



# MASTER THESIS

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Service quality, value creation and customer satisfaction, how are they related?

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**Abstract**

In this research paper, the relation between service quality, value creation and customer satisfaction in the joint problem solving process will be explored by qualitative research within an organization and among their customers and employees. In the current literature, the relation between value creation, customer satisfaction and service quality from the joint problem solving process is unclear and service quality is static approached. Current literature is describing service quality as a simplified display of a rather very complex phenomenon as service quality is. This research is conducted from a dyadic perspective in which on the one hand value creation and service quality are approached from the perspective of the clients as well as service staff. Employees of the company under investigation gave input from their perspective on what service quality, value creation and customer satisfaction means for their clients. The research is executed from the joint problem process perspective, based on previous literature studies. The organization under investigation operates from the KIBS context, which means knowledge intensive business and services context. The research is executed by different interviews among employees of the firm under investigation and among clients of the firm under investigation. The research identified that empathy, tangibles and involvement are the most important to the overall satisfaction of clients. This study contributed to the literature in a way that this research is less static than former research related to service quality and the discovery of new elements important for customer satisfaction. The contribution in practice can be found in the fact that it provides relevant insights into the elements that are important when it comes to service provision related to customer satisfaction.

**Key concepts:** *Value creation, service quality, service logic, customer satisfaction*

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# PREFACE

This master thesis is written to complete the master's period at the University of Twente. In collaboration with a marketing advisory office, this thesis is written to contribute to the literature and to provide the company under investigation with insights into customer satisfaction and the elements that create value in the joint problem solving process in a service oriented business to business context.

The subject is based on the interest of the company, my own interest and a gap in the literature. The original question of the company was to investigate the relationship between customer satisfaction and the elements that create value in the joint problem solving process in a business to business context.

During the master thesis period, I worked parttime for the company under investigation, which have provided me extra information related to the services they offer and which delivered me valuable input for my thesis.

To ensure anonymity of the organization under investigation as the respondents who were interviewed during the process, names of the respondents are not included in the report.

I would like to thank all the people involved in this research, first I would like to thank my supervisor of the university for the support and supervision during my master thesis and the critical view on the research. Next to that, I would like to thank my supervisor of the organization under investigation, for offering me the opportunity to conduct a theoretical research within a practical environment and for the confidence in interviewing the employees and the customers of the organization. At least, I would like to thank my family and (study) friends for the unconditional support.

I hope you will all enjoy reading this research paper.

## 1. Introduction

During the last decades, the importance of the concept value creation became of more importance within the field of business-to-business marketing. Value creation is described by the literature as the core purpose and central process of economic exchange (Vargo et. al., 2008). Value is not only created by the use of a good or a service. Value-in-use and value co-creation are concepts that become more widely known in the field of marketing and especially in the field of business-to-business marketing.

The context of businesses is still changing, processes become more complex and more knowledge intensive. The organization that has been analyzed for this study is a marketing advisory office, which is active in the business-to-business sector. The organization works with middle-sized and large clients in different branches. The core branches where the organization under investigation is active in are the manufacturing industry and the recreation/leisure branch. The context in which this organization operates is the knowledge intensive business and services context (also known as the KIBS). In this context, extensive collaboration and interaction are needed in the value co-creation process between service provider and clients (Aarikka-Stenroos & Jaakkola, 2012). The organization provides their clients with different services. This varies from strategic marketing advise (positioning, strategic planning) to customer satisfaction research.

This research will investigate the concept of value creation, customer satisfaction and service quality from the joint problem solving process (Aarikka-Stenroos & Jaakkola, 2012). It is important to know and to realize how service quality influences the customer satisfaction. As mentioned earlier, in every business value creation plays an important role. If looked at value creation in the B2B sector, value is established by the interaction process between customer and service provider. Value creation through interaction between the customer and the supplier is of key importance, according to the literature of Aarikka-Stenroos and Jaakkola (2012). Value is created not only by the use of the good or service, but by the reciprocal process of interaction between on the one hand the supplier and on the other hand the customer (Ballantyne & Varey, 2006; Grönroos, 2008, 2011; Payne et al., 2008).

The customer even as the supplier both have an important role within this process and contribute both in the process of value creation. The concept value creation and co-creation are closely related to the concept customer satisfaction. Customer satisfaction is defined by the literature as *'a positive affective state resulting from the appraisal of all aspects of a firm's working relationship with another firm'* (Lam, Shankar & Krishna Erramilli Bvsan Murthy, 2004). Value creation is described as the core purpose and central process of economic exchange (Vargo et. al., 2008). Whereas service is described as the application of skills and knowledge (competences) by one entity for the benefit of the other entity (Vargo, Maglio & Akaka, 2008). The three concepts are related in the way that value is created in the collaborative process. Value is created by service from the supplier and interaction with the customer. The question is which service quality elements in this process are important

for the customer satisfaction. It is important to know which elements are important for the customer satisfaction, because clients who are more satisfied are more willing to stay at the current supplier.

In the current literature, the relation between value creation, customer satisfaction and service quality from the joint problem solving process is unclear. According to the literature, service quality is a static concept (Schembri & Sandberg, 2002). Current literature is describing service quality as a simplified display of a rather very complex phenomenon as service quality is (Schembri & Sandberg, 2002). Many literature is representing service quality in models that are simplified and they represent a series of encounters where changing perceptions are accounted for (Schembri & Sandberg, 2002). This research will explore how the dimensions in the joint problem solving process and the service quality elements relate to customer satisfaction. This is the missing link in the current literature.

The goal of the research is to extract the service quality elements that are important for the suppliers in relation to customer satisfaction. Service marketing theory is used as the basis for the research.

