

Online Customer Support: The determinants of Channel Choice, and the relation between Perceived Service Quality, Customer Satisfaction and Service Loyalty

A study on Online Customer Support in a multiple-channel environment

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Title

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Abstract:

This study attempts to give a better understanding to what extent situational characteristics and personal characteristics influence the decision to make use of a particular service channel in an environment where multiple service channels are available. Subsequently, this study attempts to identify the dimensions of perceived service quality in online customer support and provide their relation with customer satisfaction and service loyalty. The results provide that situational characteristics time pressure and involvement positively influence customers in their decision to make use of email instead of web-help. This counts likewise for the personal characteristic innovativeness. Moreover, customers who consider themselves able to make use of web-help or email have a higher intention to make use of these service channels again compared to make use of Facebook or Twitter. Apart from this, the perceived service quality dimensions responsiveness, reliability and personalisation show positive relations on customer satisfaction, which also mediates these effects on service loyalty. More specific, when support is offered by web-help higher extents of responsiveness and reliability leads to increased customer satisfaction and service loyalty, while in case support is offered by email personalisation leads to increased customer satisfaction and service loyalty.

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The usage of Internet interests me already from an early age and more specifically in the field of marketing communications. Over the past years, I focused on to what extent companies could benefit the Internet to reach or create new business goals. During my masters main fields of interests were related to marketing related topics such as online advertising, branding and persuasion. Moreover, at my part-time job at MoneyBird my interest increased in the field of online customer support. Because this organisation solely offers support through Internet, the question raised how service organisations could benefit online customer support. This resulted in a research proposal, which me finally led through a ten month during process of writing this thesis. During this process, numerous people offered their opinions and support in case I needed a critical reflection. The success of the final outcome of this Master Thesis required a lot of guidance and assistance from friends, family, and lecturers. Without them I would not have managed it to complete my Master Thesis in the same period of time. Therefore I would like to thank all of them.

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1 Introduction of the study

In a time where various online service channels emerge and customers' voice is increasing, companies realise that customer support is essential to assist their customers and differentiate from competitors (Parasuraman, Zeithaml, & Malhotra, 2005; Zeithaml, 2009). For example, customer support could be executed to help customers with the usage of a company's product or services, such as banking, tax or insurance issues. Online service channels are characterised as electronic and Internet-based service channels. This differs from traditional service channels such as letters, service-desks and telephone, due to the fact that these service channels might be electronic but are not necessarily Internet-based (Kumar, 2010; Montoya-Weiss, Voss, & Grewal, 2003; Oenema, 2012). For example, websites, email, and more recently Facebook and Twitter, could be considered as online service channels.

Previous studies on customer support have widely focused on traditional service channels or environments where only one online service channel, the website, is involved. This is noteworthy because since the appearance of online service channels, such as websites, email, and more recently Twitter and Facebook, customer support through multiple service channels has become more important (Kumar, 2010). For that reason, the question arises how companies might benefit from online customer support in an environment where multiple service channels are involved.

Over the years, various online service channels have emerged, which gave companies the opportunity to offer their services through multiple channels (Kumar, 2010). However, literature on online customer support in multiple channel environments is scarce, and previous literature on multi channel environments has given large attention to channel choice. These studies tried to acquire further knowledge in the determinants of channel choice, which might be useful for companies to serve their customers in a more desirable way. Nevertheless, these previous studies on channel choice are focused on traditional service channels or suggested determinants to choose either a single online service channel or a traditional channel (Oenema, 2012; Pieterse, 2009). In this view, the question arises what are the determinants of channel choice in online customer support in a multiple channel environment.

Companies are under increasing pressure to improve the quality of customer support in order to satisfy customers' needs. Also, offering excellent customer support is an opportunity to distinguish companies' from competitors (Zeithaml, 2009). In order to achieve that opportunity, further insight in the dimensions of quality of online customer support needs to be acquired. Although several studies have already focused on the dimensions of quality in customer support by traditional service channels and different online environments, such as e-commerce, banking and insurances, its application in online customer support is missing. This in turn leads to the question of what determines quality in the context of online customer support. Therefore, this study aims to emphasise the dimensions of quality in online customer support.

Moreover, Caruana (2002), Setó-Pamies (2012) and Parasuraman et al. (2005) found that customer support offers the possibility to increase customers' satisfaction and loyalty. It should be noted that this relation is demonstrated in government, insurance and e-commerce environments where traditional service channels or only a single online service channel is involved. Because these environments might differ from online customer support, the question arises whether the quality of online customer support also influences the loyalty and satisfaction of its customers. Thus, this study aims to provide further insight in the relation between the quality of customer support, customer satisfaction, and service loyalty and which factors determines why customers use a particular service channel.

1.1 Research goal

Since the emergence of online service channels, companies have different options to execute their customer support. Because previous models with regard to customer support and its influence on customer satisfaction and service loyalty mainly focused on traditional service channels or only one online service channel, these models might be out-dated. In addition, these relations are shown in governmental, taxes, insurances and e-commerce settings, which might differ from online customer support. For these reasons, this study aims to:

- Extend the knowledge of channel choice in online customer support
- Extend the knowledge of service quality in the context of online customer support
- Extend the knowledge of customer satisfaction and service loyalty in the context of online customer support

In order to answer these questions, this study will:

- Identify factors that influence customers to make use of a particular service channel in Online Customer Support where multiple channels are available.
- Derive the dimensions of quality of online customer support based on traditional models, which are modified following reference to the related literature to a context where multiple online service channels are available;
- Determine to what extent quality of online customer support affects customer satisfaction and service loyalty, and to what extent customer satisfaction in turn influences service loyalty;
- Determine to what extent the influence of the dimensions of quality of customer support on customer satisfaction and service loyalty differs for the concerned online service channels

1.2 Research question

The previous section outlined the research goal of this study. To create a better understanding in the proposed research objectives, this study will answer the following research questions. All of the research questions are applied in an environment where multiple service channels are available.

- RQ1. Which factors determine the choice for particular service channels in online customer support?
- RQ2. To what extent does the quality of customer support influence customer satisfaction?
- RQ3. To what extent does customers' satisfaction influence service loyalty?
- RQ4. To what extent does the quality of customer support influence service loyalty?
- RQ5. To what extent differs the influence of the quality of customer support customer on Customer Satisfaction and Service Loyalty for various online service channels?

1.3 Context of the study

Dutch software-firm MoneyBird, which offers invoicing software for freelancers and small and medium enterprises, provides online customer support through the following service channels; a help function on its website, email, Facebook and Twitter. MoneyBird offers their online customer support mainly during office hours, while the web-help, shown in Figure 1, is always accessible. To create a better understanding in customers' behaviour in the context of conducting online customer support, this study attempts to provide a better understanding of which factors determine the choice of particular service channels. In addition, to extend the knowledge about the importance of online customer support and how

MoneyBird is able to optimise its online customer support this study, attempts to identify the dimensions of quality of online customer support and to what extent they have the ability to influence customer satisfaction and service loyalty. Given the fact that this study involves multiple service channels, these dimensions might differ for each of them. Therefore, for each involved service channel an explanation of how these dimensions are related to customer satisfaction and service loyalty should be provided, in order to provide an understanding how MoneyBird should execute its online customer support.

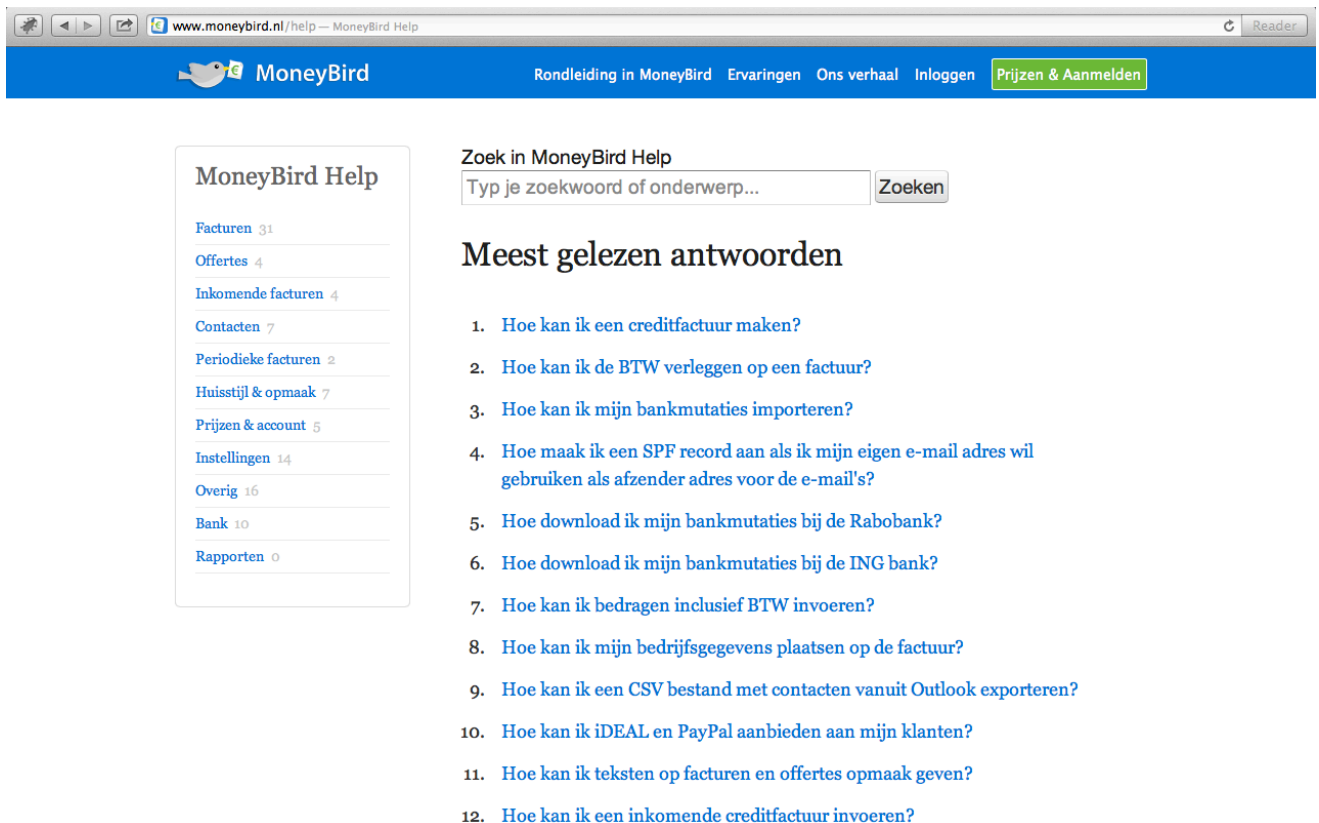


Figure 1 Example of web-help function of MoneyBird: Frequently Asked Questions

1.4 Relevance of the study

The importance of an online environment for customer support is suggested by Lenz (1999) and Kumar (2010), of which the latter states that the application of multiple channel support becomes more important since the emergence of online service channels. Previous studies on multiple channel environments have widely focused on channel choice for traditional service channels in governmental, insurance and banking environments. In addition, these studies provided insights into what determines the choice of particular service channels. However, knowledge of channel choice in online customer support is still missing, and therefore it might be useful for science and service providers of online customer support to create a better understanding of which factors determine the channel choice in online customer support.

Furthermore, the increasing importance of online customer support in multiple channel environments is suggested by the growing interest in quality of service provision (Zeithaml, 2009) which positively influences customer satisfaction and service loyalty (Caruana, 2002; Parasuraman et al., 2005). Although several studies have focused on quality of service provision in different environments, a clear understanding of the relation between quality of service provision, customer satisfaction, and service loyalty in online customer support for service providers requires a better explanation. Despite the fact that several studies

developed models that described dimensions of quality and its relation to customer satisfaction and service loyalty, these models are mainly focused on offline service channels or involved a single online service channel. Thus, researchers, companies and service providers will benefit a better understanding of the concept of quality and its influence on customer satisfaction and service loyalty in online customer support. To sum up, the following gaps are identified:

- Previous literature on service quality and channel choice in multiple channel environments has focused on traditional service channels or involved one online service channel.
- Previous literature on service quality and channel choice in multiple channel environments took place in different settings, such as governments, e-commerce, banking and insurances.
- Previous literature of service quality and its relation with customer satisfaction and service loyalty took place in different settings.

Consequently, this study aims to:

- Extend the knowledge of channel choice in online customer support
- Extend the knowledge of service quality in the context of online customer support
- Extend the knowledge of customer satisfaction and service loyalty in the context of online customer support

2 Literature review

This chapter provides a clear understanding in online customer support. First, chapter 2.1 describes the concept of online customer support. Second, chapter 2.2 outlines which factors and characteristics influence customers to make use of a particular service channel in an environment where multiple service channels are available. Last, chapter 2.3 emphasises the quality of online customer support, and how organisations might benefit online service customer support in order to increase customer support and service loyalty.

2.1 Online Customer Support as a service

Nowadays, customer support is offered for every thinkable product and service provider and is described as the way companies take care of a customer before, during and after sales transactions (Goffin & New, 2001). Customer support is offered through various service channels for several commercial purposes, such as assisting customers with the usage of their products. For example, this is done in governmental, banking, tax and insurance environments in order assist customers when performing different tasks. However, over the last years, customer support through multiple service channels became more important because various online service channels have arisen (Kumar, 2010). In other words, customer support became more important and companies' focus changed over the years from online presence and low pricing to be more service oriented (Zeithaml, 2009). The importance of customer support as a service is argued by the fact that customer support is able to create positive relations between companies and customers (Caruana, 2002; Parasuraman et al., 2005; Zeithaml, Parasuraman, & Malhotra, 2002). Also, Kumar (2010) argues that positive relations with stakeholders play a crucial role in increasing Service Loyalty. That is why service providers increase their investments and efforts in service provision to increase their customers' satisfaction and loyalty (He & Li, 2011).

As previously suggested, over the last years, customer support through multiple service channels became more important because various online service channels have emerged (Kumar, 2010). However, literature on Online Customer Support in a multichannel environment is scarce, and previous studies in multiple channel environments have been widely focused on Channel Choice (Oenema, 2012; Pieterse, 2009, 2010; Pieterse & Van Dijk, 2006). These studies attempted to provide a better explanation why these particular service channels are chosen, which might be useful for companies to serve their customers in a more desirable way. However, literature on Channel Choice has broadly focused on traditional service channels, or suggested determinants to choose either a single online service channel or a traditional service channel (Oenema, 2012; Pieterse, 2009). In light of this, the question arises of what are the determinants of channel choice in Online Customer Support in a multiple channel environment. Therefore, chapter 2.2 will further emphasise the concept of Channel Choice in Online Customer Support.

2.2 Channel Choice in Online Customer Support

The importance of customer support is addressed, however the literature on Channel Choice in Online Customer Support through multiple service channels is scarce. Therefore, previous literature on Channel Choice in multiple channel environments will be explained. Firstly, the concept of multiple channelling will be described. Coelho and Easingwood (2003) describe multiple channel support as *companies offering its customers different channels for its services*. Moreover, Montoya-Weiss et al. (2003) suggest that

multiple channel support gives companies the ability to offer their services to its customers in a most efficient way. Furthermore, Pieterse and Van Dijk (2006) suggest that in a multiple channel environment companies should offer each service by each channel, while channels' strengths and weaknesses are taken into account and customers are guided to the service channel which fits the best to perform a certain task. From these descriptions, it can be assumed that in a multiple channel customer support several service channels are available for different services in an efficient way. Because this study focuses on Online Customer Support through multiple service channels, the following definition will be used: Offering multiple online service channels to assist customers in a most efficient way.

Consequently, this study aims to acquire why particular service channels are chosen in Online Customer Support. In a study on Channel Choice at the Dutch Tax and Customs Administration, Pieterse (2009) suggested four groups of determinants that influence Channel Choice: situational characteristics, task characteristics, channel characteristics, and emotional characteristics. In addition, Oenema (2012) also mentions these groups in a study on Channel Choice in an insurance setting. However, Oenema (2012) distinguished in her study Channel Choice and channel preference. Channel preference is the behavioural intention instead of the actual choice for a particular service channel. Besides the intention to use a particular service channel, it might be interesting if a customer also actually uses this channel. For that reason, this study mainly focuses on Channel Choice. Besides this, the intention to make use of a particular service channel is included for the following reason: Because intentions are a predictor of behaviour, in this situation Channel Choice, it could be expected that this also occurs in Online Customer Support. However, it might occur that the usage of the involved service channels is not sufficient. This might prolong the data collection. Additionally, by including the intention of channel usage, this study could describe to what extent the intention of channel usage leads to actual behaviour, and if the possible limited usage of a service channel is a result of a low intention.

Furthermore, the applicability of the categories that are suggested by Pieterse (2009) in Online Customer Support is not yet shown. Different authors applied situational characteristics, task characteristics, channel characteristics, and emotional characteristics in environments where online service channels are involved for different purposes. This study will further emphasise only situational and personal characteristics for the following reasons:

- Task characteristics are often too related to the context to name it an intrinsic task characteristic (Pieterse, 2009).
- Situational characteristics include several task characteristics.
- Personal characteristics include emotional characteristics.
- Not every emotional characteristic is measurable in questionnaires.

2.2.1 Situational Characteristics influencing Channel Choice

Situational Characteristics strongly determine which service channels are preferred in a multiple channel environment (Oenema, 2012). Situational Characteristics express factors of the situation that customer experience while making use of a particular service channel. Situational Characteristics are shown to influence both channel preference and Channel Choice (Hemmer, 2012; Oenema, 2012; Pieterse, 2009). Nevertheless, it must be understood that the discussed literature is focused on Taxes, Insurance, and E-commerce settings. In addition, these studies include traditional service channels and/or involved the

decision to choose either a traditional- or only one online service channel. Therefore, Situational Characteristics might also influence Channel Choice in Online Customer Support.

