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The cues that matter: Screening for quality signals in the *ex ante* phase of buying professional services



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Keywords: Service Quality Professional services Signal Screening	Service quality has become a central driver of competitive advantage and value creation. However, due to information asymmetries, many clients find it difficult to assess the service providers' quality <i>ex ante</i> . Nonetheless, this assessment is important to understand, as it affects service provider selection and, thereby, the service delivery. In this paper, we aim to reduce the opacity of service quality by interviewing 51 clients of professional services. Building on an in-depth analysis and a framework of signaling and screening theory, we develop a taxonomy of the dimensions on which professional service quality builds and of the signals clients use to assess quality in the <i>ex ante</i> phase. We also identify two types of signals, qualifying signals and signals of excellence, and develop a conceptual model of the screening process. We conclude the paper by discussing the					

theoretical and practical implications of our results.

1. Introduction

Service quality has become a key driver of competitive advantage for a wide range of companies (Kant, Jaiswal, & Mishra, 2017; Ladhari, Souiden, & Ladhari, 2011). There are two main reasons for this phenomenon. First, GDP generated from service firms in modern economies often amounts to more than 70% (Gustafsson et al., 2016). Second, manufacturing firms increasingly engage in servitization, i.e., adding services to products, to expand their value proposition and potential revenue streams (Baines, Lightfoot, Benedettini, & Kay, 2009; Rabetino, Harmsen, Kohtamäki, & Sihvonen, 2018). In line with this development, service quality has become a central antecedent of value creation in many types of firms (Cronin Jr, Brady, & Hult, 2000; Iriarte, Hoveskog, Justel, Val, & Halila, 2018). A specific type of firm that has grown extensively in the last decades, both in terms of total turnover and the variety of service offered, is professional service firms (PSFs). The expansion of the professional service industry has led scholars to describe PSFs as important drivers of the growing knowledge economy (Brock, Powell, & Hinings, 2007; Gardner, Anand, & Morris, 2008). Professional services can be defined as relying "to a large extent on the interaction between knowledgeable clients and highly educated service providers who engage in some form of joint problem solving activity"

(Løwendahl, 2005:18). The concept includes, but is not limited to, services such as management consulting services, auditing services, legal services, advertising, and executive recruitment services (von Nordenflycht, 2010). Professional services have the key characteristic of being based on expert knowledge and competences (Greenwood, Li, Prakash, & Deephouse, 2005; Skjølsvik, 2012). This characteristic can generate information and knowledge asymmetries between the service providers and their clients, making it difficult for the latter to evaluate the service quality (Empson, 2001; Glückler & Armbrüster, 2003; Løwendahl, 2005). As a consequence, professional services are often referred to as credence goods with opaque quality (Howden & Pressey, 2008).

Extant research has further argued that quality in professional services is cocreated by clients and service providers as they engage in an iterative process of knowledge application and professional conduct to solve the client's problem (Skjølsvik, 2012). The quality creation process can be divided into three main phases (Lapierre, 1997; Løwendahl, 2005): i) *ex ante*, before the assignment; ii) *during* the assignment; and iii) *ex post*, after the assignment is completed.¹ While all three phases are essential to understand how the quality of professional services is created and evaluated, the *ex ante* phase can be argued to be particularly important, as this is the phase where the client's need and problem

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¹ These phases can be compared with the three phases—pre-core service encounter, core service encounter and post-core service encounter—used in B2C-oriented research (Voorhees et al., 2017).

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are defined and where appropriate methods and solutions are selected. This is also the phase in which the client evaluates which service provider is best suited for the assignment. In short, if the *ex ante* phase fails, the two latter steps in the quality creation process will become complicated and might not even take place (Bowman & Ambrosini, 2000). The assessment of service quality in the *ex ante* phase is thus central to both clients and service providers.

Despite the importance of the *ex ante* phase, extensive research has studied the *ex post* phase (e.g., Brady, Cronin Jr, & Brand, 2002; Cronin Jr & Taylor, 1992), and only limited attention has been given to the *ex ante* phase (Voorhees et al., 2017). Thus, the concept of *ex ante* service quality remains unclear. In this paper, we aim to provide new insights into the construction of *ex ante* service quality by unbundling the concept and identifying its building blocks. To contribute to the theorizing of *ex ante* service quality, particularly in regards to professional services, we therefore ask the following question: How is the quality of professional services assessed by clients in the *ex ante* phase?

To explore this question, we build on an interview study of clients of a specific type of professional services, management consulting services, and on signaling and screening theory (Bergh, Connelly, Ketchen, & Shannon, 2014; Connelly, Certo, Ireland, & Reutzel, 2011). Signaling theory deals with the question of how actors try to overcome information asymmetry, and how they try to signal quality (Connelly et al., 2011; Spence, 1973). Its mirror image, screening theory (Bergh et al., 2014), concerns how receivers of such signals filter, interpret, and prioritize among them, and how they try to uncover information the sender might not wish to disclose (Sanders & Boivie, 2004). Research in this field has suggested that as sources of competitive advantage move from tangible towards knowledge-based and intangible resources, it becomes increasingly difficult for clients and investors to evaluate quality and potential economic benefits (Sanders & Boivie, 2004). Additionally, organizations "whose behavior is difficult for outsiders to discern and who send ambiguous signals present important problems for researchers to explore" (Bergh et al., 2014:1354). As professional services in general and management consulting services in particular are characterized by high levels of information asymmetry, discretion, uniqueness, and quality opacity (Kubr, 2002; von Nordenflycht, 2010), they form an illustrative example of such organizations.

Based on our findings, we contribute to the theorizing on ex ante quality in professional services in three ways. First, we contribute to the literature on service quality dimensionality by developing a taxonomy of the dimensions, subdimensions and signals clients use to assess the ex ante quality of professional services. Second, we contribute to signaling and screening theory by providing a more fine-grained understanding of the role different types of signals play and when they are used in the screening process. Third, we develop a conceptual model illustrating the clients' screening of the quality of management consulting services in the ex ante phase. Thereby, we provide new insights into the demand side of the buyer-supplier relationship and how quality is constructed in the prepurchase phase.² By providing a vocabulary for its building blocks, we also help reduce its opacity (von Nordenflycht, 2010). As quality is perceived as the most important criterion when buying and selling services, especially professional services such as management consulting services, understanding on which key dimensions it builds is of high value to both academics and practitioners (Brock et al., 2007; Gardner et al., 2008; Kant et al., 2017; Ladhari et al., 2011; Løwendahl, 2005).

The paper is structured as follows: After describing our literature review, theoretical framework, and research methodology, we present the results from our analysis. We then discuss the findings in relation to previous research and describe our theoretical contributions. The paper ends with a conclusion in which we discuss the limitations of the study and the implications of the findings for future research and practice.

2. Screening for quality in the ex ante phase

2.1. A multidimensional view on service quality

Service quality has been described as a "judgment, or attitude, relating to the superiority of the service" (Parasuraman, Zeithaml, & Berry, 1988:16; Cronin Jr & Taylor, 1992). The concept has been extensively explored, especially in the service and marketing literatures (Cronin Jr & Taylor, 1992; Grönroos, 1984; Parasuraman, Zeithaml, & Berry, 1985), and is repeatedly described as a key weapon by which service firms can gain a competitive advantage and create a strong base of satisfied customers (Cronin Jr & Taylor, 1992; Kant et al., 2017; Ladhari et al., 2011; Parasuraman et al., 1985, 1988). A large body of service research has paid close attention to how service quality differs from the notions of customer satisfaction, perceived value, and customers' behavioral intentions (Brady & Robertson, 2001; Cronin Jr & Taylor, 1992; Miranda, Tavares, & Queiró, 2017; Parasuraman et al., 1988). This research has contributed to a clearer distinction between the concepts and the development of models, illustrating how they are temporarily connected, e.g., how service quality can be regarded as an antecedent or an effect of customer satisfaction and of perceived value and as influencing customers' intentions and behavior (Cronin Jr & Taylor, 1992; Dahiyat, Akroush, & Abu-Lail, 2011; Huang, Lee, & Chen, 2017; Lee, Delene, Bunda, & Kim, 2000). These models illustrate the importance of exploring how service quality is constructed by both clients and service providers.