The research question of this research therefore is:

*Which service quality elements influence customers' satisfaction in the joint problem solving context?*

This research contributes to both the literature and to practice. This research is executed to deliver a contribution to the current literature within this topic. The current literature of Parasuraman, Zeithaml and Berry (1994) and Aarikka-Stenroos and Jaakkola (2012) is quite static approached, as mentioned before. What is missing is a qualitative elaboration in this area. By this research the service dominant logic literature will be approached in a less static way than in former research.

The (practical) relevance of this research for the business world can be found in that it provides relevant insights into the elements that are important when it comes to service provision related to customer satisfaction. It provides insights into what customers think that is important when collaborating with service-providing companies.

The company under investigation wants to acquire more scientific knowledge on this concept of customer satisfaction in relation to co-creation, value creation and service quality for two reasons. First reason is to understand their customers and know better how value can be created. To optimize processes and service. The second reason is for optimization of the service they offer in relation to customer satisfaction research. It is valuable to understand the context of how value is created and what is of key importance related to customer satisfaction.

In the first chapter of this paper, the theoretical framework and the methodology are presented. As a basis for the methodology the Critical Incident Technique is used, which serves as systematic basis for the research (Bryman & Bell, 2015). In the theoretical framework, the key concepts are presented together with the research model. The second part will

present the results of the research. The third part will present the conclusions and recommendations, in this part the theoretical as the practical conclusions and recommendations will be presented. The last part of the paper will discuss the implications and limitations of the research.

## 2. Theoretical framework

*In this chapter, the key concepts within this research are explained. The key concepts value creation, co-creation, service dominant logic, service quality and customer satisfaction are defined and there will be elaborated why these concepts are interrelated. Next to that, the models used for this research will be discussed.*

### Key concepts defined

#### 2.1 Value creation and value co-creation

Value creation is a concept that is very important for every business. Essentially, every business wants to deliver value to their customers. By the literature, value creation is described as a concept that is elusive, according to Woodall (2003). The concept is quite abstract, but it is always linked to benefits on the one hand against sacrifices on the other (Grönroos, 2011). It can be noted that also in the literature, the concept of value creation is described as a little abstract.

When looked to the description of value creation more specific to the business-to-business literature, another dimension can be added to the concept. Value creation in the business-to-business context is related to the reciprocal interaction between customer and supplier process (Aarikka-Stenroos & Jaakkola, 2012). According to the literature of service marketing, it is emphasized that value is created by interaction between the client and the service provider (Grönroos, 2000). This is value co-creation. If talking about value creation, it is about the process in which the customer becomes better off (Grönroos, 2008). The well-being of the customer will increase by the value which is created. (Vargo, Maglio & Archapru Akaka, 2008).

The traditional view on value creation is more and more challenged by more recent literature, that considers value in service marketing literature as 'value-in-use'. (Grönroos, 2008). This means that value is created when the service provider and the customer together create value. Also the literature of Aarikka-Stenroos and Jaakkola (2012) acknowledged this value-in-use concept, which will be explained later on.

#### 2.2 Service dominant logic

This research is executed in the context of the service dominant logic literature, a logic that presupposes that value is created not only by the use of the good or service, but by the reciprocal process of interaction between on the one hand the supplier and on the other hand the customer (Ballantyne & Varey, 2006; Grönroos, 2008, 2011; Payne et al., 2008).



According to the service dominant logic literature, the customer is always a co-creator of value (Vargo and Lusch, 2008). Next to that, the organization is always the value co-creator and not the value creator from a service dominant logic view. (Vargo and Lush, 2008). This means that value is not created only by the supplier of the customer, it is about the process of creating value together. For that reason, the term value creation is closely related to the concept of co-creation.

### 2.3 The value creation model explained

In previous paragraphs, the concepts value creation, value co-creation and the context of the service dominant logic are explained. In this paragraph, the model of Aarikka-Stenroos and Jaakkola (2012) is explained. This model serves the theoretical basis for this research.

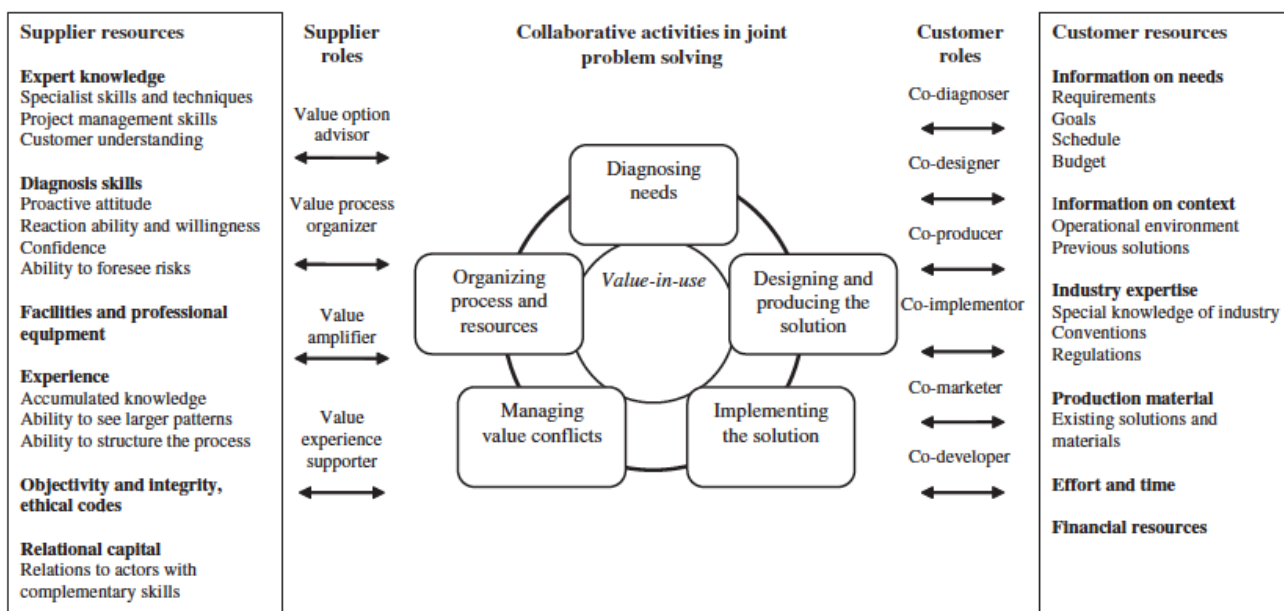


Figure 1 - Value creation model of Aarikka-Stenroos and Jaakkola (2012)

