Abstract

Purpose of the paper and literature addressed: Collaborative processes play an important role in the business marketing literature, as close interaction between buyers and sellers is a key to understanding inter-organizational exchanges. The recently emerged Service-Dominant logic also emphasises the importance of interaction and relationships in all exchange. Compared with the IMP discourse, the S-D logic puts more emphasis on the role of the customer by arguing that value is always defined and co-created by the customer. The point of departure in this paper is that the conceptual thinking of S-D logic can be drawn on to bring insight into value creation in buyer-seller relationships, particularly regarding the co-creation role of the customer.

Many streams of literature assume that certain businesses involve such complex and unique knowledge and skills and high level of specialization, that both the seller and the buyer face challenges during value creation. The purpose of the paper is to analyze how value is co-created within buyer-seller relationships in knowledge-intensive business services. We provide new knowledge to answer the following questions: What kind of activities and process elements constitute the value co-creation process? What kinds of resources do the seller and the buyer contribute to value co-creation? How do the inherent features of knowledge-intensive business services, such as information asymmetry and customization, influence value co-creation within buyer-seller relationships? The paper draws on literature in the domains of industrial marketing, S-D logic and professional services marketing.

Research method: Value co-creation is examined through conceptual analysis and empirical data collected through qualitative theme interviews within companies offering and buying professional business-to-business services in Finland.

Research findings: The study findings demonstrate how the characteristics of knowledge-intensive services, particularly the inherent information asymmetry and perceived risk, influence value-creation, and thereby increase understanding of co-creation of complex offerings in the b-to-b markets. We argue that complex offerings need to not only be co-created, but also co-clarified: the content of exchange needs to be communicated and some kind of consensus concerning the
solution proposition needs to be reached from the early stages of value co-creation. As a result, we propose a conceptual framework for value co-creation as joint problem-solving.

**Main contribution:**
The paper contributes to the IMP literature by analyzing the interaction between buyers and sellers in business-to-business context through S-D lenses, and by demonstrating that value co-creation of complex offerings such as knowledge-intensive business services is a dialogical problem-solving process during which both the buyer’s and the seller’s resources are critical and must be integrated. For practitioners, this paper highlights the special features and challenges of co-creation inherent in the context of complex, processual, knowledge-intensive offerings.

**Key words:** service-dominant logic, knowledge-intensive services, business services, co-creation, buyer-seller-relationships, value
INTRODUCTION

Collaborative processes play an important role in the business marketing literature, as close interaction between buyers and sellers is a key to understanding inter-organizational exchanges. The IMP Group focuses on studying how organizations interact in connected networks. The IMP School investigates business exchange as a dynamic phenomenon, and posits that value is created through buyer-seller resource interaction within relationships (Håkansson and Snehota, 1995). The recently emerged Service-Dominant logic also emphasizes the importance of interaction and relationships in all exchange (Vargo and Lusch 2004).

Vargo and Lusch (2008, 258) suggest that marketing should move from “thinking of customers as targets to thinking of customers as resources”. Compared with the IMP discourse, the S-D logic puts more emphasis on the role of the customer by arguing that value is always defined and co-created by the customer and therefore the seller can only make value-propositions. As interaction between buyers and sellers is a core phenomenon in inter-organizational exchanges, also a number of authors in the industrial marketing field have touched upon the co-creation role of the customer, for example in the context of customer integration and consultative selling (cf. Jacob and Ulaga 2008, 248; Sheth and Sharma 2008). All and all, a number of synergies and bridges can be identified between S-D logic and B-to-B research (e.g. Jacob and Ulaga 2008). The point of departure in this paper is that the conceptual thinking of S-D logic can be drawn on to bring insight into value creation in buyer-seller relationships, particularly regarding the co-creation role of the customer.

The service-dominant logic stresses that all exchange is based on the application of specialized skills and knowledge, and customers seek benefits of specialized competences (Vargo and Lusch 2004). Many streams of literature assume that certain businesses involve such complex and unique knowledge and skills and high level of specialization, that both the seller and the buyer face challenges during value creation. For example, Lindberg and Nordin (2008) found that industrial purchasers often feel uncomfortable when buying complex business services since such services are tedious to specify and to evaluate, and therefore they attempt to objectify the service offering with clear fixed definitions. In other words, for the buyer it might be difficult to understand and evaluate the service, and for the seller, it might be difficult to present the unit of exchange and value propositions in advance. Several authors have implied that exchange and interaction are affected by processuality, interaction intensity and tangibility of the exchange (e.g. Kalaignanam and Varadarajan 2006). In particular, studies conducted in the context of solutions marketing have highlighted the implications of complexity of the offering and intensity of customization and interaction with the customer (e.g., Cova and Salle 2008; Sawhney 2008, 368-369). For instance, a study by Tuli et al. (2007) indicates factors affecting solution effectiveness that are associated with the offering being ambiguous and developed in a process over an extended period of time. Similar challenges to exchange are stressed within the field of professional services marketing, too (cf. Löwendahl 2005, Thakor and Kumar 2000).