To better understand the service quality construction, conceptual and empirical studies have sought to find ways of conceptualizing and measuring service quality. Early studies build on the disconfirmation paradigm (Oliver, 1980), which suggests that quality emanates from a comparison of the client's expected and perceived service performance (Cronin Jr & Taylor, 1992; Parasuraman et al., 1988). In his influential article, Grönroos (1984) puts "the perceived service quality against the expected service quality" (p. 37, emphasis in original) and depicts service quality as building on two dimensions: functional quality (customers' perceptions of the service delivery) and technical quality (customers' perceptions of the outcome of the service). The disconfirmation paradigm is also present in the SERVQUAL model (Parasuraman et al., 1985, 1988), which measures customers' expected service level with their perceptions of the received service level. Following these early conceptualizations of service quality, subsequent research has focused on various themes, such as exploring the structure of service quality (Brady & Cronin Jr, 2001; Dabholkar, Thorpe, & Rentz, 1996); developing modified versions of the SERVQUAL model like the SERVPERF model (Cronin Jr & Taylor, 1992); and creating new models (Lee, Lee, & Yoo, 2000), e.g., building on functional and technical quality (McDougall & Levesque, 1994) or adapting the models to specific settings such as e-learning quality (Uppal, Ali, & Gulliver, 2018).

A central idea in this research is that service quality is a multidimensional construct (Brady & Cronin Jr, 2001; Chaipoopiruttana, 2018). In their study of retail quality, Dabholkar et al. (1996) conceptualize it as building on three levels of quality: i) customers' overall perceptions of service quality, ii) dimensions, and iii) subdimensions. Inspired by this study, Brady and Cronin Jr (2001) present a hierarchical approach to service quality. In their model, they illustrate how the concept of service quality builds on three primary dimensions: i) interaction, ii) physical environment quality, and iii) outcome quality. Each of these has three subdimensions, such as attitude, behavior and expertise (interaction), ambient conditions, design and social factors (physical environment quality) and waiting time, and tangibles and valence (outcome quality). To arrive at a perception of the overall service quality, customers first aggregate their evaluations of the subdimensions to a perception of a primary dimension, such as interaction quality. When this analysis is done, they aggregate their evaluations of the three primary dimensions to conclude about the overall service quality.

² We are grateful to one of the anonymous reviewers for suggesting this point.

While this line of research has provided important insights, the studies have tended to focus on the phase in which the service is delivered and consumed and on the subsequent ex post phase. Less is known about how service quality is perceived in the ex ante phase (Voorhees et al., 2017). However, this concept is particularly important to understand, as it is in the ex ante phase clients decide which service provider to hire. A central feature of the ex ante phase is that clients do not yet have experiences or results from the service delivery and outcome to rely on in their construction of the service quality. Instead, they must look for other cues that might indicate the level of quality (Lapierre, Filiatrault, & Chebat, 1999). Drawing on Brady and Cronin Jr's (2001) model, we suggest the perception of service quality in the exante phase might also build on primary dimensions and subdimensions. To better understand how clients act in the ex ante phase and the cues for which they look to assess quality, we draw on signaling and screening theory.

2.2. Signaling and screening for quality

Organizations and their members recurrently face challenges related to information asymmetries and uncertainties (Bergh et al., 2014) when they have access to different information and must make decisions and choices based on incomplete knowledge. Theories such as information-processing theory (Galbraith, 1973) and strategic sensemaking (Gioia & Chittipeddi, 1991) describe how actors deal with these kinds of situations by interpreting cues and how they base their actions on those interpretations. Signaling and screening theory adds an important aspect by describing how actors use signals to reduce information asymmetry and make decisions meeting their objectives (Bergh et al., 2014; Spence, 1973). The theory has been widely used in different literatures, e.g., related to marketing (Kirmani & Rao, 2000), entrepreneurship (Certo, 2003), and strategic management (Bergh et al., 2014). However, despite its popularity and explanatory power, it has so far not received much attention within the service quality literature.³ This lack of attention is somewhat surprising as a key concern in signaling and screening theory is information asymmetries related to latent quality (Stiglitz, 2000), that is, unobservable, underlying characteristics of an actor that enable him/her to fulfil another actor's needs (Connelly et al., 2011).

To explicate how actors overcome such information asymmetries, three concepts are of particular interest: First, signalers are insiders such as executives or service providers who have positive and/or negative information about an individual (Spence, 1973), an organization (Ross, 1977), a product or service (Kirmani & Rao, 2000), and its quality that outsiders such as investors or clients would find valuable. Such information includes, for instance, preliminary sales results, new R&D findings, union negotiations, or pending lawsuits (Connelly et al., 2011). Second, signals are the actions insiders take to communicate positive information about their unobservable qualities to the outsiders. The actions can be manifested in attributes and artifacts, such as certifications, or degrees from prestigious universities (Connelly et al., 2011). For signals to be effective, they need to be observable by the receivers and costly to send for those who do not possess the quality, and they must make the receivers believe the signalers are qualitatively different from other actors in the field (Connelly et al., 2011; Gomulya & Mishina, 2017; Spence, 1973). The signals need not be directly associated with quality per se but must function as credible indicators of it (Sanders & Boivie, 2004). Lastly, receivers are outsiders such as employers (Spence, 1973), firms (Certo, Daily, & Dalton, 2001), or clients (Basuroy, Desai, & Talukdar, 2006) who do not have sufficient information about the quality or intent of the individual or organization in question but who need it to make the decision whether to hire or buy from the individual or organization.

While signaling theory examines how actors, signalers, send signals to reduce information asymmetries and communicate their intent and quality to receivers (Kirmani & Rao, 2000; Spence, 1973), screening theory is its mirror image (Bergh et al., 2014). It focuses on how receivers pick up, interpret, and give different weights to the signals that signalers send, and it seeks to uncover information about the signalers' quality to decide from which signaler to hire or purchase (Connelly et al., 2011; Gomulya & Mishina, 2017; Sanders & Boivie, 2004). The receiver's experience of the quality of the selected signaler is further used to evaluate which signals to rely on in the future and to what extent (Cohen & Dean, 2005). Information about the receiver's choice also feeds back to the signalers and can be used by them to adjust the signals to send and how (Connelly et al., 2011; Spence, 1973). In the screening process, the receiver can ask the signalers directly; rely on third-party information about them, such as certifications and rankings; or look for observable attributes and information cues assumed to be correlated to desired but unobservable characteristics, actions, and qualities (Leischnig, Geigenmüller, & Enke, 2012). However, if the receiver does not know the kinds of signals for which to look or is not attentive to the signals being sent, the screening processes will not function.⁴ It is therefore vital to understand the kinds of signals receivers look for and how they interpret and "calibrate" signals by giving them different meanings or weights (Connelly et al., 2011).