According to the literature of Aarikka-Stenroos and Jaakkola (2012), value is created in three perspectives, the supplier perspective, the customer perspective and the collaborative perspective. In this research one part of the complete model of Aarikka-Stenroos and Jaakkola (2012) is used. The collaborative perspective, also called the joint problem solving process, is the phase in which value is created by 'value-in-use'. This perspective, the collaborative perspective, is the perspective of focus in the research. Service provider and customer together create value in this phase. The value-in-use is the process in value is created by consuming the service. Value-in-use is the final outcome of value co-creation (Aarikka-Stenroos and Jaakkola, 2012).

There are five stages identified by the literature. Diagnosing needs, designing and producing the solution, implementing the solution, managing value conflicts and organizing process and resources. These five dimensions will be considered as the service encounters. The service encounters are the moments in which the service provider has contact with the customer. In these phases, they will create value together.

The service encounters will be briefly explained.

- **Diagnosing needs:** In this phase, needs and goals for exchange are being identified. This is the phase where co-creation begins (Aarikka-Stenroos & Jaakkola, 2012)
- **Designing and producing the solution:** After the diagnosing needs phase, the second phase is the phase where the parties undertake a negotiation process to specify the problem for optimal value proposition (Aarikka-Stenroos & Jaakkola, 2012).
- **Implementing the solution:** The phase where the concrete solutions (reports, advices etc.) need to be implemented for the benefits that are expected from the service (Aarikka-Stenroos & Jaakkola, 2012).
- **Managing value conflicts:** This phase is about smooth interaction between customer and service provider. In business relationships, value conflicts sometimes occur (Aarikka-Stenroos & Jaakkola, 2012).
- **Organizing process and resources:** This phase is about the project management skills. According to the literature, this phase is about teach inexperienced customers about the process and progress in this process to create value (Aarikka-Stenroos & Jaakkola, 2012).

## 2.4 Service quality and SERVQUAL battery

Service is described by the literature as the application of skills and knowledge (competences) by one entity for the benefit of the other entity (Vargo, Maglio & Akaka, 2008). This definition implicates that value is created by mutual exchange and by collaboration and interaction between customer and suppliers, or also called service provider.

Service quality is about how service is perceived and expected from the customer. Service quality can be measured by the elements of the SERVQUAL model of Parasuraman, Zeithaml and Berry (1994). This literature described the SERVQUAL battery as the service quality elements that are important in service marketing.

The five dimensions will be briefly explained. (Parasuraman, Zeithaml & Berry, 1994)

1. **Tangibles:** Within this dimension equipment, visually appealing facilities, professional appearance and visually appealing materials associated with the service are meant.
2. **Reliability:** The degree in which the firm performs the serviced as promised accurately, the dependability in handling customers service problems, performing services right the first time, providing services at the right time and maintaining error free records.
3. **Responsiveness:** Willingness to provide prompt service and willingness to offer help to the customer, readiness to respond to customers' requests and keeping the customers informed about the service.
4. **Assurance:** The ability to offer trust and confidence from employees of the company. Making the customers feel safe in their transactions, employees who are courteous, employees who have knowledge to answer questions.
5. **Empathy:** The degree in which the employees are caring and providing attention to the company. Giving the customers the right individual attention, employees must be caring, having the best interest, understand the needs of their customers and convenient business hours.

## 2.5 Customer satisfaction

The key term service quality is closely related to customer satisfaction. When spoken about customer satisfaction in a service oriented B2B field of marketing, customer satisfaction in the B2B context is often defined as '*a positive affective state resulting from the appraisal of all aspects of a firm's working relationship with another firm*' (Lam, Shankar & Krishna Erramilli Bvsan Murthy, 2004).

Customer satisfaction can be divided into two concepts; customer satisfaction on service encounters and customer satisfaction of cumulative service encounters (Lam, Shankar & Krishna Erramilli Bvsan Murthy, 2004). In which by customer satisfaction on service encounters, there is looked at the customer satisfaction for each of the service encounters. By cumulative service encounter satisfaction, there will be looked at overall satisfaction of the customers towards the service. During this report, there will be looked at both elements of customer satisfaction, the overall satisfaction and the satisfaction during the several service encounters.