Furthermore, Situational Characteristics which are shown to influence Channel Choice are distance, time, importance, and complexity (Pieterse, 2009). Interestingly, the measurement took was by a vignette-study, which means that Channel Choice is measured as an intention and not as the actual choice. What is more, Oenema (2012) based her study partly on a study of Pieterse (2009) and argued Involvement to influence Channel Choice. In addition, time and importance are subsequently shown to influence the channel preference (Oenema, 2012). Because these Situational Characteristics are shown to influence Channel Choice or channel preference in a tax- and insurance setting, this may suggest that Channel Choice in Online Customer Support might be influenced through this factor. However, given the context in which this study takes place, the concepts of distance and importance are not included for the following reasons: The concept of importance is covered in the concept Involvement (McQuarrie & Munson, 1992), while distance is not applicable because each involved service channel is online and thus available by each device which is connected to the Internet. Thus, each involved service channel might be within the same distance for the customer. Nevertheless, the concepts Complexity, Time and Involvement might be determining for Channel Choice in Online Customer Support.

Complexity of a service task is shown to influence the choice or intention to choose for particular service channels in several studies (Australian Government, 2011; Hemmer, 2012; Pieterse, 2009, 2010). Complexity is multidimensional concept, which is understood in several ways (Campbell, 1988). For example, O'Reilly (1982) suggest that Complexity covers the dimensions perceived task complexity, the quality of information and its accessibility. Byström and Järvelin (1995) argue that Complexity is distinguished in two ways: perceived complexity and objective complexity. These concepts differ by the fact that perceived complexity is based on customers' perceptions of task complexity, while objective task complexity is based on given task characteristics. In addition, Maynard and Hakel (1997) argue that *subjective task complexity covers users' perception of task experience, task motivation and cognitive ability*. As O'Reilly (1982), Maynard and Hakel (1997) and Byström and Järvelin (1995) suggest, Complexity covers a subjective, perceived element, which includes customers' perception of task experience, task motivation and cognitive ability. In this study, the given task is considered as the occasion for which Online Customer Support is conducted. Thus, this means that the complexity of the particular issue will be taken into account. Because this study focuses on Channel Choice, which is based on a customers' perception of Complexity of a certain task, this study considers Complexity *as a customer based perception of task experience, task motivation and cognitive ability* (Maynard & Hakel, 1997).

Complexity is often shown to influence Channel Choice. For example, a study on the usage of e-government and e-commerce services suggest that Complexity influences Channel Choice (Australian Government, 2011; Hemmer, 2012). To be more precise: In case the Complexity increases, the preference for a *richer* service channel increases. Moreover, Complexity as a determinant of Channel Choice is also demonstrated by Pieterse (2010), who found that in case task Complexity increases, the preference for telephone and front desk-support increased. Despite the fact that this study involved traditional service channels, the preference for online service channels increase when less complex tasks occur or when background information is already available. Therefore, Complexity might influence Channel Choice in Online Customer Support, which is why Complexity is included in this study.

H1a: *Complexity influences Channel Choice in Online Customer Support*

Besides Complexity, the concept of time is explained as in case a customer is in a hurry, this influences the preference for particular service channels (Oenema, 2012; Pieterse, 2009). Because these study suggests the intention to choose a particular service channel and is shown in a vignette-study, this concept is not directly applicable in the context of this study. However, in previous studies, time is closely related to Time Pressure, which is considered as *the perceptions of the amount of time customers have between the activities they need to execute* (Srinivasan & Ratchford, 1991). Because Time Pressure is closely related to time and is applicable in questionnaires, whilst time is not, it seems an appropriate way to measure to what extent having little time to execute a certain task influences Channel Choice. Previous literature found that when customers had little time to perform certain tasks, the preference for telephone support increased while when customers had more time, the preference for an online service channel increased. Pieterse (2009) suggest that in case time pressure decreases, an online service channel is preferred. Interestingly, both studies are focused on different environments that include only one online service channel, while Channel Choice is shown as an intention. Therefore, the question arises as to what extent Time Pressure affects the decision to use particular service channels in Online Customer Support. So, Time Pressure will be included in this study.

H1b Time Pressure influences Channel Choice in Online Customer Support

In addition, Oenema (2012) found that Involvement towards an issue influences Channel Choice. Because Involvement is in her study considered as the emotional and financial involvement towards the particular issue, this is not directly applicable to the context of Online Customer Support. However, various authors used the Involvement construct of McQuarrie and Munson (1992), which holds that Involvement involves the concepts of Importance, Relevance, Concern, Meaning and Matters towards a particular service or product. Given its application in over 100 publications in various environments, it also appears to be applicable in Online Customer Support. Oenema (2012) found Involvement to decrease the choice of online service channels instead of the usage of telephone. Thus, the question arises as to what extent Involvement towards a particular service issue influence to use a particular issue in an environment where only online service channels are involved. Therefore, the concept of Involvement will be, in addition to Complexity and Time Pressure, included in this study.

H1c Involvement influences Channel Choice in Online Customer Support

2.2.2 Personal Characteristics influencing Channel Choice

Besides Situational Characteristics, Personal Characteristics are shown to affect Channel Choice in different environments (Hemmer, 2012; Oenema, 2012; Pieterse, 2009). However, it should be emphasised that channel choice is often shown as the behavioural intention to use a particular service channel instead of the actual usage of a service channel. It might be interesting if these intentions also influence the actual usage. Apart from this, given the fact that customers differ as an individual, their judgements, preferences and decisions might also differ. Although Hemmer (2012) uses the concept Individual Characteristics, it could be considered as the superordinate concept with regard to personality aspects (Hemmer, 2012). Personally characteristics which are previously shown to influence Channel Choice are Innovativeness and channel knowledge (Oenema, 2012), and will therefore be further explained.

The concept channel knowledge is derived from ability and described as *the extent to which customers consider themselves able to use a particular service channel* (Meuter, Bitner, Ostrom, & Brown, 2005). Given this description, the term Self-Efficacy of Channel Usage appears more appropriate to define this concept. However, Self-Efficacy of Channel Usage is shown to influence Channel Choice (Hemmer, 2012; Oenema,

2012; Pieterse, 2009). This is further explained by the fact that in case people have a positive experience with a particular channel, they are more likely to use it again because they recognise the ease of use (Pieterse, 2009). It has to be stated that this concept is derived from previous studies in different settings (Meuter et al., 2005; Moore & Benbasat, 1991; Pieterse, 2009). For that reason, Self-Efficacy of Channel Usage might also influence Channel Choice in Online Customer Support, and that is why this concept is included in this study.

H2a Self-Efficacy of Channel Usage influences Channel Choice in Online Customer Support

Furthermore, Oenema (2012) also found that Innovativeness is a determinant of Channel Choice. In her study, Innovativeness is described as the extent to which customers feel the usage of a particular service channel fitting their lifestyle (Oenema, 2012). In addition, Wells and Tigert (1971) describe Innovativeness *as the extent to which a customer engages in exploratory behaviours, particularly when it comes to trying new products or services*. However, in the study of Oenema (2012) is suggested that one involved online service channel is considered as more innovative than another and measures the innovativeness towards one service channel. This causes that the questioning is not applicable in a setting with multiple online service channels where no mutual ranking could be made on innovativeness. On the other hand, Wells and Tigert (1971) focus their construct of Innovativeness as a personal characteristic in general, which makes it better applicable in this study.

However, Innovativeness is shown to influence Channel Choice in a setting where traditional service channels and only single online service channel is involved. This study suggest that in case Innovativeness increases, this will in turn increase the likelihood that a customer uses a web-bases service channel (Oenema, 2012). Notable in this study is the decision to use either a traditional service channel or an online service channel, which in turn raises the question of how this affects Channel Choice in an environment where only online service channels are available. For this reason, the factors Innovativeness and Self-Efficacy of Channel Usage are included in this study.

H2b Innovativeness influences Channel Choice in Online Customer Support

As previously described, the suggested Situational Characteristics and Personal Characteristics are also considered to influence the Intention of Channel Usage. Because intentions are suggested to be a strong predictor of behaviour (Ajzen, 1991), the following hypotheses are also included in this study.

H3a Complexity influences the Intention of Channel Usage in Online Customer Support

H3b Time Pressure influences the Intention of Channel Usage in Online Customer Support

H3c Involvement influences the Intention of Channel Usage in Online Customer Support

H4a Self-Efficacy of Channel Usage influences the Intention of Channel Usage in Online Customer Support

H4b Innovativeness influences the Intention of Channel Usage in Online Customer Support

Table 1 Determinants of Channel Choice

Category	Construct	Description	Author
Situational Characteristics	Complexity	Users' perception of task experience, task motivation and cognitive ability	Maynard and Hakel (1997)
	Time Pressure	The perceptions of the amount of time	Srinivasan and

		customers have between the activities they need to execute	Ratchford (1991)
	Involvement	The Importance, Relevance, Concern, Meaning and Matters towards a particular service or product	McQuarrie and Munson (1992)
Personal Characteristics	Self-Efficacy of Channel Usage	The extent to which customers consider themselves able to use a particular service channel	Meuter et al. (2005)
	Innovativeness	The extent to which a customer engages in exploratory behaviours, particularly when it comes to trying new products or services	Wells and Tigert (1971)

2.3 Perceived Service Quality of Online Customer Support

Service quality is often used to demonstrate the extent to which customers' expectations corresponds to their observations (Zeithaml, Parasuraman, & Berry, 1988). More specifically, Zeithaml et al. (1988) suggest that service quality is based on the perception to which expected- and Perceived Service Quality correspond, while Perceived Service Quality also influences customers' expectations. This is in line with work of Caruana, (2002), Parasuraman, Zeithaml, and Berry (1985); Zeithaml et al. (1988); Zeithaml et al. (2002), and Grönroos (1984). Besides this, it should be noted that Perceived Service Quality is based on the interaction between customer and service providers, while expected service quality is also influenced by other factors (Zeithaml et al., 1988). Because this study aims to emphasise how companies might benefit Online Customer Support, this study will focus on Perceived Service Quality.

Perceived Service Quality is considered as a form of attitude related, though not equal, to satisfaction, which results from the extent to which customers' expectations correspond with the perception of performance (Zeithaml et al., 1988). The importance of Perceived Service Quality is argued by Oenema (2012) and Zeithaml (2009). They suggest that excellent Perceived Service Quality offers companies the ability to distinguish itself from competitors. Also, Perceived Service Quality offers companies the possibility to increase Customer Satisfaction (Rust & Oliver, 1994). Moreover, Perceived Service Quality is argued to influence Customer Satisfaction and Service Loyalty (Caruana, 2002; Parasuraman et al., 2005; Zeithaml et al., 2002). Therefore chapter 2.3.2 and 2.3.3 will further outline these relations. In customer support positive experiences with the service provider increases Perceived Service Quality (Zeithaml et al., 1988), which is a top 10 priority for providers of information systems (Seddon, Staples, Patnayakuni, & Bowtell, 1999). Therefore, this study will emphasise how these positive experience occur.

Since previous studies focused on Perceived Service Quality are widely focused on traditional service channels, the knowledge of Perceived Service Quality in Online Customer Support is scarce. Given the importance of Perceived Service Quality, companies should have a good understanding in their customers perceptions (Negash, Ryan, & Igbaria, 2003). For that reason, Parasuraman et al. (2005) and Wolfinbarger and Gilly (2003) developed models that are focused on Perceived Service Quality in online environments. Nevertheless, these models are mainly focused on technical aspects such as design, aesthetics and security, while this study focuses on the interaction between the customer and service provider. However, the (main) interest is to develop a measurement applicable in Online Customer Support, which coincides with the findings of Zeithaml et al. (1988). They developed a predominantly model with regard to services marketing

which includes the dimensions Tangibles, Reliability, Responsiveness, Assurance and Empathy. However, it should be stated that in an online environment no tangibles are involved. Therefore, this dimension is not included in this study. The suggested model of Zeithaml et al. (1988) is a widely used measurement focused on Perceived Service Quality in services marketing, with over 100 published articles. Although the application of these dimensions is often shown in traditional service channels, several studies tried to apply them in an online environment (Negash et al., 2003; Oenema, 2012; Wolfinbarger & Gilly, 2002). For example, Wolfinbarger and Gilly (2002) are broadly interested in technical aspects, and their study included the factors Reliability, Assurance (covered in the Security dimension), Personalisation and Customer Service (which covers the Empathy and Responsiveness). Given the presence of Empathy, Assurance, Responsiveness, Reliability and Personalisation in an online environment, these concepts will be further explained.

2.3.1.1 Empathy as a dimension of Perceived Service Quality

Empathy is often considered as a dimension of Perceived Service Quality (Wolfinbarger & Gilly, 2002; Zeithaml et al., 1988; Zeithaml et al., 2002). In most literature empathy has defined as caring and individualised attention to customers offered by a firm (Zeithaml et al., 1988). Since the emergence of online service channels it is criticised that companies nowadays focus mainly on efficiency and responsiveness, while customers expect more personal attention (Oenema, 2012). Although the Empathy-dimension originates from Perceived Service Quality of traditional service channels, its application in Online Customer Support is suggested by Wolfinbarger and Gilly (2002). Notable of this study is its focus on the experience of e-commerce websites. However, this study found customer support, which covers Empathy, as a dimension of Perceived Service Quality. In addition, Zeithaml et al. (2002) confirmed in a study on online purchases the influence of Empathy on Perceived Service Quality. However, this study also argued that only in case customers experience problems in online environments empathy is required. Nevertheless, the presence of Empathy as a dimension of Perceived Service Quality, and its inclusion as a part of Customer Support in e-commerce settings, suggests that Empathy might be a dimension of Perceived Service Quality in Online Customer Support.

2.3.1.2 Assurance as a dimension of Perceived Service Quality

Assurance is, in addition to Empathy, related to Perceived Service Quality in both offline and online environments (Wolfinbarger & Gilly, 2002; Zeithaml et al., 1988; Zeithaml, Parasuraman, & Malhotra, 2000). The term Assurance is traditionally, and in the context of service provision, described as the sense of safety and a belief by consumers that a provider is knowledgeable (Zeithaml et al., 1988). On the other hand, in online environments, Assurance is explained as customers' feelings when dealing with a website and its reputation, while they are presented clear and truthful information and offered products or services are taken into account (Parasuraman et al., 2005). Nevertheless, in the context of Online Customer Support, the first description appears more appropriate because its focus on communication with a service employee, which likewise occurs in Online Customer Support, while other studies' descriptions focus on information provided by websites.

Assurance in an online context is closely related to trust and security (Wolfinbarger & Gilly, 2002). Despite the fact that Wolfinbarger and Gilly (2002) found that Assurance is a dimension of Perceived Service Quality, it has to be stated that this is covered in the Security/Privacy dimension. Given the enormous amount of applications of the Assurance concept in traditional service channels and the findings in an e-

commerce environment, the question arises if Assurance is also a dimension of Perceived Service Quality in Online Customer Support.

2.3.1.3 *Responsiveness as a dimension of Perceived Service Quality*

The concept of Responsiveness is traditionally considered a key determinant of Perceived Service Quality, and is suggested as companies' willingness to help customers and provide prompt service (Zeithaml et al., 1988). Although few recent studies are focused on Responsiveness in online environments, Parasuraman et al. (2005) suggest Responsiveness in e-commerce settings as quick response and the possibility to ask for help in case of problems or questions. However, this does not cover companies' willingness to help customers, which might be important in the communication between customer and service provider.

Responsiveness is essential in Customer Support of e-commerce websites, and considered an important dimension of Perceived Service Quality (Wolfinbarger & Gilly, 2002). It should be stated that, besides Wolfinbarger and Gilly (2002), literature on Responsiveness in Online Customer Support is scarce. Few authors found the importance of Responsiveness in online banking and web care settings, and argued that organizations are expected to respond quickly to customers' requests to solve problems and issues (TNS, 2011) and customers evaluate companies more positively because customers perceive this as their problems are taken seriously (Hong & Lee, 2005). Also, no additional knowledge is available if Responsiveness belongs also to Perceived Service Quality in Online Customer Support. Given the findings of Wolfinbarger and Gilly (2002), the commonly provided application in traditional service channels and additional assumptions that customers' appreciate quick feedback, this study includes Responsiveness as a dimension of Perceived Service Quality.

2.3.1.4 *Reliability as a dimension of Perceived Service Quality*

Reliability is considered a key concept of Perceived Service Quality and rated as most important for customers in traditional service channels (Zeithaml et al., 1988). The notion of Reliability originates from traditional service channels, and is described as accurately and dependably performing the promised service (Zeithaml et al., 1988). It is noteworthy that Reliability in online context is argued to differ from traditional service channels, and covers the concept fulfilment (Wolfinbarger & Gilly, 2002). More specifically, Wolfinbarger and Gilly (2002) describe Reliability and fulfilment as the accurate display and description of a product so that customers receive what they thought they ordered, and delivery of the product within the promised time. In short, both descriptions mention the idea to perform promised services. However, Zeithaml et al. (1988) is widely focused on service provision. For that reason this description is better applicable in Online Customer Support context.

Reliability might be an important dimension of Perceived Service Quality in Online Customer Support. Although the importance of Reliability is often shown in traditional service channels, its application in online environments is also likely to be important (Wolfinbarger & Gilly, 2002). Findings in both traditional service channels and online environments suggest that Reliability has a major role in customers' judgement of service providers (Wolfinbarger & Gilly, 2002; Zeithaml et al., 1988; Zeithaml et al., 2000). However, these online environments are focused on e-commerce websites. With regard to these findings, the Reliability dimension might also be a dimension of Perceived Service Quality in Online Customer Support.