2.3. Signaling and screening for quality in professional services

Professional services involve extensive information asymmetries regarding quality, and the intangible qualities and collaborative nature of professional services makes the evaluation of quality difficult, both ex ante and ex post (Empson, 2001; Løwendahl, 2005; Stewart, Hope, & Muhlemann, 1998). As the signaling effect of price, suggesting higher prices typically reflect higher quality (Nayyar, 1990; Skaggs & Snow, 2004), does not work efficiently in professional services, professionals rely on other types of signals such as higher education to induce the clients to pay a price premium for their services (Glückler & Armbrüster, 2003; Armbrüster, 2006) and to differentiate themselves from competitors (Dawson, Watson, Boudreau, & Pitt, 2016; Sanders & Boivie, 2004). In response, clients use qualitative signals to overcome the credence nature of professional services, form their impressions, and decide about the service quality (Dawson et al., 2016; Day & Barksdale, 2003). Examples of such signals are the service provider's organizational form (Greenwood & Empson, 2003), reputation (Greenwood et al., 2005), appearance (Alvesson, 2001; Empson, 2001), ethical codes (DeLong & Nanda, 2003), and previous projects and references (Glückler & Armbrüster, 2003). To help clients access thirdparty information about professionals, an increasing number of actors such as Gartner Group now provide ranking lists of PSFs (Dawson et al., 2016). Although this kind of information is helpful, many organizations still want to make their own assessments of the professional's knowledge of and fit with the proposed assignment (Pemer & Skjølsvik, 2016, 2017). How this assessment is done however is not well understood, and we lack knowledge on how clients screen the professionals' and evaluate their quality ex ante.

⁴ In his seminal text, Spence (1973) uses employers and job applicants as examples and describes how employers lack information about the applicants' quality. The applicants invest in signals like education to communicate their quality to the employer and to distinguish themselves from other applicants. The employers might screen for signals like education to sort potential high-quality applicants from other applicants. If higher education works well for the employer as an indicator of the candidate's quality, the employer might use it in future hiring situations. This fact can be communicated to other candidates who then see the value of signaling their education to the employer.

³We are grateful to one of the anonymous reviewers for making this point.

2.4. Towards a tentative framework

Drawing insights from previous literature, we find a strong need for more empirical research on a number of interrelated themes. While service quality is generally described as "an attitude" (Parasuraman et al., 1988:16; Cronin Jr & Taylor, 1992), how this attitude is shaped remains under discussion. Additionally, knowledge is lacking about how service quality is perceived in the *ex ante* phase and the primary dimensions and subdimensions on which it builds (Voorhees et al., 2017). However, this concept is particularly important to understand, because clients decide which service provider to hire in the *ex ante* phase. By exploring this empirically we heed the calls for more research on the dimensionality of service quality (Brady & Cronin Jr, 2001; Kang & James, 2004; Wang, Kim, Ko, & Liu, 2016).

Further, in the current study we focus on the signals clients look for and how they interpret them in the evaluation process. In their comprehensive review of the signaling and screening literature, Connelly et al. (2011) define three avenues for future research: First, scholars are encouraged to develop typologies of signals appearing in organizational contexts and to partition "the landscape of organizational signals into meaningful categories" (Connelly et al., 2011:59). Second, they suggest signals of quality might be divided into different types, such as "pointing signals", which indicate a characteristic separating the signaler from its competitors, and "activating signals", which also activates the desired quality in the signaler (Connelly et al., 2011:59-60). For instance, while a brochure about a company's specific skills can be used as a pointing signal (Connelly et al., 2011), having external directors on the board can be regarded as an activating signal, as it both signals good corporate governance and stimulates that kind of behavior among the board members (Certo et al., 2001). Third, they find the role of the receivers in the signaling process and how they meaningfully aggregate signals is an area needing more attention (Connelly et al., 2011). In response to these calls, we will in this study empirically investigate the signals receivers, i.e., clients of professional services, look for to assess quality in the ex ante phase. We will further explore whether these signals can be summarized in a taxonomy and if the signals play different roles in the screening process.

To guide our empirical analysis, we develop a tentative framework (see Fig. 1 below). The framework combines elements from the service quality literature, with a particular focus on the hierarchical multidimensionality of service quality (Brady & Cronin Jr, 2001; Voorhees et al., 2017), with signaling and screening theory (Bergh et al., 2014; Connelly et al., 2011; Spence, 1973). Fig. 1, read top-down, illustrates how ex ante quality can be operationalized into primary dimensions. The primary dimensions build on subdimensions, which are informed by signals of quality (c.f. Dabholkar et al., 1996). Reading the figure bottom-up, on the other hand, illustrates how clients first screen for signals and use them to form initial perceptions of quality. These perceptions are first summarized into subdimensions, which then are aggregated into primary dimensions of quality which, taken together, shape the client's perception of the quality of the service providers ex ante (c.f. Brady & Cronin Jr, 2001). Fig. 1 thus illustrates how the hierarchical multidimensionality of service quality at its very foundation builds on the signals clients pick up from service providers.

3. Methodology

3.1. Research design

To meet the aim of the paper, we have used a qualitative approach to study the phenomenon in context (Miles & Huberman, 1994). The selection of methodology was based on the complexity of the research phenomenon and the need for contextualization (Creswell, Plano Clark, Gutmann, & Hanson, 2003). As an empirical example, we use a specific type of professional services: management consulting services. Management consulting is often described as an extreme form of

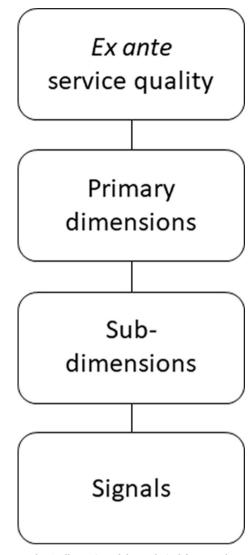


Fig. 1. Illustration of the analytical framework.

professional services, because to a large extent it builds on intangible qualities and client-consultant interaction (Kubr, 2002; von Nordenflycht, 2010). The International Council of Management Consulting Institutes (ICMCI) defines management consulting as "the rendering of independent advice and assistance about the process of management to clients with management responsibilities".⁵ Based on this definition, management consulting includes advice and assistance across a wide range of areas, such as human resources and recruiting, communication, information technology, finance, organization, strategy, marketing, regulations and legislations (Kubr, 2002).

3.2. Data collection and analysis

The current study builds on interviews with 51 clients of consulting services in 20 different large organizations operating in different industries in Norway, such as telecommunications, pulp and paper, materials, energy and logistics as well as the public sector. The choice of organizations was based on a desire to access a broad set of organizations across industries, types of business and individuals. The interviewed clients were typically part of the top management teams, division heads or key middle managers. Twelve of the 51 informants were women, and the age of all informants ranged between 40 and 60 years

⁵ See www.cmc-global.org, retrieved Sept 4, 2017.

Analytical process	Informant-centric codes			Research-centric themes	c themes
Illustrative data	Description	Signal sources	Signal	Subdimension	Quality dimension
"they have the knowledge we need"	Knowledge is not well defined; based on	Websites, pitching material, service	General knowledge	Knowledge	Resource
GFO, FoodOrg2 "Those who succeed have two thingsknowledge within their field and a commercial understanding." Strateory director 1160re	broad experience, perceived as good Knowledge of relevant areas and topics	areas, geographical coverage. Project portfolios	Content knowledge		
"We knew people from the [supplier] firm. We had knowledge of their qualities and their previous experiences." Strategy director, MediaOrg1	Experience from similar tasks, firms, industries, and markets	Presentations, meetings and interviews	Context knowledge		
"[The consultants] put themselves in the potential situation of the buyer." Strategy director, LifeOrg "[Consulting firm] was primarily chosen for its knowledge of [our firm]. They know evervthing we do." ICT manager subdivision. InfraOrg 1	The buyer knows that the supplier has the right knowledge The supplier knows the buyer firm's processes. politics. and people				
choice of person in much more important than choice of firm" Senior Vice president Business development, MetalOrg	General comments on the employees	Supplier firms' websites, pitching materials	Employees	People	
"it was of course an evaluation of the members of the team" CFO. FoodOr22	Comments about team and the team leader	Team presentations and interviews	Team		
"Capacity is important – that they can deliver." Project manager. Infractrol	Number of parallel assignments	Pitching material, proposals	Capacity	Firm	
"We cannot select a small firm – they might be very knowledgeable, but what happens if they all get sick?"	Number of employees and offices	Websites, pitching material	Size		
Chief Communication Officer, LifeOrg "It is extremely important that those you turn to understand the task and come with a concise answer about how to solve the task." Onalive manazor Informed.	Supplier shows a clear understanding of the assignment	Proposal, pitching materials, process plans, reference lists	Approach	Assignment	Delivery
Vuanty interacts, intracts, to a standard that they use that leads to a "Methodology is also important. It can be seen as a standard that they use that leads to a conclusion." Senior vice president IT, InfraOrg1 "We stick with them because we are satisfied" GFO, ConsOrg	Supplier uses tested, pragmatic, and thorough methods and tools Supplier performance beyond expectations and in "moments of truth"	Proposal, pitching materials, process plans, reference lists Memories from past projects	Methodology Own experience	Satisfaction	
"you call ask people in a similar type of job as yourself and ask which [supplier] companies are good: 'Who do you have good experience from working with?'" Chief communication officer. LifeOre	Supplier performance in past assignments	Statements from previous clients	Others' experiences		
"It is important to have a trust based advisor with an established relationship." Head of Legal, TechOre	Behavioral intentions and honesty developed over time	Impressions from presentations, rumors	Transparency	Trust	Relational
that it is people I can work with – based on chemistry and type." Deputy chief	Compatibility of individuals and	Impressions from presentations,	Gut feeling	Chemistry	