We suggest that the complexity of the offering and the value creation process originate from the information asymmetry and needed intensity of interaction within the buyer-seller relationship. Information asymmetry between sellers and buyers is a natural outgrowth of a specialization-based economic system and not a criticism of marketing or marketers themselves (Wilkie and Moore 2006, 271), but in some industries and offerings information asymmetry is extremely high and may complicate information sharing and interaction between the parties, and ultimately joint value creation. In these contexts, the expert skills of the seller are the reason for exchange, but at the same time, the expertise constrains and challenges joint value creation. There are offerings where the customer-firm interactions
actually constitute the value (Berthon and John 2006, 197), but assumingly the processual nature of the offering and information asymmetry between the actors complicate co-creation. Particularly professional services are associated with complexity, heterogeneity, specialist knowledge, and a high level of uncertainty (Gummesson, 1978; Thakor and Kumar 2000) and such characteristics challenge both the seller and the buyer during the joint value-creation. Therefore the knowledge developed within professional service research could be utilized to bring new insights into value-creation in the context of complex, knowledge-based, processual offerings.

The purpose of the paper is to analyze how value is co-created within buyer-seller relationships in knowledge-intensive business services. Drawing on conceptual analysis and empirical research, we provide new knowledge to answer the following questions: What kind of activities and process elements constitute the value co-creation process? What kinds of resources do the seller and the buyer contribute to value co-creation? How do the inherent features of knowledge-intensive business services, such as information asymmetry and customization, influence value co-creation within buyer-seller relationships?

The paper builds a bridge between the IMP and industrial marketing literature, services literature and the S-D approach: the paper integrates ideas originating from different domains in order to examine the resources and activities in the value co-creation process between actors. The dimensions of value co-creation are further explored and enriched with empirical data collected through qualitative theme interviews within companies offering and buying professional business-to-business services in Finland. As a result, we propose a conceptual framework for value co-creation as joint problem-solving.

The paper contributes to the IMP literature by analyzing the interaction between buyers and sellers in business-to-business context through S-D lenses, and by demonstrating that value co-creation of complex offerings such as knowledge-intensive business services is a dialogical problem-solving process during which both the buyer’s and the seller’s resources are critical and must be integrated. The study findings demonstrate how the characteristics of knowledge-intensive services, particularly the inherent information asymmetry and perceived risk, influence value-creation, and thereby increase understanding of co-creation of complex offerings in the b-to-b markets. We argue that complex offerings need to not only be co-created, but also co-clarified: the content of exchange needs to be communicated and some kind of consensus concerning the solution proposition needs to be reached from the early stages of value co-creation. For practitioners, this paper highlights the special features and challenges of co-creation inherent in the context of complex, processual, knowledge-intensive offerings.

The paper is organized as follows. First, we apply the S-D logic approach to outline the basic elements of value co-creation in the context of complex offerings. Second, we analyze the particular challenges that the special nature of professional services poses on co-creation. After the theoretical discussion condensed into a tentative framework, the methodological choices are presented. The subsequent section discusses the findings and elaborates the process and required resources of the interaction and co-operation in value creation on the basis of data. Conclusions are made about value creation in professional services as a process of joint problem-solving. Finally, some practical implications are presented to encourage marketers of complex, processual offerings, such as professional service firms and solution providers, to develop their marketing understanding and practices.
VALUE CO-CREATION IN THE CONTEXT OF COMPLEX OFFERINGS

Customer perceived value is considered the fundamental basis of competitive advantage for companies (Slater and Narver, 1994; Woodruff, 1997), and value creation “the raison d’être of collaborative customer–supplier relationships” (Anderson, 1995, 349). Value is a complex construct and its use within the literature varies considerably (Lin et al. 2005). Current consensus in the marketing literature is that customer perceived value can be defined as the trade-off between the benefits and sacrifices perceived by the customer (e.g. Flint et al. 1997). Many authors point out that perceived value is subjective and context-dependent (Eggert and Ulaga 2002, Whittaker et al. 2007). Value perceptions of the same offering have been found to vary for example relative to situation, time, experience, and competition (Eggert and Ulaga 2002).

The subjectivity and context dependency of value is the cornerstone of the service dominant logic perspective on marketing (Vargo and Lusch 2004 2008). According to S-D logic, knowledge and skills are flexible operant resources which are embedded in goods and services, and value is generated when they are put to use. Instead of stressing the form of outcomes, the focus is on value-in-use uniquely and phenomenologically determined by the customer (Vargo and Lusch 2008). This is why firms can only make value-propositions for their customers: firms can offer their resources for value creation, but the end result, value-in-use, depends on the collaborative process with the buyer (Vargo and Lusch 2004). The value proposition is “that particular products and service potentially could be of value if the customer finds a way to utilize them toward goals achievement” (Flint and Mentzer 2006).

The service dominant logic views all exchange as the application of specialized skills and knowledge for the benefit of the other party (Vargo and Lusch 2004a). The application of skills and knowledge is collaborative in nature: customized solutions are realized through interactions and relationships, and involving the customer as co-producer (Day 2006, 88). The role of customer is a “co-creator” and a “resource” compared to a “recipient”. In other words, both parties contribute to the interactive value-creation process.

The value-creation process begins with identification of the content of and goals for the exchange: what does the customer need, and how can the supplier fulfill those needs (e.g. Sawhney 2006). Traditionally, the process for identifying customer needs consists of tasks aiming at “hearing” the voice of the customer in order to identify known or latent needs and wants of customers by asking, listening, observing and experimenting, but in co-creation process, both the firm and the customer do the asking, listening, observing and experimenting, in order to understand the needs and wants of the other party to the exchange (Jaworski and Kohli 2006). This requires communication that is a dialogue or conversation (Lusch and Vargo 2006), rather than one-way promotion or persuasion by the seller (Ballantyne and Varey 2006, 229-230). Jaworski and Kohli (2006) point out that a dialog is not merely exchange of information, but instead, it should be the exploration and joint creation of new ideas. For example, a firm and a customer might engage in a dialog to identify a solution for enhancing the customer’s productivity, but have little idea at the beginning as to whether this requires education seminars or different equipments. Both parties’ comments elaborate the discussion and trigger new ideas, and both parties should explicitly raise “process checks” to identify all unevenness and misunderstandings (Jaworski and Kohli 2006, 112-113).