2.3.1.5 *Personalisation as a dimension of Perceived Service Quality*

Recent literature focused on online environments suggests Personalisation as a dimension of Perceived Service Quality (Wolfinbarger & Gilly, 2002; Zeithaml et al., 2000). To be more precise, Personalisation is considered as customers' perception of the individualised attention and differentiated service that fits individuals' needs and preferences (Wolfinbarger & Gilly, 2002). Although the definition of Personalisation looks similar to Empathy, Personalisation differs from empathy as following: Empathy has its focus on as caring and individualised attention, while Personalisation has focused on personalised, and differentiated service that fits individuals needs and preferences (Wolfinbarger & Gilly, 2002; Zeithaml et al., 1988).

Personalisation is, such as the previous suggested dimensions of Perceived Service Quality, found in online environments. Nevertheless, it should be noted that Personalisation is considered a characteristic of web design. Although this results from 2002 and is found as a characteristic in web design, Personalisation might also be a dimension of Perceived Service Quality in Online Customer Support for the following reason: Most online service channels have a higher ability to establish a personal focus. Thus, this will subsequently give companies the ability of two-way conversations with customers, which in turn offer increased abilities for personal and differentiated services (Daft & Lengel, 1984; Kumar, 2010; Wolfinbarger & Gilly, 2002). For that reason, Online Customer Support facilitates a favourable environment for Personalisation. In addition, customers nowadays expect more personal attention (Oenema, 2012), which is covered in the description of Personalisation by Wolfinbarger and Gilly (2002). This emphasises that Personalisation might be a dimension of Perceived Service Quality.

Table 2 Dimensions of Perceived Service Quality

Construct	Description	Author
Empathy	Caring and individualised attention to customers offered by a firm	Zeithaml, Parasuraman, and Berry (1988)
Assurance	The sense of safety and a belief by consumers that a provider is knowledgeable	Zeithaml et al. (1988)
Responsiveness	Companies' willingness to help customers and provide prompt service	Zeithaml et al. (1988)
Reliability	Accurately and dependably performing the promised service	Zeithaml et al. (1988)
Personalisation	Perception of the individualised attention and differentiated service that fits individuals needs and preferences	Wolfinbarger and Gilly (2002)

2.3.2 *Customer Satisfaction and its relation to Perceived Service Quality*

Customer Satisfaction is often a used concept in services marketing, which is defined in several ways. Traditionally, Customer Satisfaction is defined as the extent to which expectations reflect the desired performance, which results from the level of performance during transactions (Churchill Jr & Surprenant, 1982). In addition, more recent explanation is given by Oliver (2010), who characterises Customer Satisfaction as emotional responses to desired fulfilments. Also, according to Caruana (2002), who suggests Customer Satisfaction as a post purchase, global affective summary response that occurs when customers are

questioned and evaluate particular services. This appears as the most appropriate description given its focus on service provision, and its previously shown relation with Perceived Service Quality (Caruana, 2002).

From this description it could be noticed that the concept of Customer Satisfaction seems similar to Perceived Service Quality. However, a major distinction is that Customer Satisfaction is a long-term judgement that is made after the performed service, while service quality is a temporary judgment (Oliver, 2010; Zeithaml et al., 1988). Given the close relation between Perceived Service Quality and Customer Satisfaction, Perceived Service Quality is suggested to increase Customer Satisfaction (Caruana, 2002; Parasuraman et al., 2005; Wolfinbarger & Gilly, 2002). It should be noted that these findings result from studies with interest in e-commerce or retail banking, which might differ from Online Customer Support. Nevertheless, if Perceived Service Quality precedes Customer Satisfaction also in Online Customer Support, companies might benefit because this offers the ability to contribute with a short-term occasion to a long-term judgment of performed service. For that reason, Customer Satisfaction is included in this study. This leads in turn to the following hypotheses:

- H5a Empathy is a determinant of Customer Satisfaction in Online Customer Support*
- H5b Assurance is a determinant of Customer Satisfaction in Online Customer Support*
- H5c Responsiveness is a determinant of Customer Satisfaction in Online Customer Support*
- H5d Reliability is a determinant of Customer Satisfaction in Online Customer Support*
- H5e Personalisation is a determinant of Customer Satisfaction in Online Customer Support*

An additional reason why long-term judgements of performed service are important is suggested by Caruana (2002), who found that Customer Support has a mediating role between Perceived Service Quality and Service Loyalty. Although the concept of Service Loyalty will be further explained in chapter 2.3.3, this relation could be important in Online Customer Support because this offers companies the opportunity to differentiate from competitors (Zeithaml, 2009). Nevertheless, as previously described, these results origins from studies in e-commerce and banking settings. Despite the fact that these environments differ from the Online Customer Support context, this provides the cause to create a better understanding of the mediating role between Perceived Service Quality and Service Loyalty in Online Customer Support. This leads to the following hypothesis:

- H6 Customer Satisfaction is a determinant of Service Loyalty in Online Customer Support*

In addition to the relation between Perceived Service Quality and Customer Satisfaction, several moderators are suggested in the literature. First, Zeithaml et al. (2002) and Pieterse (2009) suggest that Empathy plays only a role in case customers experience a problem or in complex situations. Although these studies are focused on different environments, the presence of online service channels suggests the probability that Complexity moderates the effect between Empathy and Customer Satisfaction in Online Customer Support. Second, Oenema (2012) and Pieterse (2009) found that customers are more likely to chose a richer service channel in case they are in a hurry. This possibly means that they look for quick response, which is a main characteristic of a rich service channel (Daft & Lengel, 1984). Given the fact quick response is covered in the concept of Responsiveness, it might be likely that Time Pressure moderates the effect of the Responsiveness dimension on Customer Satisfaction. For that reason, these two Situational Characteristics will be considered to have a moderating effect between the particular dimension of Perceived Service Quality and Customer Satisfaction. This leads to the following hypotheses:

H7a Complexity moderates the effect of Empathy on Customer Satisfaction in Online Customer Support

H7b Time Pressure moderates the effect of Responsiveness on Customer Satisfaction in Online Customer Support

2.3.3 Service Loyalty and its relation to Perceived Service Quality

Service Loyalty is argued as obviously important to all businesses, and in particular to service providers (Setó-Pamies, 2012). In recent years, Service Loyalty has become increasingly popular and more important in a competitive market (Caruana, 2002; Parasuraman et al., 2005; Setó-Pamies, 2012). Both academics and companies consider Service Loyalty as being fundamental to a company's success (Setó-Pamies, 2012). The concept of Service Loyalty is described as *the extent to which a customer exhibits repeat purchasing behaviour from a service provider, holding a positive attitude toward the provider, and considers using only this provider when a need for this service exists service* (Gremler & Brown, 1996). Despite the fact that loyalty strategies are important in many settings, they are particularly suited to service providers, because of its very nature to offer more opportunities to develop loyalty (Setó-Pamies, 2012).

Previous literature on services suggest that Perceived Service Quality is an important determinant of Service Loyalty (Caruana, 2002). Because previous studies in Service Loyalty are widely focused on services such as banking and e-commerce, the question arises to what extent Perceived Service Quality influences Service Loyalty in Online Customer Support. Service providers might benefit a better understanding in this relation in Online Customer Support in order to achieve positive attitude of their customers and continued usage of their services without the consideration of using other services. Therefore, Service Loyalty is in this study considered as a dependent variable of Perceived Service Quality. Thus, this will in turn lead to the following hypotheses:

H8a Empathy is a determinant of Service Loyalty in Online Customer Support

H8b Assurance is a determinant of Service Loyalty in Online Customer Support

H8c Responsiveness is a determinant of Service Loyalty in Online Customer Support

H8d Reliability is a determinant of Service Loyalty in Online Customer Support

H8e Personalisation is a determinant of Service Loyalty in Online Customer Support

Table 3 Major variables in this study

Construct	Description	Author
Perceived Service Quality	A form of attitude, related but not equal to satisfaction, that results from the extent to which customers' expectations corresponds with the perception of performance	Zeithaml et al. (1988)
Customer Satisfaction	A post purchase, global affective summary response that occurs when customers are questioned and evaluate particular services	Caruana (2002)
Service Loyalty	The extent to which a customer exhibits repeat purchasing behaviour from a service provider, holding a positive attitude toward the provider, and considers using only this provider when a need for this service exists service	Gremler and Brown (1996)

3 Method

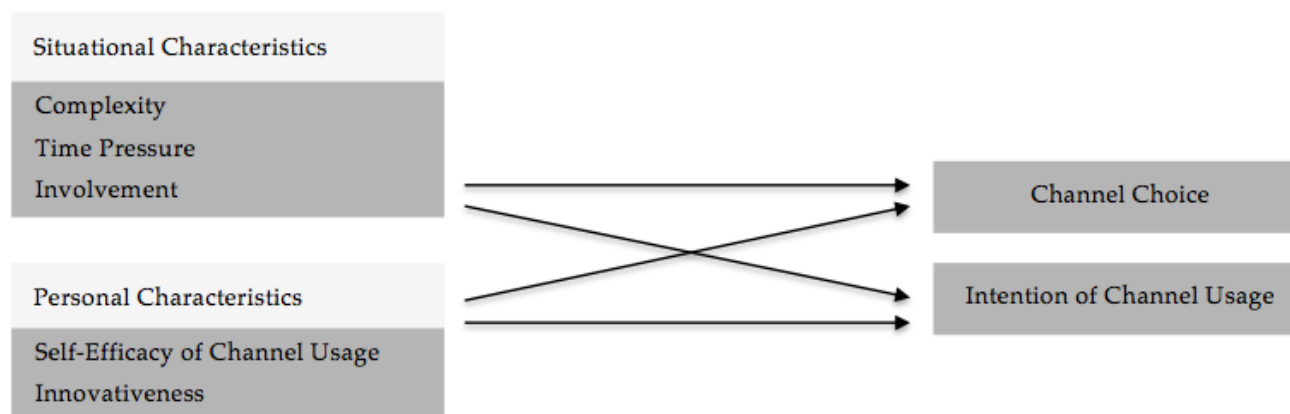
This chapter explains the research instruments and procedures that are used during the execution of the study. First, chapter 3.1 outlines the research model of this study and emphasises the dependent and independent variables of this study. Second, chapter 3.2 explains which instruments and constructs are used to gather the data. Third, chapter 3.3 gives further insight in the procedures and respondents that are participating in this study. And last, chapter 3.4 describes the quality of the used research instruments.

3.1 Research Model

The data gathering process is designed to retrieve customers' evaluation of their experience with Online Customer Support. This study attempted in the first place to investigate Channel Choice in Online Customer Support, which is shown in figure 2. In this model the Situational Characteristics Complexity, Time Pressure and Involvement are independent variables. Also the Personal Characteristics Self-Efficacy of Channel Usage and Innovativeness are included as independent variables. The dependent variables are Channel Choice and the intention to use web-help, email, Facebook and Twitter. This model provides further insight in the determinants of channel choice, and answers the following research question.

RQ1. Which characteristics determine the choice for particular service channels in Online Customer Support?

Figure 2 Hypothesised model of Channel Choice in Online Customer Support



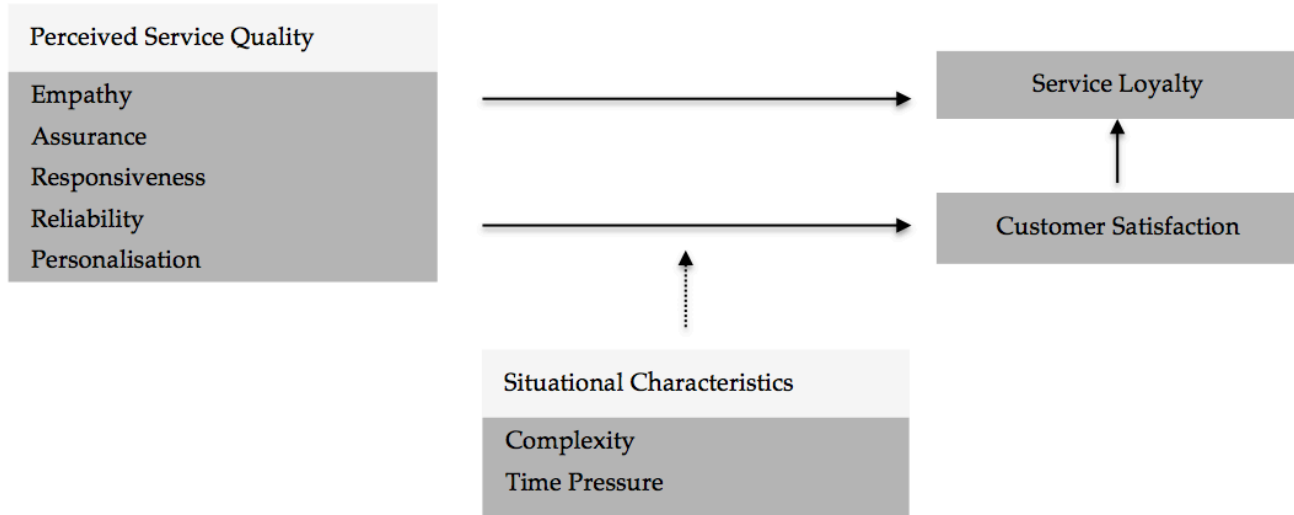
The second part of this study is focused on Perceived Service Quality, Customer Satisfaction and Service Loyalty in Online Customer Support. Figure 3 shows the hypothesised research model. This model suggests that Perceived Service Quality includes the dimensions Empathy, Assurance, Responsiveness, Reliability and Personalisation, and that these dimensions influence both Service Loyalty and Customer Satisfaction. In addition, Customer Satisfaction is also expected to influence Service Loyalty. This model will be applied separately for each involved service channel to create a better understanding, whether the dimensions of Perceived Service Quality differ for each service channel. Apart from this, it is suggested that Situational Characteristics moderate the effect between Perceived Service Quality and Customer Satisfaction. Hence, the following research questions will be answered by investigating this model.

RQ2. To what extent does the Perceived Service Quality dimensions influence Customer Satisfaction in Online Customer Support?

RQ3. To what extent does Customer Satisfaction influence Service Loyalty in Online Customer Support?

- RQ4. To what extent does the Perceived Service Quality dimensions influence Service Loyalty in Online Customer Support?
- RQ5. To what extent differs the influence of the Perceived Service Quality dimensions on Customer Satisfaction and Service Loyalty for the involved service channel web-help, email, Facebook and Twitter?

Figure 3 Hypothesised model of Perceived Service Quality, Customer Satisfaction and Service Loyalty



3.2 Instruments

The data in this study is gathered by an online questionnaire. As shown in Figure 2, this questionnaire measures the determinants of Channel Choice in Online Customer Support. In addition, as shown in Figure 4, this questionnaire will provide to what extent the dimensions that covered in Perceived Service Quality influences Customer Satisfaction and Service Loyalty. The online questionnaire (Appendix A) is provided to customers who used Online Customer Support. To measure the factors that are suggested to influence Channel Choice and the dimensions of Perceived Service Quality, customers are asked to reflect the questions on the last occasion wherefore the Online Customer Support is approached. This online questionnaire is offered in Dutch. The original items that will be further explained, are derived from English literature and translated by three native Dutch speakers with full professional proficiency in English. Afterwards two other native Dutch speakers, also with full professional proficiency in English, back-translated the items of the questionnaire. This indicates no noteworthy differences, which resulted in applying these questions in this study.

The concepts that are used in this study are derived from scales that are validated in previous studies on channel choice, perceived service quality, customer satisfaction and service loyalty. The factor Innovativeness is measured in this study with an scale of Wells and Tigert (1971), which is adjusted to the context of Online Customer Support. This scale is already used in over 600 publications. Moreover, Self-Efficacy of Channel Usage and Complexity, which are considered to influence Channel Choice, are adjusted to the context from scales that are used by Oenema (2012), Maynard and Hakel (1997). The factor Involvement is used with an adjusted scale of McQuarrie and Munson (1992), and has been previously used by Oenema (2012). In addition, the construct Time Pressure is derived from a study of Srinivasan and Ratchford (1991). The original scale measures long-term time availability and is adjusted to measure the short-term time availability in the occasion that Online Customer Support is consulted.

The factors that are suggested to measure Perceived Service Quality are derived from the SERVQUAL model of Zeithaml et al. (1988) and Wolfinbarger and Gilly (2002) and are adjusted to Online Customer Support context. The concepts of Customer Satisfaction and Service Loyalty are measured with constructs of Caruana (2002), Gremler and Brown (1996). All of involved constructs are measured on a 7-point likert-scale.

3.3 Procedures and respondents

The participants of this study are invited to fill in an online questionnaire one day after consulting Online Customer Support. In this invitation customers are notified that participation in this study is anonymous and the data will be used for scientific purposes and for improving the services of the service provider. The invitations are sent to customers who used email, Facebook or Twitter one day after the usage of Online Customer Support. In a timespan of seven weeks between October 29th 2013 and December 17th 2013, in total 1698 customers are invited of which 266 participated. Amongst them are 197 male and 69 female participants with an average age of 40 years ($SD = 11.81$). The participants made use of web-help ($n = 141$), email ($n = 122$) or Twitter ($n = 3$) to solve different kinds of service issues. No single customer who made use of Facebook participated in this study. The educational level from the involved participants differs from Primary School level ($n = 1$), Intermediate vocational education level ($n = 46$), Junior College level ($n = 29$), Bachelor degree level ($n = 120$) and University level ($n = 70$).