Table 2

Overview over measures taken to ensure trustworthiness.

Table adapted from Wallandorf and Polk (1980) and Poolar et al. (2017)

Trustworthiness criteria	How it was addressed in the study
Credibility – extent to which results appear to be an acceptable representation of the data.	51 interviews conducted across 20 organizations Summary of findings presented to practitioners (buyers and sellers of management consulting services) and expert researchers All data checked for contradictory evidence to the findings Detailed and non-redundant data analysis conducted using Atlas.ai for coding and Excel for summaries
Transferability – extent to which findings from one study will appear in other contexts	Consistent concepts represented in the data from multiple informants and organizations Informants provided thick descriptions of the concepts to allow for understanding of relevance across informants
Dependability – extent to which findings are stable and consistent over time across location	Informants reflected on events over the last 3–5 years and included multiple times and places in their descriptions Supporting documents and in depth observation of selected meetings were used as supporting data
Confirmability – extent to which interpretations and the result of the participants and the phenomenon as opposed to researcher bias	Open ended questions were used to ensure no priming or leading effects Over 350 pages of interview transcripts were coded One researcher collected and analyzed the data while another researcher scrutinized the collection and reviewed the coding Summary of findings presented to practitioners (buyers and sellers of management consulting services) and expert researchers
Integrity – extent to which interpretations are influenced by misinformation or participants illusions	Anonymity of each informant ensured The participants were ensured that the data would be protected

old. The interviewed informants were selected based on their involvement in the purchasing of management consulting services. Thus, we sought to access people with extensive experience hiring management consulting services in each organization. The individuals involved in these purchases had a varied set of positions and roles in organizations, which made it difficult *ex ante* to identify who they were. Thus, considerable efforts and initial discussions with people across the organization were needed to identify the most relevant and accessible individuals. The group of informants in the study captures the variety of the positions and roles of clients of management consultants (for a detailed overview over the informants, see Appendix A).

The main objective of the research was to maximize the variation in the types of services and to obtain access to a wide set of management consulting services, also recognizing many of these types of services are highly intertwined. In each interview, a number of purchasing processes related to different types of management consulting services were covered. One hundred forty-two service purchases were studied. The majority of them dealt with services within traditional management consulting, such as strategy, marketing, recruiting, organizational and leadership development, project management and mergers and acquisitions (60). The remaining services concerned law (23); IT (21); communication consulting and advertising (19); and auditing, investment banking and financial services (19) (see also Appendix A).

The complexity, size and duration of the studied management consulting service assignments varied, ranging from relatively small assignments to those lasting over 3–5 years. Another differentiating characteristic was the variation in the clients' purchasing approaches, which included purchasing of services for particular assignments (70%) and durable relationships in the form of formal or informal frame agreements (30%). By incorporating a considerable degree of variation in the types of services, length and size of projects as well as purchasing approaches, we capture extensive variation in management consulting services. In looking for similarities and commonalities across screening in this varied set of data, our aim was to enhance the internal and external validity of our findings.

The number of interviewees was based on a saturation approach, in which the benefits of further interviews were compared with the value, time and cost of conducting additional interviews (Guest, Bunce, & Johnson, 2006). The interviews were collected by one of the coauthors, a senior researcher with experience in management consulting. The interviews were semistructured and centered on how clients

operationalized service quality and evaluated it in the *ex ante* phase. To allow for triangulation, we asked all the informants the same key questions (see Appendix B), while allowing for additional questions and discussions in the interviews. All interviews were recorded, transcribed in full, and imported into Atlas.ti, a qualitative data analysis software.

The data were analyzed in three main phases (Gioia, Corley, & Hamilton, 2013): First, to become familiarized with the data, we read and reread the transcripts several times and used memos to summarize key initial insights. Second, we used Atlas.ti to categorize the data into informant-centric codes regarding how the clients and service providers perceived and evaluated ex ante quality. In particular, we classified the data concerning their choices of service providers based on the qualities for which they were looking and they thought were important in selecting service providers. Based on this phase, a broad set of informantcentered codes were developed. To organize these codes, they were integrated into higher-level constructs, in which related codes were classified together. The coding was done sequentially by the two authors involved in the project. First, one author performed each of the four phases of the analysis individually. The other author coded selected sections of the data. The authors then discussed their results to allow alternative interpretations to be voiced and incorporated.

In the third phase, we compared the informant-centric codes and their content with screening theory. In doing so, we switched back and forth between theory and data, and analyzed the codes to identify research-centric themes, concepts and dimensions (Gioia et al., 2013). For example, we found "resources" to be one of the three primary dimensions of *ex ante* service quality, and it built on three subdimensions: "knowledge", "people", and "firm". The subdimension "knowledge", in turn, built on three signals: "general knowledge", "content knowledge" and "context knowledge". An overview of the main identified categories is found in Table 1.

To conduct the research in a trustworthy fashion, we carefully incorporated measures in each step of the research efforts to ensure credibility, transferability, dependability, conformability, and integrity (Beeler, Zablah, & Johnston, 2017; Wallendorf & Belk, 1989). An overview of measures taken to ensure trustworthiness is found in Table 2 below.

4. Findings

The analysis revealed the clients used three primary dimensions to

evaluate the quality of professional services *ex ante*: i) resource quality, ii) delivery quality and iii) relational quality. It also revealed the subdimensions on which the primary dimensions were built and the signals clients used as indicators of their quality. Below, we will describe each of the primary dimensions and their associated subdimensions and signals. The section ends with the development of a taxonomy of *ex ante* quality of professional services.

4.1. Resource quality

The first primary dimension, resource quality, referred to the type of resources the service provider possessed. It is built on three subdimensions: the service provider's *knowledge*, its *people*, and *firm*.

4.1.1. Knowledge

Knowledge was the most emphasized subdimension among the clients. To evaluate the service providers' knowledge, the clients looked for three signals of knowledge: general knowledge, content knowledge, and context knowledge. The first, general knowledge, referred to the service provider firm's knowledge base - i.e., its expertise and experience from working in various areas such as change management, strategic advice, outsourcing, and project management-as well as from working in different industries and geographical regions. The clients regarded the service providers' general knowledge as particularly important when they felt they lacked a clear idea or specification of the kind of knowledge they needed for a specific assignment. In these situations, the clients used the general knowledge as a signal to sort out which service providers would be able to help them assess their situations and develop a solution to their problems. The clients described the general knowledge in rather generic terms, such as, "They [the consultants] are good knowledge-wise ... " (HR manager, InfraOrg), or " ... they [the consultants] lag in terms of knowledge" (organizational development project manager, IntraOrg). To assess the service providers' general knowledge, the clients looked at the service providers' web sites, pitching material, service areas and geographical coverage.

