Video Chat as Sales Channel for Telecommunication Service

a quantitative analysis of success factors using the example of a German telecommunication service provider

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ABSTRACT

Purpose: Online sales have been a rising star throughout the past years and lately often been overshadowing traditional sales channels. Nevertheless, face-to-face communication and a feeling of personal interaction has been a missing part of a completely satisfying and wholesome customer experience. Resulting from that, the objective of this study is to find out whether a video chat sales tool can close this gap by increasing the net promoter score, purchase intention, trust and perceived personality as well as interactivity, and consequently contribute to extend the latest version of media and information richness theory by Dainton and Zelley (2015), which represents the main theoretical foundation of this research. Some social presence theory (Drake, 2015) elements, such as perceived personality in form of proximity, are part of the theoretical foundation as well. One of the leading German telecommunication companies has started a pilot project aiming at providing a more personal, interactive and trustworthy online sales experience by offering a video sales chat tool, which is called Whisbi, to its customers. This video sales chat not only allows customers to see the agent that they are talking to, but offers more innovative features, which also give sales agents the opportunity to share their screen and show products to their customers. This real time set up is used as a case study in order to find out whether this tool could close this gap.

Method: In order to test the construct, a questionnaire consisting of sixteen questions has been distributed to every customer who has used Whisbi throughout a three-month period in 2018. 2399 valid responses from German customers over the age of 18 have been collected. Those customers have been divided into five different groups, indicating which single feature or feature combination they have or have not experienced during their sales video chat. The empirical testing includes a one-way ANOVA, in order to find out whether there are statistically significant differences between groups. It is tested whether the effects on perceived interactivity, personality, trust, net promoter score (NPS) and purchase intention of those five different feature groups differ significantly from each other. A Tukey HSD test is performed afterwards, in order to specify which groups specifically do or do not differ significantly from each other. Afterwards, a mediator analysis is performed to test whether trust, perceived personality or perceived interactivity have a mediating effect on the main effect (features on NPS).

Findings: Results show that in general the five different feature groups show significant differences between groups on perceived interactivity and personality, trust, net promoter score and purchase intention: the higher the combination of features, the more positive the overall customer experience was rated. Furthermore, trust, perceived interactivity and personality show mediating effects on the main effect.

Conclusion: Whisbi does extend the latest version of Media and Information Richness Theory, as according to his study, it is perceived as being more interactive and personal than traditional video sales, if at least two or more features are experienced by the customer. Furthermore, higher combinations of features have positive effects on trust, NPS and purchase intention which not only support elements of media richness theory, but also elements of social presence theory. Therefore, Whisbi could represent the foundation for a newer, updated version of the media richness model in collaboration with elements of social presence theory.

Keywords. Conversational Commerce, Media Richness, Online Sales, Trust, Net Promoter Score
1. INTRODUCTION

The term sales is defined as “any of a number of activities designed to promote customer purchase of a product or service. Sales can be done in person or over the phone, through e-mail or other communication media according to the American Marketing Association (2017). Telephone sales enable customers to order something via phone (AMA, 2017). This “allows for interaction between participants, enables immediate feedback and [it] sets up opportunities to overcome objection, all within the same communication event when both the sender and the receiver are geographically distant” (Fill & Turnbull, 2016). Next to telephone sales, companies use online websites as a selling medium for their products. Since companies are not able to sell products without making them available to customers, those sales channels are important. As soon as products are available through one of those channels, customers can start shopping. Shopping, and especially online shopping within the context of this research, is therefore another important term that needs to be distinct. It is a more recent way of traditional shopping and is defined as “the act of purchasing products or services over the internet” (Business Dictionary, 2018). Throughout the last decade, the number of online shoppers in Germany rose from around 35k to 50k and is forecasted with an enormous growth rate in the near future (Statista, 2016). These numbers show that people are not only willing, but eager to close a sale online.

According to Statista (2015), a majority of 58.4% of telecommunication and mobile phone customers are interested in closing a sale over the internet whereas others still prefer the traditional way of in-store purchases (Whisbi, 2018) depending on the complexity of a product (Fill & Turnbull, 2016). Nowadays, most mobile phone contracts and plans have a duration of at least 24 months and prices for such contracts over a period of two years easily add up to as much as 2500€ and more (O2, 2018; Telekom, 2018; Vodafone, 2018). Therefore, some customers try to gather information through telecommunication providers’ hotlines or use digital marketing channels such as their websites. However, in general and regardless of the given product category, they much rather close the final sale in an actual store after looking at and touching the products and talking to a sales representative face-to-face (Van Bommel, Edelman & Ungerman, 2019; Whisbi, 2018).

Up until now, digital marketing, which is defined as “the use of digital technologies to create an integrated, targeted and measurable communication which helps to acquire and retain customers while building deeper relationships with them” (Smith, 2007) has been a helpful tool in ensuring businesses and customers a many-to-many approach. England and Finney (2007) suggested interactive media as part of digital marketing and defined it as “the integration of digital media including combinations of electronic text, graphics, moving images, and sound, into a structured digital computerized environment that allows people to interact with the data for appropriate purposes.” In some cases, that is still not enough, and an actual face-to-face sales or immediate response talk is necessary for customers to close a contract. According to literature, a lack of interpersonal conversations in online environments increases the potential for a lack of trust in companies (Chesney, Chuah, Doele & Hoffmann, 2017) To reduce this feeling of distrust when using websites, companies need to “develop ways to overcome the lack of physical cues that consumers use to assess quality, safety of security” (Beatty, Reay, Dick & Miller, 2011; Chesney et al., 2017). It is suggested to do this best with new information technology mechanisms (Fang, Qureshi, Sun, McCole, Ramsey & Lim, 2004).
Marketers are aware of the need for new information technologies. In order to improve the situation and increase the number of customers closing a contract online, new online features were invented. These are for example live video sales chat opportunities that offer the possibilities of an in-store experience, no matter where customers are located. Chris Messina defined this new way of business to customer interaction through messaging and live chat apps such as Whatsapp and Facebook Messenger or voice technologies such as Google home or Amazon’s Alexa as conversational commerce (Messina, 2015; Shopify, 2018). Conversational commerce can be performed in many different ways but it is essential that customers get the opportunity to easily communicate with either a human representative or chatbot in order to get personalized recommendations and support on products and services or to get other questions answered in an easy and convenient way (Messina, 2015; Shopify, 2018). This links directly to media richness theory, first developed by Lengel in 1983 and recently built on by other researchers (Dainton & Zelley, 2015; Drake, 2015). Different levels of media richness and the strength of a medium to communicate information from sender to receiver (Drake, 2015), influence customer’s trust and willingness to purchase a product. Consequently, the higher the level of richness, the better the sales performance will be (Daft & Lengel, 1983). Lately, video conferencing was characterized as the medium holding the highest level of richness right after a personal face-to-face talk (Dainton & Zelley, 2015). However, a new web tool called “Whisbi” adds two new dominant features to its online sales experience. These are video walks and screen sharing, which increase the level of richness (Whisbi, 2018). For more detailed information about this tool, a practical case can be found on page 5.