The online questionnaire is executed with the survey tool Qualtrics. In order to maintain the respondents' privacy, personal information is kept separately from the regular answers and added to the dataset after finishing the questionnaire. In the invitation that is sent to customer, the following variables are attached which will be saved in the dataset: service issue id and the channel that is used to perform the service request. The invitation that is sent to customers who used e-mail or Facebook for conducting online customer support received is shown in Appendix B. Customers who used Twitter for conducting support received a different message because of the limited amount of 140 characters that could be submitted, and is shown in Appendix C.

The procedure for the customers of web-help was slightly different. Customers are asked by the start of the usage of the web-help what question they have. This question is logged to create a better understanding of their issue and how this relates to Channel Choice. Further logged information contains the customers' email, and that they made use of web-help. To maintain the customers privacy, the information that is stored is only visible for the service employees and the author. The stored email address is only used to invite the customer send an invitation one day after the customers used the web-help.

3.4 Quality of research instruments

The Cronbach's alpha for each scale was assessed to test the reliability. In the research, twelve different scales were used. The study on Channel Choice contained both Situational Characteristics and Personal Characteristics. Situational Characteristics includes Complexity (4 items; $\alpha = .82$), Time Pressure (3 items; $\alpha = .94$) and Involvement (5 items; $\alpha = .85$). Personal Characteristics consist of Innovativeness (3 items; $\alpha = .86$) and Self-Efficacy of Channel Usage (3 items; $\alpha = .97$), which both indicate a high level of internal consistency. Factor analysis on Situational Characteristics is shown in Appendix F. The items are extracted with a Principal Component Analysis, rotation method: Varimax with Kaiser Normalization and four iterations. Results show that three components are extracted: Complexity, Time Pressure and Involvement. Appendix F shows also a factor analysis on Personal Characteristics, which executes a Principal Component

Analysis, rotation method: Varimax with Kaiser Normalization and three iterations. Results show that two components are extracted which belong to the constructs Innovativeness and Self-Efficacy of Channel Usage.

The second research model with regard to Perceived Service Quality suggests the following five dimensions: Empathy, Assurance, Responsiveness, Reliability and Personalisation. The factors Empathy (4 items; $\alpha = .85$), Assurance (4 items; $\alpha = .92$), Responsiveness (4 items; $\alpha = .81$), Reliability (4 items; $\alpha = .93$) and Personalisation (6 items; $\alpha = .92$) appears all to be highly internal consistent. Also Customer Satisfaction (3 items; $\alpha = .93$) and Service Loyalty (5 items; $\alpha = .83$) did also show to be highly internal consistent.

The dimensions of Perceived Service Quality show a high Cronbach's Alpha when the 22 items are measured together ($\alpha = .84$). The results of a Factor analysis, extraction method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization and six rotations, is shown in Appendix F. Results suggest that Assurance, Reliability and Personalisation belong to individual components. However, the dimensions Empathy and Responsiveness show overlap. This means that customers are likely to give same answers on questions related to Empathy and Responsiveness. Given the high internal consistency of the two dimensions, and because previous literature also approached these dimensions as an individual this study uses the dimensions individually. It has therefore taken into account that when relations of Empathy are found, this covers parts of Responsiveness, or vice versa.

4 Results

This chapter describes the results of this study. First, the relation between Situational Characteristics, Personal Characteristics and Channel Choice are explained in chapter 4.1. Second, chapter 4.2 shows the relation between Situational Characteristics, Personal Characteristics and the Intention of Channel Usage. Third, chapter 4.3 provides the relation between the dimensions of Perceived Service Quality and Customer Satisfaction. Fourth, chapter 4.4 emphasises the relation between Customer Satisfaction and Service Loyalty. Fifth, chapter 4.5 explains the relation between the dimensions of Perceived Service Quality and Service Loyalty. And last, chapter 4.6 describes to what extent the research model with regard to the Perceived Service Quality dimensions, Customer Satisfaction and Service Loyalty differ for the involved service channels.

4.1 The determinants of Channel Choice in Online Customer Support

This section outlines the relation between Situational Characteristics, Personal Characteristics and Channel Choice. According to the discussed literature, Situational Characteristics consist of the factors Complexity, Time Pressure and Involvement. Moreover, Personal Characteristics include the factors Self-Efficacy of Channel Choice and Innovativeness. The participants of this study made use of web-help ($n = 141$), email ($n = 122$) or Twitter ($n = 3$) to solve different kinds of service issues. Given the limited response of customers who made use of Facebook ($n = 0$) and Twitter ($n = 3$), the relation between Situational Characteristics and Personal Characteristics on Channel Choice of these two specific channels is not included in this study. Therefore, the results of this study will mainly focus on the determinants of Channel Choice of web-help and email.

Table 4 provides the results of an independent sample t-test and shows the differences of Situational Characteristics and Personal Characteristics between web-help and email. The mean scores are based on results on a seven-point likert-scale. No significant differences are found on Situational Characteristics between the users of web-help and email while significant differences are found on Self-Efficacy of Channel Usage between users of web-help ($M = 6.10$, $SD = 1.44$) and email ($M = 6.55$, $SD = 1.30$) conditions; $t(261) = -2.64$, $p = .009$. In addition, significant differences are found for Innovativeness between users of web-help ($M = 4.96$, $SD = 1.59$) and email ($M = 5.44$, $SD = 1.29$) conditions; $t(261) = -2.76$, $p = .008$.

Table 4 Mean scores of Situational Characteristics and Personal Characteristics

		Channel	<i>n</i>	<i>M</i>	<i>SD</i>	<i>T</i>	<i>p</i>
Situational Characteristics	Complexity	Web-help	141	2.90	1.44	.69	.492
		Email	122	2.77	1.54		
	Time Pressure	Web-help	141	2.38	1.72	-1.44	.151
		Email	122	2.68	1.68		
Personal Characteristics	Self-Efficacy of Channel Usage	Web-help	141	5.58	1.11	-1.87	.063
		Email	122	5.83	1.04		
	Innovativeness	Web-help	141	6.10	1.44	-2.64	.009**
		Email	122	6.55	1.30		
		Web-help	141	4.96	1.59	-2.76	.008**
		Email	122	5.44	1.29		

Note. * $p < .05$, ** $p < .01$

In short, Personal Characteristics are shown to differ significantly between the users of web-help and email. However, this study attempts to provide if both Situational Characteristics and Personal Characteristics

influence Channel Choice. Table 5 provides the results of a multinomial logistic regression analysis on the influence of Situational Characteristics, Personal Characteristics on Channel Choice. This table considers the users of web-help as the reference group compared to the users of email. The overall model is significant according to the chi-square statistic (χ^2 ($DF = 5$) = 18.801, $p = .002$). This suggests the research model predicts significantly better, or more accurately, than the null model. The model predicts 7% of the responses correctly (Cox and Snell). The McFadden's R^2 is .05.

Table 5 The prediction of Situational Characteristics and Personal Characteristics to use email

		B	SE	Wald	P
Situational Characteristics	Complexity	-.11	.09	1.475	.225
	Time Pressure	.17	.08	4.069	.044*
	Involvement	.28	.12	4.121	.042*
Personal Characteristics	Self-Efficacy of Channel Usage	.18	.11	2.480	.115
	Innovativeness	.20	.10	4.172	.041*

Note. Reference group: web-help, $R^2 = .069$ (Cox and Snell), $R^2 = .092$ (Nagelkerke), $R^2 = .052$ (McFadden), * $p < .05$

The results in Table 5 indicate that Situational Characteristics Time Pressure ($b = .165$, Wald = 4.069, $p = .044$) and Involvement ($b = .246$, Wald = 4.121, $p = .042$) are found to positively influence the usage of email instead of web-help. In addition, Innovativeness ($b = .200$, Wald = 4.172, $p = .041$) is also shown to positively influence the usage of email compared to web-help. However, no significant evidence is found that Complexity ($b = -.112$, Wald = 1.475, $p = .225$) and Self-Efficacy of Channel Usage ($b = .175$, Wald = 2.480, $p = .115$) influence the usage of either web-help or email. These results are summarised in Table 6, which shows the suggested hypotheses with regard to Channel Choice in Online Customer Support.

Table 6 Hypotheses of Channel Choice

	Hypothesis	Supported
H1a	Complexity influences Channel Choice in Online Customer Support	No
H1b	Time Pressure influences Channel Choice in Online Customer Support	Yes
H1c	Involvement influences Channel Choice in Online Customer Support	Yes
H2a	Self-Efficacy of Channel Usage influences Channel Choice in Online Customer Support	No
H2b	Innovativeness influences Channel Choice in Online Customer Support	Yes

4.2 The determinants of Intention of Channel Usage in Online Customer Support

Given the limited response on Facebook and Twitter, and the fact that Channel Choice occurs after the Intention of Channel Usage, this study also provides customers' Intention of Channel Usage of the involved service channels. Table 7 shows the average scores on the Intention of Channel Usage of the available service channels among the customers. The scores are measured with a seven-point likert-scale and suggest lower intentions to use of Facebook ($M = 2.26$, $SD = 1.65$) and Twitter ($M = 2.19$, $SD = 1.65$) among the respondents than the used service channels web-help ($M = 5.88$, $SD = 1.35$) and email ($M = 5.38$, $SD = 1.82$).

Table 7 Mean scores on Intention of Channel Usage

Factor	M	SD
Web-help	5.88	1.53
Email	5.38	1.82
Facebook	2.26	1.65
Twitter	2.19	1.65

To create a better understanding which of the Situational Characteristics and Personal Characteristics influences the Intention of Channel Usage of web-help, email, Facebook and Twitter, this section further outlines these results. Table 8 shows the findings of a Multiple Regression Analysis on the influences of Situational Characteristics and Personal Characteristics on the intention to use web-help. This model explains about 17% of the variance of the intention to use web-help by Situational Characteristics and Personal Characteristics ($R^2 = .166$, $F = 1.337$, $p < .001$). Moreover, Table 8 shows that both Self-Efficacy of Channel Usage ($b = .33$, $t = 4.79$, $p < .001$) and Innovativeness ($b = .16$, $t = 2.40$, $p = .017$) positively influencing the intention to use web-help. However, the findings of this study do not provide statistical evidence for the relation between Situational Characteristics Complexity ($b = -.07$, $t = -1.19$, $p = .235$), Time Pressure ($b = -.02$, $t = -.39$, $p = .695$) and Involvement ($b = -.01$, $t = -.09$, $p = .927$) on the intention to make use of web-help.

Table 8 The relation between Situational Characteristics, Personal Characteristics and the intention to use web-help

Factor	B	SE	t	Sig.
Complexity	-.07	.06	-1.19	.235
Time Pressure	-.02	.05	-.39	.695
Involvement	-.01	.08	-.09	.927
Self-Efficacy of Channel Usage	.33	.07	4.79	.000**
Innovativeness	.16	.07	2.40	.017*

Note. $R^2 = .166$, $F(5,260) = 1.337$, $p < .001$, * $p < .05$, ** $p < .01$

Table 9 provides the relation between Situational Characteristics, Personal Characteristics and the intention to use email. For the intention to use email, 15% of the variance is explained by Situational- and Personal Characteristics ($R^2 = .151$, $F(5,260) = 9.258$, $p < .001$). Involvement ($b = .19$, $t = 2.00$, $p = .046$), Innovativeness ($b = .25$, $t = 3.19$, $p = .002$) and Self-Efficacy of Channel Usage ($b = .29$, $t = 3.45$, $p = .001$) are significant predictors for the intention to use email in Online Customer Support. However, no evidence is found for Complexity ($b = .12$, $t = 1.57$, $p = .117$) and Time Pressure ($b = .11$, $t = 1.66$, $p = .097$) to influence the intention to use email.

Table 9 The relation between Situational Characteristics, Personal Characteristics and the intention to use email

Factor	B	SE	t	Sig.
Complexity	.12	.08	1.57	.117
Time Pressure	.11	.07	1.66	.097
Involvement	.19	.10	2.00	.046*
Self-Efficacy of Channel Usage	.29	.08	3.45	.001**
Innovativeness	.25	.08	3.19	.002**

Note. $R^2 = .151$, $F(5,260) = 9.258$, $p < .001$, * $p < .05$, ** $p < .01$

The prediction of the intention to use Facebook in Online Customer Support is provided in Table 10. This table explains 4% of the variance of the intention to use Facebook by Situational Characteristics and Personal Characteristics ($R^2 = .038$, $F = 2.077$, $p = .069$). Table 9 shows that Self-Efficacy of Channel Usage ($b = -.20$, $t = -2.49$, $p = .013$) is negatively influencing the intention to use Facebook. Moreover, the factors Complexity ($b = .05$, $t = .66$, $p = .511$), Time Pressure ($b = .05$, $t = .72$, $p = .473$), Involvement ($b = -.04$, $t = -.41$, $p = .680$) and Innovativeness ($b = -.02$, $t = -.27$, $p = .787$) do not have influence on the intention to use Facebook.

Table 10 The relation between Situational Characteristics, Personal Characteristics and the intention to use Facebook

Factor	B	SE	t	Sig.
Complexity	.05	.07	.66	.511
Time Pressure	.05	.06	.72	.473
Involvement	-.04	.09	-.41	.680
Self-Efficacy of Channel Usage	-.20	.08	-2.49	.013*
Innovativeness	-.02	.08	-.27	.787

Note. $R^2 = .038$, $F = 2.077$, $p = .069$, * $p < .05$, ** $p < .01$

Table 11 shows the relations between Situational Characteristics and Personal Characteristics on Channel Choice on the intention to use Twitter. This model explains 4% of the variance of the intention to use Twitter ($R^2 = .043$, $F = 2.358$, $p = .041$). Even as for Facebook, the intention to make use of Twitter is negatively influenced by Self-Efficacy of Channel Usage ($b = -.27$, $t = -3.32$, $p = .001$). Furthermore, Complexity ($b = -.05$, $t = -.63$, $p = .527$), Time Pressure ($b = .05$, $t = .79$, $p = .428$), Involvement ($b = -.04$, $t = -.44$, $p = .661$) and Innovativeness ($b = .09$, $t = 1.16$, $p = .246$) do not influence the intention to use Twitter.

Table 11 The relation between Situational Characteristics, Personal Characteristics and the intention to use Twitter

Factor	B	SE	t	Sig.
Complexity	-.05	.07	-.63	.527
Time Pressure	.05	.06	.79	.428
Involvement	-.04	.09	-.44	.661
Self-Efficacy of Channel Usage	-.27	.08	-3.32	.001**
Innovativeness	.09	.08	1.16	.246

Note. $R^2 = .043$, $F = 2.358$, $p = .041$, * $p < .05$, ** $p < .01$

The provided results of this study suggest that Time Pressure, Involvement and Innovativeness positively influence customers' choice for support by email. Self-Efficacy of Channel Usage is shown to positively influence the preference to make use of web-help and email, while it is negatively related to make use of Facebook and Twitter. However, no relation is shown that these intentions also lead to actual behaviour. The results of the research model and its associated hypotheses are summarised in Table 12.

From this part of the report, the respondents who made use of Twitter are excluded from the results because no comparison could be made because the limited response on Facebook and Twitter and its associated low intention among the respondents.

Table 12 Hypotheses of the Intention of Channel Usage

	Hypothesis	Supported
H3a	Complexity influences the Intention of Channel Usage in Online Customer Support	No
H3b	Time Pressure influences the Intention of Channel Usage in Online Customer Support	No
H3c	Involvement influences the Intention of Channel Usage in Online Customer Support	By email
H4a	Self-Efficacy of Channel Usage influences the Intention of Channel Usage in Online Customer Support	Yes
H4b	Innovativeness influences the Intention of Channel Usage in Online Customer Support	By web-help and email

4.3 The relation between Perceived Service Quality and Customer Satisfaction

In this study, Perceived Service Quality consists of the dimensions Empathy, Assurance, Responsiveness, Reliability and Personalisation and are all hypothesised to influence Customer Satisfaction. Table 13 shows the average scores of these dimensions, which are measured on a seven-point likert-scale. The results show relatively high scores for Empathy ($M = 5.44$, $SD = 1.26$), Assurance ($M = 5.42$, $SD = 1.15$), Responsiveness ($M = 5.46$, $SD = 1.31$), Reliability ($M = 5.61$, $SD = 1.26$), Personalisation ($M = 4.80$, $SD = 1.31$) and Customer Satisfaction ($M = 6.02$, $SD = 1.12$). To measure the relation between Perceived Service Quality and Customer Satisfaction, the variables of Perceived Service Quality are first combined into one construct in order to measure the relation between Perceived Service Quality ($\alpha = .946$) and Customer Satisfaction. Linear Regression analysis shows that Perceived Service Quality is a predictor for Customer Satisfaction in Online Customer Support ($b = .53$, $t = 8.95$, $p < .001$), where about 24% of the variance of Customer Satisfaction is explained ($R^2 = .235$, $F(1,261) = 8.008$, $p < .001$).

Table 13 Mean scores of the Perceived Service Quality Dimensions and Customer Satisfaction

	<i>M</i>	<i>SD</i>
Empathy	5.44	1.26
Assurance	5.42	1.15
Responsiveness	5.46	1.31
Reliability	5.61	1.26
Personalisation	4.80	1.31
Customer Satisfaction	6.02	1.12

Second, the five dimensions are assessed by a multiple linear regression to describe if the separate dimensions would add significant value to the model with the other predictors. Table 16 provides the results of multiple regression analysis for the research model. The results show that the five dimensions explain about 27% of the variance ($R^2 = .268$, $F(5,257) = 18,782$, $p < .001$). As can be seen in Table 16, influences on Customer Satisfaction are shown by Reliability ($b = .24$, $t = 3.74$, $p < .001$) and Personalisation ($b = .22$, $t = 3.74$, $p < .001$). The other dimensions, Empathy ($b = .04$, $t = .47$, $p = .639$), Assurance ($b = -.01$, $t = -.12$, $p = .903$), and Responsiveness ($b = .05$, $t = .64$, $p = .524$) do not influence Customer Satisfaction in the research model.