When, on the other hand, the clients had a rather clear understanding of the type of knowledge their assignment would demand, they were more interested in the service providers' *content knowledge*. This aspect concerned the service providers' knowledge of the areas, topics, or skills relevant to the assignment. To assess the content knowledge, the clients looked at the service providers' project portfolios, assuming if the service providers had performed similar assignments before, the clients could expect them to know how to organize and run them.

While the clients used general and content knowledge to create a shortlist of potential service providers, these two types of knowledge were not enough for a service provider to win an assignment. Rather, to select which service provider to hire, the clients regarded the signal context knowledge as central. Context knowledge referred to the service providers' understanding of the client's specific situation, its industry and market. Said a business area manager in MediaOrg2, "And not least [important], knowledge of the corporation's, the business areas' specific problems." To evaluate the service providers' context knowledge, the clients asked the service providers about their knowledge of the buying firms' industries, the operating environment in them, regulative conditions, and current trends and challenges. They also asked the service providers about their knowledge of the buying firm to see whether the service providers understood its internal context - e.g., its corporate structure, strategies, goals, business values, and culture - and how the assignment would fit with and contribute to the client. The clients normally asked such questions when they interviewed a number of shortlisted service providers to determine which one to hire.

4.1.2. People

To evaluate the second subdimension of resource quality, *people*, the clients looked at the *employees* in the service provider firm and the

proposed team as signals. The clients used information from ranking lists and the service provider firms' web sites to create a rather generic picture of the *employees* of specific service provider, describing them as being e.g., "nice", "good", or "senior". As described by an HR-director in a division of InfraOrg1, "Then I gave weight to the people that I felt could manage to get such a project ashore." The clients also stated they wanted the team to be "strong" in terms of its members' competences and experiences and dedicated to the client. Said the senior vice president of business development at MetalOrg: "...you are buying a team and not an individual..." To assess this feature, the clients looked at the teams' presentations and their members' experiences. They also gave particular weight to the team leader. The clients' perception of the team leader as skilled, experienced and attentive to their needs would then spill over onto the client's perception of the other team members. Thus, while the assessment of the employees in the service provider firm played an important role in qualifying for the client's short list of potential service providers, the clients' assessment of the team and particularly the team leader was central in the selection of which of the shortlisted service providers to hire.

4.1.3. Firm

In evaluating the third subdimension of resource quality, the service provider firm, the clients relied on two signals: *size* and *capacity*. The client used web sites, proposals and pitching materials to get a first impression of the service provider's *size*, including number of employees, number of offices, and locations. However, they claimed most important was *capacity*, i.e., the service provider's ability to mobilize resources to meet the client's particular need. Capacity was even described as a key selection criterion, as the clients wanted to avoid hiring a service provider that would not have time to work on the assignment: "It is not the number [of employees] – 100 or 200 – that is central, but to what degree they have resources to cover our need" (senior vice president IT in InfraOrg1). Capacity was assessed by asking service providers about their current work load, whether the team members would work on more than one assignment, and if so, how much time they would allocate to the client's assignment.

4.2. Delivery quality

The second primary dimension of *ex ante* quality of professional services was service delivery. The clients described two subdimensions as particularly relevant: understanding the *assignment* and *satisfaction* with past projects.

4.2.1. Assignment

The clients regarded the service providers' understanding of the assignment as central, as a misunderstanding of it would affect its results. As described by the senior vice president of organization and communication at TeleOrg2: "Who had understood it [the assignment]? In that we included to what degree they truly had understood how things worked today and came up with a solution." To determine how well the service providers had understood the assignment, the clients used the service providers' proposed approach, i.e., how they planned to perform the assignment, as a signal. To assess the service providers' approach, the clients used information from interviews and presentations about their proposed process plans, milestones, deliveries, and adaption to the buying firm. Although all clients claimed approach was a central signal, some clients described their perception of the service providers' approach in general terms, e.g., saying a service provider's approach was "good" or "bad", while others included very detailed considerations of it into their evaluations. The clients further expressed a preference for a coproductive, relational, and process-based approach, rather than an expert-based approach, in which the service provider developed the solution on its own.

The clients also used the service providers' *methodology* as a signal, relating it "...to the way they [the consultants] work and their use of

tools" (senior vice president IT, InfraOrg1). While the clients varied in how detailed their descriptions of the methodology were, those who provided more information described the underlying theoretical foundation, to what degree the methodology was tested according to academic standards, considered ethical, and involved only limited risk, as important factors. However, although they expected the methodology to be pragmatic and practical, they claimed even more important was that the service providers could offer new, different, creative and innovative ways of approaching the assignment. Nevertheless, the methodology was considered important but not important enough to determine the client's final selection of a service provider.

4.2.2. Satisfaction

Another important subdimension of delivery quality was the clients' satisfaction with the service providers' past performance. Satisfaction was said to be achieved when the service providers met or exceeded the clients' expectations, especially regarding the adapting of solutions and work processes to the client's needs. This claim could be made for the entire assignment or in certain key moments - referred to as "moments of truth" - in which it was essential for the service providers to perform well. The clients used their own experiences of a service provider's past performance as a signal of its future performance. As described by the senior vice president of LifeOrg: "I have had some positive [experiences] and then I return [to that service provider], and some negative and then I try someone else ... "While the clients stated they wanted to be open to hiring new service providers, they admitted that by using service provider performance in past assignments as a signal of quality, they implicitly gave service providers they knew well an advantage. They also admitted service providers who previously had not managed to live up to the clients' expectations would have a disadvantage in the service provider selection process, as clients found it difficult to disregard their past experiences.

The clients described situations in which they had no personal experience from a specific service provider. Then, they asked colleagues or previous clients in other firms for statements about *their experiences* of the service provider. The statements were rather detailed and included information about the service provider's performance, professionalism, social skills, customer service, attentiveness and adaptability. The clients pointed out however that, in addition to obtaining information about the details of past assignments, it was also important to them who made the statement, as this distinction affected the weight the clients would give to it.

4.3. Relational quality

The third primary dimension, relational quality, referred to the quality of the relations between clients and service providers. It consisted of two main subdimensions: *trust* and *chemistry*.

4.3.1. Trust

The clients described trust as based on service providers' honesty and willingness to work in the best interests of their clients rather than out of self-interest. The clients further described trust as fragile and not as something one has but as something one must build. An essential part of building trust was that the service providers were transparent regarding their skills, processes, and ideas. The clients preferred service providers who were open about their strengths and weaknesses and about the services they could and could not perform for the clients. As described by a division head in OilOrg: "We have worked together on many issues, especially with [consultant], and he knows our issues and situation; we are close to him and we know what he can and cannot do." The quote also illustrates the personal nature of trust. However, while the clients claimed trust was "a must" and an established trustbased relation with the service provider was important, they treated it as a basic requirement rather than a final selection criterion. To assess trust, the clients used their impressions of the service providers from presentations, interviews, meetings and discussions as well as rumors and recommendations from colleagues.

4.3.2. Chemistry

The second subdimension was personal chemistry. This subdimension was highlighted by clients as a very important foundation for building relations and thus as playing a central role in the performance of the assignment. While trust was regarded as developing over time, chemistry was described as a phenomenon that took place instantly. It was also regarded as a necessary first step towards building close clientservice provider relationships that would support the delivery: "You get a sense of whether you can work with them, personally...you need to like each other" (senior vice president of organization at PaperOrg). Thus, while recurrent assignments would enable service providers to develop strong relational knowledge, drawing on chemistry was a way for new service providers to win assignments. The clients used impressions as having a good "gut feeling" and "to like each other" as signals of chemistry. The impressions came from e.g., interviews and meetings and regarded the service providers' styles and appearances, including their flexibility, humility, language and tone, and the ability to understand and adjust to the client's dress code and humor. The clients also used examples of qualities they did not like as guides to qualities to look for among the service providers. As exemplified by an organizational development manager at InfraOrg1, "I would never buy consulting services from an extremely snobbish, arrogant, and selfrighteous consultant."