Sheth and Sharma (2008) point out that when the exchange is about intangibles, specialized skills, and knowledge, the orientation of sales people shifts towards solution selling and consultative selling, in which activities such as problem identification, presentation of solution, and continued customer support are in a greater role (Sheth and Sharma 2008). Instead of persuasion and push-activities, sales people need to understand the customer, to support decision making, to act as experts, and to be capable of answering
questions (Sheth and Sharma 2008). When suppliers’ specialized skills and knowledge become more important to customers, selling activities are more related to education of customers (Sheth and Sharma 2008) and sellers need to move towards learning and sense-making processes in order to provide optimal value propositions. Defining the content and goals for exchange is a hermeneutical process where both parties, not only the buyer, contribute to determining the appropriate solution to customer problems.

Many authors stress the importance of clearly communicating value propositions, especially in the context of complex offering. Plötner (2008) states that especially the depiction of service potential should be stressed in the content of the provider’s pre-sales communication. However, according to Lindberg and Nordin (2008), developing specifications of more complex services is sometimes very difficult. Especially specifying the results of a creative service, such as architects or PR-firms were considered challenging by buyers. The findings of Lindberg and Nordin (2008) and Edvardsson et al. (2008) reveal that the some buying firms put much effort into the initiation stage of buying in which the need is identified and required offerings are clarified. These customers required carefully developed specifications and took part in the specification process which served as the basis on which suppliers develop their offerings.

After the identification the content the parties move towards co-production. Co-production is commonly thought of as the customer performing some of the work traditionally done by a producer. Whilst S-D logic diminishes the distinction between goods and services, there are still fundamental differences between goods and services even from a customer’s standpoint: firstly, customer participation is different whether the customer chooses to buy software for income tax preparation versus buying the expertise of a tax consultant and secondly, information asymmetry exists between some service providers and customers and affects interaction (Kalaignanam and Varadarajan 2006, 172).

VALUE CO-CREATION WITHIN PROFESSIONAL SERVICES

This section discusses the particular challenges that the special nature of professional services poses on value co-creation. The body of services marketing literature focuses on the marketing implications of the processual, interactive nature of exchange that typically occurs in services. Particularly professional services are associated with such characteristics: many service classification schemes categorize professional services as the most heterogeneous services involving a high degree of customer influence and provider discretion (e.g., Lovelock, 1983; Schmenner, 1986; Cunningham et al. 2004). Hence, there is a considerable body of research addressing the implications that heterogeneity, complexity, intangibility, and customer presence and participation may have on the marketing, management and creation of the professional service.

The category of professional services rests on their distinctive features such as application of expertise, high customization and credence qualities that lead to vague evaluation criteria and high risk from the customer’s point of view (Edvardsson, 1989; Silvestro et al., 1992; Lapierre, 1997; Thakor and Kumar 2000; Löwendahl 2005). A variety of occupations in both consumer and industrial markets are included in the class of professional services, for example medicine, law, engineering, architecture, accounting, consulting and advertising (e.g. Löwendahl 2005, 22-23). Professional services are based on the application of specialist knowledge, skills and experience which are typically acquired through extensive formal training and practice (e.g., Wilson, 1972; Hausman 2003; Jaakkola and Halinen 2006). The core of the professional service offering is the use of specialist knowledge in problem solving for the customer (Gummesson, 1978; Edvardsson, 1989; Löwendahl 2005). The tangibility of
the professional service offering varies; solutions may be very intangible in nature, such as financial recommendations, investment decisions, or health advice; but they may also take a tangible form such as blueprints, surgical procedures, or architectural designs (Jaakkola and Halinen 2006). The problem-solving can be based on innovating new solutions or presenting old solutions (Løwendahl 2005) which affects the nature and the amount of required co-creation process.

The features of the professional service affect the marketer’s way to provide their service. Professionals traditionally enjoy a relatively autonomous status in their work. Autonomy refers to professional’s freedom and obligation to exercise their judgment in an objective manner, relying on their expertise and knowledge without the influence of non-members of their profession (Gummesson, 1978; Ritsema van Eck-van Peet et al., 1992). The expertise and professional status authorize professional service providers to address their clients’ problems (Hausman 2003; Lapierre, 1997). In many professional fields, providers are personally held accountable and liable for their actions (Løwendahl, et al. 2001). Due to the special knowledge needed to evaluate the service, and also the requirement of objectivity, many professional fields exercise self-regulation through traditions, norms, or codes of ethics shared by the profession (Ritsema van Eck-van Peet, et al., 1992).

According the professional service literature, providers solve their clients’ problems by applying their specialist knowledge and skills, and also professional norms (e.g., Løwendahl 2005, 22; Jaakkola and Halinen 2006). In terms of the contributions by customers, the services marketing domain offers a wealth of literature on “customer participation”, referring to the influence and input that customers bring to the creation of the service (Larsson and Bowen, 1989). Customer participation is considered to be prominent in professional services in particular (Hausman 2003). In fact, one could argue that in professional services, co-production by the customer is likely to imperative, rather than a matter of choice. In other words, the professional service needs some input from the client to occur at all; unless the customer provides some information or material concerning the problem, the service cannot be realised (Bitner et al., 1997; Dawson 2000). In other words, the professional service marketing suggests that in this context, customers co-create not only value, but also the offering itself.