Table 14 The relation between the Perceived Service Quality dimensions and Customer Satisfaction

Factor	<i>B</i>	<i>SE</i>	<i>t</i>	<i>Sig.</i>
Empathy	.04	.08	.47	.639
Assurance	-.01	.08	-.12	.903
Responsiveness	.05	.07	.64	.524
Reliability	.24	.07	3.74	.000**
Personalisation	.22	.06	3.74	.000**

Note. $R^2 = .268$, $F(5,257) = 18,782$, $p < .001$, * $p < .05$, ** $p < .01$

4.3.1 The role of Complexity on the relation between the Perceived Service Quality dimensions and Customer Satisfaction

Table 15 provides the moderating effect of Complexity on the relation between the Perceived Service Quality dimensions and Customer Satisfaction. This table includes a mean-split and distinguishes Low Complexity ($n = 142$, $M \leq 2.8365$) and High Complexity ($n = 121$, $M > 2.8365$). For Low Complexity situations, about 23% of the variance of Customer Satisfaction is explained ($R^2 = .225$, $F(5,136) = 7,890$, $p < .001$).

.001), while for High Complexity about 37% of the variance of Customer Satisfaction is explained ($R^2 = .367$, $F(5,115) = 13,322$, $p < .001$). Table 15 shows influences of Reliability in case of High Complexity ($b = .35$, $t = 4.10$, $p < .001$) and Personalisation in case customers experience Low Complexity ($b = .28$, $t = 3.33$, $p = .001$). No significant relations are found of Empathy, Assurance and Responsiveness in case customers experience either low or High Complexity.

Table 15 The moderating effect of Complexity on the relation between the Perceived Service Quality dimensions and Customer Satisfaction

Low Complexity					High Complexity			
Factor	B	SE	T	Sig.	B	SE	t	Sig.
Empathy	.09	.11	.84	.405	-.11	.13	-.82	.415
Assurance	-.05	.11	-.49	.625	.10	.12	.86	.394
Responsiveness	-.04	.11	-.39	.695	.17	.10	1.75	.083
Reliability	.17	.10	1.72	.088	.35	.08	4.10	.000**
Personalisation	.28	.08	3.33	.001**	.15	.09	1.76	.082

Note. Low Complexity: $n = 142$, $R^2 = .225$, $F(5,136) = 7,890$, $p < .001$, High Complexity: $n = 122$, $R^2 = .367$, $F(5,115) = 13,322$, $p < .001$, * $p < .05$, ** $p < .01$

4.3.2 The role of Time Pressure on the relation between the Perceived Service Quality dimensions and Customer Satisfaction

Table 16 shows the moderating effect of Time Pressure on the relation between the Perceived Service Quality dimensions and Customer Satisfaction. This analysis includes a mean-split and distinguishes Low Time Pressure ($n = 155$, $M \leq 2.5184$) and High Time Pressure ($n = 108$, $M > 2.5184$). For Low Time Pressure, about 22% of the variance of Customer Satisfaction is explained ($R^2 = .217$, $F(5,149) = 8,240$, $p < .001$), while for High Time Pressure about 37% of the variance of Customer Satisfaction is explained ($R^2 = .374$, $F(5,102) = 12,211$, $p < .001$).

Table 16 The moderating effect of Time Pressure on the relation between the Perceived Service Quality dimensions and Customer Satisfaction

Low Time Pressure					High Time Pressure			
Factor	B	SE	t	Sig.	B	SE	t	Sig.
Empathy	.14	.11	1.34	.184	-.15	.14	-1.10	.273
Assurance	-.03	.09	-.36	.723	.07	.15	.46	.645
Responsiveness	-.06	.09	-.72	.473	.25	.12	2.14	.035*
Reliability	.13	.08	1.57	.120	.36	.10	3.53	.001**
Personalisation	.24	.07	3.40	.001**	.16	.11	1.53	.130

Note. Low Time Pressure: $n = 155$, $R^2 = .217$, $F(5,149) = 8,240$, $p < .001$, High Time Pressure: $n = 108$, $R^2 = .374$, $F(5,102) = 12,211$, $p < .001$, * $p < .05$, ** $p < .01$

Results show that Responsiveness influences Customer Satisfaction in case customers experience High Time Pressure ($b = .25$, $t = 2.14$, $p = .035$), while no influence is found for Responsiveness on Customer Satisfaction when Low Time Pressure is experienced ($b = -.06$, $t = -.72$, $p = .473$). Moreover, positive influences are found between Reliability and Customer Satisfaction when High Time Pressure is experienced ($b = .36$, $t = 3.53$, $p < .001$), and Personalisation when Low Time Pressure is experienced ($b = .24$, $t = 3.40$, $p = .001$). The results do not show influences of Empathy and Assurance on Customer Satisfaction when the customer experiences either Low or High Time Pressure.

4.4 The relation between Customer Satisfaction and Service Loyalty

This study hypothesises that Customer Satisfaction positively influences Service Loyalty, which could be confirmed by this study. Results of this study provide that Customer Satisfaction is positively related to Service Loyalty ($b = .68$, $t = 15.54$, $p < .001$) and explains about 48% of the variance ($R^2 = .481$, $F(1,261) = 241,455$, $p < .001$). This indicates that Customer Satisfaction might mediate the relation between the Perceived Service Quality dimensions and Service Loyalty and will be further explained in chapter 4.5.

Table 17 provides the results of a Multiple Regression Analysis and shows the influence of Customer Satisfaction and the Perceived Service Quality dimensions on Service Loyalty. This model explains 50% of the variance of Service Loyalty ($R^2 = .501$, $F(6,256) = 42,890$, $p < .001$). This indicates that Customer Satisfaction might mediate the relation between the Perceived Service Quality dimensions and Service Loyalty and will be further explained in chapter 4.5.

Table 17 is shown that Customer Satisfaction has a significant positive influence on Service Loyalty when the dimensions of Perceived Service Quality are also considered to influence Service Loyalty ($b = .61$, $t = 12.13$, $p < .001$). This indicates that Customer Satisfaction might mediate the relation between the Perceived Service Quality dimensions and Service Loyalty and will be further explained in chapter 4.5.

Table 17 The relation between Customer Satisfaction and the Perceived Service Quality dimensions on Service Loyalty

Factor	B	SE	t	Sig.
Empathy	.06	.07	.93	.355
Assurance	.07	.06	1.05	.295
Responsiveness	.02	.06	.29	.776
Reliability	.02	.05	.36	.718
Personalisation	.00	.05	-.06	.953
Customer Satisfaction	.61	.05	12.13	.000**

Note. $N = 263$, $R^2 = .501$, $F(6,256) = 42,890$, $p < .001$, * $p < .05$, ** $p < .01$

4.5 The relation between Perceived Service Quality and Service Loyalty

The Perceived Service Quality dimensions are all hypothesised to positively influence Service Loyalty. Results of this study show that when Perceived Service Quality is considered as one construct, which covers the dimensions Empathy, Assurance, Responsiveness, Reliability and Personalisation, this construct positively influences Service Loyalty ($b = .49$, $t = 8.28$, $p < .001$). In this analysis, 21% of the variance of Service Loyalty is explained ($R^2 = .21$, $F(1,261) = 68,539$, $p < .001$). Further analysis is shown in Table 18 and provides the results of the research model by a Multiple Regression Analysis. In this analysis, 22% of the variance of Service Loyalty is explained ($R^2 = .215$, $F(5,257) = 14,005$, $p < .001$). The results show that only Reliability ($b = .17$, $t = 2.56$, $p = .011$) and Personalisation ($b = .13$, $t = 2.21$, $p = .028$) have a positive influence on Service Loyalty in Online Customer Support. However, no statistical evidence is found for Empathy ($b = .09$, $t = 1.02$, $p = .307$), Assurance ($b = .06$, $t = .76$, $p = .466$) and Responsiveness ($b = .04$, $t = .61$, $p = .540$) to influence Service Loyalty.

Table 18 The relation between the Perceived Service Quality dimensions and Service Loyalty

Factor	B	SE	t	Sig.
Empathy	.09	.09	1.02	.307
Assurance	.06	.08	.76	.446
Responsiveness	.04	.07	.61	.540
Reliability	.17	.07	2.56	.011*
Personalisation	.13	.06	2.21	.028*

Note. $N = 263$, $R^2 = .215$, $F(5,257) = 14.005$, $p < .001$, * $p < .05$, ** $p < .01$

Chapter 4.4 provides that when Customer Satisfaction is controlled the dimensions of Perceived Service Quality do not influence Service Loyalty. This indicates a complete mediation of Customer Satisfaction between Reliability, Personalisation and Service Loyalty. A Sobel-test show a significant mediating effect of Customer Satisfaction between both Reliability ($S = 3.30$, $SE = .04$, $p < .001$) and Personalisation ($S = 3.51$, $SE = .04$, $p < .001$) in their relation with Service Loyalty

4.6 Perceived Service Quality in Online Customer Support per service channel

In the previous section is described to what extent Perceived Service Quality is related to Customer Satisfaction and Service Loyalty in Online Customer Support. However, this study includes multiple service channels. Therefore chapter 4.6.1 outlines how the research model looks for the web-help. In addition, chapter 4.6.2 provides the influences of the Perceived Service Quality dimensions on Customer Satisfaction and Service Loyalty when Online Customer Support is offered by email.

4.6.1 Perceived Service Quality of web-help in Online Customer Support

Table 19 provides the influences of the Perceived Service Quality dimensions on Customer Satisfaction and Service Loyalty when support is offered web-help. In this analysis is 34% of the variance of Customer Satisfaction explained by the dimensions of Perceived Service Quality ($R^2 = .344$, $F(5,135) = 14.143$, $p < .001$). As provided in Table 19, Responsiveness ($b = .25$, $t = 2.18$, $p = .031$) and Reliability ($b = .38$, $t = 4.32$, $p < .001$) positively influence Customer Satisfaction when web-help is consulted. The dimensions Empathy ($b = -.18$, $t = -1.46$, $p = .146$), Assurance ($b = .06$, $t = .63$, $p = .530$) and Personalisation ($b = .13$, $t = 1.80$, $p = .074$) do not add significant value to the research model.

Table 19 The relation between the Perceived Service Quality dimensions and Customer Satisfaction by web-help

Factor	B	SE	t	Sig.
Empathy	-.18	.12	-1.46	.146
Assurance	.06	.09	.63	.530
Responsiveness	.25	.11	2.18	.031*
Reliability	.38	.09	4.32	.000**
Personalisation	.13	.07	1.80	.074

Note. $n = 141$, $R^2 = .344$, $F(5,135) = 14.143$, $p < .001$, * $p < .05$, ** $p < .01$

This study hypothesises that Customer Satisfaction influences Service Loyalty, and is confirmed by the results of this study ($b = .73$, $t = 13.51$, $p < .001$). In this analysis, 57% of the variance of Service Loyalty ($R^2 = .568$, $F(1,139) = 182.435$, $p < .001$) is explained by Customer Satisfaction. Table 20 provides the influence of Customer Satisfaction on Service Loyalty when the Perceived Service Quality dimensions are also considered.

This analysis explains 59% of the variance of Service Loyalty ($R^2 = .588$, $F(6,134) = 31,902$, $p < .001$). The results show that Customer Satisfaction positively influences Service Loyalty ($b = .67$, $t = 1.05$, $p < .001$). No influences are found for the other Perceived Service Quality dimensions. This indicates a possible mediating effect of Customer Satisfaction on the relation between Responsiveness and Reliability, which will be further explained.

Table 20 The relation between Customer Satisfaction and the Perceived Service Quality dimensions on Service Loyalty by web-help support

Factor	B	SE	t	Sig.
Empathy	.12	.10	1.23	.221
Assurance	.01	.07	.18	.858
Responsiveness	.00	.09	-.02	.988
Reliability	.00	.07	.00	1.00
Personalisation	.03	.06	.47	.641
Customer Satisfaction	.67	.07	1.05	.000**

Note. $n = 141$, $R^2 = .588$, $F(6,134) = 31,902$, $p < .001$, * $p < .05$, ** $p < .01$

The relations between the dimensions of Perceived Service Quality on Service Loyalty are shown in Table 21, and explain 28% of the variance of Service Loyalty ($R^2 = .278$, $F(5,135) = 1.380$, $p < .001$). When support is offered by web-help, Reliability ($b = .26$, $t = 2.83$, $p = .005$) positively influences Service Loyalty. The influences of Empathy ($b = .00$, $t = -.02$, $p = .984$), Assurance ($b = .05$, $t = .55$, $p = .583$), Responsiveness ($b = .16$, $t = 1.42$, $p = .158$) and Personalisation ($b = .12$, $t = 1.54$, $p = .126$) on Service Loyalty are not shown to add significant value to the research model.

The positive relation between Reliability and Service Loyalty indicates a full mediation by Customer Satisfaction. Because when Customer Satisfaction is controlled in the research model, no significant relation is visible. This full mediation is confirmed by a Sobel-test ($S = 3.86$, $SE = .07$, $p < .001$).

Table 21 The relation between the Perceived Service Quality dimensions and Service Loyalty by web-help

Factor	B	SE	t	Sig.
Empathy	.00	.12	-.02	.984
Assurance	.05	.10	.55	.584
Responsiveness	.16	.12	1.42	.158
Reliability	.26	.09	2.83	.005**
Personalisation	.12	.08	1.54	.126

Note. $n = 141$, $R^2 = .278$, $F(5,135) = 1.380$, $p < .001$, * $p < .05$, ** $p < .01$

4.6.1.1 The role of Complexity on the relation between the Perceived Service Quality dimensions and Customer Satisfaction by web-help

Table 22 provides the results of a Multiple Regression Analysis on the influence of the Perceived Service Quality dimensions on Customer Satisfaction with a moderating effect of Complexity. The moderating effect is tested with a mean-split and distinguishes Low Complexity ($n = 75$, $M \leq 2.8954$) and High Complexity ($n = 66$, $M > 2.8954$). The results of Low Complexity explain 32% of the variance of Customer Satisfaction by the Perceived Service Quality dimensions ($R^2 = .321$, $F(5,69) = 6.516$, $p < .001$), while High Complexity explain 37% of the variance of Customer Satisfaction ($R^2 = .374$, $F(5,60) = 7.183$, $p < .001$).

Significant influences are shown for Reliability on Customer Satisfaction in case customers experience both Low Complexity ($b = .33$, $t = 2.76$, $p = .007$) and High Complexity ($b = .42$, $t = 3.10$, $p = .003$). No significant relations are found for Empathy, Assurance and Responsiveness on Customer Satisfaction for low-

and High Complexity. Although no significant relations are found on the influence of Personalisation on Customer Satisfaction, there is a large difference visible between these relations when Low Complexity ($b = .18, t = 1.81, p = .075$) and High Complexity is perceived ($b = .08, t = .61, p = .547$).

Table 22 The moderating effect of Complexity on the relation between the Perceived Service Quality dimensions and Customer Satisfaction by web-help

Low Complexity					High Complexity			
Factor	B	SE	t	Sig.	B	SE	t	Sig.
Empathy	-.17	.16	-1.01	.316	-.20	.21	-.94	.350
Assurance	.02	.12	.17	.864	.12	.17	.73	.466
Responsiveness	.23	.17	1.37	.174	.25	.18	1.40	.167
Reliability	.33	.12	2.76	.007**	.42	.14	3.10	.003**
Personalisation	.18	.10	1.81	.075	.08	.13	.61	.547

Note. Low Complexity: $n = 75, R^2 = .321, F(5,69) = 6.516, p < .001$, High Complexity: $n = 66, R^2 = .374, F(5,60) = 7.183, p < .001$ * $p < .05$, ** $p < .01$

The role of Time Pressure on the relation between the Perceived Service Quality dimensions and Customer Satisfaction by web-help

Table 23 provides the results of the moderating effect of Time Pressure on the relation of the Perceived Service Quality dimensions on Customer Satisfaction. The moderating effect is executed with a mean-split and distinguishes Low Time Pressure ($n = 87, M \leq 2.3783$) and High Time Pressure ($n = 54, M > 2.3783$). The research model of Low Time Pressure explains 29% of the variance of Customer Satisfaction by the Perceived Service Quality dimensions ($R^2 = .286, F(5,81) = 6.502, p < .001$), while this model for High Time Pressure explains 41% of the variance of Customer Satisfaction ($R^2 = .407, F(5,48) = 6.583, p < .001$). Moreover,

Table 23 provides significant relations between Reliability and Customer Satisfaction when both Low Time Pressure ($b = .23, t = 2.43, p = .017$) and High Time Pressure ($b = .62, t = 3.04, p = .004$) are experienced. However, no significant evidence is found for the relation between Empathy, Assurance, Responsiveness and Personalisation on Customer Satisfaction when both Low Time Pressure and High Time Pressure are experienced.

Table 23 The moderating effect of Time Pressure on the relation between the Perceived Service Quality dimensions and Customer Satisfaction by web-help

Low Time Pressure					High Time Pressure			
Factor	B	SE	t	Sig.	B	SE	t	Sig.
Empathy	-.08	.13	-.64	.523	-.32	.25	-1.27	.209
Assurance	.10	.10	.10	.322	-.06	.25	-.24	.809
Responsiveness	.16	.12	1.35	.182	.37	.23	1.56	.125
Reliability	.23	.09	2.43	.017*	.62	.20	3.04	.004**
Personalisation	.12	.08	1.51	.134	.16	.16	1.03	.311

Note. Low Time Pressure: $n = 87, R^2 = .286, F(5,81) = 6.502, p < .001$, High Time Pressure: $n = 54, R^2 = .407, F(5,48) = 6.583, p < .001$ * $p < .05$, ** $p < .01$

4.6.2 Perceived Service Quality of email in Online Customer Support

The influences of the dimensions of Perceived Service Quality on Customer Satisfaction are shown in Table 24. In this model is 38% of the variance of Customer Satisfaction explained by the dimensions of

Perceived Service Quality ($R^2 = .384$, $F(5,116) = 14.444$, $p < .001$). Moreover, Customer Satisfaction is influenced by Personalisation ($b = .56$, $t = 5.83$, $p < .001$). However, no statistical evidence is found for Empathy ($b = .16$, $t = 1.39$, $p = .168$), Assurance ($b = -.24$, $t = -1.81$, $p = .074$), Responsiveness ($b = -.05$, $t = -.54$, $p = .594$) and Reliability ($b = .07$, $t = .76$, $p = .448$) to influence Customer Satisfaction in Online Customer Support when support is offered by email.