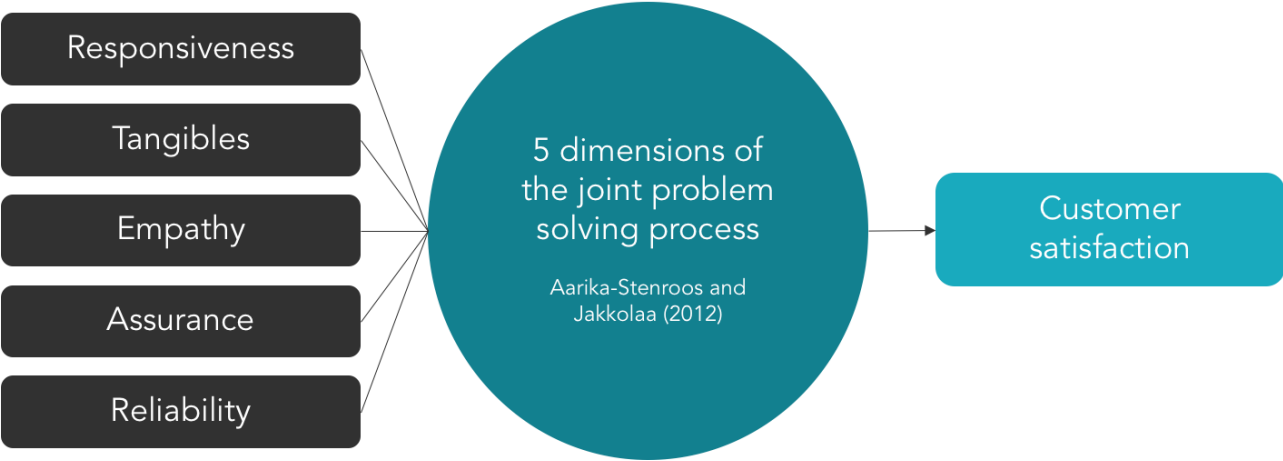
### 2.6 Explanation of the model

The research is based on the literature of several well-known academics in this field of research. The gap in the literature is defined by the literature of Schembri and Sandberg (2002). The concept of service quality considered as static by the literature, because of the simplified display of a rather very complex phenomenon as service quality is. (Schembri & Sandberg, 2002). Many literature is representing service quality in models that are simplified and they represent a series of encounters where changing perceptions are accounted for (Schembri & Sandberg, 2002). These theories are considered as demonstrative for the service quality literature, therefore Schembri and Sandberg (2002) argued that these service quality models are quite statics views on the far more dynamic processes of service quality.

For this research, two models are combined. The models explained in previous paragraphs are used as the basis for a theoretical framework. The model of Parasuraman, Zeithaml and Berry (1994) serves as the basis for the service quality elements that are important in each of the five dimensions/ service encounters of the joint problem solving process from Aarikka-Stenroos and Jaakkola (2012).

The relations identified in this model are going to be explored by the research. This research will test whether the theory is still up to date and which of these elements are important for the customer satisfaction.

The five service quality elements serve as basis service elements for each of the service encounters (dimensions of the joint problem solving process). For this research, it is explored which service elements will influence the customer satisfaction in each of these dimensions.



**Figure 2. Research model, Mariska Mulder**

The five service elements in the context of the service encounters in the joint problem solving process related to customer satisfaction.

### 3. Methodology

In this chapter, the methodology of the research is explained. To ensure the quality of this qualitative research, the theoretical view of Tracy (2010) is used as underpinning for the methodology. First, the validity of the research is discussed, afterwards the construction of the research topics is described and next to that the different the choices of data categorization will be explained.

#### 3.1 Description of the research

According to the literature of Aarikka-Stenroos and Jaakkola (2012), value is created in three perspectives, the supplier perspective, the customer perspective and the collaborative perspective. This last perspective, the collaborative perspective, is the perspective of focus in the research. This perspective is the one where value is created by value-in-use through the reciprocal process between customer and supplier. In this process, different phases are identified. The goal of the research is to extract the service quality elements that are important for the suppliers in relation to customer satisfaction. The service quality elements that are extracted by the literature are the five dimensions from the SERVQUAL battery from Parasuraman, Zeithaml and Berry (1994). These two models are used, because the company under investigation operates in the knowledge insensitive businesses and services (KIBS-) context. On the other hand, the dimensions from Parasuraman, Zeithaml and Berry (1994) are used to check whether this are the elements that create value.

For the research, the interpretive research approach, based on the literature of Schembri and Sandberg (2002) is used. By using an interpretive approach to study the concepts service quality, customer satisfaction and value creation, a more dynamic and contextual understanding of the concepts are gathered (Schembri & Sandberg, 2002). The advantage of the interpretivist approach is that it gives room to a more context based approach (Schembri & Sandberg, 2002). The interpretive approach is used to obtain a context-based holistic view on the concepts value creation, customer satisfaction and service quality elements.

For the interviews used in this research, the phenomenographic approach is used. Phenomenography describes how different aspects in the world are experienced in different ways (Schembri & Sandberg, 2002). This phenomenographic approach is mainly in the field of service quality an effective way to study how service quality is experienced and perceived (Schembri & Sandberg, 2002).

For the execution of the research, chosen is for an exploratory research in the form of interviews and a focus group. For the research, interviews were held with employees and customers of the organization under investigation. One interview was held in the form of a focus group. With four employees of the organization. On the one hand, internal interviews in the form of a focus group. In this focus group the goal is to identify what employees think

is important in the service context of the company. What are the elements that create value for organizations they serve.

Next to that, six interviews with customers of the organization under investigation were conducted. The interviewees are selected on the diversity of function and branch. Because of the diverse portfolio of the organization, diverse organization of this portfolio are selected in different branches.

The internal interviews were held to investigate the elements that create value and ensure customer satisfaction for the customers in the opinion of the employees. The external interviews were held to investigate whether the elements described by the employees are the elements that create value for the customers and make them satisfied.

### 3.2 Goal in the research

In the current literature, the relation between value creation, customer satisfaction and service quality from the joint problem solving process is unclear. Therefore, the goal of this research is to explore the relation and to identify service quality elements that are important for the customer satisfaction and value creation in the joint problem solving process.

The first goal in the research is therefore, gather understanding of the company, its processes and their clients.

The second analytical goal is to identify in every phase/ service encounter identified by Aarikka-Stenroos and Jaakkola (2012) and the elements that are important for the customer satisfaction by interviewing external clients of the company. Identify the service quality aspects that are most important in the process (Parasuraman, Zeithaml & Berry, 1994).

### 3.3 Trustworthiness

To ensure the trustworthiness of the research, four criteria for this qualitative study are checked (Bryman & Bell, 2015).

#### **Credibility**

To ensure the credibility within the research, the interviews are recorded and the transcripts of the interviews only include relevant findings for the research. The information is treated confidential and the interviewees is ensured that the data is only used for research purposes. After the completion of the research the results will be shared with the participants who are interested in the results of the research.