One of the leading German telecommunication companies has partnered with Whisbi, an innovative real-time live video and chat provider. They primarily want to engage with online customers in an interactive way of communication to increase trust, digital sales revenues, customer satisfaction and brand awareness (Whisbi, 2018). To do so, customers have the opportunity to get a “personal, face-to-face, online conversation through a video chat in combination with co-browsing” (Whisbi, 2018). Customers can see the sales agent and request a video walk, which means that products are shown and compared just as in a traditional retail store set up.

The telecommunication provider sells mobile phone, landline, and TV contracts as well as a combination of them. Furthermore, hardware such as smartphones, traditional phones and tablets in combination with a contract are sold. Next to features like seeing the agent and being able to compare products, agents can share their screen which means that customers can see what the agents see: a website showing the whole portfolio, a final order overview, as well as private and contract related information. Personal information such as name, address and credit card information can be reviewed and confirmed by the customers, similar to a retail store set up.

As this tool serves as a direct sales channel to customers, customer satisfaction is another important term which needs to be distinct. According to Tre and Wilton (1988, p.204), satisfaction is defined as “the consumer’s response to the evaluation of the perceived discrepancy between prior expectations (or some norm of performance) and the actual performance of the product as perceived after its consumption”. In other words, companies want to find out whether customers were happy with their experience or not. Within this study, the Net Promoter Score (Reichheld, 2003) will be used to measure customer satisfaction.
This study aims at finding out whether Whisbi, as a video tool, serves as an innovative new technology that allows a German telecommunication provider to open up a new online sales channel for its customers – a new technology, which could serve as an extension of media richness theory (Dainton and Zelley, 2015, p. 185). This develops a new level of personal face-to-face conversations and video conferencing, which could therefore extend the actual media richness model. Therefore, it aims at finding out whether those features have a positive effect on and therefore increase the level of perceived interactivity and personality, trust, customers’ purchase intention and customer satisfaction measured by means of the net promoter score (NPS). Another objective is to find out whether trust, perceived interactivity and personality mediate the effect of features on NPS. Consequently, the following research questions arise:

**RQ1:** Does a higher combination, in comparison to a lower combination, of innovative Whisbi features, a video tool, increase perceived interactivity and personality, trust, NPS and the purchase intention?

**RQ2:** Do trust, perceived interactivity as well as perceived personality mediate the effect of features on NPS?

Within the study, a survey is distributed to all customers using Whisbi, the online sales channel of one of the leading telecommunication companies in Germany. The study aims at answering the above stated research questions and to test the extended version of the media richness model, which will be introduced within the next chapter.
**Whisbi Case**

Nowadays, customers of telecommunication companies, would like to be able to do everything they can do in a traditional retail store by simply using their phone. In other words, they want to be able to securely take care of their personal business on the go. To live up to those wishes, customer experience needs to be improved by offering various online sales channels and purchasing options.

Vodafone Spain incorporated Whisbi on their website, a conversational technology tool which offers a live video chat and screen sharing solutions. An integrated virtual online store gives customers the feeling of being present in an actual retail store while having a personal sales conversation with an agent, no matter where they are.

Whisbi offers several new features compared to a traditional video conversation. Different options appear as soon as customers choose to use the live video chat tool on the Vodafone’s website. Each sales agent has a smartphone which, by using the collaborating Whisbi app, enables him/her to select which camera view the customer should have during the live video chat. The connection is always one way. Customers are guaranteed to not be seen, only heard, which serves as a safety framework and therefore reduces the inhibition of using this tool. Agents can either select a camera attached to their computer screen, which puts themselves in the focus for a personalized sales talk, or one out of 12 cameras within the virtual store for a product review. Using the latter, agents are doing a so-called “video-walk”. They simply leave their work space, walk into the virtual store which is set up in the middle of the call center, only meters away from their desk, choose one of the cameras within the virtual store by using the app and present smartphones and other products to demonstrate differences in size or color for example. As soon as customers opt for a product, such as an actual smartphone or a data plan, personal customer information is needed. In order to increase the level of trust and guarantee the accuracy of information, Whisbi enables agents to share their computer screen. This means that customers can see which information is typed in by the agent, which data plan is booked and which product is bought – live and in real-time. Resulting from that, customers have the opportunity to check for spelling mistakes and the correct bank account number for example. This reduces, if not eliminates, the risk of errors and consequently cancellations.

In the Whisbi case of Vodafone Spain, sales conversations between company agents and customers in real-time increased the number of interactions by 118% and the conversion rate by 24% by bridging the gap between in-store and over-the-phone services. (Whisbi, 2018)
2. LITERATURE REVIEW

Currently, online shopping is receiving more and more attention. The website of a company is in that case the only way to show and explain which products the company holds and sells. This is why the design, presentation and execution of an e-commerce website is as important as the layout of a traditional retail store (Liang & Lai, 2001).

2.1. Media and Information Richness Theory

How personal a medium can be is very diverse and yet, it can be categorized by its level of richness, which refers to “the ability of a communication medium to transmit different types of information from sender to receiver” (Drake, 2015). In theory it is said that “information-richer electronic media such as virtual environments engender greater trust between interaction partners compared to less rich ones” (Chesney et al., 2017). This section explains the nature of different stages in media. Media richness theory has been developed by Lengel (1983) and is built up on several studies (Dainton & Zelley, 2015; Drake, 2015). Daft and Lengel (1983) discuss the range of a medium from being lean, as for example a numeric output, to being rich, as in a personal face-to-face conversation. In between, it is built up from written, formal bulletins in a document, over written, personal letters or memos, to telephone conversations (Lengel, 1983). Within the updated versions, several levels in accordance with today’s digitalization have been added to media richness theory. These types of media “differ in (1) feedback capability, (2) communication channels utilized, (3) source and (4) language” (Bodensteiner, 1970; Holland, Stead & Leibrock, 1976; Daft & Lengel, 1983). Consequently, the hierarchy of richness, which (Lengel, 1983) distinicts as the potential information carrying capacity data, is shown in Figure 1 (Dainton and Zelley, 2015, p. 185). Ranging from lean to rich, the following ascending order has been developed by Dainton and Zelley (2015): bulk mail; memos and letters; video or audio recordings; texting and instant messaging; e-mail; telephone; video conferencing, social networking and interactive websites; face-to-face.

<table>
<thead>
<tr>
<th>Richer Media</th>
<th>Face-to-face</th>
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<td>Video conferencing, social networking, interactive websites</td>
<td>Video conferencing, social networking, interactive websites</td>
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<td>E-mail</td>
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<td>Texting, instant messaging, microblogs</td>
<td>Texting, instant messaging, microblogs</td>
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<td>Video or audio recordings</td>
<td>Video or audio recordings</td>
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<td>Memos, letters</td>
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<td>Leaner Media</td>
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<td>Bulk mail, brochures, pamphlets, flyers</td>
<td>Bulk mail, brochures, pamphlets, flyers</td>
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*Figure 1 Dainton and Zelley (2015, p. 185)*
In other words, video conferencing, amongst others, is rated as the medium with the highest information richness only preceded by a personal face-to-face conversation (Anderson, O'Malley, Doherty-Sneddon, Langton, Newlands & Mullin, 1997; Dainton & Zelley, 2015; Drake, 2015; Short et al., 1976).