The disequilibrium of expertise and experience between the professional and the customer creates an information asymmetry between the parties to the exchange (Thakor and Kumar 2000). Customers typically lack the expertise needed to understand and evaluate the quality of the service or the professional, which potentially creates a sense of risk for the client (Mitchell, 1994). The client is dependent on the service provider to define the problem, and the expert may even know better what the customer needs (Thakor and Kumar 2000). Even routinized buyers may feel a great deal of insecurity when buying professional services because they can assess to a very limited degree whether what they are buying will be worth its cost; in fact, they cannot verify or scrutinize the service even after the purchase (Ploetner 2008; Mitchell, 1994).

We suggest that information asymmetry between the seller and the buyer may complicate joint value co-creation and especially information sharing and interaction between the parties. If customers are not aware of their own needs and best options, they are also unable to articulate their needs and objectives for value, or integrate their resources during the value-co-creation. The issue is pertinent particularly in the context of professional services.

In sum, professional services are associated with complexity, heterogeneity, specialist knowledge, and a high level of uncertainty (Gummesson, 1978; Thakor and Kumar 2000). Such characteristics challenge both the seller and the buyer during a value co-creation: for the service provider, it might be difficult to present the service offering in advance and to manage
the service process in order to achieve the best service outcome, and for the customer it might be difficult to understand and evaluate the service and to identify and integrate its resources on its own initiative.

SYNTHESIS: JOINT PROBLEM-SOLVING AS VALUE CO-CREATION

To provide a synthesis of the previous theoretical discussion, this section outlines how the professional services offering can be seen through S-D logic lenses, and how value can be co-created following the S-D logic. We posit that complexity of the exchange has implications on value co-creation; first, in terms of the basis of the exchange and process of value creation, and secondly, in terms of the participants’ resources and roles in the process.

As a starting point, we propose a tentative framework (Figure 1) that describes the value creation of complex offerings - such as professional services - as a joint problem-solving process that is co-created through interaction. The process consists of diagnosing the problem and providing a solution which provides value-in-use when it is implemented. Problem solving is a complex dialogical process in which both parties have an active role and they contribute resources. Sellers of complex offerings need to indicate their relevant expert resources to illustrate their value-propositions and guide the co-creation process, and customers bring out their needs and applicable resources. In order to achieve the solution that provides the best value-in-use, the resources of both parties need to be integrated.

The b-to-b professional service literature and S-D literature focus on the application of specialist knowledge and skills to solve individual client’s problem as the basis of exchange. Furthermore, both approaches consider customers as being responsible for involving their own resources. However, the professional services literature stresses outcome-based problem solving that is complex and intangible by nature, and is carried out in a situation where information asymmetry occurs. Hence, the initial diagnosis of needs and potential solutions is dependent on the seller party, on the account of their expertise. The service provider customizes the offering to fit customer needs, and the customer role is primarily to be a recipient of the service. The service-dominant logic approach instead sees the customer as a co-producer or co-creator of the service.

Furthermore, the professional service literature implicitly views knowledge and skills of the service provider as operand resources, in other words, the professional knowledge is the core offering and “end product” that is offered to the customer. The S-D logic in turn appreciates the operand nature of knowledge as a means to create effects for the customer, rather than having value in its own. Value-in-use refers to the results or outcomes of the service in terms of the value that is perceived by the client.

To conclude, the value co-creation of complex offerings can be described as customer-focused problem solving: it is a hermeneutical diagnosis formulated through interaction with the customer and the service provider, and a proposition of the application of professional expert skills and the customer knowledge in interaction to create optimal value-in-use potential for the customer.
In order to study value co-creation of complex offerings as joint problem solving process, qualitative research design was used. Empiric primary data of the study consists of face-to-face theme interviews, and written interview reports are used as secondary data. Primary data interviews were conducted during summer 2005—winter 2010. The secondary data consists of written structured interview reports that provide snap shots on challenges of value co-creation from buyers’ or sellers’ viewpoints within various diverse professional service industries. The data type, their utilization and analysis are illustrated in the table 1.

The informants varied from entrepreneurs to top managers. Because professional services were used as research context, especially those representing the sellers were from various professional service industries such as design, industrial design, advertising, interpreting and localization, engineering consulting, landscape consulting, software engineering and consulting, accounting, and corporate banking. Buyers of professional services were mostly SM-sized firms and the informants were managers who possessed key roles in buying and implementing the services.

The interviews covered the following themes: 1) the challenges and uncertainties of buying/providing complex services 2) process of co-creation and interaction intensity 3) expected benefits/value-in-use 4) participation, roles and resources of both parties in co-creation. Each interview lasted about one and a half hours, and they were all tape-recorded and transcribed.

The principles of abductive research were followed, that is the data collection and analysis and the search for complementary theories were parallel iterative processes (Dubois and Gadde 2002). The dialogue between the empirical data and the theory guided the analysis. The aim of the analysis was to build and broaden the existing conceptual understanding of value co-creation of complex offerings. Because of the strong empirical foundation and the large amount of data, we used QSR NVivo software and Word-Office tabling in managing data and analysis.