#### **Transferability**

Because this study will look at only one specific organization and a part of their clients, it is important that there is enough information about the context of the research.

Therefore, information about the organization under investigation and about the organizations of their clients is gathered before executing the field research.

### Dependability

To ensure dependability of the research, all interviews are recorded and the original records can be requested from the researcher. The transcripts in the appendix only contain relevant elements for the research.

### Confirmability

To ensure the confirmability, the researcher has no personal values within the research. Although complete objectivity in business research is impossible (Bryman & Bell, 2015), the researcher has operated in good faith. We can assume that the researcher has conducted this research in good faith, through the accurate reporting of the transcripts and the recordings that are still available after research in the form of recordings. Next to that, an accurate description of the methodology is made.

## 3.4 Sampling

To ensure diversity in the interviewees, the external interviewees are selected from different segments of customers of the company under investigation. Six respondents were selected from different functions within the organization.

For the selection of the employees, random selection has not been taken into account. The focus group is held with the four employees who deal most directly with the customers and are therefore are the ones who are closest related to the customers in the co-creation process.

Respondent	Company	Function
1	G.	President EMEA
2	T.	Director
3	N.	Head visitor management
4	K.	Head member management
5	H.	Commercial director
6	D.	Manager Marketing sales excellence

Table 1, Respondents overview

## 3.5 Construction of research topics

As mentioned before, two theories are leading for the research. For the interviews (internal and external) a construct is created. A 5x5 matrix which is used a guideline for the

interviews. Here the matrix has been described. On the left side of the matrix, the five service encounter phases are described. In the columns of the matrix, the SERVQUAL battery elements are described. The goal of the interview is to identify the elements that are important for the customer satisfaction in each phase of the joint problem solving process. Chosen is for a more open ended survey, as interpretation and discussion is important to identify the real experiences of the participants. The 5x5 matrix serves as a basis for the interviews, but it is about the experiences.

The matrix is for both internal as external interviews the same, because this matrix serves as a general guideline, but for the external interviews the focus is on how the organization under investigation performs on these elements. Whether for the internal interviews it is about how the organization under investigation acts within these service encounters and what they think is important for their customers.

	<b>Tangibles</b>	<b>Reliability</b>	<b>Responsiveness</b>	<b>Assurance</b>	<b>Emphathy</b>	
<b>Diagnosing needs</b>	What is important in the diagnosing needs phase and what makes you as a customer satisfied in this phase?					<b>Customer satisfaction</b>
<b>Designing and producing the solution</b>	What is important in the designing and producing the solution phase and what makes you as a customer satisfied in this phase?					
<b>Implementing the solution</b>	What is important in the Implementing the solution phase and what makes you as a customer satisfied in this phase?					
<b>Managing value conflicts</b>	What is important in the Managing value conflicts the solution phase and what makes you as a customer satisfied in this phase?					
<b>Organizing process and resources</b>	What is important in the Organizing process and resources phase and what makes you as a customer satisfied in this phase?					

**Table 2 - Key themes described - Research Matrix**



### 3.6 CIT – Critical Incident Technique, Bryman & Bell (2015)

To conduct a systematic research, the critical incident technique is used (Bryman & Bell, 2015).

<b>Activity</b>	Conducting 7 interviews; one in the form of a focus group with 4 employees of the organization under investigation. 6 interviews with clients of the organization under investigation.
<b>Aim of the activity</b>	Gathering information about: Value creation, co-creation, service quality (elements) and customer satisfaction in service-oriented organization, which can answer the research question: <i>Which service quality elements influence customers' satisfaction in the joint problem solving context?</i>
<b>Situation</b>	Focus group (interview) with 4 employees of the organization under investigation 6 separate interviews with customers of the organization under investigation.
<b>Critical incidents</b>	Value creation, co-creation, service quality and customer satisfaction in service-oriented organization
<b>Critical interactions</b>	Differences in relation to value creation by different organizations
<b>Dimensions</b>	The dimensions of Parasuraman and Zeithaml and the dimensions of the value creation framework of Arikaa Stenroos and Jaakola. For the exact dimension, there is referred to chapter 3.5)
<b>Sole researcher</b>	To ensure consistency in the research, there is only one researcher involved. The researcher is experienced in the field of conducting interviews and focus groups, this to ensure objectivity in questioning

**Table 3, Key themes described - Research Matrix**

For the external research a semi-structured interview is created. The matrix described in the previous section (section 3.5) is used as guidance for the interview. The purpose of the interview was to identify the most important elements for value creation and customer satisfaction. Therefore, it was important to stimulate a natural conversation to find out the most important elements that create value and that are important to customer satisfaction.

The design of the internal focus group was in essential the same. For the focus group a conversation guide was designed (see appendix). A few key topics and questions were described in this guide. For some topics, further explanation was needed and therefore, further questions were needed. In this case, the purpose of the focus group was to identify the most important elements for value creation and customer satisfaction toward the client. For that reason, it was important to stimulate a natural conversation and identify problems, obstacles and views on how employees of the organization under investigation looks towards the joint problem solving process.

## 4. Results and findings

In this section, the results of the research are described. After coding the data, the results are divided in the five service encounters used for this research.

### 4.1 External results

#### 4.1.1 Diagnosing needs phase

Based on the results gathered by the external interviews, the data shows that there are a few elements that are of main importance in this phase.

- Empathy/ listening to the customer
- Think along with the client and ensure individual attention
- Customers expect partnership with the service provider
- Involvement and interest in the organization
- Flexibility
- Clarity

Listening and empathy in this phase is of great importance. The respondents expect from the service provider that there is not only a customer – supplier relationship, but that they are really interested in the organization of the client and want to know the client and their business environment. According to the respondents, you have to make sure that when you have a first meeting with the customer, you are already familiar with the customer's business and that you are really interested. This is important to make the customer satisfied. You have to ensure that you have a good view on the business of your customer and know his complex business environment very well.