4.4. A taxonomy of ex ante quality in professional services

The identified dimensions and subdimension of *ex ante* quality described above provide information about clients' perceptions of the important aspects of professional services and the signals they use as indicators of quality. Drawing on our findings, we outline a taxonomy of *ex ante* quality in professional services illustrating the primary dimensions, subdimensions and signals on which it builds.

5. Discussion

This paper set out to explore how the quality of professional services is evaluated *ex ante* by performing a qualitative empirical study of the signals clients of a specific type of professional services – management consulting services – use as indicators of quality. By drawing on signaling and screening theory we provide a fresh perspective to the service quality literature.⁶

5.1. Unbundling ex ante quality in professional services

First, our study contributes to the theorizing of the dimensionality of service quality (Brady & Cronin Jr, 2001; Chaipoopiruttana, 2018; Kang & James, 2004; Wang et al., 2016) by unbundling the concept and developing a taxonomy of the primary dimensions, subdimensions, and signals on which clients draw to assess the *ex ante* quality (see Fig. 2) (Leischnig et al., 2012; Voorhees et al., 2017). Comparing our results with previous research on the quality of professional services in general (Bachnik, Nowacki, & Szopiński, 2018; Cameran, Moizer, & Pettinicchio, 2010; Day & Barksdale, 2003) and consulting services in particular (Glückler & Armbrüster, 2003; Haverila, Bateman, & Naumann, 2011; McLachlin, 2012; Momparler, Carmona, & Lassala, 2015), we find differences in the dimensions clients use in the *ex ante* and the *ex post* phases. Extant research has found that in the *ex post* phase, clients use dimensions such as the service provider's reputation, organizational structure and resources (Greenwood & Empson, 2003;

 $^{^{\}rm 6}\,\rm We$ are grateful to one of the anonymous reviewers for highlighting this point.

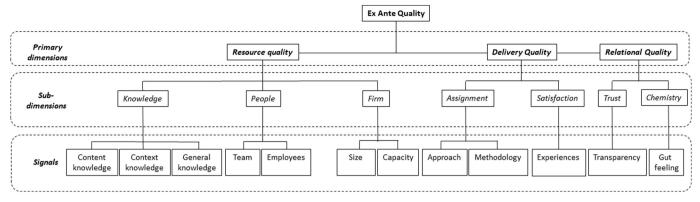


Fig. 2. Taxonomy of the primary dimensions, sub-dimensions and signal in ex ante professional service quality.

Haverila et al., 2011) and the individual professional's knowledge and competences, appearance, ethical codes and customer orientation (Alvesson, 2001; Cameran et al., 2010; Empson, 2001; Haverila et al., 2011; McLachlin, 2012; Momparler et al., 2015) as input in their construction of the service quality. We nuance and conceptualize this picture first by showing that in the ex ante phase, clients seek to reduce the opacity, uncertainties, and informational asymmetries associated with consulting services by paying close attention to three main dimensions: resources, delivery, and relationship. These dimensions are assessed based on a set of subdimensions, which concern the service providers' proposed knowledge, people, and firm (which together constitute resources); the proposed assignment and past satisfaction with previous assignments (which together constitute delivery); and chemistry and trust (which constitute relationship). We also show that clients distinguish between different types of knowledge, of which context knowledge is deemed the most important and the most effective signal of quality (c.f. Spence, 1973; Connelly et al., 2011; Gomulya & Mishina, 2017). Thus, the findings indicate that to win an assignment, signals related to the people from the service provider firm and their understanding and fit with the client firm are particularly effective and important for clients.

5.2. Qualifying signals and signals of excellence in the screening process

Second, our findings contribute to the service quality literature by unveiling the screening process in which clients assess the service providers' quality *ex ante*. Our findings support a processual view of quality (Grönroos, 2001) and add to the theorizing of signals by providing a fine-grained image of how they can be partitioned into different types, qualifying signals and signals of excellence, depending on how and when in the screening process they are used by the receivers (Connelly et al., 2011). Reading Fig. 3 bottom-up illustrates the division between qualifying signals and signals of excellence.

In the first phase of the screening process, clients scan the market for potential service providers and develop a shortlist. In doing so, they screen for qualifying signals to identify which service providers would be suitable for an assignment. Examples of such signals are the service provider's general knowledge, employees, and size. These signals are mainly picked up from aspects such as the service providers' web sites, CVs, portfolios and project proposals. As these objects are tangible, we denote them as artifacts. In this phase, the clients can hold a certain distance, as the qualifying signals can be picked up without close interaction with the service providers (e.g., by surfing web sites). From the service provider's point of view, sending out qualifying signals might give them a chance to be evaluated for an assignment, but these signals are not sufficiently effective to win the assignment. Due to the tangibility, we further suggest that the artifacts can play a double role in the screening process. On the one hand, clients might intentionally screen for qualifying signals, such as a service provider's size, and use information from artifacts as "evidence" (e.g., facts of the number of offices, employees, etc.). On the other hand, clients might come across qualifying signals from artifacts for which they were not intentionally looking (e.g., finding new web sites about service providers), thereby widening the range of signals to include in the assessment. Paradoxically, although service providers can create artifacts and thus control their shaping, the limited or nonexistent interaction with clients in the first phase of the screening process means that they have little control over how the artifacts are used or interpreted by the clients.

In the next phase, clients screen for *signals of excellence* to further define the *ex ante* quality of the shortlisted service providers. Such signals include the service provider's context knowledge, team, approach, and the client's experiences and gut feeling. To assess these signals, clients rely mainly on people-related attributes such as statements from previous clients, rumors, and impressions from meetings, interviews and presentations. As these are intangible and subjective summations of their beliefs about the service providers, we denote them as *attitudes* (Brady & Cronin Jr, 2001). In this phase, the clients need to interact more closely with the service providers to pick up signals of excellence. Interestingly, while the attitudes are shaped by the clients, the closer interaction enables the service providers to influence the clients' interpretations of them, e.g., by engaging in relationshipbuilding communication, using humor, etc.

The outcome of the screening process is an assessment of the service providers' overall *ex ante* quality, which the clients can use to differentiate between and rank the qualifying service providers. This ranking can then be used in combination with other criteria such as price to make a final selection of a service provider. The findings thus contribute to identifying not only new types of signals (Certo et al., 2001) and how these signals are used in the screening process (Connelly et al., 2011) but also how they build on tangible artifacts or intangible attitudes and rely on distant or close service provider interaction.

The screening process is illustrated in the conceptual model below (Fig. 4). Although the model for reasons of clarity is described as linear, clients can move back and forth between the phases, as they receive new information regarding e.g., service providers and the assignment.