Data sets were analyzed by seeking elements of co-creation process, both parties’ resources and parties’ roles. Two data sets provided different kind of knowledge for analysis: the primary data was in the main role in analysis of co-creation process. This data set also offered plenty of citations to illustrate the phenomena. The secondary data provided more exemplars for value-in-use potential and required resources within various industries.
RESULTS: THE CONTENT AND THE PROCESS OF THE VALUE CO-CREATION IN PROFESSIONAL SERVICES

On the basis of empirical research, several stages of value co-creation of complex offerings were found, that constitute the joint problem solving. The process and the required resources by the seller party and the buyer party are discussed next. Also both parties’ roles in value co-creation are analyzed. Each found category is illustrated with extracts and examples from the data.

The process of joint problem-solving as a value co-creation process

On the basis of empirical research, 7 stages of value co-creation of complex offerings were found, namely identification of the need, definition of the optimal value proposition on the basis of expected value-in-use, specifying the process and the concrete outcome, specifying the required resources, mobilization of resources, managing contradicting and unwanted value propositions, and co-implementing the solution, that constitute the joint problem solving.

The initial diagnosis and identification of the need as the launch stage of co-creation

As professional service literature suggested, data indicated that the exchange begins with an identification of the content of and goals for the exchange. According to S-D logic both parties do the asking, listening, observing and experimenting in co-creation process in order to identify known or latent needs and wants of customers. However, the information asymmetry inherent in professional services poses challenges to customer-determined value creation emphasised in the S-D approach in the initial phase of co-creation. In the case of professional services, customers may not be knowledgeable enough to identify and determine their problem or the service they actually need. An important part of the value proposition by the seller party is hence the diagnosis and identification of what the customer actually needs. This is illustrated in the following comment from the data:

*If the customer is less experienced in buying translation services, we really need to define what translating and localization are and what the customer really needs and wants. (Translation and localisation services)*
In this phase, the customer indicates its needs, budget, time schedule and background information that contribute the need co-identification.

**Specification of diagnosis: Specifying and choosing the optimal value-proposition on the basis of expected value-in-use**

In the next stage, the potential value co-creation activities with various resource requirements and value-in-use-potential are discussed, illustrated and weighted. This is done in order to outline the potential options that might provide value for the customer and to choose the co-creation path that prefigures the most optimal value for the customer. From the customer’s perspective the clearly defined specification also generate comparable offerings and value propositions (see Lindberg and Nordin 2008). In the following citation, the refined goal of joint value co-creation is polished through dialogical and hermeneutical learning:

> Often when you start talking with the customer, they can’t tell you anything and it takes us ages to try to figure out what it could be. Then they look at our proposition and say that “this is not quite it, it’s a bit expensive, you shouldn’t focus on that, and we don’t need this or that”. (Market research and consulting)

Many authors have pointed out that determining the content of the service, the service offering, cannot be solely dependent on customers’ perception on what is of value for them. The seller party needs to determine their own sense of value, because in complex offerings and information asymmetry, the customer does not know what to expect as a value.

However, crucial challenge for joint value-creation process is how parties are able to communicate the various value-in-use potentials that might emerge from various solutions since information asymmetry and uncertainty related to the realization of value overshadows the interaction. In the context of professional services, customers may find it difficult to evaluate the value they can derive from the use of the service (Lapierre, 1997). As a consequence of information asymmetry, the customer may be unable to evaluate the quality of the professional service even after the service has been created (Ploetner 2008). In some cases, the final result of the service unfolds only over time: it is likely to be many months before the earnings or losses produced by an instance of investment advice, for example, can be assessed (Sharma and Patterson, 1999). Therefore it may be challenging for professional service firms to communicate and illustrate the potential value-in-use for the customer. The following citation shows an example of the use of reference cases to outline the kind of value-in-use might be gained with the provided solution:

> If we can tell through reference cases how much a previous customer’s business did benefit from design, it certainly interests the customer. They think that we can truly enhance their business. (Industrial design agency as service provider)

**Specifying the concrete output and the process**

In specification stage, the concrete outputs and the process need to be defined and determined. Even though the clients may have to rely on the professional to determine what they actually need, the offering needs to be jointly *specified* to ensure the accuracy of the diagnosis and hence value of the service. All products and services, no matter how complex or intangible they are, need to be objectified at some point in time to make them exchangeable (cf. Lindberg and Nordin 2008). In many professional services, however, the service offering may be rather unspecified, at least in terms of the exact output. Data indicated how complex process and expected solutions of professional services were determined with the customer and illustrated for the customer by the seller party. As the result, the need was transformed into a clearly specified assignment which serves as a basis for the development of offering. The following citations illustrate the necessity and challenges of clarifying the core of the
exchange in advance:

In our business it is extremely crucial that there is an agreement about what will be sold and bought. We have to be able to describe in advance, what this case is all about, what we are going to do to you and what you will get with your investment. (Industrial design)

According to the data, the specification phase is crucial for creating optimal value-in-use. For example global manager from a high tech firm commented that the specification phase is the most important but time taking phase of value creation. If the parties fail in the co-specification, the following value-in-use potential is not promising and in the worst cases, even negative outcomes will emerge: For example flaws and dearth in production designing will lead to increased costs and too expensive prices in the markets, prolonged time schedules when the launch of the product or service will be delayed and the competitor makes it and gains advantage, which leads to loss of sales, decreasing market share, monetary losses, lost resources and breach of faith and obligations for distributors and even loss of reputation and image.