Table 24 The relation between the Perceived Service Quality dimensions and Customer Satisfaction by email

Factor	B	SE	t	Sig.
Empathy	.16	.12	1.39	.168
Assurance	-.24	.13	-1.81	.074
Responsiveness	-.05	.08	-.54	.594
Reliability	.07	.09	.76	.448
Personalisation	.56	.10	5.83	.000**

Note. $n = 122$, $R^2 = .384$, $F(5,116) = 14.444$, $p < .001$, * $p < .05$, ** $p < .01$

Table 25 shows the relation between Customer Satisfaction and the Perceived Service Quality dimensions on Service Loyalty. In this table, Service Loyalty is for 43% explained by the dimensions of Perceived Service Quality and Customer Satisfaction ($R^2 = .429$, $F(6,115) = 14.407$, $p < .001$). Results provide significant evidence that Customer Satisfaction positively influences Service Loyalty ($b = .51$, $t = 5.74$, $p < .001$).

Table 25 The relation between Customer Satisfaction and the Perceived Service Quality dimensions on Service Loyalty by email support

Factor	B	SE	t	Sig.
Empathy	.03	.11	.22	.825
Assurance	.20	.13	1.53	.128
Responsiveness	.02	.08	.19	.847
Reliability	.03	.08	.32	.753
Personalisation	.04	.11	.35	.727
Customer Satisfaction	.51	.09	5.74	.000**

Note. $n = 122$, $R^2 = .429$, $F(6,115) = 14.407$, $p < .001$, * $p < .05$, ** $p < .01$

Table 26 shows the relation between the Perceived Service Quality dimensions and Service Loyalty. In this table, Service Loyalty is for 27% explained by the dimensions of Perceived Service Quality and Customer Satisfaction ($R^2 = .266$, $F(5,116) = 8.398$, $p < .001$). This table shows an influence of Personalisation on Service Loyalty ($b = .32$, $t = 3.10$, $p = .002$). Customer Satisfaction mediates this influence of Personalisation on Service Loyalty. ($S = 3.98$, $SE = .07$, $p < .001$). Nevertheless the other dimensions of Perceived Service Quality Empathy ($b = .11$, $t = .85$, $p = .396$), Assurance ($b = .07$, $t = .52$, $p = .602$), Responsiveness ($b = -.01$, $t = -.08$, $p = .936$) and Reliability ($b = .06$, $t = .64$, $p = .524$) do not provide statistical evidence to influence Service Loyalty.

Table 26 The relation between the Perceived Service Quality dimensions and Service Loyalty by email

Factor	B	SE	t	Sig.
Empathy	.11	.13	.85	.396
Assurance	.07	.14	.52	.602
Responsiveness	-.01	.09	-.08	.936
Reliability	.06	.09	.64	.524
Personalisation	.32	.10	3.10	.002**

Note. $n = 122$, $R^2 = .266$, $F(5,116) = 8.398$, $p < .001$ * $p < .05$, ** $p < .01$

4.6.2.1 The role of Complexity on the relation between the Perceived Service Quality dimensions and Customer Satisfaction by email

Table 27 shows the moderating effect of Complexity on the relation between the Perceived Service Quality dimensions and Customer Satisfaction. The moderating effect is measured with a mean-split ($M = 2.7684$). In the Low Complexity group ($n = 67$) is 35% of the variance of Customer Satisfaction explained by the dimensions of Perceived Service Quality ($R^2 = .352$, $F(5,61) = 6.634$, $p < .001$). In the High Complexity group ($n = 55$) is 52% of the variance of Customer Satisfaction explained by the dimensions of Perceived Service Quality ($R^2 = .517$, $F(5,49) = 1.482$, $p < .001$). Table 27 shows a significant relation of Personalisation on Customer Satisfaction when Low Complexity is experienced ($b = .63$, $t = 4.23$, $p < .001$). However, in case high complexity is experienced Personalisation does not influence Customer Satisfaction ($b = .42$, $t = .42$, $p = .126$). Although no more significant relations are found, the moderating effect of Complexity on the relation between Reliability on Customer Satisfaction shows large differences in case of Low Complexity ($b = .02$, $t = .12$, $p = .909$) and High Complexity ($b = .22$, $t = .22$, $p = .102$).

Table 27 The moderating effect of Complexity on the relation between the Perceived Service Quality dimensions and Customer Satisfaction by email

Low Complexity					High Complexity			
Factor	B	SE	t	Sig.	B	SE	t	Sig.
Empathy	.19	.18	1.06	.295	-.06	.17	-.06	.166
Assurance	-.32	.19	-1.67	.100	.08	.19	.08	.191
Responsiveness	-.13	.15	-.88	.383	.14	.11	.14	.105
Reliability	.02	.16	.12	.909	.22	.10	.22	.102
Personalisation	.63	.15	4.23	.000**	.42	.13	.42	.126

Note. $n = 67$, Low Complexity: $R^2 = .352$, $F(5,61) = 6.634$, $p < .001$, High Complexity: $n = 55$, $R^2 = .517$, $F(5,49) = 1.482$, $p < .001$, * $p < .05$, ** $p < .01$

4.6.2.2 The role of Time Pressure on the relation between the Perceived Service Quality dimensions and Customer Satisfaction by email

Table 28 provides the results of the moderating effect of Time Pressure on the relation between the Perceived Service Quality dimensions and Customer Satisfaction. The moderating effect is executed with a mean-split and distinguishes Low Time Pressure ($n = 70$, $M \leq 2.6803$) and High Time Pressure ($n = 52$, $M > 2.6803$). When Low Time Pressure is experienced ($n = 70$), 43% of the variance of Customer Satisfaction is explained by the dimensions of Perceived Service Quality ($R^2 = .430$, $F(5,64) = 9.646$, $p < .001$). Moreover, when High Complexity ($n = 52$) is experienced, the Perceived Service Quality dimensions explain 42% of the variance of Customer Satisfaction ($R^2 = .419$, $F(5,46) = 6.624$, $p < .001$). Table 28 provides a significant relation between Personalisation and Customer Satisfaction when both High Time Pressure ($b = .45$, $t = 2.50$, $p = .016$) and when Low Time Pressure is experienced ($b = .63$, $t = 4.60$, $p < .001$). However, no influences are found

between Empathy, Assurance, Reliability and Responsiveness and Customer Satisfaction when both Low Time Pressure and High Time Pressure are experienced.

Table 28 The moderating effect of Time Pressure on the relation between the Perceived Service Quality dimensions and Customer Satisfaction by email

Low Time Pressure					High Time Pressure			
Factor	B	SE	t	Sig.	B	SE	t	Sig.
Empathy	.15	.20	.76	.452	.06	.17	.35	.726
Assurance	-.26	.17	-1.52	.134	-.18	.24	-.76	.451
Responsiveness	-.20	.12	-1.70	.093	.23	.13	1.81	.076
Reliability	.08	.14	.55	.588	.15	.12	1.21	.233
Personalisation	.63	.14	4.60	.000**	.45	.18	2.50	.016*

Note. Low Time Pressure: $n = 70$, $R^2 = .430$, $F(5,64) = 9.646$, $p < .001$, High Time Pressure: $n = 52$, $R^2 = .419$, $F(5,46) = 6.624$, $p < .001$, * $p < .05$, ** $p < .01$

The described results are able to answer the set hypotheses and are summarised in Table 29. Chapter 5 will further describe, explain and discuss the research questions and the associated hypotheses.

Table 29 Overview of the prescribed hypotheses

	Hypothesis	Supported
H5a	Empathy is a determinant of Customer Satisfaction in Online Customer Support	No
H5b	Assurance is a determinant of Customer Satisfaction in Online Customer Support	No
H5c	Responsiveness is a determinant of Customer Satisfaction in Online Customer Support	In whole model, by web-help
H5d	Reliability is a determinant of Customer Satisfaction in Online Customer Support	In whole model, by web-help
H5e	Personalisation is a determinant of Customer Satisfaction in Online Customer Support	In whole model, by email
H6	Customer Satisfaction is a determinant of Service Loyalty in Online Customer Support	Yes
H7a	Complexity moderates the effect of Empathy on Customer Satisfaction in Online Customer Support	No
H7b	Time Pressure moderates the effect of Responsiveness on Customer Satisfaction in Online Customer Support	In whole model
H8a	Empathy is a determinant of Service Loyalty in Online Customer Support	No
H8b	Assurance is a determinant of Service Loyalty in Online Customer Support	No
H8c	Responsiveness is a determinant of Service Loyalty in Online Customer Support	No
H8d	Reliability is a determinant of Service Loyalty in Online Customer Support	In whole model, by web-help
H8e	Personalisation is a determinant of Service Loyalty in Online Customer Support	In whole model, by email

5 Discussion

This study attempts to determine the influences of Situational Characteristics and Personal Characteristics on Channel Choice. Moreover, this study provides the relation between the Perceived Service Quality dimensions, Customer Satisfaction and Service Loyalty in Online Customer Support and makes several important contributions to the existing literature. While previous literature is focused on only one online service channel, this study attempts to draw a view on the environment of Online Customer Support by taking multiple service channels into account. First, chapter 5.1 describes and discusses the influences of Situational Characteristics and Personal Characteristics on Channel Choice in Online Customer Support, and comes up with explanations for these relations. Second, chapter 5.2 draws the conclusions based on the results the study with regard to the relation between the Perceived Service Quality dimensions, Customer Satisfaction and Service Loyalty, which comes together with possible explanations based on literature. Third, chapter 5.3 mentions managerial implications that could be derived from the outcomes of this study. At last, chapter 5.4 emphasises the limitations of this study and provides directions for future research.

5.1 Discussing Channel Choice in Online Customer Support

This study contributes to a better understanding of Online Customer Support by examining the influences of both Situational Characteristics and Personal Characteristics on Channel Choice. The first aim of this study, as expressed in RQ1, is: *Which characteristics determine the choice for particular service channels in Online Customer Support?* The results of this study are based on customers who made use of web-help ($n = 141$) and email ($n = 122$). Due to the absence of (sufficient) respondents who made use of Twitter ($n = 3$) and Facebook ($n = 0$), this study is not able to give an explanation if Situational Characteristics and Personal Characteristics have a certain influence on Channel Choice. The small number of respondents who made use of these service channels for support could be explained by customers' low intention to make use of Twitter and Facebook in Online Customer Support, which is shown in Table 7. This is a noteworthy finding because previous literature emphasised the importance of Online Customer Support since the increasing appearance of online service channels (Kumar, 2010). It has to be stated that the study of Kumar (2010) focused on a broad B2C and B2B market, while in this study only one specific service provider is involved. In addition, the current hosting organisation is focused on online financial administration, which might cause different intentions to make use of the involved service channels.

This study hypothesised that Situational Characteristics Complexity, Time Pressure and Involvement influence Channel Choice in Online Customer Support. The first hypothesis, which expected Complexity to influence Channel Choice, is not supported. In other words, no statistical evidence is found that users' perception of the particular task and its associated motivation and ability does influence customers' decisions to make use of either web-helps or email. This might because of the relatively low mean score and the associated variance of Complexity in this study.

The second hypothesis suggests that Time Pressure influences Channel Choice in Online Customer Support. While previous literature found Time Pressure to influence the intention to make use of particular service channel, this study provide statistical evidence that Time Pressure also influences the actual choice to make use of a particular service channel. This is in line with literature of Oenema (2012) and Pieterse (2009), and means customers' perceptions of the amount of time they have between activities they need to execute influence their decision to make use of a particular service channel. To be more precise, when customers' perception of time they have increases, the usage of web-help in Online Customer Support increases. On the

other hand, when customers' perception of time they have decreases, the usage of email increases. This can be explained as following: if customers experience Time Pressure, they do not look for an answer themselves for the particular issue by web-help, but make use of email in order to solve the particular issue by the service provider. Point of discussion is that Time Pressure is shown to influence Channel Choice, but not to influence the intention to make use of one of the involved service channels. Previous literature suggested that intention is a strong predictor for behaviour (Ajzen, 1991). However, this contradicts with the findings of this study that found that the actual behaviour is influenced by Time Pressure, but not the intention to do this. This could possibly be explained by the measurement methods of this study. Channel Choice is registered at the moment of usage, while their Intention of Channel Usage is asked afterwards. This might cause that customers have a different view on their intentions when there are questioned than when the actual situation occurs.

The third hypothesis, which argues Involvement as a determinant of Channel Choice in Online Customer is also confirmed by this study. This corresponds with findings of Oenema (2012), who found Involvement to decrease the choice of an online service channel instead of the usage of telephone. However, this study considered telephone as a richer service channel than web-based self-service channels. In this study, the results provide also that the richer service channel, following the description of Daft and Lengel (1984), is chosen when customers' perception of Involvement towards the particular service issue increases. In other words, the Importance, Relevance, Concern, Meaning and Matters towards the particular issue positively influence the usage of email instead of web-help.

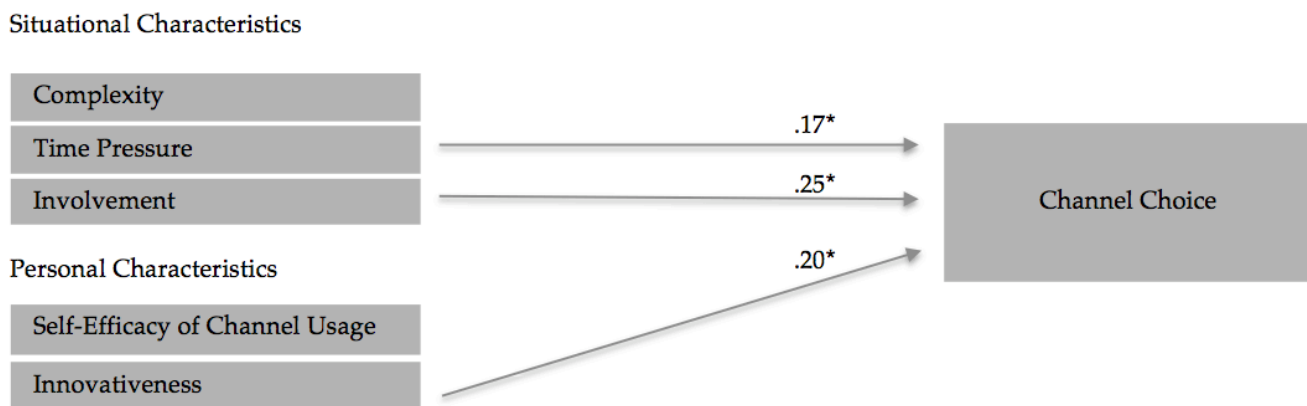
Besides Situational Characteristics, this study hypothesised that according to the literature Channel Choice in Online Customer Support is influenced by Personal Characteristics. Self-Efficacy of Channel Usage describes the extent to which customers consider themselves able to use the actual used service channel. However, no statistical evidence is found that Self-Efficacy of Channel Usage influences the actual choice of a particular service channel. Possible explanation for this outcome is the fact that customers could have similar abilities to make use of both web-help and email. However, this could not be provided with the results of this study. Besides this, this study does not explain if customers' might have used multiple service channels to solve a particular service issue. So, customers could have tried to solve their particular issue first by web-help before consulting support by email.

No significant relations are found that Self-Efficacy of Channel Usage influences Channel Choice, which contradicts with findings in previous literature (Hemmer, 2012; Oenema, 2012; Pieterse, 2009). However, Self-Efficacy of Channel Usage is found to positively influence customers' intention to use web-help and email. Customers who made use of, and consider themselves able to use, web-help or email have an increased intention to use these service channels. This is in line with findings of Pieterse (2009), who found that customers who have experience with a particular service channel are more likely to use it again. Different findings are shown for the intention to use Facebook and Twitter in Online Customer Support. Statistical evidence is found for Self-Efficacy of Channel Usage to negatively influence the intention to use Facebook or Twitter. This means when customers' extent to which consider themselves able to use web-help or email increase, their intention to make use of Facebook or Twitter decreases.

Second Personal Characteristic that is hypothesised is Innovativeness, and shows a positive influence on usage of email. This is in line with literature of Oenema (2012), who also found Innovativeness to have an influence on Channel Choice. This study confirms that the extent to which a customer engages in exploratory behaviour when it comes to trying new products or services has a positive influence on the usage of email instead of web-help. To be more precisely, customers with higher extents of Innovativeness are more likely to

use email, while people with lower extents of Innovativeness are more likely to use web-help. Point of discussion is the fact that Innovativeness is shown to positively influence the usage of email and negatively influences the usage of web-help. However, results of this study do also provide that Innovativeness positively influences the Intention of Channel Usage of both web-help and email. Thus, increased Innovativeness cause higher intentions to use web-help, but decreases the actual usage. Possible explanation for this contradiction could be found by the measurement methods used in this study. The Intention of Channel Usage is measured with a Multiple Regression Analysis, while the actual Channel Choice is measured with a Multinomial Logistic Regression Analysis. This means that the actual usage distinct the usage of either web-help or email. However, in the measurement of the Intention of Channel Usage no distinction is made between the involved service channels. This means that although customers have an increased intention to use multiple service channels, they finally decide to make use of one of them. Besides this, a stronger predictive value is found for the intention to use email compared to the intention to use web-help. This might explain that although the both positive intentions, finally the decision is made to use email to consult Online Customer Support.