2.1.1. **Perceived Interactivity**

Perceived interactivity and perceived personality, among others, build the basis for media richness theory and act as richness characteristics. The higher the customers perception of each factor, the higher the richness level of a medium is. Interactivity in this context, in literature, serves as a synonym for new media (McMillan & Hwang, 2013). It is expected to change the communication process between companies and its customers by offering new forms of dialogue (Bezjian-Avery, Calder & Iacobucci, 1998; McMillan & Hwang, 2013). Perceived interactivity means that “information from the customer rather than about the customer” (Day, 1998, p.47) should be collected. In other words, it should be an exchange of information which increases trusting levels and the likelihood of a purchase.

2.1.2. **Perceived Personality**

Perceived personality, in other words, how personal a message is, is just as important in determining whether a medium is or needs to be rich in order to communicate a specific message. A customer perceives an interaction as more personal, whenever the conversation includes nonverbal cues, gestures and body language of their counterpart, the sales agent (Drake, 2015). This theoretical part can be traced back to what is introduced by social presence theory. The more detection a medium can offer, the more effective and trustworthy it is (Drake, 2015; Rockmann & Northcraft, 2008; Short, Williams & Christie, 1976. An in dept explanation will be given below.

2.1.3. **Ambiguity**

Since Weick (1969) influenced the work of Daft and Lengel, the notion of ambiguity, which states that there is a probability of various interpretations, plays an important role in media richness theory as well. Daft and Lengel (1983) assume that the primary objective of communication is understanding. Therefore, media richness theory states that “the more ambiguous the message, the richer the medium should be in communicating that message” (Dainton & Zelley, 2015, p. 185). Furthermore, it is stated that “a highly ambiguous message communicated using a lean media form is likely to exacerbate uncertainty and create misunderstanding” (Dainton & Zelley, 2015, p.1 85). Consequently, matching ambiguity and the level of richness of the media is very essential and reversely leads to higher levels of trust and customer satisfaction.
2.2. Social Presence Theory

In accordance with social presence theory it is discussed that some forms of media allow a sender “to be more present” (Drake, 2015) than others, thus the communication may be richer (Drake, 2015; Lombard & Ditton, 1997; Short et al., 1976). The more meaning and detection a medium can offer to the collaboration between human beings, the more effective and trustworthy it is (Drake, 2015; Rockmann & Northcraft, 2008; Short et al., 1976). Social presence factors such as non-verbal communication, proximity and orientation, as well as physical appearance as suggested by Drake (2015) and Sallnäs, Rassmus-Grohn and Sjostrom (2000) building on social presence theory (Short et al., 1976), ensure a face-to-face like video chat framework for sales conversations. In other words, a new level of media richness arises in Dainton and Zelleys (2015) media richness construct, in between face-to-face and simple video conferencing. This, consequently, increases perceived interactivity and personality as well as the level of trust (Fill & Turnbull, 2016; Whisbi, 2018).

In literature, Fang et al. (2014) suggest that new information technology mechanisms such as safeguard online credit card guarantee and the latest communication systems need to be developed and implemented. This is in order to create trust whenever people sell or trade online through electronic interfaces, because “environments richer in information are expected to engender higher levels of trust.” (Chesney et al., 2017)

Whisbi, a live video chat tool, seems to meet this need by providing several new features in addition to traditional video conferencing, which are video walks and screen sharing. These live video chat features are considered interactive media and have certain characteristics such as personalization, interactivity, social presence and trust from a user perspective, amongst others (Fill & Turnbull, 2016, p. 604; Whisbi, 2018.). These characteristics represent the advantages over traditional telesales and decrease the gap between the experience of a face-to-face conversation and a regular telesales call enormously (Whisbi, 2018). Daft and Wiginton (1979) suggest that a “face-to-face medium allows the simultaneous observation of multiple cues, including body language, facial expression and tone of voice, which convey information beyond the spoken message.” The live video chat tool ensures the exact same, which is why except for haptics, it is almost as rich as a personal face-to-face conversation and is in literature already used as a form thereof (Drake, 2015). Using this tool, messages that a call center agent wants to deliver to a customer can be personalized on a one-to-one basis within a personal and private video session (Fill & Turnbull, 2016, p. 609; Whisbi, 2018). This gives agents the opportunity to sell on a more personal level using mimicry and gesture. This is extremely important when taking ambiguity into account. Nowadays, smart phone contracts run at least 24 months and are very complex by including a lot of limited extras (such as more GB data for a period of time, 3 months free trial for several TV or music apps and much more), as well as limitations such as country restrictions for example. On top of that, the latest smartphones can easily exceed costs of 1000€ (Vodafone, 2018), which makes this bundle a very cost intensive and complex purchase. Information can easily be misunderstood by the customer over the phone for example, which is why according to theory, it needs a rich sales medium (Daft & Lengel, 1983; Weick, 1969).

Concluding, a combination of elements from both media richness theory, as well as social presence theory, seems to be the basis for what Whisbi represents: a sales medium offering three
dominant features. Those features make a distinctive difference to traditional telesales and are namely video sharing, video walks, and screen sharing. They support the simplicity of making a purchase and consequently a monetary transaction. If these factors are given, customers feel more secure and satisfied with the whole experience of the online store. This is due to the possibility of non-verbal communication, increased interactivity with the customer and the screen sharing opportunity, for example, which lets customers double check the contract and personal data and consequently increases trust.

2.3. Trust

Literature has highlighted that trust can relate to different situations. It may relate to a specific person or a personal relationship (Mutz, 2005), an unknown person or strangers (Gefen, Benbasat & Pavlou, 2008), as well as to trading partners in business (Gefen & Straub, 2004) and commercial interactions in general (Toufaily, Souiden & Landhari, 2013). The importance of the latter has increased with the rise of e-commerce, electronic market places and online activities (Bansal, Zahedi & Gefen, 2016; Chesney et al., 2017; Schlichter & Rose, 2013). Internet technology as well as the companies that use it “are the objects of trust” (Beldad, de Jong & Steehouder, 2010; Chesney et al., 2017; Doney & Cannon, 1997). Therefore, it is not enough for customers to be able to simply trust a website. The company behind it needs to be trustworthy as well, which is why trust in relation to brand credibility became especially important in service literature (Berry, 2000; Chesney et al., 2017).

In a business context, trust is defined as the customers’ belief that a service provider has a high degree of integrity and is reliable. Also important is the combination of competence and benevolence (Chesney et al., 2017, Dinev & Hart, 2006), which is part of a construct called “trusting beliefs” (McKnight, Choudhury & Kacmar, 2002). Both of these dimensions are stated as an independent factor influencing the level of trust in a vendor (Gefen & Straub, 2004; Mayer, Davis & Schoorman, 1995; McKnight et al., 2002). The greater the perception of each individual factor, the greater the level of trustworthiness as a whole, intention to purchase a product and the customer satisfaction resulting in high NPS scores (Doney & Cannon, 1997; McKnight et al., 2002; Morgan & Hunt, 1994). Competence arises as soon as a company delivers what they promised (Sirdeshmukh, Singh & Sabol, 2002). If a company is considered being competent, customers believe that the agents of a company deliver good advice (McKnight et al., 2002). Benevolence is the “extent to which a trustee is believed to want to do good to a trustor” (Mayer et al., 1995). In other words, benevolence is ensured whenever a company acts in the customers’ best interest while forgetting about possible profits that the company could make or lose. If the vendor is expected to have a high level of benevolence, customers can expect honest advice by the company. In line with that, their motivation to follow this advice is increased which results in an increase in purchase intention (Culnan & Armstrong, 1999; McKnight et al., 2002).

