follows the methodological recommendations given by Meredith (1993).

During the first phase, the initial propositions will be further developed into hypotheses by means of additional literature research and exploratory, multiple, embedded case studies (Yin, 2003). Semi-structured interviews (Rubin & Rubin, 1995) and document research (Stake, 1995) will be used in the case studies.

We propose to study one to two services in each of the four categories according to Wynstra et al.'s classification of business services (Wynstra et al., 2006). The number of cases should lie between four and ten. This number is in line with Eisenhardt's recommendations regarding the sample size for case studies (Eisenhardt, 1989). The number of business services under examination will therefore vary between a minimum of 16 to a maximum of 80. During an introductory meeting the services to be studied and the employees to be interviewed will be defined. The target group of respondents is based in purchasing, quality management and/or other departments responsible for the quality of specific externally business services.

In line with an approach chosen by van der Valk (2007) to examine buyer-seller interaction patterns during service exchange, we also aim to study buying companies from a wide range of industries. This may allow for some degree of external validity. The buying companies will be selected according to the type of industry (services vs. manufacturing companies) and the type of their customers (B2B vs. B2C). We choose the first criterion because we expect differences in the adoption of quality management practices related to the type of industry the buying company operates in. Regarding the second criterion we also follow van der Valk's (2007) argument that in B2B settings, customers of the buying company may be more involved in the specification and definition of requirements of the service than in more anonymous B2C markets. We therefore propose to select at least one B2B, and

B2C service company as well as one B2B, and B2C manufacturing company. Public institutions or governmental companies are not included as purchasing processes for them are rather specific and subject to particular legislation which may not be applicable to other companies (cf. Schiele & McCue, 2006).

The second research phase comprises testing the propositions derived from the case studies by means of a quantitative method which is still to be defined. This phase is supposed to achieve some degree of statistical generalizability. This phase will strive to develop a structural equation model following a two-step approach consisting of the development of a measurement model and then testing the structural model (cf. Hair, Jr., Black, Babin, Anderson, & Tatham, 2006; Homburg & Giering, 1996).

Conclusion

Business services represent a significant portion of a buying company's expenditures. However, research on purchasing of business services in general and on quality management for business services in particular is relatively scarce. The research project proposed in this paper wants to shed more light on the question how buying companies use quality management practices for managing the quality of their externally sourced business services.

In doing so, it analyzes literature on service quality and quality management. Based on the literature review it formulates the problem and develops initial propositions regarding the determinants of the design and adoption of quality management practices for business services by buying companies as well as their impact on service quality and business performance. Afterwards, the paper suggests a preliminary conceptual framework. Finally, it presents a research methodology entailing case studies for the further elaboration of propositions and some constructs and a subsequent quantitative analysis.

The research project wants to contribute to the development of theory in the area of quality management by taking a purchasing perspective and adding externally sourced business services into the existing knowledge base. This may also support purchasing managers in their attempts to design efficient quality management practices in this context. Service providers may benefit from better understanding how their professional customers evaluate their services offered.

Appendix 1: Overview of business services in scope

Study	OECD (2000)	CAPS (2003)	BME (2005)	Business services in scope of paper	Examples of business services in scope of paper
Business services in scope (alphabetically sorted)	Accommodation and food services	Computer hardware	Construction	Computer implementation and maintenance services	Hardware and software implementation, customization, maintenance on single user level, telecommunication services
	Administrative and support, and waste management	Consulting	Consulting	Facility services	Cleaning, catering, security, real estate maintenance
	Arts, entertainment and recreation	Employee benefits	Facility management	Financial services	Banking, finance, insurance
	Education	Engineering and manufacturing equipment	Financial services	Professional services	Management consultancy, software development and implementation on company or unit level, accounting and auditing, legal, architects
	Finance and insurance	Facilities maintenance	Fleet management	Research and development service	Development, engineering
	Health care and social assistance	Fleet (executive, non-executive)	Human resource services	Technical maintenance and repairs	Maintenance and repair of production equipment
	Information	Industrial supply	IT services	Transportation and distribution services	Warehousing, value-added logistics, transport
	Management of companies and enterprises	Insurance	Logistics services	Fleet management	Provision of vehicles for transportation of staff or goods
	Other	Logistics freight	Marketing services	Human resource services	Training, recruitment
	Professional, scientific and technical	Marketing	Industrial maintenance	Marketing services	Campaign development, production, print services
	Public administration	Printing	Patent and legal services	Travel management	Organisation and booking of business travels
	Real estate, rental and	Software	Purchasing services		