Figure 4 Influences of Situational Characteristics and Personal Characteristics on Channel Choice



Note. Reference group: web-help, * $p < .05$

What furthermore could be derived from this study is that customers who made use of email have a significant higher intention to use email again, compared to customers who used web-help. Besides this, it has to be taken into account that this study distinguishes the usage of one particular service channels. However, customers are able to use multiple of the available service channels in order to solve a particular occasion. For example, before a customer consults support by email, they might have used the web-help before. This study does not describe if people tried to make use of multiple service channels to solve a particular issue, which could influence the results of this study.

Finally, the question arises in what way this study adds value to the existing literature. Where previous studies describe the influences of situational characteristics, task characteristics, channel characteristics, and emotional characteristics in offline environments (or involved one online channel), this study explained influences of Situational Characteristics and Personal Characteristics in an environment where multiple online service channels are available. Despite this study involved the influences of two categories, Situational Characteristics and Personal Characteristics, this study provides the following valuable contributions. First, Customers are consistent in their behaviour in the field of Channel Choice in Online Customer Support. Customers who made use of web-help and email have a high intention to make use of these service channels again, and do have little intentions to make use of other service channels such as Facebook and Twitter. This

is explained by the finding that when customers' extent to which they consider themselves able to make use of web-help and email increases, the intention to make use of Facebook and Twitter decreases. And second, this study confirms that Time Pressure, Involvement and Innovativeness, as shown in Figure 4, influence Channel Choice in Online Customer Support.

5.2 Discussing Perceived Service Quality, Customer Satisfaction and Service Loyalty

The importance of Online Customer Support that is suggested by Zeithaml (2009), Kumar (2010), He and Li (2011) is confirmed by this study. In accordance with prior research in both online and offline contexts, in Online Customer Support the Perceived Service Quality dimensions are also shown to have a major role to increase Customer Satisfaction and Service Loyalty. According to the literature, higher extents of particular Perceived Service Quality dimensions positively influence Customer Satisfaction (Wolfenbarger & Gilly, 2002; Zeithaml et al., 1988), which is also confirmed by this study. The results of this study are based on customers who made use of web-help ($n = 141$) and email ($n = 122$).

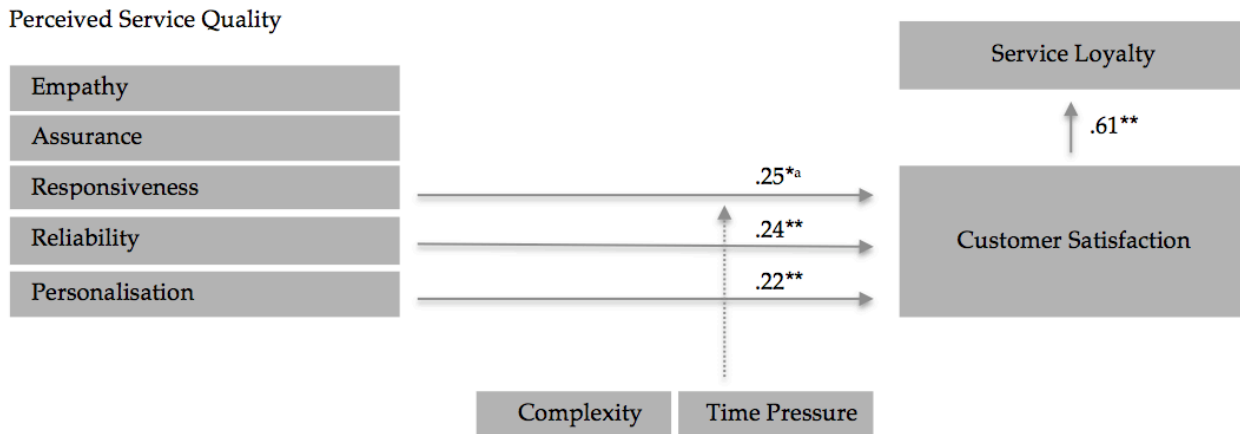
This study attempts, amongst others, to answer the following research question: *To what extent does the Perceived Service Quality dimensions influence Customer Satisfaction in Online Customer Support?* Hypothesised is that the five dimensions of Perceived Service Quality positively influence Customer Satisfaction. This study included Personalisation as a new dimension of Perceived Service Quality that furthermore exists of previously used SERVQUAL dimensions. Nevertheless, the results show different outcomes than expected. First, expected was that Empathy positively influences Customer Satisfaction. However, no significant relation is found between Empathy and Customer Satisfaction. In other words, this study does not provide statistical evidence that caring and individualised attention to customers offered in Online Customer Support leads to increased Customer Satisfaction. This is in line with arguments of Zeithaml et al. (2002), who argued that customers only look for Empathy in offline contexts. However, this result contradicts findings of Oenema (2012), who found Empathy to influence Customer Satisfaction in the context of online damage reports. This contradiction with our expectations could be explained by the environment, the low variance of Empathy, and the fact that the Multiple Regression Analysis might have faded away the effects of Empathy by the other four dimensions.

Second, the hypothesis that Assurance influences Customer Satisfaction is not supported in this study. This means that no statistical evidence is found that customers' sense of safety and belief that the service provider is knowledgeable has a relation with Customer Satisfaction in Online Customer Support. The same arguments as for Empathy can be mentioned to explain this. The five dimensions of Perceived Service Quality mutually influence their effects on Customer Satisfaction, which causes that individual influences are faded away by the influences of the other dimensions. Moreover, the low variance might cause that these dimensions are not significant in the research model. In addition, findings in previous literature are focused on different contexts and service channels, which might suggest the influences of Empathy and Assurance, are less important in Online Customer Support.

Third, this study expected that Responsiveness is positively related to Customer Satisfaction. However, the results of this study do not provide statistical evidence that Responsiveness directly influences Customer Satisfaction. Moreover, a moderating influence of Time Pressure was hypothesised on this relation, which is finally confirmed by this study. Results of this study describe companies' willingness to help customers and provide prompt service only leads to increased Customer Satisfaction in case of little amounts of

time to execute multiple activities are experienced by customers. Possible explanation therefore is provided by Oenema (2012) and Pieterse (2009). They argue that customers are more likely to choose a richer service channel when they are in a hurry. This might indicate that customers look for quick response in such situations. Quick response is covered in Responsiveness, and therefore this study is able to explain when High Time Pressure is perceived Responsiveness positively influences Customer Satisfaction.

Figure 5 Influences of Perceived Service Quality dimensions on Customer Satisfaction and Service Loyalty



Note. ^a = significant in the High Time Pressure condition, * $p < .05$, ** $p < .01$

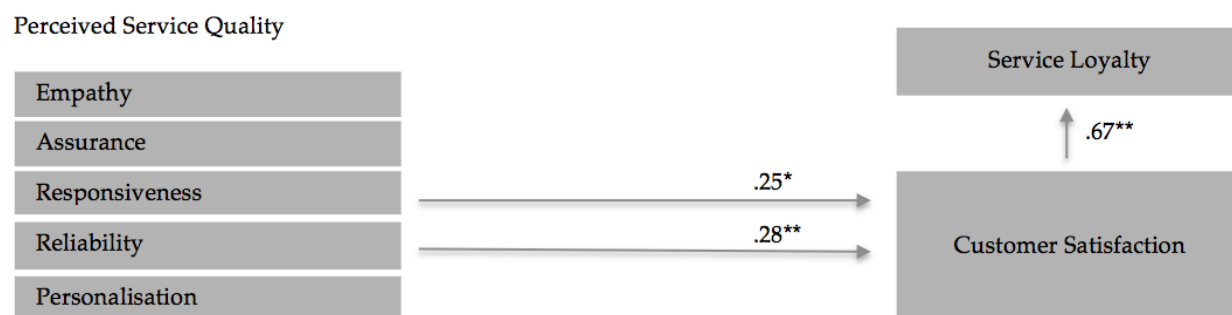
Fourth, Reliability is shown to add significant value to the research model given a positive influence on Customer Satisfaction. Reliability is considered a key concept of Perceived Service Quality and rated as most important for customers in traditional service channels (Zeithaml et al., 1988). This finding is in line with previous literature in both online and offline environments (Wolfinbarger & Gilly, 2002; Zeithaml et al., 1988; Zeithaml et al., 2000). This relation means that when customers perceive higher levels of accurate and dependable performed promised service, this leads to increased Customer Satisfaction.

Fifth, also statistical evidence is found for Personalisation to positively influence Customer Satisfaction. Despite this factor is traditionally not considered as a dimension of Perceived Service Quality and do not origin from SERVQUAL, this factor is previously found to influence Customer Satisfaction in offline and e-commerce environments. The found relation in Online Customer Support means that customers' perception of the individualised attention and differentiated service that fits individuals' needs and preferences is also a determinant of Customer Satisfaction in Online Customer Support. Because traditionally Personalisation is not considered as a dimension of Perceived Service Quality of SERVQUAL, this study adds value to previous literature by showing the critical role of Personalisation as a dimension of Perceived Service Quality.

Third research question of this study is: *To what extent influences Customer Satisfaction Service Loyalty?* The importance of Service Loyalty, which is previously suggested by Caruana (2002), Parasuraman et al. (2005) and Setó-Pamies (2012) in both offline and online contexts, accounts also in the context of Online Customer Support. Figure 5 shows the research model and provides the relation between Customer Satisfaction and Service Loyalty in Online Customer Support. The research model shows that Customer Satisfaction has a strong predictive value for Service Loyalty. This means that customers' evaluation of the particular service is influencing customers' attitude, repurchasing behaviour and consideration to use only the particular service provider when need for this service exists.

Fourth research question that this study attempts to answer, as formulated in RQ4, is: *To what extent does the Perceived Service Quality dimensions influence Service Loyalty in Online Customer Support?* Besides the positive influences of Reliability and Personalisation on Customer Satisfaction, Reliability and Personalisation are mediated by Customer Satisfaction to influence Service Loyalty. The non-significant results of Empathy, Assurance, and Responsiveness to influence Service Loyalty could be explained by the fact that Service Loyalty is a result of Customer Satisfaction. Because these dimensions are not related to Customer Satisfaction, a direct influence of Empathy, Assurance and Responsiveness on Service Loyalty is unlikely. However, when Customer Satisfaction is controlled in the research model the dimensions Responsiveness, Reliability and Personalisation are not longer affecting Service Loyalty. This means that Customer Satisfaction has a complete mediating effect on the relations between these dimensions and Service Loyalty.

Figure 6 Influences of Perceived Service Quality dimensions on Customer Satisfaction and Service Loyalty by web-help

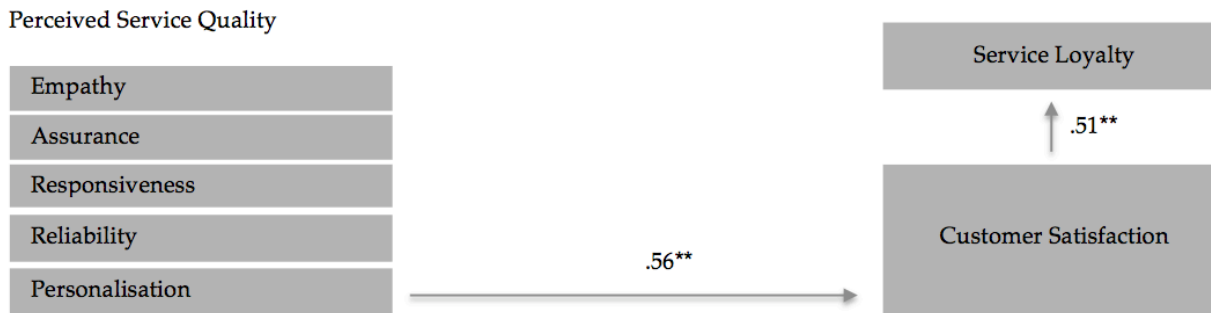


Note. * $p < .05$, ** $p < .01$

The last research question is: *To what extent differs the influence of the Perceived Service Quality dimensions on Customer Satisfaction and Service Loyalty for the involved service channel web-help, email, Facebook and Twitter?* This adds value for both academics and managerial purposes. Figure 6 shows how the research model looks for web-help, and provides that Responsiveness and Reliability contribute to increased Customer Satisfaction. This needs some further explanation. As discussed in chapter 5.1, when Time Pressure decreases, the usage of web-help increases. However, customers who made use of web-help show that Responsiveness, which covers companies' willingness to help customers and provide prompt service, leads to increased Customer Satisfaction. Thus, although these customers have a lower probability to experience Time Pressure, Responsiveness is nevertheless positive related to Customer Satisfaction. In addition to its positive relation with Customer Satisfaction, Reliability is also shown to positively influence Service Loyalty. This relation means that when customers perceive a higher level of accurate and dependable performed promised service, this leads to a higher extent of repeat purchasing, a positive attitude, and consider to use only this provider when a need for this service occur.

The discussed research model focused on web-help shows differences with the research model focused on email. Figure 7 shows the research model for Online Customer Support by email. When support by email is provided, Personalisation influences both Customer Satisfaction and Service Loyalty. The shown relation means when customers' have a perception of individualised attention and differentiated service that fits their needs and preferences, this leads to a positive evaluation, a higher extent of repeat purchasing behaviour and the consideration to make only use of the involved service provider.

Figure 7 Influences of Perceived Service Quality dimensions on Customer Satisfaction and Service Loyalty by email



Note. * $p < .05$, ** $p < .01$

The different results between web-help and email could be explained as following. First, it is shown that customers are influenced by Time Pressure, Involvement and Innovativeness to make use of either web-help or email. This means that there might be differences in the situations and personal characteristics that cause customers to choose a service channel. It might that these differences influence their expectations, which finally will be included in their judgement about the Perceived Service Quality dimensions. Second, in the study of Oenema (2012) are the involved service channels distinguished in terms of richness. This means that service channels differ in abilities and characteristics, which is explained by the Media Richness Theory (Daft & Lengel, 1984). Although there is criticism on this theory, email offers the ability to transmit multiple cues and interaction with a service employee is possible. In addition, email has a larger ability to establish a personal focus, while web-help is quicker medium in order to retrieve response of a service provider. This might suggest that abilities and characteristics of service channels could explain differences in the results.

Finally, what could be concluded from this study? Summarised are the main conclusions of this study, which confirm that:

- Personalisation is a dimension of Perceived Service Quality.
- Reliability, Personalisation and Responsiveness (When High Time Pressure is experienced) positively influence Customer Satisfaction in Online Customer Support.
- Reliability and Personalisation positively influence Service Loyalty in Online Customer Support.

When these relations are shown for the service channels web-help and email, this study shows that:

- Responsiveness and Reliability positively influence Customer Satisfaction, which mediates these influences on Service Loyalty, when Online Customer Support is offered by web-help.
- Personalisation positively influences Customer Satisfaction, which mediates these influences on Service Loyalty, when Online Customer Support is offered by email.

5.3 Managerial implications

In terms of managerial implications, the results indicate Online Customer Support is an important service in order to increase Customer Satisfaction and Service Loyalty. Marketers should therefore not underestimate the power of Online Customer Support. What can be considered from this study is the fact that customers rarely consider making use of Facebook and Twitter. The usage of web-help and email is notwithstanding popular among the customers, who also showed to have a high extent of Customer Satisfaction and an over average score on Service Loyalty. Offering support by these two service channels could be considered as essential in order to increase Customer Satisfaction and Service Loyalty.

Apart from this, the low intention to make use of Facebook and Twitter does not directly mean organisations should stop offering their support services by these channels for the following reasons. First, the little amount of users who prefer to make use of both Facebook and Twitter might negatively react on this decision. Second, it might be that companies have a support system where multiple service channels are integrated. This will cause that no additional effort and costs are required to answer on service request by these service channels. Third, companies might benefit Facebook and Twitter in other ways, such as informing customers and for advertising purposes. However, leaving these service channels could only be considered when additional effort or costs are required for offering services by these channels while no additional benefits are available.

What furthermore could be derived from the results is that customers who experience High Time Pressure are influenced to make more use of email instead of web-help. In addition, the results provide that when High Time Pressure is experienced, Responsiveness leads to increased Customer Satisfaction. Thus, companies should therefore focus on showing willingness to help customers and provide prompt service. More specific, in web-help companies should focus on Reliability and Responsiveness of their services. Organisations might benefit these findings by optimising web-help to improve quick answers on customers' questions. In addition, Reliability is also directly related to Service Loyalty. Organisations should therefore focus on offering useful and accurate answers on customers' questions by web-help to benefit this advantage.

Moreover, when customers' Involvement towards a particular issue increases, the usage of email also increases. It might be that in such situations customers look for more personal attention to solve a particular issue. When Online Customer Support is offered by email, results provide the importance of Personalisation. To benefit the advantages of increased Customer Satisfaction and Service Loyalty, organisations should therefore focus on offering customers an increased perception of individualised attention and differentiated service that fits the needs and preferences of customers. In addition, companies might benefit this by forcing a conversation with customers. For example, companies could send new customers an email that invites them to ask questions and show willingness to assist them with the particular service. This might lead to increased support effort, but offers an opportunity to offer personalised attention to customers that increases Customer Satisfaction, which in turn leads to Service Loyalty.