In today’s world, one major reason that leads to a decrease in trust often is the lack of interpersonal interactions in online environments (Chesney et al., 2017). Customer – company agent interactions on sales websites are foremost limited to chats, if even, or a sales hotline numbers which would result in a phone call. Nevertheless, both options are rather anonymous without a chance of co-presence (Biocca, Burgoon, Harms & Stoner, 2001). Due to the fact that physical presence, which
usually allows for non-verbal communication is not given, cues such as body language and facial expressions are not given either (Bente, Ruggenberg, Kramer & Eschenburg, 2008; Cyr, Hassanein, Head & Ivanov, 2007; Gefen & Staub, 2004). As a result, a significant reduction of trust may be the consequence, as the other person cannot be seen. Whisbi, as a live video chat tool, seems to fill this gap. Its new features, video walks and screen sharing, most likely ensure a high level of establishing trust in the vendor. Consequently, customers’ purchase intention as well as the NPS score is expected to increase (Dinev & Hart, 2006).

2.4. Purchase Intention

According to literature, motivational media richness features have an impact on the customers’ willingness to buy or willingness to transact with a business (Chesney et al., 2017; Drake, 2015; Morgan & Hunt, 1994; Short et al., 1976). In general, the goal of each shopping website is to convince customers to buy a product or to close a contract (McKnight et al., 2002). However, purchasing items over the internet does not often offer the possibility to closely inspect products for specific colors and sizes, nor does it offer the possibility to see or even look the sales agent in the eye (Ba, Whinston & Zhang, 1999; Grazioli & Javenpaa, 2000). Moreover, to finalize an order, personal information such as the name and credit card information of the customer are needed (McKnight et al., 2002), which over the phone could easily be misspelled or noted with mistakes within the numerical credit card order. This can lead to problems, such as delays or cancellations, within the order process. Consequently, customers feel a high level of risk, are hesitant, and rather visit a traditional retail store (Dinev & Hart, 2006).

To reduce this risk and increase the customers’ purchase intention, according to Fang et al. (2014), new information technology mechanisms, such as safeguard online credit card guarantee and the latest communication systems, need to be developed and implemented. Whisbi, compared to traditional telesales, uses three outstanding new features, which increase a feeling of personal selling and interactivity in a sales conversation. Seeing the agent through a webcam in real time and being able to inspect the product closely helps customers to build trust (Doney & Cannon, 1997; Gefen & Staub, 2004; McKnight et al., 2002; Morgan & Hunt, 1994). Furthermore, by being able to see a final order overview and double check personal information via screen sharing, customers are expected to be less hesitant in closing a sale. In reverse, customers feel safer and therefore sense an increased willingness to purchase.

2.5. Net Promoter Score

In order to find out how satisfied customers are with a company, its service and products, “firms typically collect feedback data via costumer surveys using measures of attribute level and overall satisfaction” (Morgan & Rego, 2006). However, most of the time the outcomes of such measures are very complex and do not correlate to specific forecasts of growth and profits (Reichheld, 2003). According to Reichheld (2003), “you simply need to know what your customers tell their friends about you”. Being convinced by this statement, he introduced the construct of the net promoter score (Reichheld, 2003) in order to give companies a simple measure opportunity. The answers to the foremost asked NPS question “how likely is it that you would recommend our company to a friend or
colleague?” (Reichheld, 2003) immediately shows who of the customers promotes the company. Promoting something or someone is in this case a predictor and indicator of loyalty, as customers are putting not just the company’s, but also their own reputation on risk. Loyalty is defined as the willingness of a person to make a sacrifice or a personal investment in order to build up and strengthen a relationship (Reichheld, 2003). The NPS is based on a 0 to 10 rating scale, whereas scores of 9 and 10 represent loyal promoters, being very likely to recommend the company. Customers answering the question with a 7-8 likelihood are considered to be passively satisfied and customers rating below 6 are very unlikely to recommend a company and are therefore considered detractors (Reichheld, 2003). Even though focusing mainly on the promoters may seem wrong, literature states that a promoter of a company is “a key driver of possible growth” (Reichheld, 2003). It reflects how well those loyal customers have been treated in the past and how satisfied they are with their experience. Conversely, those customers usually stay loyal to a company and stick to their products, which reduces acquisition costs. On the other hand, by actively recommending a company or product to friends and family, they bring in new customers.

The following framework results from the relationships between all above mentioned variables and is to be tested in a real company environment of one of the leading German telecommunication companies:

![Figure 2 Research framework](attachment:image.png)
In accordance with the framework, the following hypotheses derive:

**H1:** A higher combination of media richness features used (video sharing, screen sharing, video walk) is assumed to have a more positive effect on (a) net promoter score and (b) purchase intention than a lower combination.

**H2:** A higher combination of media richness features used (video sharing, screen sharing, video walk) is assumed to generate (a) higher perceived interactivity and (b) a more perceived personal experience than a lower combination.

**H3:** A higher combination of media richness features used (video sharing, screen sharing, video walk) is assumed to result in a more positive level of perceived (a) competence and (b) benevolence than a lower combination.

**H4:** Richness characteristics (a) perceived interactivity and (b) perceived personality mediate the effect between media richness features used and the net promoter score.

**H5:** Trusting beliefs mediate the effect between media richness features used and the net promoter score.

### 3. STUDY

#### 3.1. Method

**3.1.1. Research Design**

In order to measure both research question and the correlating model, an online survey was designed and executed on the company’s website right after each customer – sales agent interaction through Whisbi. The survey, which consisted of a total of 16 items, was distributed via Medallia, the company’s preferred survey tool.

**3.1.2. Procedure**

For the actual sales conversation, none of the sales agents was briefed or forced to use a specific number or combination of features. They were told that each conversation should be as natural as possible and tailored to the customers’ needs and wants. Here, it needs to be taken into account that each customer could have had a different intention when they used the service. Some might have already known which contract/device they wanted, whereas others did not. Maybe they solely wanted to inform themselves or had a simple service request. Depending on that, agents offered the correlating features that they thought would fit best. Based on personal experience it is to be assumed, that high numbers of service calls could be the reason for an unequal distribution throughout groups. Service calls usually do not require using any of the features which could explain why the No feature group is significantly bigger than the other groups.