Identification and mobilization of resources – and the customer’s resources particularly

The joint value creation process requires customers’ participation and input. In professional services customers however are dependent on experts, and therefore they need motivation and clear procedures in order to integrate their resources. Brown and Bitner (2006) raise the point that it may be difficult to get customers to contribute what is needed from them. Although professional service literature emphasises the critical value of the contribution by the customer – particularly information – the customer is nevertheless considered to have little understanding of the use of that information in problem solving. Therefore, during the co-creation process, professional service firms need to identify, activate, collect and integrate customer resources and other contributions to make value creation possible, as is illustrated in the following citations:

We need to figure out if the customer already possesses material or texts that we can put to use. Sometimes we discuss with the customer what kind of terminology and style they want to use. They need to tell us what they want, and we need to ask questions, for example, to whom their promotion texts or instructions will be directed and do they have different kinds of standards or legislations in different countries. (Translating and location services)

The input that is provided by customers is the most challenging part of the process: how to get the information from the customer in the right form. It can be improved by giving them precise instructions, making clear agreements and getting them to check and approve their data. We’ve also put a lot of effort in developing our clients’ information systems. (Information and analysis services)

Managing conflicts concerning contradicting and unwanted value-propositions

When professional service providers must weigh customers’ preferences, expectations and needs against their objective professional judgment, the diagnosis may sometimes result in a solution that is not preferred by the customer (Mills and Moshavi, 1999). For example, a physician should decline to prescribe unnecessary or harmful substances to patients even if they request it. We found similar value co-creation conflicts and disagreement which needed to be managed. In b-to-b knowledge intensive services this phase might require critical
discussions how contradicting needs and resource requirements will affect the value potential. For example in one assignment where an engineering agency designed new production lines, the buyer did not first want to invest on building new production facilities. The buyer wanted to fit the new lines into existing facilities, but the seller party saw that the desired production process cannot be executed in the existing facilities and the quality of the production would have damaged if the new production lines would have been fitted into too disorganized old facilities. The buyer accepted the investment requirements only after making reference visits, hearing outsider industry expert statements and using another consultant for further information.

Co-implementing the solution

When the solution for the problem is constructed jointly, the implementation follows. The service-dominant logic implies that to create value-in-use, customers must learn to use and adapt the offering to their unique needs and usage (Vargo and Lusch 2004a). Applied to professional services, one can argue that value is often determined by how the customers use, adapt and implement the solution that is offered as the result of the professional service. For example, if a patient follows the prescribed treatment regimen or if a company utilizes the results of a market research study or follows a business consultant’s recommendations, it is assumed to gain better value-in-use. Hence, the argument that companies can only make value propositions is well suited to professional services. Personnel management and research service agency continued the value co-creation in implementation phase by supporting the client in processing the research results by providing expert support and data on standards to be used in the comparison of results. The agency also supports capitalizing the results in every day practices.

Perceiving the value-in-use by the buyer

Value-in-use is the results or outcomes of the service in terms of the value that is perceived by the client. In the data the value-in-use potential of complex offerings concerned decreased costs, increased revenues, aplomb due to expert support, reliability and usability, image and compatibility of future solutions. For example buyers of occupational health care service perceived the following value-in-use elements: motivating working environment, decreased sick leaves, and better ability to work – and all these benefits increase the efficiency of the buyer’s business.

Resources, inputs and roles in co-creation of professional services

The value co-creation process of professional services requires resources and inputs from both parties, since adopting the service-dominant logic transfers buyers from “recipients” into “co-creators” with relevant resources. In the context of professional services, information about the customer’s problem and situation to be solved is considered a critical resource (Dawson 2000). Obtaining this critical resource requires effective dialogic communication rather than one-way promotion (cf. Ballantyne and Varey 2006). These resources and roles of both parties are discussed next.

According the professional service literature, providers provide expert skills since they solve their clients’ problems by applying their specialist knowledge and skills, and also professional norms (e.g., Löwendahl 2005, 22; Jaakkola and Halinen 2006). The following citation by a buyer who sought solutions on engineering designing illustrates the resources of the expert and how they contribute co-creation:

We buy the special know-how that is needed in the planning of this kind of a project and that shortens the process and timetables. You can gather the relevant
information by your own as well, but there’s a huge rummage in ‘how are we going to do this and that, and how to put these together’. They have the know-how, the experience and clear processes already, so they can take a short cut instead of going through every offer, all the machinery, every interface, and that means, in a big project like this, weeks if not months.

Even if customer participation is seen as necessary and valuable input to the professional service process, customers were not treated as equal partners in joint value creation by expert sellers or by the buyers themselves. Customers are traditionally expected to delegate responsibility for problem solving to the professional (cf. Mills and Moshavi, 1999). Due to information asymmetry, the provider often needs to lead the process to aid the customer to articulate its wants and needs, as is illustrated in the following comment from an inexperienced buyer of a design service:

*We haven’t used design services before so we can’t necessarily put together such a brief that they are used to. So we just orally tell them, what we think we would need, and they have to use their experience to figure out what we really want.* (Saw mill as the customer)

Very clearly the buyers themselves indicated in interviews and in interview reports that they expected professional service providers to lead a dance and contribute more and even proactively. The buyers, actually, most often indicated that wanted to put the expert in charge, to delegate “almost everything” to them and to count on their opinions, evaluations and suggestions. For example, if the seller party suggested supplementary services, this was perceived as active “extra problem solving” that facilitated gaining the optimal solution. The buyers were only willing to provide the relevant information on request. On technological industries, however, the buyers wanted to run the show, and they tested professionals and were keener on being involved in the joint problem solving.