Also, the creation of involvement is mentioned as an important element in this phase. Involvement from the side of the organization under investigation towards the client, but also the creation of involvement among the employees of the client, to ensure that the employees understand the usefulness of services and that this can also be supported organization wide.

Event	Element	Respondent	Quote
Expectations of service provider	Clarity/ understand needs and wishes of customer	1	I would look for clarity of the purpose of the relationship. I think that is really important. I think that this is something . did very well at the start
Expectations of service provider	Partnership, remove worries, statistical analysis	2	Expecting a partnership, not just a customer - supplier relationship, taking a constructive critical look. Know us and want to get to know us. But also that they bring examples from the outside world, how it can work well
Expectations of service provider	Responsiveness / easy accessible	3	It is very important to me that I have a good contact and that you are easily accessible.
Expectations of service provider	Involvement/ Clarity	4	For me it was very important that ALP comes up with a clear story, what is branding, what is marketing. We went into depth with that. To introduce that to the team. To do that in the form of self-motivation. Not just listening, but also working.
Expectations of service provider	Involvement/ Interest in the organization	5	It is very important that you have a good picture of the organization. In the case of a corporate like D it is a very complex organization so you have to have a very good picture of what plays and lives within the organization and one of the tips that I can give is that you have to look at the current programs within such an organization, that you try to connect with the organization. You must do your analysis well. You have to know which competencies the organization already has and which they do not have and which perfectly match that to close that gap. I think that as value creation you should focus on that.

Table 4, Quotes diagnosing needs phase

#### 4.1.2 Designing and producing the solution

A pro-active way of working is very important in this phase. Ensure that you come up with different innovative ideas and be proactive, according to the respondents. It is important that the service provider stimulate the process and keep it up and running.

In this phase respondents indicate that it is important to facilitate examples from practice. And show the customer best practices. Next to that, communication, contact and reliability are of key importance in this phase.

Event	Element	Respondent	Quote
Designing and producing solution	Contact	1	I will give the organization under investigation a 10, at the very start I would say a 9. But the things become better, especially because of the contact, therefore a 10.
Designing and producing solution	Communication and contact	3	ALP say what they do and they do what they say, clear communication with the customer and fulfill agreements.
Designing and producing solution	Pro-activity	4	Kick off was very good, and also after that phase in the process kept pace. They made sure that new things were set in motion. Such as developing brochures, other materials and bringing new everyone. That is one of the most important things
Designing and producing solution	Example from practice	2	How the process will be, but also look at how you will implement it properly. - how could we pay more attention to that. (By giving examples from practice)

Table 5, Quotes designing and producing the solution

### 4.1.3 Implementing the solution

On the one hand the respondents indicate that implementation is something they should do on their own, but by listening better to the respondents you can see that there is a need for resources to make the process of implementation run more smoothly. Mainly when it comes to creating involvement among their employees, the clients see a major task for themselves, but they also want to get help from the organization under investigation.

In this phase, the tangibles from the side of the organization are important for the satisfaction. By offering the right tools/ advices/ support the clients will become more satisfied about the implementation.

Another important element in this phase is involvement. Clients want to implement the service bought from the organization under investigation in their whole organization. Involvement from the people within their own organization is of great importance to this implementation phase. Service implementation seems a difficult process. Involving all employees and creating support, that is what the goal of the service is. Clients would like to get some extra support from their service provider.

Event	Element	Respondent	Quote
Implementation phase	Implementation own responsibility	2	We are responsible for the implementation. Border where ALP is involved and where not. Implementing is a challenge and that has to do with leadership. How is this supported by the management. This is with us. You do your best to provide it as concretely as possible to implement it
Implementation phase	Involvement from employees	2	The support from the employees stands with a good system with enough input, this is necessary to make this grow wider within the organization. We have to take this up this year, also online, and this must be continued.
Implementation phase	Capacity of employees/ involvement employees	4	With us, capacity was the problem. With ALP this was never the problem. They pushed us more than the other way around.

**Table 6, Quotes implementing the solution phase**

### 4.1.4 Managing value conflicts

All the respondents have mentioned that there are not that much problems occurred with the organization under investigation. If problems will occur it is important that the problem will be acknowledged by the service provider. A quick reaction is essential in this phase. This will influence the customer satisfaction, respondents are more satisfied with organizations who handle with problems in this way. Openness and handling problems quick is in this phase of great importance.

Event	Element	Respondent	Quote
<i>Problem solving phase</i>	<i>Not looking for blame or ownership, but accepting problem</i>	1	I have seen service providers not solving problems, thus I know the difference lets say. The difference is, not looking for blame of ownership op the problem, but accepting that there is an problem.
<i>Problem solving phase</i>	<i>Listening</i>	3	Generally speaking, by listening carefully to the questions, mention where the question comes today. you have to empathize with your customers.
<i>Problem solving phase</i>	<i>Quick reaction, listening and transparency</i>	4	By acting quickly. By quickly ensuring that what did not go well, that you enter into the conversation quickly, and resolving it as quickly as possible, speed and decisiveness and openness are very important.

**Table 7, Quotes managing value conflicts**

## 4.2 Internal results

### 4.2.1 Diagnosing needs phase

The diagnosing needs phase is an important phase for the organization under investigation. According to the respondents, this phase is the phase right after the acquisition process. Based on customer wishes and needs, this is the first phase of collaboration, according to the respondents. The degree of collaboration is mediocre. The collaboration takes place in the identification of the wishes and the needs and the first steps to set up the service. Collaboration takes place with one or a few contact persons of the organization.