**3.1.3. Sample**

The sample of this study draws on German customers of one of the leading telecommunication companies. Those customers had to specifically use Whisbi, the company’s online sales channel tool, in order to qualify to take part in this study.
Within the survey, customers of all ages were able to participate but for this research, only responses of customers above the age of 18 were considered valid, as underaged customers are not allowed to close contracts. The survey was conducted with Medallia, a survey tool that the telecommunication company preferred and already worked with. After customers used Whisbi, the online survey showed up immediately. This way no distribution via email or other social channels was necessary, but customers were able to immediately answer the survey questions, seconds after using the tool. Over a period of 9 weeks between August and October 2018, a final number of 2399 valid responses were collected. Whenever just one information concerning demographics was missing, the questionnaire was still considered valid and used within this study. Questionnaires with two or more information missing were removed from this study. Consequently, table 1 shows the overall sample composition of gender, type of customer and product purchase throughout all five feature groups, namely no feature, Agent seen, Agent + Screen, Agent + Video and All features. Age, throughout the whole sample size shows the following distribution: 8.5% 18-24, 22% 25-34, 19% 35-44, 31.6% 45-59, 12.4% 60-69 and 6.5% 70+. Customers needed an average of 5 minutes to complete the survey.

Table 1 Distribution of group sizes

<table>
<thead>
<tr>
<th>Variable</th>
<th>No features</th>
<th>Agent seen</th>
<th>Agent + Screen</th>
<th>Agent + Video</th>
<th>All features</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>755</td>
<td>76.8%</td>
<td>711</td>
<td>81.3%</td>
<td>181</td>
<td>74.2%</td>
</tr>
<tr>
<td>Female</td>
<td>228</td>
<td>23.2%</td>
<td>163</td>
<td>18.6%</td>
<td>63</td>
<td>25.8%</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>983</td>
<td>100%</td>
<td>874</td>
<td>100%</td>
<td>244</td>
<td>100%</td>
</tr>
</tbody>
</table>

| Type of customer        |            |            |                |               |              |       |
| Loyal                  | 763         | 77.6%      | 678            | 77.8%         | 187          | 76.3% | 63    | 73.3% | 108 | 64.7% | 1799 | 75.1% |
| New                    | 220         | 22.4%      | 194            | 22.2%         | 58           | 23.7% | 23    | 26.7% | 59  | 35.3% | 554  | 23.0% |
| Missing                |             |            |                |               |              |       | 47    |       |     |       | 1.9% |
| Total                  | 983         | 100%       | 872            | 100%          | 245          | 100%  | 86    | 100%  | 167 | 100%  | 2353 | 100% |

| Product purchase       |            |            |                |               |              |       |
| Yes                    | 203         | 20.3%      | 213            | 23.9%         | 88           | 35.5% | 33    | 37.9% | 105 | 60.7% | 642  | 26.8% |
| No                     | 798         | 79.7%      | 677            | 76.1%         | 160          | 64.5% | 54    | 62.1% | 68  | 39.3% | 1757 | 73.2% |
| Total                  | 1001        | 100%       | 890            | 100%          | 248          | 100%  | 87    | 100%  | 173 | 100%  | 2399 | 100% |

| Distribution           |            |            |                |               |              |       |
| 1001                   | 41.7%      | 890        | 37.1%          | 248           | 10.3%        | 87    | 3.6% | 173 | 7.2% | 2399 | 100% |
3.1.4. Measures

All items, besides the NPS, were evaluated on a 10-point Likert scale ranging from (1) “totally disagree” to (10) “totally agree”. NPS was measured on a 0-10-point Likert scale. To measure the given constructs, the scales were created by following the rule of Spector (1992) and each case adapted to the specific given case and context of this research.

In order to find out whether a customer bought a product/closed a contract or not, a yes/no question was asked to determine the answer (see table 3). For this question “yes” was coded 0 and “no” was coded 1, which is why the lower the mean, the better the result is. Furthermore, in order to find out which customer used which combination of features, three yes/no questions were asked (see table 3) concerning every individual feature (agent video sharing, screen sharing, video walk). The total distribution of feature groups can be found in table 1.

Even though the total number of participants is relatively large, the distribution of group sizes is not equal and consequently leads to a violation of the assumption of equal variances. These will be further discussed within the result section.

Afterwards, in order to measure the influence of all three Whisbi features and combinations thereof on perceived interactivity (M = 6.28, SD = 3.4) and perceived personality (M = 6.98, SD = 3.33) two statements were given (see table 3).

Originally, as proposed within the theoretical framework, trusting beliefs were two separate variables, namely, competence and benevolence. After conducting a factor analysis, in order to test for data reduction and simplification, results showed that all six items measure the same (trust) and are therefore combined into and used as one variable (see table 2). To find out whether media richness features have a positive effect on the trust (M = 6.39, SD = 3.07, α = 0.98), six statements were given (see table 3).

Since the net promoter score is the most common measure to detect customer satisfaction within this telecommunication company, one standard item (see table 3) was used to measure the NPS (M = 6.62, SD = 3.77). The statement was measured on a 0-10 scale with 0 being “very unlikely” and 10 being “very likely”.

<table>
<thead>
<tr>
<th>Table 2 Factor analysis for items measuring trusting beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 1</td>
</tr>
<tr>
<td>Competence</td>
</tr>
<tr>
<td>Competent assistance (Berät mich kompetent)</td>
</tr>
<tr>
<td>Customer-oriented (Berät bedarfsorientiert)</td>
</tr>
<tr>
<td>Great business (Gutes Unternehmen)</td>
</tr>
<tr>
<td>Benevolence</td>
</tr>
<tr>
<td>Best interest (Bestes Interesse)</td>
</tr>
<tr>
<td>Supports me (Unterstützt mich)</td>
</tr>
<tr>
<td>Appreciates me (Schätzt mich)</td>
</tr>
</tbody>
</table>
### Table 3 Overview of all items

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Mean (SD)</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase intention</td>
<td>Did you just buy a product or conduct a contract?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agent video sharing</td>
<td>Were you able to see the customer sales agent via video?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen sharing</td>
<td>Did the agent share his/her screen with you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video walk</td>
<td>Did the agent do a shop walk or showed any products to you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived interactivity</td>
<td>I perceived the conversation as being interactive.</td>
<td>6.28 (3.4)</td>
<td></td>
</tr>
<tr>
<td>Perceived personality</td>
<td>I perceived the conversation as being personal.</td>
<td>6.98 (3.33)</td>
<td></td>
</tr>
<tr>
<td>Trust (comp. + ben.)</td>
<td></td>
<td>6.39 (3.07)</td>
<td>.98</td>
</tr>
<tr>
<td>Competence</td>
<td>1. I believe that the company provides their customers with competent assistance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. I believe that the company gives customer-oriented advice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. I believe that the company is a great telecommunication business.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td>1. I believe that the company acts in my very best interest.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. I believe that the company supports me.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. I believe that the company appreciates me as a customer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net promoter score</td>
<td>On a scale from 0 to 10, how likely is it that you would recommend our company to friends or colleagues?</td>
<td>6.62 (3.77)</td>
<td></td>
</tr>
<tr>
<td>Demographics</td>
<td>Please state your gender.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please enter your age.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please choose whether you are already a customer of this company, now a new customer or just interested in their products.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.1.5. Analyses

After conducting the survey and collecting the data through Medallia, the excel output file has been merged into SPSS 23.0. Afterwards several analyses have been conducted. Data retrieved from descriptive and frequency tables, a factor analysis and a reliability analysis (Cronbach’s alpha) have already been presented within the method section. The following result section will compare means in the form of a one-way between subject ANOVA analysis and discuss a mediation PROCESS analysis suggested by Hayes (2009).