Study	OECD (2000)	CAPS (2003)	BME (2005)	Business services in scope of paper	Examples of business services in scope of paper
	leasing				
	Transportation and warehousing	Total Travel	Research and development		
	Wholesale and retail trade		Travel management		

Source: Own depiction

Appendix 2: Description of service quality dimensions in B2C contexts and their assignment to physical context, interaction, and outcome quality

Model	Dimension	Short description	Assignment to conceptual dimension
Grönroos (1984)	Functional quality	Outcome, i.e. what a customer actually receives	Interaction quality
	Technical quality	Perceived interaction, i.e. how the customer obtains the service	Outcome quality
Parasuraman et al. (1988)	Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence	Interaction quality
	Empathy	The caring, individualized attention the service provider offers its customers	Interaction quality
	Reliability	The ability of a service provider to perform the promised service dependably and accurately	Interaction quality
	Responsiveness	The willingness of the service provider to help customers and provide prompt service	Interaction quality
	Tangibles	Physical facilities, equipment, and appearance of service providers' personnel	Physical context quality
Lehtinen & Lehtinen (1991) – first model	Corporate quality	Customers' view of the provider's reputation and image	Interaction quality
	Interactive quality	Interaction processes between customer and service provider and/or their equipment	Interaction quality
	Physical quality	Materials and facilities of a service provider	Physical context quality
Lehtinen & Lehtinen (1991) – second model	Output quality	Customers' evaluation concerning the result of a service production	Outcome quality
	Process quality	Customers' perception of the service production process and his/her participation	Interaction quality
Rust & Oliver (1994a)	Service environment	Internal environment of the service provider in regard to its organizational culture and philosophy towards service provision (e.g. organizational culture and philosophy) and external environment, i.e. physical appearance of the service provider's location	Physical context quality
	Service delivery	Perceived quality of the interaction process between customer and service provider	Interaction quality
	Service product	Design of the service including the specifications and service targets to offer	Outcome quality
Dabholkar, Thorpe, & Rentz (1996)	Personal interaction	Way the customer perceives being treated by the retail store staff	Interaction quality
	Physical aspects	Appearance and the layout of the retail store	Physical context quality
	Reliability	Ability of a service provider to perform the promised service accurately	Interaction quality
Brady & Cronin, Jr. (2001)	Interaction quality	Customers' interpersonal actions that ensue during service delivery	Interaction quality
	Outcome quality	Customers' perceptions as what he is left with when the service has been rendered	Outcome quality
	Physical environment quality	Surrounding environment or physical facilities of a service provider	Physical context quality

Source: Own depiction

Appendix 3: Summary of publications examining the dimensions of service quality in a B2B environment

Publication	Type of study	Sample size and respondents	Service examined	Model used	Findings regarding service quality dimensions
Brensinger & Lambert (1990)	Empirical	170 purchasers	Less-than-truckload (LTL) motor carrier service	SERVQUAL	The predictive quality of SERVQUAL in this context was low.
Harte & Dale (1995)	Conceptual	n/a	Professional services	SERVQUAL and literature research	Tangibles, empathy, assurance, reliability, timeliness are requested most by clients of professional services.
Bienstock et al. (1997)	Empirical	462 purchasers	Physical distribution service	Revised SERVQUAL	Timeliness, availability, condition have most significant impact on service quality perception of professional buyers.
Patterson & Spreng (1997)	Empirical	128 users of consultancy services	Professional business services	Dimensions based on Grönroos (1984)	The technical/outcome factor was more significant than the five process dimensions (methodology, service, relationships, global and problem identification).
Durvasula et al. (1999)	Empirical	114 shipping managers	Ocean freight services	SERVQUAL	Tangibles, reliability and a third factor combining responsiveness, assurance, and empathy best fit for measuring service quality.
Gounaris (2005)	Empirical	515 senior managers	Training and recruiting	SERVQUAL vs.	INDSERV comprising the