On the question, what makes the clients very satisfied with the service provided, they answered that communication, pro-activity/ listening, quick fixes, friendliness, thinking together with the client and honestly are the most important elements that could create value for the clients, according to the respondents.

The respondents assume that namely aspect related to responsiveness and empathy are important in this phase.

Event	Element	Quote
Diagnosing needs	Consultation about wishes and needs	If a customer comes to us, first discuss what the need is, but if someone with a problem comes to us, regarding KTO, then the process is ready. (So it dependent from the service)
Diagnosing needs	Pro-activity	Proactive, or that we need to fuel something. In general I have the feeling that we need to fuel something. They do have a problem, but they don't know the problem yet. Latent need is present. If we do not encourage that, then the customers do not start such a quick investigation.
Diagnosing needs	Thinking along with client, clarity, honesty, flexibility	Important in this phase is: Thinking along, being clear, being concrete, being honest, being able to quickly start the studies. To be flexible. Removing uncertainty with a service / investigation. Somehow they have a lot of questions about the service. Based on my experience that there are many questions from the customer side. And to remove the uncertainty of the service.

Table 8, Quotes diagnosing needs phase

#### 4.2.2 Designing and producing the solution

In this phase, more collaboration is needed than in the initial phase, according to the respondents. The elements that make the customers satisfied in this phase are:

- Pro-activity
- Taking care of insecurities/ remove worries
- Thinking with the client
- Communication
- Friendliness
- Quick fixes

Tangibles are considered as important in this designing and producing phase. Tangibles are important, because it is the visible aspect for the client. By seeing the (examples of) tangibles, they can experience what they can expect from the service.

Next to that the involvement was mentioned as an important element. Involvement in two ways: involvement from the employees of the organization under investigation towards the client. But next to that also involvement from employees of the organization of the client in the service that is provided. This point is also a point for improvement according to the organization under investigation.

Event	Element	Quote
<i>Designing and producing solution</i>	<i>Intensive collaboration</i>	They have given their approval on the quotation, then there is often 1 person with whom there is a lot of cooperation with that customer. We have a lot of contact with that, who is the point of contact.
<i>Designing and producing solution</i>	<i>Process and collaboration</i>	Well I think we have established a very efficient process. We really take them by the hand we take it over somewhat and we tell them what they have to deliver. We are talking specifically about the KTO.
<i>Designing and producing solution</i>	<i>Tangibles</i>	These tangibilities are especially important in the initial phase. Then it is really visible to the customer that something is going to happen.
<i>Designing and producing solution</i>	<i>Involvement for employees</i>	Especially in the first wave, those account managers will be very cautious about what they can expect. They have many doubts, it is important that they can see things for themselves. To dispel those doubts. Especially in the beginning, to involve the workplace of our customers.
<i>Designing and producing solution</i>	<i>Involvement for employees</i>	They would like to be taken a little more by the hand. We can do some things to make them enthusiastic.

**Table 9, Quotes designing and producing the solution**

#### 4.2.3 Managing value conflicts

When problems arise, it is important for the client to ensure a quick reaction, listening to the client and provide the client with an appropriate solution, according to the employees of the organization under investigation.

If problems occur, they are often custom. To solve them, tailor made solutions must be offered.

Event	Element	Quote
<i>Problem solving phase</i>	<i>Quick reaction, acknowledge problem</i>	The first step is always to respond immediately even if you know that you are wrong and then it is very custom. Find out what the problem is and then come up with a solution as quickly as possible. Responding quickly is crucial in this.
<i>Problem solving phase</i>	<i>Custom problems</i>	Some problems always come back, but also a lot of custom, new things.
<i>Problem solving phase</i>	<i>Problem for the company under investigation</i>	One of the major problems is that the point of contact does not want as much as we as ALP want. You actually talk to a wall that is very reactive, then there is a certain limit on which we can do our work.

**Table 10, Quotes managing value conflicts**

#### 4.2.4 Implementing the solution

The employees of the organization under investigation are not sure whether this phase is already optimally used at the moment.

There was a discussion about how to offer the customer more support in this phase. The respondents have not often experienced this phase. Simply because not enough attention is paid to this internally. Only in the form of a workshop. Respondents think that this phase could be optimized to make customers more satisfied.

Event	Element	Quote
<i>Implementation phase</i>	Implementation unused	I think there is not enough focus from the team on further implementation. There is more focus on the completion of the project and not on any further upsell of the products
<i>Implementation phase</i>	Stimulate involvement	I think it is very pleasant if the customer can have a reactive attitude. That we can offer something that we can boost involvement in the organization.
<i>Implementation phase</i>	Implementation outside the process	I have no idea how well our recommendations are being implemented. I assume so. It often falls outside the process.

Table 11, Quotes Implementation phase

#### 4.2.5 Organizing process and resources

When it comes to organizing processes and resources, a lot of one-way traffic takes place in this process. Project management is briefed to the client, but not always in collaboration. According to the respondents, more collaboration and more consultation is needed in this phase to satisfy their customers.

Event	Element	Quote
<i>Organizing process and resources</i>	More focus	We started this well when we shared all the schedules with the customers, but I think we should give this much more focus.
<i>Organizing process and resources</i>	Remove worries	This also makes them very satisfied: taking it out of their hands. In which the removal of worries works very well. Customer counts on our expertise.

Table 12, Quotes Organizing process and resources



### 4.3 Synthesis results

It can be concluded that all the elements of the SERVQUAL battery are important in the overall value creation process in the joint problem solving process. But not all the elements are important for the customer satisfaction. The most important elements for customer satisfaction are:

- Empathy/ listening to the customer
- Pro-activity/ taking responsibility and pro-actively suggesting solutions
- Reliability/ can rely on the service provider

According to the respondents, these are the most valuable elements for customer satisfaction. Empathy and tangibles are considered as most valuable in the initial phase, the diagnosing need phase of value creation and customer satisfaction.