3.2. Results

3.2.1. One-way in between subject ANOVA

When conducting a one-way ANOVA analysis in order to compare means for the different conditions as in hypotheses H1 – H3 (see table 4) within this study, data needs to meet several assumptions. The assumption of independence is fulfilled, as the data has been sampled randomly as well as independently. After testing for normality in form of histograms, it is to say that data are not normally distributed, which will be further discussed within the limitations part. Furthermore, homogeneity of variance has been tested in form of a test of homogeneity of variances (Levene’s Test). Results show that all significant levels are at p < 0.001 and therefore violate the assumption. Consequently, a Brown-Forsythe as well as a Welch test have been conducted as they are more robust in case of a violation. The results showed that again, all significant levels are at p < 0.001. In case of a violation of the assumptions, a non-parametric test (Kruskal Wallis) needs to be conducted. Results showed statistically significant differences between groups at the p < 0.001 level. Those results align with the following testing results found while conducting a one-way between subject ANOVA. This type of analysis has, despite the violation of assumption, been conducted because the data has been sampled in a real-life setting, which means that those large differences in sample sizes (see table 1) were foreseen, expected and accepted.

Consequently, in order to compare the effect of features on perceived personality, perceived interactivity, trust, the net promoter score and purchase intention, a one-way between subject ANOVA was conducted in five feature conditions. Those five conditions are namely “No feature”, “Agent seen”, “Agent + Screen”, “Agent + Video” and “All features’. Features, representing the independent variable, shows significant effects on all dependent variables at the p < 0.001 level. The effect on perceived personality for the five conditions was \(F(4, 2394) = 101.48, p = 0.001\), for perceived interactivity \(F(4, 2394) = 119.29, p = 0.001\), for trust \(F(4, 2394) = 84.47, p = 0.001\), for net promoter score \(F(4, 2394) = 82.53, p = 0.001\) and for purchase intention \(F(4, 2394) = 37.62, p = 0.001\).

Concluding, results show that there are significant differences between at least some groups within each of the five conditions to be found. Therefore, in order to determine where these significances exist exactly and to report which conditions significantly differ from others, a Tukey HSD post hoc test needed to be conducted. The following table shows the means (M) and standard deviations (SD) for each condition and dependent variable.
Table 4 Tukey HSD post hoc test results

<table>
<thead>
<tr>
<th></th>
<th>Interactivity M (SD)</th>
<th>Personality M (SD)</th>
<th>Trust M (SD)</th>
<th>NPS M (SD)</th>
<th>Purchase intention M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No feature</td>
<td>4.85 (3.41)</td>
<td>5.64 (3.58)</td>
<td>5.36 (3.19)</td>
<td>5.29 (4.02)</td>
<td>0.8 (0.4)</td>
</tr>
<tr>
<td>Agent seen</td>
<td>6.73 (3.09)</td>
<td>7.42 (2.98)</td>
<td>6.55 (2.85)</td>
<td>6.93 (3.53)</td>
<td>0.76 (0.43)</td>
</tr>
<tr>
<td>Agent + Screen</td>
<td>7.6 (2.92)</td>
<td>8.28 (2.54)</td>
<td>7.59 (2.54)</td>
<td>8.19 (2.78)</td>
<td>0.65 (0.48)</td>
</tr>
<tr>
<td>Agent + Video</td>
<td>8.67 (2.1)</td>
<td>9.29 (1.09)</td>
<td>8.48 (1.69)</td>
<td>9.01 (1.79)</td>
<td>0.62 (0.49)</td>
</tr>
<tr>
<td>All features</td>
<td>9.17 (1.56)</td>
<td>9.38 (1.38)</td>
<td>8.77 (1.77)</td>
<td>9.2 (1.66)</td>
<td>0.39 (0.49)</td>
</tr>
</tbody>
</table>

Note: means within the same column that do not share a superscript differ significantly with p < .05.

Interactivity

The above stated post hoc comparison (using Tukeys HSD test) indicates that all conditions significantly differ from each other with the stated means and standard deviations, besides the Agent + Video condition (M = 8.67, SD = 2.1) and the All features condition (M = 9.17, SD = 1.56). As can be seen in table 4, the results suggest that in general the higher the combination of features, the more interactive a sales video chat is perceived. The only exclusions are the feature conditions Agent + Video and All features, as in this case, the means do not significantly differ from each other. Therefore, hypothesis 2a is partly supported.

Personality

Table 4 shows that most conditions differ significantly from each other like no feature (M = 5.64, SD = 3.58) and all other conditions, Agent seen (M = 7.42, SD = 2.98) and all other conditions, Agent + Screen (M = 8.28, SD = 2.54) and all other conditions besides Agent + Video (M = 9.29, SD = 1.09) and All features (M = 9.38, SD = 1.38) and all other conditions besides Agent + Video. Therefore, the only two conditions where the means do not differ significantly from each other are Agent + Screen and Agent + Video, and Agent + Video and All features. This outcome suggests that for higher levels of perceived personality, agents should aim on offering at least a combination of two features minimum. Concluding, hypothesis 2b is partly supported.

Trust

Outcomes for trust show almost the exact same results as personality stated above. Even though the means of Agent + Screen (M = 7.59, SD = 2.54) and Agent + Video (M = 8.49, SD = 1.69) as well as Agent + Video and All features (M = 8.77, SD = 1.77) do not differ significantly from each other, all other conditions do given the means and standard deviations stated in table 4. This concludes that again, higher combinations of at least two features have a more positive effect on trust than no or only one feature. Agents should therefore always aim on offering the highest combination of features. Considering the results, hypothesis 3 is partly supported.
Net Promoter Score

Net promoter score results show the same pattern as personality and trust. Most of the means differ significantly from each other, but there are two exceptions. Again, the mean scores of Agent + Screen (M = 8.19, SD = 2.78) and Agent + Video (M = 9.01, SD = 1.79) as well as Agent + Video and All features (M = 9.2, SD = 1.66) do not differ significantly from each other. As Reichheld (2003) suggests only net promoter scores of at least 9 represent loyal promoters; therefore, agents should always aim on offering the highest combinations of all three features, but least offer a combination of Agent + Video in order to generate more loyal customers. Taken those results into account, hypothesis 1a is partly supported.

Purchase intention

Tukey’s HSD test for purchase intention shows a different pattern than before. Even though almost all conditions differ significantly from each other again, there are two exceptions which need to be stated as they do not differ significantly from each other. These are namely No features (M = 0.8, SD = 0.4) and Agent seen (M = 0.76, SD = 0.43) as well as Agent + Screen (M = 0.65, SD = 0.48) and Agent + Video (M = 0.62, SD = 0.49). Within SPSS, All features were coded as follows: 0 = yes and 1 = no, which is why this variable (M = 0.39, SD = 0.49) shows by far the best test results and consequently the highest take rate. This means that customers being offered all three features bought a product or closed a contract in 61% of the cases. Therefore, for this dependent variable, it is of high importance that agents use all three features at all times. Concluding, hypothesis 1b is partly supported.