5.3. Temporality of signals

Lastly, while previous research has identified types of signals, such as pointing and activating signals (Certo et al., 2001), it has been less precise on the temporality of their use (Connelly et al., 2011). We add new insights to this research by finding signals previously used by clients as signals of excellence are then turned into qualifying signals. For instance, our results indicate reputation and trust plays a more limited role in the assessment of *ex ante* quality than previous research has assumed. Extant literature has repeatedly identified reputation and trust as key criteria and as highly effective signals of quality, both for service providers to win new assignments and for clients selecting

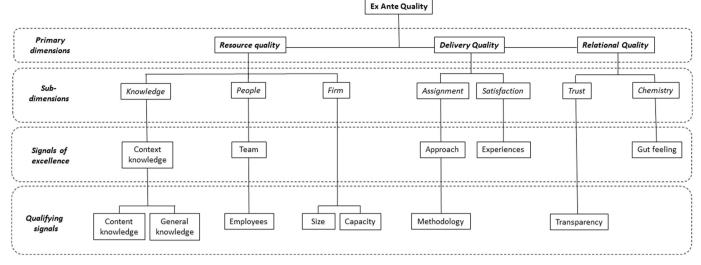
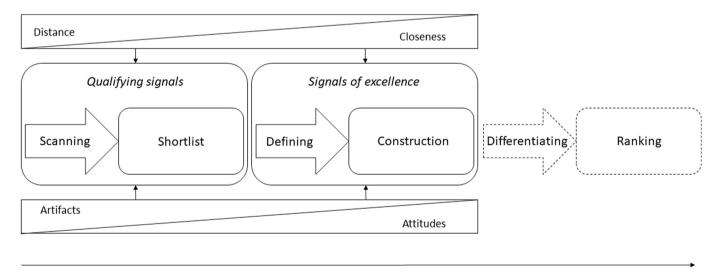


Fig. 3. Taxonomy of the primary dimensions, sub-dimensions, signals of excellence, and qualifying signals in ex ante quality in professional services.

service providers (Armbrüster, 2006; Cameran et al., 2010; DeLong & Nanda, 2003; Greenwood et al., 2005; Haverila et al., 2011; McLachlin, 2012; Momparler et al., 2015; Stewart et al., 1998). For instance, Glückler and Armbrüster (2003) showed in their study of clients hiring management consultants in Germany, how they largely relied on the consultants' brand (public reputation), recommendations from colleagues (networked reputation), and their own prior use of the consultants (experience-based trust) as indicators of quality and used them to select which consultancy to hire. Our data indicate however that a consultancy's general, public reputation does not play an important role for the clients, more than as part of others' experiences of using it. Furthermore, although the clients in our study depicted trust as "a must", they treated it more as a basic requirement the consultants had to possess to be considered for the assignment rather than an order-winning factor. Thus, while reputation and trust-building remain important for consultants as a means of obtaining new assignments and to position themselves as unique and value-adding partners to their clients, the effectiveness of the signal is not as strong as previously thought (c.f.

Spence, 1973; Connelly et al., 2011; Gomulya & Mishina, 2017). A possible explanation for this surprising finding is many clients are becoming experienced buyers of management consulting services and seek to formalize the purchasing process to reduce the importance of trust and personal relationships in their selection of service providers (Pemer & Skjølsvik, 2016).

In a similar vein, the finding that clients treated transparency as a qualifying signal informed by attitudes (from presentations and rumors) rather than artifacts also indicate the division of signals is not fixed but can change over time. Previous research has shown that as clients of management consulting services reach higher levels of purchasing maturity, they become more skilled in measuring and quantifying subjective quality criteria (Pemer & Skjølsvik, 2017). We thus suggest that as clients become more experienced, signals of excellence might transition into qualifying signals. In the transition, the attitudes might also be translated into artifacts. For instance, rather than relying on impressions from presentations, the clients can grade them in a predefined grading sheet and then compare the scores of different service



Screening process

Fig. 4. Conceptual model of the screening process. The model illustrates how clients first scan the market for potential service providers and develop a shortlist. In doing so, they screen for qualifying signals that can be picked up from a distance from artifacts. In the second phase, clients screen for signals of excellence to define and construct the shortlisted service providers' *ex ante* service quality. The signals of excellence build on attitudes that are shaped in the client-service provider interaction. The constructions, lastly can then be used by the clients to differentiate between the shortlisted service providers' qualities and develop a ranking, that can be combined with other selection criteria to decide which service provider to hire. (As this last phase is not part of the current study, the lines are dotted.)

providers (Pemer & Skjølsvik, 2017). Although not present in our data, we suggest that increased experience and purchasing maturity might make the *ex ante* assessment of quality – which so far has tended to be relatively informal and subjective – more formalized and, at least seemingly, objective. By providing insights into how different types of signals are temporally connected, we heed the call for more research on temporality in signaling and screening (Connelly et al., 2011).

6. Conclusions

The current study set out to explore how clients assess the quality of a specific type of professional services – management consulting services – *ex ante*. As the *ex ante* phase can be assumed to have strong implications on the subsequent service provider selection process, the outcomes of the project and the value created (Bowman & Ambrosini, 2000), developing new knowledge in this area is relevant from both a theoretical and practical perspective (Brock et al., 2007; Gardner et al., 2008; Kant et al., 2017; Ladhari et al., 2011; Løwendahl, 2005). By identifying the dimensions, subdimensions, and signals on which *ex ante* service quality builds and by defining the different roles of signals in the screening process, as well as the temporality of their use, we contribute to the theorizing of how clients construct the quality of management consulting services.

6.1. Theoretical implications

Looking ahead, our study provides a foundation for future theory development on how service quality is assessed and constructed in the ex ante phase and has several theoretical implications. First, the findings illustrate clients use different types of signals in different phases of the screening process. This finding indicates future studies need to be more precise on which phase(s) of the screening process they study, as the signals used by clients are likely to shift from phase to phase. Second, the unbundling of the ex ante service quality concept into dimensions and subdimensions enables future studies to disentangle to what extent other types of knowledge-intensive, professional services build on similar or other dimensions and subdimensions. This categorization would add to the theorizing on the qualities characterizing or distinguishing - different types of services and their ex ante qualities, and enable testing the generalizability of the results from the current study. Lastly, the finding that signals of excellence mainly builds on intangible and subjective attitudes shaped in client-service provider interaction suggests a fruitful research endeavor would be to explore in more detail the perceptions on which clients base their attitudes, for example, by performing experiments. Doing so would further reduce the opacity of ex ante service quality, and provide new valuable theoretical insights (von Nordenflycht, 2010).

6.2. Managerial implications

The findings have implications for clients of professional services. First, by being aware of how the concept of quality can be operationalized into different dimensions, subdimensions and signals, the clients can be more precise in their communication of why they find a certain service provider to possess high quality, thereby making their selection and evaluation processes more transparent. The proposed taxonomy can also form an important starting point in discussions among actors in the buying firm about which criteria to use and how much weight to give to each of them. Thereby, it can serve as an input to the formation of purchasing processes for professional services.

The findings also have implications for PSFs, such as management consultancies. While previous research has stated trust and reputation are central for PSFs to win new assignments, the findings from the current study add nuance to this statement. The interviews revealed that although trust is regarded as important, the clients saw it as a basic requirement. For professionals, signaling context knowledge, relational knowledge and chemistry are more important to clients. This feature indicates PSFs need to reconsider on which signals they should focus and at which stages in the client's selection process. As a first step, they should ensure qualifying signals are in place and then focus on developing strong signals of excellence. To develop context knowledge, PSFs are also well advised to develop strategies for which clients to prioritize to gain new context knowledge and for recruiting and retaining professionals whose knowledge and personalities fit with the client firms.