Next to that, for the clients of the organization under investigation 'involvement' is very important in the diagnosing needs phase and in the implementation phase.

Involvement works in two ways according to them.

1. Involvement from employees of organization under investigation towards the client. Overall score on this element is good.
2. Involvement creation within the organization of the client. The service the company under investigation offers are advisory trajects in which involvement is extremely important to create support within the organization and facilitate a good implementation of the service within the organization. Clients experience sometimes difficulties with on this point. They consider it as difficult to facilitate a good involvement of their employees within their own organization.

The organization under investigation acknowledged the point of creating involvement as very important for their clients and considered it as point that could make the client very satisfied.

The organization under investigation is well aware of the importance of 'involvement'. Involvement on the side of the employees of the organization under investigation is good. But the creation of involvement for the organization of the client is less well developed.

## 5. Conclusions

This paper provided an answer to the following research question:

*Which service quality elements influence customers' satisfaction in the joint problem solving context?*

Based on the research, empathy and tangibles are considered as the most important elements from the SERVQUAL battery in relation to the overall customer satisfaction. These two elements were already identified by previous literature. Next to that, there is another important element of service quality mentioned: 'involvement'. This element is not well defined by the previous literature. Many service providers deliver a service in the form of an advice. The involvement of the employees of the organization of the client, is important because they have to understand the usefulness of services provided by the service provider. Next to this it is important that the service is supported organization-wide.

Especially in the first phases of collaboration, involvement is important. This is the phase in which support must be created by staff of the organization of the client. Also in the phase of implementation, involvement is considered as very important. When employees are not involved, the implementation of the service becomes more difficult.

In the initial phase of collaboration, the diagnosing needs phase, empathy and tangibles are the most important elements for customer satisfaction.

It is all about relieving the customer, thinking along and taking the worries out of the hands of the customer.

## 6. Discussion

### Theoretical implications

During the last decades, the importance of the concept value creation became of more importance within the field of business-to-business marketing. Value is not only created by the use of a good or a service. Value-in-use and value co-creation are concepts that become more widely known in the field of marketing and especially in the field of business-to-business marketing. In the current literature, the relation between value creation, customer satisfaction and service quality from the joint problem solving process is unclear.

This research has analyzed how value is created in the joint problem solving process between customer and supplier and how this influences customer satisfaction. The research enriched the current literature about value creation and customer satisfaction in the joint problem solving process in a way that it identified elements that are not earlier described by the literature. Parasuraman, Zeithaml and Berry (1994) described the five SERVQUAL elements. These elements are important for the value creation for service oriented businesses. According to the literature of Aarikka-Stenroos and Jaakkola (2012), value is created in three perspectives, the supplier perspective, the customer perspective and the collaborative perspective. The collaborative perspective is the perspective in which value is

co-created. The authors looked at the service elements that created value and the value co-creation process, but the link between value creation and customer satisfaction is unclear.

This research consists of six external interviews and one internal interview (focus group with four employees of the organization under investigation). The respondents for the external interviews are selected on difference in branch and difference in function. For the selection of the employees, random selection has not been considered.

Expected from the theory was that the SERVQUAL service elements that create value in the joint problem solving process were all important for the customer's satisfaction. By the qualitative research, it is identified that in every phase in the joint problem solving process, different value creating elements are important for the customer satisfaction and that not all the service quality elements lead to customer satisfaction. Overall the most important elements for the customer satisfaction are empathy, tangibles and involvement. Were involvement was not earlier defined by the current literature. So, it can be concluded that in the process of co-creation and collaboration, it is important to ensure empathy towards clients and ensure good listening. Next to that it is important that the service provider is acting in a pro-active way and that facilitates in involvement. Involvement works in two ways. Involvement from employees of organization under investigation towards the client and involvement creation within the organization of the client.

### **Practical implications**

Based on the research outcomes, there are some practical implications for the organization under investigation. During the research empathy is one of the most valuable elements for customer satisfaction in the overall process. An advice to the organization under investigation is therefore to focus on this element in all the service encounter phases. Empathy is considered as very important. According to the clients, the organization under investigation is an emphatic supplier, so ensure that empathy is always embedded in the organization.

Next to that, tangibles are important to the client. Especially in the initial phase, the diagnosing needs phase, there is a need for a preview of what they could expect as result of the service provided by the organization under investigation. The advice to the organization under investigation is to focus on this element and to ensure tangibles, especially in the first phases of collaboration.

Next to the need for tangibles, there is a need for more involvement on the side of the client. An advice to the organization under investigation is to provide clients pro-actively with case studies and examples from other companies. This is one way to create more involvement among employees of the organization.

The employees of the company under investigation are aware of the fact that offering the best service they can is very important to the clients. They are also aware of the fact that they could provide more materials to the clients to stimulate involvement in the company of the client. Which is both beneficial for the client as for the organization under

investigation. A recommendation for the company is to embed this in the general process and provide the customers with more materials from the first phase of collaboration.

### **Limitations**

The limitations of the research are the small number of respondents. Only six external interviewees and only four internal interviewees have given their input for this research. For that reason, it is not completely generalizable for all the businesses in the KIBS context.

On the other hand, this research is executed for one company in specific. The company under investigation delivers a specific range of services to their clients (all marketing related). So, they provide specific KIBS related services. For that reason, the results are in less degree generalizable for the whole population.

To ensure the relevance of the research, not only field research is executed, but also desk research is executed to ensure the relevance of the research.

### **Recommendation for further research**

This research has explored the elements important for customer satisfaction in relation to the service quality elements and the service encounters in the joint problem solving process. It can be concluded from the research that not all the SERVQUAL elements are of importance for the customer satisfaction. Because of the nature of this qualitative research, there is only limited data available. Therefore, the recommendation for further research is to investigate in a qualitative way the elements that are important for the customer satisfaction.

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