3.2.2. PROCESS Mediation Analysis

The above stated ANOVA results indicate that the independent variable features has significant effects on perceived interactivity, perceived personality and trust. Therefore, the PROCESS SPSS macro by Hayes (Hayes, 2019) is being used to test whether perceived interactivity, perceived personality and trust have mediating effects between features and net promoter score by calculating the significance of the understanderdized coefficients.

Perceived Interactivity as a Mediator

![Mediation model perceived interactivity](image_url)

Figure 3 Mediation model perceived interactivity
To find out whether perceived interactivity acts as a mediator between features and net promoter score, a mediation analysis has been conducted using PROCESS Model 4 (Hayes, 2019). The results show that features have a significant effect on perceived interactivity (a-path) with $B = 1.165$, $t (2397) = 20.953$, $p < 0.001$. Furthermore, it shows that perceived interactivity has a significant effect on net promoter score (b-path) with $B = 0.764$, $t (2396) = 44.301$, $p < 0.001$ as well as features have a significant direct effect on net promoter score (c'-path) with $B = 0.215$, $t (2396) = 4.206$, $p < 0.001$.

Concluding, figure 3 shows that features have a significant effect on perceived interactivity (a-path) and perceived interactivity on net promoter score (b-path). Hayes (2019) states that the confidence interval of indirect effects is an indicator for mediation. Whenever those numbers do not cross zero, mediation can be assumed. It indicates that mediation is happening with a 95% confidence interval of (0.807, 0.974). Therefore, hypothesis H4a is supported.

**Perceived Personality as a Mediator**

![Diagram](image.png)

**Figure 4 Mediation model perceived personality**

PROCESS Model 4 by Hayes has also been used to analyze whether perceived personality has a mediating effect on features and net promoter score. The analysis shows that features has a significant effect on perceived personality (a-path) with $b = 1.051$, $t (2397) = 19.004$, $p < 0.001$. Moreover, features have a significant direct effect on net promoter score (c'-path) with $B = 0.141$, $t (2396) = 3.473$, $p < 0.001$ as well as perceived personality on net promoter score (b-path) with $B = 0.916$, $t (2396) = 65.488$, $p < 0.001$.

Figure 4 indicates that according to the above-mentioned a- and b-paths, a significant indirect effect can be found throughout the whole model. Furthermore, with a confidence interval of 95% (0.88,1.05) of the indirect effects which do not cross zero, mediation is indicated. Concluding, it can be said that features have significant effects on perceived personality (a-path), and perceived personality has a significant effect on net promoter score (b-path). Therefore, mediation can be assumed and hypothesis H4b is supported.
A third PROCESS analysis, using Model 4, has been conducted to find out whether trust has a mediating effect on features and net promoter score. Path a (features on trust) shows a significant effect with $B = 0.928$, $t(2397) = 18.084$, $p < 0.001$ as well as path c’ (direct effect of features on net promoter score) with $B = 0.121$, $t(2396) = 3.502$, $p < 0.001$. Another significant effect can be found following path b (trust on net promoter score) with $B = 1.060$, $t(2396) = 82.335$, $p < 0.001$.

Finally, figure 5 shows that features have a significant effect on trust, and trust has a significant effect on net promoter score which already indicated mediation. Additionally, with a confidence interval of 95% (0.89, 1.078) of indirect effect which do not cross zero, again, mediation can be assumed. Therefore, hypothesis H5 is supported as well as H4a and H4b.

### 3.2.3. Overview of hypotheses

Table 4 below provides an overview of all hypotheses and whether they are supported (significant effects between and within groups), partly supported (some significant effects between and within groups) and rejected (non-significant effects).

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Stands</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>A higher combination of media richness features used is assumed to have a more positive effect on net promotor score than a lower combination.</td>
<td>Partly supported</td>
</tr>
<tr>
<td>H1b</td>
<td>A higher combination of media richness features used is assumed to have a more positive effect on purchase intention than a lower combination.</td>
<td>Partly supported</td>
</tr>
<tr>
<td>H2a</td>
<td>A higher combination of media richness features used is assumed to generate higher perceived interactivity than a lower combination.</td>
<td>Partly supported</td>
</tr>
</tbody>
</table>
The main objective of this study was to test the extended media richness model, and answer these two research questions: Does a higher combination, in comparison to a lower combination, of innovative Whisbi features, a video tool, increase perceived interactivity and personality, trust, NPS and the purchase intention? Do trust, perceived interactivity as well as perceived personality mediate the effect of features on NPS? In order to answer those questions, a questionnaire including 16 items has been distributed to actual customers of one of the leading telecommunication companies in Germany, right after making use of the Whisbi tool.

After conducting a factor analysis, originally stated competence and benevolence variables under the construct of trusting beliefs were combined, resulting in only one dependent variable named trust. As there was no need to specifically divide those two constructs but measure the overall trust in a vendor, the telecommunication company in this case, using competence and benevolence combined only simplified the study.

ANOVA results showed that features, as the only independent variable within this study, has main effects on all five dependent variables perceived interactivity, perceived personality, trust, NPS and purchase intention. In all cases findings show that a higher combination of features has a more positive effect on each dependent variable than a lower combination. The first group No features showed the lowest means throughout all dependent variables, whereas the last group, All features, showed the highest means throughout all dependent variables. Therefore, is it to say that overall the higher the combination of features, the higher the means of perceived interactivity and personality, trust, purchase intention and NPS.

For features on perceived interactivity, only the groups Agent + Video and All features do not differ significantly from each other. In cases of features on perceived personality, trust and NPS, results show that the means of Agent + Screen and Agent + Video as well as Agent + Video and All features did not differ significantly from each other. Furthermore, features showed a significant effect on purchase intention. Nevertheless, no feature and Agent seen, as well as Agent + Screen and Agent + Video did not differ significantly from each other.

Those results can be explained in both a theoretical but also practical way, as this study was conducted in a real time set up. According to media richness theory, information-richer media create a
higher level of trust between people interacting with each other. This study mostly supports this finding as in general, features have a positive effect on trust. Higher combinations of features show higher means of trust throughout the whole study (see table 4). Also, in order to be understood, more ambiguous messages should be explained via a richer medium – there should be a match between ambiguity and the choice of medium. As already said, contracts and smartphones are costly products with high levels of ambiguity. As means of trust and NPS scores increase linear with an increase in features throughout the whole study (see table 4), media richness theory is supported again. Those results show that with the highest combination of features, All features, the trust level and NPS score is highest. This means that the ambiguity level of a contract/smartphone required the richest medium in order to achieve the most positive results. Due to the fact that features have significant positive effects on perceived interactivity and perceived personality, which combined are two of the most important predictors of media and information richness theory (Dainton & Zelley, 2015), this study supports the assumption: Whisbi, as an innovative live video chat tool, is richer in media than traditional telephone calls or video conferencing, when at least a combination of two features (Agent seen and Agent + Screen, Agent seen and Agent + Video) or best, all three features, is used at the same time and experienced by the customer.