6.3. Limitations and implications for future research

The study presented above has a number of limitations inspiring future research. First, the current study has primarily focused on larger client firms, due to the infrequency and limited amount of such purchases among smaller firms. While we believe our findings can be generalized to clients of professional services in smaller firms (i.e., they are likely to use similar signals to assess ex ante service quality), more empirical studies are needed to investigate this assumption. Second, the study was performed in Norway, which is often described as a rather mature country in regards to the use of professional services (FEACO, 2016). It would therefore be interesting to see whether the findings from the study holds also in other geographical contexts, or if contextual factors such as culture, norms and regulations, influence how clients evaluate service quality in the ex ante phase. Third, the current study focuses on a particular type of professional services: management consulting services. While we believe the findings are generalizable to other professional services as well, particularly neo-professions, empirically testing these studies would be illuminating studying ex ante quality in e.g., classic professions such as legal services and auditing or in professions providing more tangible outcomes, such as engineering consulting (see von Nordenflycht, 2010). Fourth, the current study focuses on clients with extensive experience of hiring management consultants. However, first-time clients may have less knowledge than experienced clients about which signals to look for or be inattentive to the signals being sent in the screening process (Connelly et al., 2011). Thus, it would be interesting to explore how, if at all, first-time clients' screening processes and service quality assessments differ from experienced clients.⁷ Lastly, we would like to encourage future studies to explore if the ex ante service quality evaluation differs between companies using formalized or nonformalized purchasing processes and to test the conceptual model. Insights from studies of private and public sector client organizations have proved some indications of this differentiation (Pemer & Skjølsvik, 2016), but more research is warranted to understand how ex ante quality is evaluated and, perhaps more importantly, how the dimensions and signals used by clients to evaluate quality ex ante evolve and differ between different organizational configurations.

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⁷We are grateful to one of the anonymous reviewers for suggesting this avenue for future research.

Appendix A. Overview over informants

#	Informant	Type of organization	Org. Identifier	Industry	Type of service (industry)	Type of services purchased
1	ICT manager in subdivision	Large publically owned organization	Infra-Org1	Infrastructure	Management consulting, IT services	Organizational development, strategic con- sulting, project management
2	HR director in sub-division	owned organization			Management consulting	Leadership and organizational development, financial consulting
3	Project manager, division				Management consulting	Project management
4	Organizational director				Management consulting	Leadership and organizational development
5	Senior vice president IT				Management consulting, IT services,	Leadership development, simulation, analysis,
6	Leadership development				legal services Management consulting	mergers & acquisitions, project management Leadership and organizational development
7	manager, division Manager, internal academy				Management consulting	Leadership and organizational development
8	Quality manager, corporate				Management consulting	Analysis
9	Knowledge manager, divi- sion				Management consulting	Leadership and organizational development
10	Project director, head office				Management consulting	Strategic consulting
10	Sales and customer man-				Management consulting	Benchmarking, customer statistics
10	ager, division				Management consulting	Chartenia consulting ansient monocoment
12	ICT manager, head office				Management consulting	Strategic consulting, project management
13	Chief financial officer				Management & financial consulting	Tax advice project management
14	Purchaser				Management consulting	Framework agreement
15	Purchaser	T	Lafar Oral	T. C	Law and IT consulting	Framework agreement
16	Purchaser	Large publically	Infra-Org1	Infrastructure	Recruitment and IT consulting	Framework agreement and IT project
17	Purchaser	owned organization			Management consulting	Framework agreement
18	Purchasing director	T	T-1- 0-1	m - 1	Broad range of services	Not directly involved in purchases
19	Service line manager, divi- sion	Large publically listed organization	Tele-Org1	Telecom	Management consulting	Pricing consulting
20	Customer area manager				Management consulting	Pricing consulting
21	Purchaser				IT consulting; dive. purchases	Diverse
22	Head of purchasing				Wide range of services	Diverse
23	Purchaser				Management consulting	Pricing consulting
24	Head of leadership devel- opment	Large public directo- rate	Food-Org1	Food	Management consulting	Leadership development
25	HR professional				Management consulting	Leadership development
26	HR professional				Management consulting	Leadership development
27	Purchaser				Management consulting	Framework agreement leadership develop- ment
28	Purchaser				Management consulting	Risk management
28 29	Chief financial officer	Large multinational	Life-Org	Life sciences	Management consulting	General consulting
30	Senior vice president	Large intritinational	Life-Oig	Life sciences	Investment banking	Full-scale and smaller assignments
	strategy					
31	Chief communication of- ficer				Design services and advertising	Choice of design agency and advertising agency
32	Executive vice president HR	Large multinational	Tech-Org	Technology	Management consulting	Organizational development
33	Head of legal department	0			Legal services	Generally, specific and more general problems
34	Executive vice president communication				Communication consulting	General and specific needs
35	Senior vice president	Large multinational	Paper-Org	Pulp & Paper	Investment banking, strategy con- sulting	Acquisition, growth and portfolio management
36	strategy Senior vice president cor-				Communication consulting	Design of annual report, media issues and
37	porate communication Senior vice president orga-				Organizational/management con-	general communication Leadership program; event; corporate govern-
<i>c</i> -	nization		0.115	o.u	sulting; recruitment	ance; recruitment
38	Division vice president	Top 10 Oslo Stock	OilOrg	Oil & Gas	Management consulting/legal	Strategy implementation, change
39	Executive vice president strategy	Exchange	Media- Org1	Media	Management consulting, investment banking; legal recruitment	Variety of consulting and investment banking services
40	Business area manager		Media- Org2	Media	Design services and advertising	Choice of design agency and advertising agency
41	Chief financial officer, se- nior vice president IT	Top 50 company on Oslo Stock Exchange	Food-Org2	Food	IT services, auditing, legal manage-	ERP system, annual auditing, legal and con- sulting services generally, buyouts
42	Purchasing manager, head	USIO STOCK EXCHAIISE	EnergyOrg	Energy	ment consulting Legal services	Outsourcing of legal services, particular need
43	office Senior vice president busi-		Metal-Org	Metal	Legal, management consulting	Generally in these areas
44	ness development Senior vice president busi-	Top 200 Oslo Stock	Publish-	Publishing	Legal and management consulting ser-	Related to audit, strategy process
45	ness development Deputy chief executive of-	Exchange	Org AirlineOrg	Airline	vices Legal and investment banking services	Confidential and generally on legal services
	ficer		-			
46	Senior vice president orga- nization & communication		Tele-Org2	Telecom	Legal; recruitment; communication; organizational consulting, advertising,	Organizational development and generally for legal, consulting and advertising services
47	Business development man- ager	Subsidiary of interna- tional firm	Infra-Org2	Infrastructure	Legal and investment banking services	Country specific legal issues; generally
48	Chief financial officer	Private company; €1 bn + in sales	Cons-Org	Consumer products	Legal services; management, financial and IT consulting	Strategy processes and issues, transfer pricing; intranet
				•	U U	

49	Purchaser	Tax authorities	TaxOrg	Public sector	Management and IT consulting	
50	Competence manager	Real estate	Estate-Org		Management consulting	
51	Purchaser	Education	EduOrg		Management consulting	

Framework agreement Leadership development Framework agreement

Appendix B

The interview protocol is structured around themes to allow the questions to be adjusted to the informants' knowledge, ideas and experiences. In the interviews, we sought to avoid using theoretical concepts such as signaling or screening. Instead, we strived to let the informants use their own words to describe their situations, thoughts and experiences.

B.1. Interview protocol - client organizations

B.1.1. Theme 1 - background

The informant's background, previous and current roles in the organization.

B.1.2. Theme 2 - experience of management consultants

Give example of projects s/he has been involved in or heard about. What role did s/he have in them? Why were consultants hired? Who hired them? What happened in the projects? Why? What were the results? Was the project different from other consulting projects in the organization? If yes, why and in what sense? What happened in the organization before, during and after the projects?

B.1.3. Theme 3 - the organization's use of management consultants

How do you usually work with consultants in your organization? Are consultants used often? What role do they take and not? Who hires the consultants?

B.1.4. Theme 4 - purchasing management consulting services

If someone wants to hire management consultants, how do they go about to do it? Are there any processes, structures, formats or procedures that should be followed? Who is allowed to hire consultants? Has this changed over time? Why (not)?

B.1.5. Theme 5 - ex ante quality

How do you evaluate the quality of the consultants in the purchasing phase? What selection criteria are used in the purchasing of management consultants? How have these criteria developed over time?

B.1.6. Theme 6 – signals

How are the different criteria evaluated? What is used to evaluate each of the quality criteria – go through the mentioned criteria and ask about how they are evaluated.

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