Data indicated that the customer education activities by the seller party were obvious when the content of economic exchange was formulated. Especially inexperienced customers need to be taught according to an expert:

*Many times we have to actually teach, how the process procedures go, how you go through an investment project, what kind of design services you need for it.*

Even though the customer input is crucial for specifying of the content of the service and finding the best solution, marketers still need to define their value-propositions on the basis of their expert knowledge and skills, and determine the solution without compromising their professional integrity. Hence, professionals have to lead the joint value creation process.

The co-creation role of customers in determining and also contributing to the outcomes of the professional service however is indeed evident despite the complexity of the offering. In many cases customers could be considered as equal partners rather than resources: expert customers are able to develop the offerings even better than the producer can and lead users can contribute more to value creation than the producer (cf. Kalaignanam and Varadarajan 2006, 175). In the business-to-business context such expert customers can be found particularly: they typically possess critical information concerning the market, conditions and requirements linked to their industry. In fact, firms often develop their own in-house expertise as buyers to match with the expertise of the suppliers (Løwendahl 2005, 41). Both expert and novice customers can contribute to the value creation process with their industry and even substance knowledge. An expert engineer from a seller party’s viewpoint describes the differences between novice and expert buyers as co-creators:
The client tells that they need something of this kind, and we don’t have anything else concrete, except that they have this product that they would like to market, but how should they do it. There’s our square one. Then we brainstorm with the client. They have a high expertise on the equipment that they possess. We go through things with their experts. After that we usually make a plan, which shows the process, and make a preparatory plan out, in which we show the need of space and other things. It’s a really interactional relationship at that point. So, we always brainstorm together, if the opposite party has expertise. If they don’t have the expertise, it’s a different story. Then they’ll just announce that they need this kind of a thing to be done. Then we have to start from zero and brainstorm it here at us, and go and present it like: could it be like this, what changes you want, what do you want to be different.

The joint process of solving the customer’s problem may involve complex dialogical processes where both parties assume an active role and contribute resources, like the following citation from the field of industrial design and branding reveals. In this case, a saw mill and a design agency created designer wooden decoration boards:

We had a product development project for a new product group, and in the beginning we had only a faint idea of what we want. Then the industrial designing agency generated several options for us as they possess design competence and experience in concept designing. Then we chose some of their ideas, discussed more, and cut down on the amount of potential solutions and options in order to finally find our own interesting concept for a product. We didn’t want to link the solution to plywood because we sell it in a good price anyway. Instead, we wanted to find new alternatives to refine our materials, but to avoid investments on new production lines. After choosing the new product concept we started to develop it further together. And finally we ended up with the solution that we together implement at the moment, the concrete product concept of wood. (Saw mill)

The customer as a resource should turn into operant resource, if the propositions of S-D logic are followed. Our data provides more reflections on this: for example the marketing manager of an engineering agency stressed that it is important for an expert to interact clients whose assignments advance the accumulation of expertise, because “meddling with everything and everyone limits your resources and destroys the profound know-how” and therefore customers are critical operant resources who also build the expertise of the seller within co-creation processes.

To summarize our findings, we provide an elaborated model that illustrates the value co-creation process as joint problem solving aiming at optimal value-in-use (Figure 2).
In sum, we argue that the complexity and professionalism involved in the exchange set certain limits to co-creation of offerings and value. In the case of asymmetrical information, the expert has to assume greater responsibility for creating the service, i.e. in problem resolution, and the customer may play the role of a resource contributor rather than an equal partner. However, the role of the client is nevertheless critical in implementing the solution, and always in determining the value-in-use of the service.
CONCLUSIONS AND IMPLICATIONS

In this paper we have analyzed value co-creation in the context of complex offerings. We contributed by introducing of model of value co-creation of complex offerings and by providing focused phases of co-creation and identifying inputs of actors to co-creation.

The aim of the paper was to analyse the co-creation of professional service offerings by combining the perspectives of the service-dominant logic, professional services literature and relevant b-to-b literature such as IMP-literature. We conclude that the SD-logic can bring new insights into understanding value creation in professional services, and SD-logic could learn something from the complex and relational-oriented interaction in information asymmetry situation that occurs naturally in professional services. We contribute also IMP-literature and relevant b-to-b service literature by identifying resources needed in resource interaction and resource development and by stressing that resources are integrated with the customer in order to provide value-in-use.

We suggest that value creation in complex offerings such as professional services can be described as a problem-solving process that is co-created through interaction, where both parties contribute and integrate resources. The co-creation of complex offerings is problem solving for the customer, encompassing the specification of the service and finding a solution for the problem, and sometimes also the implementation of the solution. Following the lexicon of the service-dominant logic, such offering can only be considered a value proposition for the customer. The problem-solving process can be characterised as hermeneutical, developing through dialogical interaction. Customer input influences each stage of the process, but we argue that particularly in professional services, it may and should not always be guiding the process. Instead, it might be valuable if the marketer leads occasionally the co-creation process due to their expertise and experience. The ultimate value-in-use is determined by the customer. Typically, the value-in-use is the result of the implementation of the solution.

By analysing a field that inherently involves a high degree of specialization and customer influence, this paper contributes to the evolving service-dominant logic discourse with new insights and questions. Although the S-D logic argues that services are not confronted with unique marketing challenges and considers the demarcation between different types of offerings as obsolete, we identified some unique challenges resulting from the characteristics of the basis of exchange and the creation process of professional services. The S-D logic do not pay attention to the point that specialization and expert skills of the marketer often lead to information symmetry that complicates the joint value-creation process.