Social presence theory states that the more detection and meaning a medium can offer to an interaction between humans, the more effective and trustworthy it is. Looking at the results in table 3, those findings are supports as well. The more meaning, in form of non-verbal communication and proximity via video chat and video walks, as well as detection in form of screen sharing is offered, the higher the mean levels of trust and NPS are.

Furthermore, purchase intention is foremost triggered by trust. Being able to see the agents as well as the product or a visual statement of contract conditions can enormously increase levels of trust and consequently the customers purchase intention (Doney & Cannon, 1997; Gefen & Staub, 2004; McKnight et al., 2002; Morgan & Hunt, 1994). Results show that with each increase in trust scores, customers were more likely to purchase a product or conduct a contract (see table 4).

Next to several main effects, three mediation effects were to be found. Perceived Interactivity, perceived personality and trust all mediate between features as the independent, and net promoter score as the dependent variable. This result is another important finding and will be addressed within the marketing implications later on.

Concluding, result show that all hypotheses were supported, at least partly. Therefore, the latest media richness model by Dainton and Zelley (2015, p. 185) should be updated to a newer version and include Whisbi, as an ever richer medium than traditional video conferencing. It offers two more crucial features – video walks and screen sharing - for an even more satisfying and wholesome customer experience in online sales.

Nevertheless, it has to be kept in mind that this study was a conducted in a real time set up. Therefore, some results need to be explained in a more practical way. First of all, some customers might have called solely because of a service, instead of a sales request. Second, apart from customers with service requests, all other customers had a unique sales request and therefore a different need and want. Agents always reacted accordingly by offering features that they thought were most appropriate
in each and every individual situation. Some customers probably just wanted to extend their contract, which would not necessarily require any of the features. Some customers probably already informed themselves about contract option but did not know which handset they would want, and on the other hand, some customers probably already knew which smartphone they would like to have but did not know which contract would fit their personal situation best. Some customers, especially the new ones, probably had no idea what they would want at all or knew what the options were even. This factor, the personal need of each customer, is most likely the reason why some means of the different feature groups did not differ significantly from each other, as mentioned above.

5. LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

This study is a first attempt in analyzing and consequently underlining the importance of innovative communication channels within a sales environment. Future research should try to overcome the limitations which were faced within this study. First, as the questionnaire was distributed to all customers using the Whisbi tool in a real-life setting, group sizes resulted in uneven numbers and non-parametric distributions. One of the reasons for the disproportional high number in condition one, no feature, could have been technical failure. Since Whisbi is still treated as a pilot project, technical problems happened on a regular basis. Those problems included call break-ups or not loading the video, which automatically obviated the possibility of screen sharing and video walks. Even though those unequal numbers were foreseen and expected, future research should be aware of the fact and aim for results with normality and even group numbers using a rather controlled than real time set up.

Second, due to the fact that more than 75% of all respondents were already customers of the telecommunication company, bad prior experiences could have been a reason for more negative test results in general. Therefore, future research should aim on a controlled setting, that focuses on new customers only in order to guarantee results that have not been affected by prior experiences with or feelings about a certain company.

Third, as this research was conducted within the telecommunication sector, results cannot be generalized. Contracts are a long-lasting and complex product, which might need a lot of explanation. Furthermore, they are very costly, just like the latest smart phones that could come with it. Therefore, future research needs to study whether the Whisbi tool, or similar ones offering equal features, show similar results in completely different sectors. It needs to be researched whether less or even more expensive and less or even more complex products show the same findings.

Fourth, researchers should also consider that this tool was only tested as a sales channel and therefore in a sales environment. Especially screen sharing could be a pioneering feature within the service sector when it comes to personal information that need to be changed or mistakes within customer bills for example. Consequently, it could be of great interest to find out whether Whisbi would also have such positive effects on specific factors within a service environment.
6. MARKETING IMPLICATIONS

Throughout this study, a model was developed which provides an overview of determinants for purchase intention and net promoter score but also for richness characteristics and trust.

Apart from the above stated limitations, theoretical implications need to be considered: media and information richness theory and model should be updated to a newer version including Whisbi, or other conversational tools, as a new and richer medium in between face-to-face conversation and video conferencing as suggested by Dainton and Zelley (2015). Almost all findings support the fact that Whisbi, if at least two features are used at the same time, have significant positive effects on variables such as trust, net promoter score and purchase intention. Alternatively, to extending the media richness model, theoretical implications could also include combining media and information richness theory and social presence theory in order to explain Whisbi and the power and benefits of its features as a whole. Due to the latest technology that Whisbi offers and as perceived interactivity is a media richness factor and perceived personality can be traced back to social presence theory, it would be convenient to combine both theories. Therefore, a whole new theory including the latest model should be considered in the future.

Furthermore, as all of those factors play very important roles within the sales sector, these findings could be useful for companies that either look for scientific proof to push the use or for companies who would like to implement such a tool, to have a scientific basis when pitching the idea for example.

The primary marketing implication is to increase awareness and illustrate how important new information technologies can be in a sales environment, especially within the telecommunication sector. Furthermore, the importance of factors which are needed to reach the highest results in purchase intention and net promoter score need to be understood by marketeers and further focused on in the future.

As already mentioned within the limitation section above, Whisbi still holds a lot of technical issues which can result in complete failure to connect or constraints in using either single or all features at a time. In order to be able to guarantee a smooth and successful sales call procedure, marketeers, in cooperation with their technicians and developers, need to assure an almost error-free Whisbi experience for both sales agent and customer. Otherwise, an experience embossed by technical failures and break downs could result in the complete opposite and give customers a non-professional impression of such a sales service and consequently score lower results and trigger that customers either become detractors and disadvice friends and family to use this service or do never want to use this service again themselves.

Pretending that technical failures are almost eliminated and considering the results of this study, companies could make a real change in their way of selling products and services using this tool. It is important that when companies decide to use it, marketeers and especially sales agents who foremost use the tool are totally committed and understand the importance of high combinations of features, which scientifically proven, can have an enormous impact on sales numbers in form of purchase intention and customer satisfaction, calculated with the help of a net promoter score.

Results showed that customers experiencing a combination of all three features (61%), compared to a regular sales call using no Whisbi features (20%), were 41% more willing to buy a product or close
a contract. Those numbers need to be in every marketeers' and every sales agents’ mind, as they indicate the importance of using those features and the sales impact, that it could actually have.

In line with such high sales results, the best combination to realize similar high outcomes in customer satisfaction, is again the all feature option. Even though results did not significantly differ from the Agent + Video condition, the score was still slightly higher and closer to a 10, which represents the best and highest net promoter score outcome as suggested by Reichheld (2003). He argues that all scores of at least 9 represent loyal promoters, which are very important for the company, as they usually put their own reputation on risk by telling others about products or services in a way that they are totally convinced of them and would definitely encourage friends and family to buy or use the same service as well. Therefore, again, marketeers should be aware of those numbers and especially the impact a combination of all three features used could have and communicate this importance throughout their sales agents.

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