Another implication that could be derived from this study is that customers are consistent in their behaviour regarding Channel Choice. Customers who made use of web-help and email are not likely to switch to the different service channels Facebook and Twitter. In case the usage of these service channels are stimulated, it will be more likely to guide new customers without experience of web-help and email to these service channels. In addition, customers who made use of email are less likely to make use of web-help instead of using email again. This means that companies' efforts in support by email might increase. Given the fact that support by email has higher costs than web-help, this might be accompanied with increased costs of Online Customer Support.

5.4 Limitations and Future research directions

The discussed results have, such as every study, some gaps that create directions for future research. First, it has to be stated that this study is focused on a provider of financial administration software for freelancers and SME's. Note that it is common for customers of such online services to make use of online service channels, because the involved service is only online available. Noteworthy finding is the low intention to make use of Facebook and Twitter in Online Customer Support. Although the increasing

importance of online service channels (Zeithaml, 2009), in Online Customer Support Facebook and Twitter are less likely to be used. This causes an interesting subject of future research. However, in other online service the presence of support by Facebook and Twitter could be more important. The results may therefore not be generalised to every provider of Online Customer Support. For that reason, the research model should be tested in different online environments.

Another direction for future research is to have a more in depth focus on the influence of Self-Efficacy of Channel Usage. Results of this study provided that Self Efficacy of Channel Usage is positively related to the Intention of Channel Usage for web-help and e-mail. In addition, this study is able to describe is that higher extents of self-efficacy to make use of both web-help and email is negatively related to the intention to make use of Facebook and Twitter. However, this study measured only the Self-Efficacy of Channel Usage of the actual used service channel. Therefore, this study is not able to explain if the low intention to make use of Facebook and Twitter is caused by a lack of Self-Efficacy of Channel Usage. For that reason, future research have to explain if particular service channels are preferred, or used above another due to lack of Self-Efficacy of Channel Usage of the other service channels.

Moreover, future research has to provide a better understanding which characteristics cause the little (intention of) usage of Facebook and Twitter. Although this research provides a low intention to use Facebook and Twitter for Online Customer Support, it might that Facebook and Twitter has an added value for organisations for different purposes. A direction for future research is to investigate other fields wherein service providers might benefit Facebook and Twitter.

This study provided that Time Pressure influences Channel Choice. However, no relations are found that Time Pressure influences the Intention of Channel Usage. This means that the actual behaviour takes place while there is no statistical evidence for the intention to do this. Given the fact that intention is a strong predictor for actual behaviour (Ajzen, 1991), this finding needs further explanation. Fact is that the current study measured the actual behaviour at a different moment than the intention, which is measured afterwards. Future research should therefore focus on the moment of questioning customers' intention, which needs to be measured at the same time customers have to make the decision to make use of a particular service channel.

Furthermore, this study tested the moderating effect of Complexity and Time Pressure by a mean split. Thus can be considered as a point of discussion. A mean split is often used in social science, and provides a possibility to categorise scores of a continuous variable. The advantage of this method is that it offers the ability to make a distinction between low and high scores. However, there are two points of discussion regarding this method. First, values above or under the mean score are treated the same as values further away from the mean. For example, when the mean score of Time Pressure is 3.0 and a participant had a mean of 3.10 on that scale the participant is categorised in the group with a High Time Pressure. Even if the score is more inclined to the group with a low score of Time Pressure. Second, when a continuous variable is categorised, its power become less accurate and therefore it is harder to find effects that are present. A direction of future research is therefore to further investigate the role of Time Pressure on the relation between Responsiveness and Customer Satisfaction.

Another limitation which has to be described, is the fact that previous literature found that service quality is based on the gap between Perceived Service Quality and expected service quality (Zeithaml et al., 1988). However, this study only includes the dimensions of Perceived Service Quality. Future research should therefore take also customers' expectations and previous experiences into account while making use of Online Customer Support.

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Appendix A

English	Dutch
You recently used the web-help or customer support of MoneyBird. We are interested in the situation that caused you to use this	Je hebt enkele dagen geleden gebruik gemaakt van de help-functie of de klantenservice van MoneyBird. We willen graag meer weten over de situatie die jou er toe zette om hier gebruik van te maken
I found this to be a complex task	Ik vond dit een ingewikkelde situatie
This task was mentally demanding	Deze situatie vroeg veel geestelijke inspanning
This task required a lot of thought and problem solving	Deze situatie vroeg veel aandacht en gepuzzel
I found this to be a challenging task	Ik vond dit een uitdagende situatie om op te lossen
<i>Items and their adapted translations adopted from Complexity (Maynard & Hakel, 1997)</i>	

English	Dutch
At the moment I made use of the web-help or customer support of MoneyBird...	Op het moment dat ik enkele dagen geleden gebruik maakte van de help-functie of de klantenservice van MoneyBird...
I found myself pressed for time	Was ik in tijdnood
I was in a hurry	Had ik haast
There was so much to do that I wish I had more time	Was er zoveel te doen dat ik meer tijd had willen hebben
<i>Items and their adapted translations adopted from Time pressure (Srinivasan and Ratchford 1991)</i>	

English	Dutch
You recently used the web-help or customer support of MoneyBird. The situation that caused you to use this was for me...	Enkele dagen geleden maakte je gebruik van de help-functie of de klantenservice van MoneyBird. De situatie die jou er toe zette om hier gebruik van te maken was voor mij...
Important – Unimportant*	Belangrijk- Onbelangrijk*
Relevant – Irrelevant*	Relevant - Niet relevant*
Means a lot to me - Means nothing for me*	Betekent veel voor mij - Betekent niets voor mij*
Matters to me - Doesn't matter*	Telt voor mij mee- Telt niet voor mij*
Of no concern - Of concern to me	Niet van belang voor mij - Van belang voor mij
<i>Items and their adapted translations adopted from Involvement (McQuarrie & Munson, 1992)</i>	

English	Dutch
You recently made use of Channel X. Fill in the following questions with regard to your usage of Channel X	Je hebt enkele dagen geleden gebruik gemaakt van Kanaal X. Vul onderstaande vragen in met betrekking tot jouw gebruik van Kanaal X.
I am fully capable of using Channel X	Ik heb voldoende kennis om Kanaal X te gebruiken
I am confident in my ability to use Channel X	Ik heb vertrouwen in mijn eigen kunnen om Kanaal X te gebruiken
Using Channel X is well within the scope of my abilities.	Het gebruik van Kanaal X past ruim binnen mijn capaciteiten
<i>Items and their adapted translations adopted from Knowledge of Service Channel (Oenema, 2012)</i>	

English	Dutch
When I see a service a product somewhat different from the usual, I check it out	Wanneer ik een service of product zie die anders is dan gebruikelijk, ben ik geneigd om te bekijken hoe het werkt
I am often among the first people to try a new service or product	Ik ben vaak een van de eersten die gebruik maakt van een nieuwe service of product
I like to try new and different things	Ik probeer graag nieuwe dingen
<i>Items and their adapted translations adopted from Innovativeness (Darden & Perreault Jr, 1976)</i>	

English	Dutch
If in the future a similar situation occurs, I am likely to solve this by	Indien in de toekomst een vergelijkbaar probleem zich voordoet, is het waarschijnlijk dat ik dit probeer op te lossen via
Web-help	De help-functie
Email	Email
Twitter	Twitter
Facebook	Facebook

English	Dutch
Please indicate how you experienced the online service provision during your recent usage of the web-help of the customer support.	Geef aan hoe je de online dienstverlening van MoneyBird hebt ervaren tijdens het gebruik van de help-functie of de klantenservice.
When MoneyBird promises to do something by a certain time, it does so	Wanneer MoneyBird belooft om iets te doen voor een bepaalde tijd, doet het dit
When you have problems, MoneyBird is sympathetic and reassuring	Wanneer je een probleem ondervindt, dan is MoneyBird sympathiek en geruststellend
MoneyBird is dependable	MoneyBird is betrouwbaar
MoneyBird provides its services at its time to do so	MoneyBird biedt haar service op het juiste moment aan
<i>Items and their adapted translations adopted from Reliability (Zeithaml et al., 1988)</i>	

English	Dutch
MoneyBird does not tell customers exactly when services will be performed*	MoneyBird vertelt haar klanten niet precies wanneer diensten worden uitgevoerd*
You do not receive prompt service from MoneyBird's employees*	Je ontvangt geen snelle service van MoneyBirds' medewerkers*
Employees of MoneyBird are not always willing to help customers*	Medewerkers van MoneyBird zijn niet altijd bereid om haar klanten te helpen*
Employees of MoneyBird are too busy to respond to customers' requests promptly*	Medewerkers van MoneyBird zijn te druk om snel te reageren op verzoeken van klanten*
<i>Responsiveness (Zeithaml et al., 1988)</i>	

English	Dutch
Employees of MoneyBird do not give you individual attention*	Medewerkers van MoneyBird geven geen persoonlijke aandacht*
Employees of MoneyBird do not know what your needs are*	Medewerkers van MoneyBird weten niet wat mijn wensen zijn*
MoneyBird does not have your best interests at heart*	MoneyBird heeft niet het beste met je voor*
MoneyBird does not have operating hours convenient to all their customers*	MoneyBirds' openingstijden van support zijn niet geschikt voor al haar klanten*
<i>Empathy (Zeithaml et al., 1988)</i>	

English	Dutch
You can trust employees of MoneyBird You feel safe in your transactions with MoneyBird's employees Employees of MoneyBird are polite Employees get adequate support from MoneyBird to do their jobs well	Je kunt de medewerkers van MoneyBird vertrouwen Je hebt een gevoel van vertrouwen wanneer je met MoneyBird medewerkers communiceert Medewerkers van MoneyBird zijn beleefd MoneyBird's medewerkers krijgen voldoende ondersteuning vanuit de organisatie om haar werkzaamheden goed te verrichten
<i>Assurance (Zeithaml et al., 1988)</i>	

English	Dutch
The web-help/customer support gives you personal attention The level of personalization at this web-help/customer support is about right, not too much or too little This web-help/customer support understands my specific needs This web-help/customer support has features that are personalized for me This web-help/customer support stores all my preferences and offers me extra services or information based on my preferences This site does a pretty good job guessing what kinds of things I might want and making suggestions.	De help-functie geeft mij persoonlijke aandacht De mate van persoonlijke aandacht die MoneyBird biedt is voldoende, niet te veel en niet te weinig De help-functie begrijpt mijn specifieke wensen/behoefte De help-functie biedt functies die zijn aangepast aan mijn behoeften De help-functie onthoudt al mijn voorkeuren en biedt mij extra service of informatie aan de hand van mijn voorkeuren De help-functie is goed in het inschatten van mijn behoeften en het aanbieden van suggesties
<i>Personalisation (Wolfenbarger & Gilly, 2002)</i>	

English	Dutch
In the following questions we are interested in your opinion about MoneyBird Based on all of your experience, how satisfied overall are you? Compared to other invoice solutions (e.g. word, excel, other invoice tools, etc.) you have done business with? In general I am satisfied	In onderstaande vragen zijn wij benieuwd naar jouw mening over MoneyBird Hoe tevreden ben je over MoneyBird, op basis van jouw ervaringen Vergeleken met andere facturatie mogelijkheden, ben ik tevreden (Bijvoorbeeld Word, Excel of andere facturatie software) In het algemeen ben ik tevreden over MoneyBird
<i>Customer satisfaction (Caruana, 2002)</i>	

English	Dutch
I am likely to... Say positive things about MoneyBird to other people Recommend MoneyBird to someone who seeks your advice Encourage friends and others to do business with MoneyBird Do more business with MoneyBird in the coming months Seldom consider switching away from MoneyBird	Ik ben erg geneigd om... Positieve dingen te vertellen aan andere mensen over MoneyBird MoneyBird aan te bevelen aan iemand die mijn advies nodig heeft Andere mensen aan te sporen om gebruik te maken van MoneyBird Vaker gebruik te maken van MoneyBird in de komende maanden Ik overweeg zelden om het gebruik van MoneyBird te stoppen
<i>Items and their adapted translations adopted from Service Loyalty (Gremler & Brown, 1996; Caruana, 2002)</i>	

English	Dutch
What is your age	Wat is je leeftijd
What is your gender	Wat is je geslacht
What is your current or highest level of education?	Wat is je huidige of hoogst genoten opleidingsniveau?
-Primary School	-Lagere School
-Intermediate vocational education	-VMBO/MBO
-Junior College	-HAVO/VWO
-Bachelor degree	-HBO
-University	-WO

Appendix B

Beste (naam klant),

MoneyBird doet momenteel in samenwerking met Universiteit Twente onderzoek naar online dienstverlening. Dit onderzoek gaat over hoe dienstverleners zoals MoneyBird zo optimaal mogelijk gebruik kunnen maken van online service kanalen om haar klanten zo goed mogelijk te helpen.

Omdat jij volgens onze informatie recentelijk gebruik hebt gemaakt van de help-functie of omdat je contact gehad hebt met de klantenservice van MoneyBird, willen wij jou enkele vragen stellen over jouw mening en ervaring met onze online dienstverlening. Door deel te nemen aan dit onderzoek zal MoneyBird jou in de toekomst nog beter kunnen helpen en draag je bovendien bij aan dit onderzoek van Universiteit Twente.

De deelname is volledig anoniem en de uitkomsten van het onderzoek worden alleen gebruikt voor wetenschappelijke doeleinden en ter verbetering van onze dienstverlening. Indien je vragen hebt over onderstaand onderzoek, kun je contact opnemen met ondergetekende.

We horen graag jouw mening zodat wij onze dienstverlening in de toekomst kunnen verbeteren. Alvast onze hartelijke dank voor je deelname.

[link]

Of kopier en plak de URL in je browser

[link]

Met vriendelijke groet,
Frans van der Meijde
frans@moneybird.com

Appendix C

Samen met Universiteit Twente doen wij onderzoek naar online dienstverlening. Graag horen we jouw mening via [link]

Appendix D

Beste (naam klant),

Enkele dagen geleden heb je van ons een uitnodiging ontvangen om deel te nemen aan een onderzoek van MoneyBird in samenwerking met de Universiteit Twente. We hebben gezien dat je nog niet hebt deelgenomen of dat de enquête nog niet volledig is ingevuld.

Omdat jij volgens onze informatie recentelijk gebruik hebt gemaakt van de help-functie of omdat je contact gehad hebt met de klantenservice van MoneyBird, willen wij jou enkele vragen stellen over jouw mening en ervaring met onze online dienstverlening. Door deel te nemen aan dit onderzoek zal MoneyBird jou in de toekomst nog beter kunnen helpen en draag je bovendien bij aan dit onderzoek van Universiteit Twente.

De deelname is volledig anoniem en de uitkomsten van het onderzoek worden alleen gebruikt voor wetenschappelijke doeleinden en ter verbetering van onze dienstverlening. Indien je vragen hebt over onderstaand onderzoek, kun je contact opnemen met ondergetekende.

Wij hopen op jouw deelname aan dit onderzoek of dat je jouw reeds gestarte enquête wilt afronden. Alvast onze hartelijke dank voor je deelname.

[link]

Of kopier en plak de URL in je browser

[link]

Met vriendelijke groet,
Frans van der Meijde
frans@moneybird.com

Appendix E

Je enquête voor ons onderzoek met Universiteit Twente is nog niet (volledig) ingevuld. Zou je deze willen afronden? [link]

Appendix F

Construct	Item	Component		
		1	2	3
Complexity	I found this to be a complex task		.797	
	This task was mentally demanding		.892	
	This task required a lot of thought and problem solving		.842	
	I found this to be a challenging task		.672	
Time Pressure	I found myself pressed for time			.941
	I was in a hurry			.947
	There was so much to do that I wish I had more time			.899
Involvement	Important – Unimportant*	.807		
	Relevant – Irrelevant*	.825		
	Means a lot to me - Means nothing for me*	.865		
	Matters to me - Doesn't matter*	.864		
	Of no concern - Of concern to me	.582		

Note. Rotation converged in 4 iterations.

Construct	Item	Component	
		1	2
Innovativeness	When I see a service a product somewhat different from the usual, I check it out		.817
	I am often among the first people to try a new service or product		.894
	I like to try new and different things		.869
Self-Efficacy of Channel Usage	I am fully capable of using Channel X	.934	
	I am confident in my ability to use Channel X	.954	
	Using Channel X is well within the scope of my abilities.	.958	

Note. Rotation converged in 3 iterations

Construct	Item	Component				
		1	2	3	4	5
Empathy	Employees of MoneyBird do not give you individual attention*		.617			.422
	Employees of MoneyBird do not know what your needs are*		.457			.401
	MoneyBird does not have your best interests at heart*		.665			
	MoneyBird does not have operating hours convenient to all their customers*		.464			.443
Assurance	You can trust employees of MoneyBird				.781	
	You feel safe in your transactions with MoneyBird's employees				.762	
	Employees of MoneyBird are polite		.462		.700	
	Employees get adequate support from MoneyBird to do their jobs well				.798	
Responsiveness	MoneyBird does not tell customers exactly when services will be performed*					.825
	You do not receive prompt service from MoneyBird's employees*		.830			
	Employees of MoneyBird are not always willing to help customers*		.733			
	Employees of MoneyBird are too busy to respond to customers' requests promptly*		.792			
Reliability	When MoneyBird promises to do something by a certain time, it does so			.745		
	When you have problems, MoneyBird is sympathetic and reassuring			.783		
	MoneyBird is dependable			.875		

	MoneyBird provides its services at its time to do so	.821
Personalisation	The web-help/customer support gives you personal attention	.773
	The level of personalization at this web-help/customer support is about right, not too much or too little	.745
	This web-help/customer support understands my specific needs	.812
	This web-help/customer support has features that are personalized for me	.837
	This web-help/customer support stores all my preferences and offers me extra services or information based on my preferences	.787
	This site does a pretty good job guessing what kinds of things I might want and making suggestions.	.821

*Note. Rotation converged in 6 iterations, * = reversed items*