Publication	Type of study	Sample size and respondents	Service examined	Model used	Findings regarding service quality dimensions
		from service customers	consultancies, corporate banking, software development and maintenance, freight shipping.	alternative model INDSERV	dimensions potential quality, hard quality, soft quality, and outcome quality outperforms SERVQUAL.
Woo & Ennew (2005)	Empirical	185 senior government engineers and professional architects	Consulting engineering services	International/Industrial Marketing and Purchasing Group (IMP) interaction model (Håkansson, 1982; Ford, 1997)	The quality criteria social exchange and cooperation are relatively more important than financial exchange, product/service exchange, information exchange, and adaptation in customer's evaluation of quality for professional services.
Seth, Deshmukh, & Vrat (2006a)	Empirical	117 professionals	Transport services	Revised SERVQUAL	Service reliability, credibility, service competence, intra-organisational communication, service flexibility, financial trust and pleasant environment have most significant impact on service quality perception of professional buyers.

Source: Own depiction

Appendix 4: Quality Management Practices

Quality management practice	Description	Potential techniques	Selected literature
Management support	Actions and behaviors of senior management which show commitment to quality	Setting clear quality objectives, encouragement of employee involvement into activities for quality improvement	Ahire, Landeros, & Golhar (1995); Dean, Jr. & Bowen (1995); Flynn et al. (1994); Fynes (1999); Hemsworth et al. (2008); Molina-Azorín et al. (2009); Powell (1995); Sánchez-Rodríguez & Martínez-Lorente (2004); Saraph et al. (1989); Zu (2009)
Quality information	Adequate, accurate, and timely visibility of defect rates, compliance to specifications, adherence to schedules etc.	Histograms, Pareto charts, cause-and-effect diagrams, check sheets, scatter diagrams, flowcharts, and control charts	Ahire et al. (1995); Dean, Jr. & Bowen (1995); Evans & Lindsay (2002); Flynn et al. (1994); Fynes (1999); Molina-Azorín et al. (2009); Powell (1995); Sánchez-Rodríguez & Martínez-Lorente (2004); Saraph et al. (1989); Zu (2009)
Process management	Cross-departmental process analysis and improvement	Process and role definitions, cleanliness and efficient organization of the workplace, statistical process control	Ahire et al. (1995); Dean, Jr. & Bowen (1995); Flynn et al. (1994); Molina-Azorín et al. (2009); Powell (1995); Saraph et al. (1989); Zu (2009)
Product and/or service design	Reviews of products and services before production and the design of products or services with respect to quality	Cross-functional project teams, design reviews, value analysis, and the systematic identification of customer requirements	Ahire et al. (1995); Flynn et al. (1994); Fynes (1999); Saraph et al. (1989); Zu (2009)
Workforce management	Recognition of employee performance on quality and encouragement team dynamics	Quality circles, careful recruitment approaches, teamwork, reward systems, and commitment to training	Ahire et al. (1995); Dean, Jr. & Bowen (1995); Flynn et al. (1994); Fynes (1999); Hemsworth et al. (2008); Molina-Azorín et al. (2009); Powell (1995); Sánchez-Rodríguez & Martínez-Lorente (2004); Saraph et al. (1989); Tawfik Madi (2009); Zu (2009)
Supplier involvement	Establishment of long-term relationships with suppliers and enhancement of suppliers'	Joint product development, emphasis on quality as a criterion in supplier selection and the	Ahire et al. (1995); Flynn et al. (1994); Fynes (1999); Hemsworth et al. (2008); Molina-Azorín et al. (2009); Sánchez-Rodríguez & Martínez-Lorente (2004); Saraph et al. (1989); Zu (2009)

Quality management practice	Description	Potential techniques	Selected literature
	capabilities of meeting the purchasing company's requirements	application of vendor assessment or certification procedures	
Customer involvement	Effective measurement and monitoring of customers' needs, expectations and/or satisfaction	Field visits, customer feedback mechanisms, round-tables with customers regarding quality	Ahire et al. (1995); Dean, Jr. & Bowen (1995); Flynn et al. (1994); Fynes (1999); Molina-Azorín et al. (2009); Powell (1995); Zu (2009)

Source: Own depiction

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