In the case of complex offerings, there is typically information asymmetry between the parties: the customer has minor knowledge and understanding concerning the needed offering, and therefore the interaction process and required resources might be vague in the eyes of customers who cannot diagnose their own needs clearly without the marketer’s critical input. For the marketer, it might be difficult to present the basis of exchange and value propositions in the form of an offering in advance and to manage the process in order to achieve the best outcome and value-in-use. Due to the superior knowledge of professionals, they also need to incorporate ethical aspects into the service offering. It is marketer’s responsibility to use the knowledge for customer in the optimal and ethical way, when offerings are created, and this kind of ethical attitude and way of thinking is stressed in professional service practices. Information symmetry increases the significance of the marketer’s ethics, clear interaction procedures and hermeneutical communication as well marketer’s responsible to guide the customer.

We support the argument by Lindberg and Nordin (2008) that all products and services, no matter how complex or intangible they are, need to be objectified at some point in time to
make them exchangeable. We argue that in the context of complex exchange, the content of exchange needs to be specified and communicated, and some kind of consensus concerning the solution proposition need to be agreed upon in the beginning of value-creation process to make such of solutions tradable. We suggest that instead of considering value-in-use to be entirely determined by the customers, we could regard it to be a part of the provider’s expertise to be able to present and illustrate the customers’ potential for value-in-use already before or during the process.

Another contribution to the service-dominant logic discourse is drawing attention to the notion that resource and skills integration through joint value-creation is a complex process that may occur in a relationship with asymmetrical information. Value creation is a dialogical process that integrates both the marketer’s and the customer’s resources in order to achieve the optimal value creation process and value-in-use. Customer co-production of the service offering is needed to make problem-solving possible. Therefore both parties have also responsibilities to define and co-create the offering. The offering specification and design process requires interaction in the form of dialogue. Both parties can contribute to offering specification with their valuable inputs: The seller needs to apply specialized knowledge as a resource and to provide optimal information in information asymmetry situation. The customer’s responsibility is to contribute to the co-creation by communicating their needs and industry knowledge. Furthermore, professional service providers have the obligation and right to evaluate customer needs and requirements in the light of their professional integrity, even though that sometimes means not adhering to customer needs.

To inspire future research, we raise questions such as how to manage and optimize interaction during the diagnosis process, and how to engage and manage the dialogue between parties in exchange relationships with information asymmetry and power imbalance. We argue that together with “solutions” (cf. Sawhney 2006; Tuli et al. 2007), professional services are a good example of complex and customized offerings that may present with special challenges in terms of value co-creation that are not encountered in the context of more generic, simple products or services, and urge researchers to invest more effort in studying professional services.

Our paper has implications for researchers in the field of professional services marketing and management, too. Despite acknowledging the importance of customer participation, researchers in professional services marketing have perhaps remained rather provider-oriented in their approach to value creation, which may originate from the objectivity requirements and information asymmetry within professional services. The S-D logic implies that the service offering is resource provision rather than a solution for customer needs, because value is only created when the buyer uses the resources provided by a professional service firm, and integrates them with their own skills and knowledge. The S-D logic challenges the traditional perspective on professional service offering creation from a marketer-centered to a customer-centered perspective, considering the customer an active participant in the offering co-creation. Despite the superior knowledge and professional authority of the provider, the customer should not be considered merely an operand resource. Research on professional services should pay more attention to the outcomes of the problem-solving, and study the potential for facilitating optimal value-in-use for the clients. Although references to value-in-use in the professional service context have been made in the literature already in the previous millennium (e.g. Lapierre, 1997), studies of value creation for credence goods have remained scarce (Howden and Pressey 2008). We suggest the professional services literature should pay more attention to what takes place after the professional service process, as that is when the ultimate value of the service is determined.

This paper has focused on the characteristics of professional services. However, analogous implications could be drawn to any complex offerings and solutions with unstructured
decision and production processes. We assume that intangibility, complexity, customization and co-creation lead to a blurred unit of exchange, increased risks and fuzzy expectations. Instead of regarding all offerings as alike, further research could investigate the dimensions that distinguish between offerings in terms of characteristics of value-creation processes.

Our analysis provides some advice for managers as well. We have pointed out that intangibility, complexity, and information asymmetry create marketing challenges for service marketers particularly when offerings or value propositions are defined and specified. Typically, the customer needs the supplier to define the offering, and customers may be unable to specify the services they are buying even during the exchange process. Service- or solution marketers - cannot ignore such problems. Parties to the relationship need to achieve a common understanding of the offering and its value. Professional service marketers should illustrate their value-propositions better, and customers need to more carefully indicate their needs and integrate their applicable resources.

Resource integration in information asymmetry situation sets new challenges for both parties. For example, new communication procedures and practices are needed in order to reduce the risks perceived by the customer. However, when offerings are complex and intangible and information asymmetry occurs, gaining this kind of mutual understanding is extremely challenging. Therefore the co-design and co-defining process needs procedures and tools that facilitate interaction, dialogue, and trust; such tools facilitate identification of misunderstandings and help to avoid mistakes.

Additionally, marketers are challenged to communicate the potential for value-in-use for the customer. Instead of illustrating the professional service “product”, they should illustrate the potential value-in-use for customer. Parties to the relationships need more in-depth understanding of their partner to be able to define and communicate potential value-in-use. In the case of increasingly complex and intangible offerings, the company could try to tangibilize the value of the offering. Especially in a situation of information asymmetry and credence qualities marketers need to present value-scenarios of various solutions instead of value-propositions. For example, by using references, service providers can illustrate some long-term benefits of the offering and tangibilize the whole offering for the customer.

References:


