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A whole new Customer Experience: the use of Augmented Reality in the B2B versus the B2C sector

The influence of augmented reality on the level of involvement and emotion in the customer experience of B2B versus B2C in the automotive industry.

A qualitative study

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Abstract

In this research, the influence of augmented reality on the level of involvement and emotion during the customer experience has been investigated by also taking the differences between the B2B and B2C sector into account. A literature review has been carried out to explore the current knowledge on the topic and to form a basis for conducting the interviews. There have been interviewed 12 people in total, 6 from each sector, to provide the required results. The respondents were given a scenario in which augmented reality was used for the product presentation of a car. For both sectors there was a separate scenario to measure the differences between the two. The results imply that augmented reality does influence the level of emotion and involvement during the customer experience for both consumers groups in the automotive industry. Several aspects of the technology have their share in this influence, of which the independency when using it is the most prominent one. The findings of this study resulted in contributions to both theory and practice. For the latter, there are provided recommendations to marketing and customer experience managers. In addition, suggestions on how to interpret the results and areas for future research are provided.

Keywords: augmented reality, customer experience, involvement, emotion, B2B, B2C, automotive industry.

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1. Introduction

The rise of digitization has led to new technologies such as virtual reality (VR), augmented reality (AR) and the internet of things (IoT). Augmented reality's first appearance dates back to the 1950s, but back then there was not so much knowledge and technology as nowadays (Carmigniani et al., 2011). Augmented reality, as defined by Carmigniani et al. (2011), is a real-time direct or indirect view of a physical real-world environment that has been augmented by adding virtual computer-generated information to it. Kowalczuk, Siepmann, and Adler (2021) refer to augmented reality (AR) as an innovative tool that superimposes virtual objects on the user's real environment which adds a completely new experience. There are three important features of augmented reality: (1) it combines virtual and physical worlds, (2) there is continuous and implicit user control of the points of view and (3) interactivity (Carmigniani et al., 2011; Rauschnabel, Feliz, & Hinsch, 2019). These features are what differentiates augmented reality from other new technologies like virtual reality.

Currently, augmented reality is applied in areas such as training and education, healthcare, travel, and tourism, but also in retail and marketing (Grzegorczyk, Sliwinski, & Kaczmarek, 2019). This has led to the concept of AR marketing and can be defined as a strategic concept that integrates digital information or objects into the subject's perception of the physical world, often in combination with other media, to expose, articulate or demonstrate consumers benefits to achieve organizational goals (Rauschnabel et al., 2019). Integrating augmented reality into an organization's marketing could provide unique benefits to their marketing program (Scholz & Smith, 2016). However, it could also be used to enhance the customer experience (Grzegorczyk et al., 2019). The customer experience is bound to change because of the increase in the use of new technologies. It is expected that along the customer experience new touchpoints will emerge (Hoyer, Kroschke, Schmitt, Kraume, & Shankar, 2020; Lemon & Verhoef, 2016). This is where the challenge for organizations to keep control over creating and managing the customer experience starts. Due to the increase in touch points for the consumers, the control of the organizations on the experience is slipping away (Lemon & Verhoef, 2016). Organizations are required to reconfigure their existing touchpoints to fit with the use of the new technologies in order to regain control over the customer experience (Hoyer et al., 2020). This study explores if augmented reality could be used to reconfigure those touchpoints and whether it would provide a unique and more interactive customer experience.

1.1 The research topic

This research will focus on the influence augmented reality (AR) has on the customer experience. More specifically, it looks at the influence augmented reality has on the level of involvement and emotion in the customer experience and if it is different for consumers buying a passenger vehicle (B2C) and consumers buying a commercial vehicle (B2B). The difference in involvement and emotion between these groups is expected to be caused by the use of augmented reality. Several antecedents and outcomes related to involvement, emotion and the customer experience are taken into account to examine those constructs in relation to augmented reality. The aim of this research is to provide an in-depth understanding of which consumer groups are more likely to engage with augmented reality and how it improves decision making for two main consumer groups (B2B and B2C) in the automotive industry by conducting a qualitative research into this topic. A qualitative approach can help understand people and their motivations and actions (Myers, 2013), which makes it most suited for this topic. In addition, the richness of the material in a qualitative study ensures that profound statements about a specific phenomenon can be made on the basis of a small number of observation units (Bleijenbergh, 2015). The main research question of this study is as follows:

Does augmented reality influence the level of emotion and involvement during the customer experience and how does this influence differ for business-to-consumers (B2C) versus business-to-business (B2B) in the automotive industry?

1.2 The relevance of the research topic

The insights that will be generated by doing research into this topic will contribute to the existing literature on augmented reality and the customer experience. Up to now, augmented reality has mostly been studied to explore the possibilities of using the technology within the area of products and services. There are very few studies focusing on the influence of augmented reality on consumers, which makes the topic largely untouched. Considering augmented reality could serve for enhancing the customer experience, it is of relevance to find out how the integration of augmented reality into the customer experience would influence different consumer groups. Augmented reality is assumed to have a certain ‘wow factor’ to it which is expected to be more appealing to the B2C sector as compared to the B2B sector (Gankhuyag, Xiang, & Bonnevie, 2015). Since both sectors are different in nature, they can be seen as somewhat opposing. In the B2B sector the decision-making and purchasing process is more straightforward making augmented reality’s ‘wow factor’ less attractive to them (Gankhuyag et al., 2015). Considering that consumers from both sectors are buying a product

with a different purpose, makes it interesting to compare them as well. Besides, it would be interesting for an organization to see whether augmented reality would have the same effect for the B2B sector as it does for the B2C sector. It is for this reason that the influence of augmented reality on the customer experience is measured for these two consumers groups. The expectation is that the way in which augmented reality is used during the customer experience could result in different levels of emotion and involvement between these groups. This expectation is discussed further in Section 2.

For this study, there has been chosen to explore the influence of augmented reality on the customer experience in one specific industry, namely the automotive industry. This industry has been dealing with several challenges over the past few years and is still encountering new ones. As mentioned in the research of Llopis-Albert, Rubio, and Valero (2021), one of these challenges is digitization. As a result, consumer needs are changing which requires automotive organizations to act on this. This study explores if augmented reality could be the solution to the challenge of digitization and the changing consumer needs.

Exploring the influence of augmented reality during the customer experience of the B2B and B2C sector would fill a gap in the current research literature by providing a more in-depth understanding of which consumers are likely to engage with AR but also how consumers react to this new technology, how positively (or negatively) they experience it and if it helps them to make better decisions. This need for an in-depth understanding into the topic has been acknowledged in the studies by Hilken, De Ruyter, Chylinski, Mahr and Keeling (2017) and Hoyer et al. (2020). In addition, Hilken et al. (2017) and Hoyer et al. (2020) describe the need for a better understanding of how AR can improve decision making and what makes for a compelling experience. Since the B2B and B2C sector each have their own decision-making process, this study provides insight into how augmented reality influences this process in both sectors and in which sector it would have the most influence.

As a result, doing research into this topic provides marketing and customer experience managers with insights on what benefits (or downsides) the integration of augmented reality into the customer experience could have. For these managers who are active in the automotive industry, it provides detailed information on which consumers groups react more positively to the use of augmented reality and what influence it has for the level of involvement and emotion experienced by consumers. Most importantly, it provides insights into how the purchase intention of consumers (B2B and B2C) is changed by the use of augmented reality.

1.3 The outline of the research

This research starts by explaining and structuring the existing literature on the customer experience and augmented reality. Then it will dive deeper into the influence augmented reality might have on the customer experience of B2C versus B2B within the automotive industry, and how constructs such as involvement and emotion are interesting to integrate into this relationship. Since this study is qualitative in nature, the data has been collected through interviews with both consumer groups. The collected data is thoroughly discussed in the results section followed by the conclusions that can be drawn from it. After the conclusion, there is a discussion section in which the literature comes back and proceeds with the theoretical and managerial implications. The study ends by addressing its limitations and suggestions for further research which includes a framework that could be tested in the future.

2. Theoretical background on the research topic

2.1 The theory of the customer experience

The customer experience, as defined by Lemon and Verhoef (2016), is a multidimensional construct focusing on a customer's cognitive, emotional, behavioral, sensorial and social responses to a firm's offerings during the customer's entire purchase journey. In the study by De Keyser, Lemon, Keiningham and Klaus (2015), customer experience is described as the cognitive, emotional, physical, sensorial, and social elements that mark the customer's direct or indirect interaction with a market actor, in which the market actor can be both human and non-human. In this study the focus will be on the emotional and behavioral responses as well as a non-human market actor, in this case augmented reality. The rationale behind this is that consumers experience a wide range of emotions during the interactions with a company when searching for or choosing their products or services (Manthiou, Hickman, & Klaus, 2020). Additionally, the behavior of consumers is expected to be changed by the interaction with the chosen non-human market actor.

The customer experience is iterative and dynamic and consists of three stages: prepurchase, purchase and postpurchase (Lemon & Verhoef, 2016; Nasution, Sembada, Miliani, Resti, & Prawono, 2014; Jain, Aagja, & Bagdare, 2017). As defined by Lemon and Verhoef (2016), the prepurchase stage encompasses all aspects of the customer's interaction with the brand, category, and environment before a purchase interaction. The purchase stage is one step further and covers all customer interactions with the brand and its environment during the purchase itself. Lastly, the postpurchase stage consists of customer interactions with the brand and its environment following the actual purchase. The focus of this research

will be the prepurchase stage since this is where consumers are actively searching for information, evaluate the alternatives and want to try out the product if possible. It is also the stage in which consumers shape their perceptions and form their attitudes which are important for decision making (Jain et al., 2017). Moreover, the experiences of consumers in the prepurchase stage are crucial when it comes to whether the consumer decides to continue the customer experience with the organization (Nasution et al., 2014). Therefore, the prepurchase stage can be seen as the most important and most valuable stage. If consumers are not satisfied by the touch points with the organization during that phase, the chances of them continuing are low, and the organization may lose a (potential) customer. However, if the consumers are satisfied in this stage, it could have several benefits amongst which the consumer becoming a customer is the most desirable one.

Changes in the customer experience

The interaction between an organization and consumers is changing since the latter increasingly wants to interact with an organization and in that way co-create value. Therefore, organizations should let go of the firm-centric view and focus on co-creating value by means of personalized interactions with their customers (Prahalad & Ramaswamy, 2004). This can be referred to as customer-centric logic and suggests that customers are not only a critical source of information but also active participants for new value creation and innovation (Palma, Trimi, & Hong, 2019). As mentioned by De Keyser et al. (2015) and Prahalad and Ramaswamy (2004), organizations can create optimal experience environments in which consumers can participate and co-create their own personalized experiences. In this way, the customer experience will not solely be created by the organization anymore.

The integration of new technology is found to be important when creating optimal customer experiences (Hoyer et al., 2020). Several studies have suggested how these new technologies play a role. First, these new technologies allow for consumers to have a more dynamic and autonomous role in their experiences and for the company to increase the value provided to consumers (Flavián, Ibáñez-Sánchez, & Orús, 2019). Second, the use of augmented reality increases consumer involvement (Park & Yoo, 2020) and enables consumers to create and manage their own experience. Third, it can increase the knowledge consumers have about the product (Park & Yoo, 2020; Hoyer et al., 2020), increase curiosity and enjoyment, and have the consumers create an emotional connection to the product (Hoyer et al., 2020). Fourth, it aids consumers to collect information, facilitate imagination and assist in making a decision (Hoyer et al., 2020). Lastly, augmented reality enables organizations to

promote value co-creation (Hilken et al., 2017), which as aforementioned is increasing. When using new technologies to enhance the customer experience, the focus should be on adopting them to improve and provide more value to the core experience of the consumers and not only on satisfying the consumers' need to try new technologies (Flavián et al., 2019). So, the use of augmented reality should extend the customer experience and be offered during (one of) the stages to help fulfill the organization's (marketing) objectives.

Operationalization of the customer experience

Purchase intention will be used to measure the customer experience since this can be seen as an item belonging to the construct. A study by Nasution et al. (2014) describes that elements of the marketing strategy, with whom a consumer might interact with in either of the three stages, may influence a consumer's purchase intention. The same study of Nasution et al. (2014) states that the customer's level of involvement, emotional and interpersonal factors should be taken into account with the operationalization of the customer experience. Moreover, a customer's level of involvement and level of emotion might explain why the customer experience is perceived in a positive or negative way and if the consumer is to go on with it after the prepurchase stage. Besides, consumers are more involved with products linked with positive affect that generates pleasant emotions (Calvo-Porral, Ruiz-Vega, & Lévy-Mangin, 2018). According to Mano and Oliver (1993), arousal (a form of emotion) is one of the most direct expressions of involvement. These studies show that involvement and emotion are often influencing each other and are therefore examined together in relation to the customer experience. Therefore, it is assumed that involvement and emotion are related to each other in this study as well. As the study by Huang (2012) describes, the purchase intention might increase when affective involvement, cognitive involvement and flow experiences are improved and enhanced via a high quality of interactive features (Huang, 2012). For this reason, this study takes involvement and emotion (often conceptualized as flow) into account and considers augmented reality as the interactive feature to explore this further. These two constructs are defined and discussed by literature in Section 2.2 and 2.3.

The purchase intention will be measured for the two different consumer groups as mentioned in Sections 1.1 and 1.2: consumers buying a passenger vehicle (B2C) and consumers buying a commercial vehicle (B2B). These two groups will hereafter be referred to as respectively private consumers and fleet managers. As regards the fleet managers, their main responsibility is concerned with organizing the fleet, which could be cars, vans or trucks an organization has available for its use. Other responsibilities are buying or leasing new

vehicles, registering these new vehicles, have meetings with importers or dealers, and so on. As regards the private consumers, these could be anyone who is interested in, or currently in the process of, buying a new car with the purpose of using it privately.

2.2 The level of involvement during the customer experience

As aforementioned, the level of involvement influences the purchase intention (Huang, 2012) and could determine how consumers perceive the customer experience. In addition, depending on the level of involvement, consumers differ in the extent of their decision process and their search for information (Laurent & Kapferer, 1985; Kassarjian, 1981). Therefore, involvement can be regarded as a behavioral response to a firm's offering and thereby partly constitutes the customer experience. For this reason, the level of involvement is taken into account when examining the influence of a nonhuman actor during the customer experience.

Definitions and the operationalization of involvement

The study by Traylor and Joseph (1984) provides several definitions of involvement such as being the interest in a stimulus, being the bridges or connections between the self and the stimulus, or relevance of the stimulus to personal goals. The authors themselves define involvement as the response that reflects an individual's sense of self or identity and is activated or provoked by external stimuli (Traylor & Joseph, 1984). In line with this definition, Zaichkowsky (1985) defines involvement as a person's perceived relevance of the object based on inherent needs, values, and interests.

Involvement has been operationalized in many ways. Laurent and Kapferer (1985) came up with four antecedents or facets of high involvement purchases: (1) the perceived importance to the buyer, (2) the perceived risk associated with the product purchase, (3) the symbolic value attributed by the consumer to the product and (4) the emotional or hedonic value of the product. Mittal and Lee (1989) define six sources of involvement which are: product-sign value, brand-sign value, product-hedonic value, brand-hedonic value, brand risk and product utility. Zaichkowsky (1986) came up with a framework in her study which defines three antecedents of involvement: (1) person factors, (2) object or stimulus factors and (3) situational factors. Only the first two antecedents are applicable for involvement with products. Three possible outcomes of involvement with products as identified in the same study by Zaichkowsky (1986) are: relative importance of the product class, perceived differences in product attributes, and preference of a particular brand. Several of these antecedents, influences and outcomes will be used to measure the level of involvement.

A consumer can be involved with either advertisements, products, or purchase decisions. The focus will be on product involvement because this can lead to greater perception of attribute differences, perception of greater product importance and greater commitment to brand choice (Zaichkowsky, 1985). Also, the construct is more concerned with the relevance of the product and the needs and values of the consumer (Zaichkowsky, 1985). A concrete definition of product involvement is given by Dholakia (1997) who defines the construct as an internal state variable that indicates the amount of arousal, interest or drive evoked by a product class. The definition used by Mittal and Lee (1989) states that product involvement is the interest a consumer finds in a product class, in which the interest stems from the consumer's perception that the product class meets important values and goals.

As mentioned by Laurent and Kapferer (1985) and Dholakia (1997), risk is often associated with the level of involvement. More concrete, it is assumed that perceived risk influences involvement, hence it being an antecedent in the study by Laurent and Kapferer (1985). One of the reasons why risk is often associated with product involvement is because both constructs incorporate the notion of importance of a product class to the consumers (Dholakia, 1997). Therefore, the chances are that consumers with a high level of involvement also experience high perceived risk. Another reason is that high levels of perceived risk and product involvement are likely to result in more extensive information gathering and more elaborate information processing by the consumer (Dholakia, 1997). This same study by Dholakia (1997) mentions that each product class has risk inherently associated with it, but this risk is perceived differently by each individual consumer. A car belongs to a product class where consumers often perceive the risk to be high. Yet, it is expected that this risk will be different for certain consumers groups.

The level of involvement for B2C versus B2B

According to Zaichkowsky (1986) there are two underlying factors that are assumed to influence whether a product is considered high or low involving. These factors are (1) the personal importance, personal ego, or personal relevance and (2) the differentiation of alternatives which is the amount of product distinction within a product class. If the level of interest in a stimulus is very low, a consumer's cognitive and behavioral activities are different from high involvement situations (Antil, 1984). In addition, high involvement suggests that the beliefs about product attributes are firmly held and only influenced by strong quality arguments, while with low involvement, beliefs are not strongly held and thus easily influenced (Zaichkowsky, 1986). This is also proposed by the elaboration likelihood model of

Petty and Cacioppo (1983). The model suggests that as an issue or product increases in personal relevance or consequences, it becomes more important and adaptive to forming a reasoned opinion. Consumers are more motivated to devote the cognitive effort required to evaluate a product when involvement is high (Petty and Cacioppo, 1983). Further, when consumers are believed to be highly involved, they engage in several behaviors such as active search, active information processing and have an extensive choice process (Laurent & Kapferer, 1985; Kassarjian, 1981). Additionally, under high involvement, deliberate choice occurs (Zaichkowsky, 2012; Kassarjian, 1981). In the case of low involvement, attitudes appear to be affected by simple acceptance and rejection cues in the persuasion context and are less affected by argument quality (Petty and Cacioppo, 1983). Consumers with low involvement do not hold strong beliefs about product attributes (Zaichkowsky, 1985). Furthermore, information is received holistically, and choices are made without any high degree of awareness (Kassarjian, 1981). A situation in which a consumer is either unwilling or unable to exert effort or devote emotional resources to buying a product is characterized as a low-effort situation. Besides, consumers usually do not form strong beliefs or accessible, persistent, resistant, or confident attitudes (Hoyer, MacInnis, & Pieters, 2018, p. 155).

Buying a car can be seen as a purchase in which consumers experience high product involvement. According to Abramson and Desai (1993) the financial risk and personal relevance of the purchase dictate that car buyers put forth much effort before making a decision. The study by Zaichkowsky (1987) measured the varying degrees of involvement for several products and concluded that automobiles are perceived to be the most involving product category. However, it is expected that not all consumers experience a high level of involvement when it comes to purchasing a car. Private consumers are believed to have high involvement with the product. One of the reasons for this is that buying a car has a high personal relevance for this type of consumer. Moreover, a car is assumed to have a high symbolic value to it, which could be seen as a motivation why this consumer group puts more effort into buying a new car. Lastly, private consumers will see buying a car as a purchase with a high perceived risk and have therefore high involvement in order to reduce the level of risk associated with it. A fleet managers' level of involvement is expected to be lower than that of a private consumer. For fleet managers, it assumed that a car does not have such a high personal relevance because they do not buy the vehicles for themselves, but for the organization. In turn, this might also explain why they see it as a purchase with lower perceived risk. In addition, having no personal assets involved is expected to be a reason why cars have a lower perceived risk and less symbolic value for fleet managers. For them, buying

a car is more relevant on an organizational level and therefore it is expected that their beliefs are more easily influenced since they want the best deal for the organization. Moreover, their choice process is less extensive as opposed to private consumers. So, the expectation is that for private consumers a car has high personal relevance, more symbolic value and higher perceived risk attached to it as compared to fleet managers, and the beliefs of fleet managers are expected to be influenced easier than those of private consumers.

2.3 The level of emotion during the customer experience

Another construct that is found to be important regarding the customer experience, alongside involvement, is emotion. When experiences regarding emotions are improved and enhanced by means of interactive features, this could lead to an increase in the purchase intention (Huang, 2012). Moreover, a customer's emotional factors are important to consider when operationalizing the customer experience (Nasution et al., 2014), meaning that it partly constitutes the customer experience as well. For this reason, the level of emotion is taken into account when examining the influence of a nonhuman actor during the customer experience.

Definitions and the operationalization of emotion

Emotion is part of the affective component of behavior (Lavidge & Steiner, 1961) and is defined by Bagozzi, Gopinath and Nyer (1999) as *'a mental state of readiness that arises from cognitive appraisals of events or thoughts, is often expressed physically, and may result in specific actions to affirm or cope with the emotion, depending on its nature and meaning for the person having it.'* A person's emotional state can influence various aspects of information processing including encoding and retrieval of information, different strategies used to process information, evaluations and judgments, and creative thinking (Bagozzi et al., 1999) and may serve as an effective retrieval cue (Isen, Shalker, Clark, & Karp, 1978). Consumers with a high level of emotion during the customer experience will search for more information on a product and process this information more extensively as compared to consumers with a lower level of emotion. Moreover, if consumers will be encountered with a certain cue, this will evoke certain emotions which the consumer associates with this cue based on previous experiences. Therefore, it is of importance for organizations, when using certain cues, to have it create a positive experience in the minds of the consumer. This could lead to benefits for the organization in the future when the consumers will be exposed to this cue again. Examples of such benefits are more positive evaluations regarding an organization's products or services but also the organization itself.

There can be made a difference between two kinds of emotions: incidental emotions, which arise from sources that are unrelated to a particular decision, but their influence carries over to that subsequent decision, and integral emotions, which are experienced when marketers embed emotions in the marketing stimuli or contexts with the intension of influencing a particular decision (Achar, So, Agrawal, & Duhachek, 2016; Han, Lerner, & Keltner, 2007; Lerner & Keltner, 2000; Pham, 2007). Incidental emotions, which have an influence on how consumers decide, can be provoked by unrelated environmental factors such as prior events or a consumer's personality (Achar et al., 2016). Integral emotions on the other hand, are elicited by features of the target object, whether these features are real, perceived or imagined, and play a role in consumer's evaluation of, decisions about and behavior towards objects (Pham, 2007). When encountered with a specific feature of an object, this might evoke a certain feeling for the consumer. If positive emotions are evoked, consumers will most likely evaluate the object more positively as compared to when negative emotions are evoked. Integral emotions can appear very rapidly and enter through simple associations (Pham, 2007). Therefore, organizations should use cues which evoke positive emotions and, in that way, create positive associations with the product, so that when a consumer is exposed to the cue again, it immediately arouses these integral emotions.

The level of emotion for B2C versus B2B

A consumer's emotion will influence the outcome of their decision and the way in which information is being processed (Garg, Inman, & Mittal, 2005). Research in the area of emotions describes that consumers who are in a positive mood have shown to evaluate stimuli more positively than consumers in a neutral or negative mood when the stimuli concern consumer goods (Bagozzi et al., 1999; Isen et al., 1978). In this case, the consumer good is a car which would suggest that consumers in a positive mood evaluate stimuli regarding a car more positively. This is expected to be the case for private consumers. Private consumers are assumed to be more invested during the customer experience and thus experience a higher level of emotion because it is not an everyday purchase for them. Especially since a car costs a lot of money and is considered a durable product that the consumer will usually live with for a number of years (Abramson & Desai, 1993). For fleet managers, it is assumed that there is less emotion involved when buying a car. Their goal is often to get the best deal for the least amount of money. In addition, fleet managers are expected to be in a more neutral mood when it concerns cars because they work with vehicles on a daily basis and new cars are being bought more often. So, the excitement of buying a new car is less for fleet managers as

compared to private consumers, who as aforementioned often buy a car for a longer period of time and do not change for several years. To follow up, people in a positive mood, as compared to those in a neutral or negative mood, tend to be better at integrating information, finding relationships among stimuli, and finding creative solutions (Bagozzi et al., 1999). Interestingly, information processing and strategies used to process information were also found to be important when a consumer experiences high involvement. To follow up on this, the study by Mano and Oliver (1993) describes that high involvement products elicit stronger emotional reactions. Therefore, the assumption is that private consumers, as compared to fleet managers, experience a higher level of emotion because buying a car is also seen as a high involvement purchase for them. In other words, it can be suggested that consumers who have high involvement also have a high level of emotion.

2.4 The use of augmented reality in practice

Augmented reality can be used by an organization for its product presentations. One of the key benefits for using augmented reality for product presentations is the ability to have a 360-degree product rotation or an actual try-on (Hilken et al., 2017). Moreover, it would improve the consumer's ability to evaluate the product due to the possibility of controlling the virtual product themselves by using the same physical movements as would normally be used when evaluating the actual product (Hilken et al., 2017). Lastly, it enables consumers to understand products better and feel confident in their purchase decision (Choi & Choi, 2020). According to Choi and Choi (2020) products can be either search products or experience products. Search products can be understood without interacting with it, while experience products do need interaction with the product to be understood (Choi & Choi, 2020). Building forth on this distinction, the use of augmented reality for product presentations can be distinguished into (1) product presentations focusing on providing information (search products) and (2) product presentations focusing on arousing emotions and providing an experience (experience products). The former will be referred to as augmented reality for informational purposes and the latter will be referred to as augmented reality for emotional purposes. When the AR product presentation is used for emotional purposes, it will be more focused on providing an opportunity for consumers to experience the product and not on providing detailed (technical) information. Consumers will be able to experience the product without actually using it. When the AR product presentation is used for informational purposes, it will be focused on enabling consumers to see the most interesting and meaningful product information and less focused on experiencing the product.

2.4.1 The influence of augmented reality on emotion

One of the constructs that is expected to be influenced by the use of augmented reality is emotion. As came forth in the section on emotion itself, it was clear that the use of certain cues might evoke positive feelings or integral emotions. Augmented reality is expected to be such a cue that can influence a consumer's level of emotion. This relationship between augmented reality and emotions, or affective responses, is already explored to a certain extent in the study by Javornik (2016), who provides a research agenda for studying the impact of augmented reality on consumer behavior. This study by Javornik (2016) mentions that a customer experience including AR might be more hedonic (affective) than utilitarian (cognitive). So, a customer may experience more emotions or more positive feelings when encountered with AR. This might partly be due to the fact that interactivity leads to affective responses (Javornik, 2016). These affective responses or positive feelings that follow from using augmented reality could be transmitted to the product and in that way lead to more positive evaluations of the product (Kowalczuk et al., 2021). This means that organizations can make use of augmented reality to have it create a positive experience for the consumer and at the same time create positive product evaluations. In the same way, when a consumer is encountered with augmented reality, this could evoke positive feelings and result in consumers evaluating the encounter as positive, so that when the next time the consumer encounters augmented reality, it will again have these positive feelings and associations. In addition, augmented reality does arouse higher feelings of enjoyment, but lower values of usefulness as compared to web-based product presentations (Kowalczuk et al., 2021; Yim, Chu, & Sauer, 2017). This might be due to the fact that augmented reality is more focused on creating an experience and increasing engagement with products and brands (Rauschnabel et al., 2019) which is something that online cannot be done as extensive as in real life. By creating an experience, the consumer might be less focused on the actual product information and more on the use of augmented reality and how it enhances the product presentation in general, what might explain the higher feelings of enjoyment.

The relationship of augmented reality on emotion of a certain consumer group within a specific industry is not yet thoroughly explored. More specifically, the use of augmented reality for emotional or informational purposes and its influence on emotion remains unknown. This study expects that the more informational use of augmented reality regarding product presentations will evoke more emotion for B2B as compared to B2C. One of the reasons for this is that consumers from the B2B sector are often buying in larger quantities, want a more customized or tailored product and often have longer negotiations (Dibb, Simkin,

Pride, & Ferrell, 2019). Therefore, more information about the characteristics of a car such as the measurements are needed instead of the options regarding colors and in-car features. In addition, consumers from the B2B sector are usually better informed about the product (Dibb et al., 2019) and thus do not seek the whole extensive experience that consumers from the B2C sector seek. Therefore, it can be assumed that the B2B sector sees a car more as a search product and not so much as an experience product. As a result, using augmented reality for informational purposes would be more influential for the level of emotion for B2B.

In the case of B2C, the use of augmented reality for emotional purposes regarding product presentations is expected to evoke more emotion for this consumer group. Their interests lie with making the car as much to their personal liking as possible and thus make it their 'own'. In addition, there are several factors that also influence the decision of the consumers from the B2C sector. An example of this are social factors such as social classes, culture and family (Dibb et al., 2019). These factors influence the decision-making process and might to a certain extent be the primary reason for buying a car or not. A car, as mentioned before, can have a high symbolic value and reflect the social class or status of a consumer and it that way have an influence on the perception of others. This reflection of a consumer's self within a car could be one of the underlying reasons why the B2C sector would be more triggered by the emotional use of augmented reality. For this reason, it can be assumed that B2C see a car more as an experience product than as a search product. Therefore, using augmented reality for emotional purposes would have a stronger influence on the level of emotion for B2C.

2.4.2 The influence of augmented reality on involvement

Another construct that is expected to be influenced by the use of augmented reality is involvement. The level of involvement has an influence on how well interactive features are comprehended by consumers (Macias, 2003). Augmented reality can be seen as such an interactive feature because, as mentioned in Section 1, one of the key features of augmented reality is interactivity. Augmented reality also influences the level of involvement by providing consumers with a more interactive and fun shopping experience (Park & Yoo, 2020). When encountered with augmented reality, consumers need to devote more cognitive resources to make use of the technology. As aforementioned, Petty and Cacioppo (1983) suggest that consumers devote more cognitive effort to a product when the level of involvement is high. The study by Sicilia, Ruiz and Munuera (2005) addresses this as well by suggesting that interactive information needs to be structured by the consumer and by doing

so requires extensive cognitive effort. So, the use of augmented reality leads to an increase in the cognitive resources devoted to a product by consumers and in that way could also lead to an increase in the level of involvement. Because augmented reality is an interactive way of experiencing the product, it might also reduce the perceived risk consumers have, since the consumers are able to interact with the product and thus already have some kind of experience with the product via augmented reality. As aforementioned, perceived risk was found to be one of the antecedents of involvement. Therefore, the use of augmented reality might have a positive influence on the level of perceived risk. This positive influence is expected to take the form of a decrease in the level of perceived risk. In turn, this decrease might lead to a higher level of involvement because consumers feel more comfortable with the product and want to explore more.

As mentioned in Section 2.4, the use of augmented reality can either be focused on providing information or on arousing emotions and providing an experience. It can be assumed that the level of involvement of B2B and B2C consumers will differ based on either the informational or emotional use of augmented reality. It is expected that consumers who have high involvement with the product, are more open to trying new technologies such as augmented reality to experience the product or parts of it. Due to the fact that a car has high personal relevance for consumers with high involvement, it is assumed that these consumers are more engaged when buying the product and will most likely react more positively to the use of augmented reality during the customer experience as compared to consumers with a low level of involvement. Another reason is that consumers with a high level of involvement have more orienting responses to the interactivity because of an interest in the product category (Macias, 2003). The interactivity also stimulates the elaboration of information (Park & Yoo, 2020). Moreover, consumers with high involvement make extensive use of cognitive resources to process relevant information and will utilize interactive features when available. It is expected that consumers from the B2C sector have high involvement with the product and will make more use of the interactive features augmented reality has to offer. When augmented reality is used for emotional purposes, there will be more interactive features available to use and thus more cognitive resources are required. Since consumers with high involvement make more use of their cognitive resources, which is expected to be the case for B2C, the availability of many interactive features to experience the product will likely be more of interest to them as opposed to B2B. Therefore, the B2C sector will see a car more as an experience product and thus the use of augmented reality for emotional purposes is assumed to increase the level of involvement

Since consumers with a low level of involvement perceive the product to have a lower personal relevance and symbolic value, experiencing the product in a whole new environment, which is the case with augmented reality, is assumed to be less attractive for them. Another reason why the use of augmented reality is less appealing to consumers with lower involvement, in this case B2B, is because they tend to engage in heuristic processing of information and thus rarely use interactive features to actively process information (Park & Yoo, 2020). In other words, consumers with a low level of involvement will barely use their cognitive resources when encountered with augmented reality. Therefore, a less interactive experience, which will be the case when augmented reality is used for the more informational purposes, will require less cognitive resources and processing, and be more suited for B2B.

3. Methodology

3.1 The research method

A qualitative study concerns all types of research that are focused on gathering and interpreting linguistic material and based on that material make a conclusion about a certain phenomenon (Bleijenbergh, 2015). Additionally, it is used to study social and cultural phenomena and can help understand the broader context (Myers, 2013). Most of the data of a qualitative study is delivered by means of interviews, observations, and documents (Bleijenbergh, 2015; Myers, 2013). This research is considered a qualitative study because it aimed to understand people and their motivation in a certain situation. In other words, the aim was to provide an in-depth understanding of the influence augmented reality has in the B2B versus the B2C sector within the automotive industry. Therefore, the approach of this study has been inductive because this concerns a more open-ended and exploratory approach (Myers, 2013) and does not have a clear theoretical framework to start from (Bleijenbergh, 2015). Besides, the focus of a study with an inductive approach is theory-building, which was also one of the aims of this study.

The topic of this study was found most suitable to be tested more inductive and exploratory in nature. The constructs that were taken into account in this research are the customer experience, involvement, emotion, and augmented reality. Due to the fact that this concerns a qualitative study, there was no need to develop a conceptual framework with hypotheses, yet after the literature review there were certain expectations regarding the constructs. The main expectation is that a consumer's level of involvement and level of emotion are influenced by augmented reality and the two purposes for which it can be used.

This study used interviews to acquire the data that was necessary to explore this relationship in more detail. Further elaboration on the interviews is provided in Section 3.2.

As aforementioned, one of the aims of this research was theory-building. More specifically, this study aimed to come up with a conceptual framework and perhaps hypotheses that could be tested in future research. So, this research is considered preliminary and will serve as a beginning for testing the relationship between augmented reality and the influence on the B2C and B2B sector during the customer experience.

The operationalization of the constructs

This research has several constructs derived from literature that need to be operationalized beforehand to make them measurable during the data collection process. First of all, the customer experience. The customer experience construct consists of the following items (1) purchase intention, (2) a nonhuman actor and (3) the prepurchase stage. In other words, there has been looked at how the nonhuman actor, in this case augmented reality, would have an influence on a consumer's purchase intention when going through the prepurchase stage. These three items were also used to formulate questions for the interviews.

Second, there is the construct of involvement which was measured as either high involvement with a product or low involvement with a product meaning that a private consumer and fleet manager have either high or low involvement with a car. Many antecedents and sources of involvement have been identified by previous studies (Laurent & Kapferer, 1985; Mittal & Lee, 1989; Zaichkowsky, 1986) of which a few were considered as well. These antecedents are personal relevance, perceived risk, and symbolic value. So, the level of involvement was measured based on these three items and on being high or low.

The third construct being studied is emotion. There can be made a difference between two kinds of emotions: incidental emotions and integral emotions (Han et al.., 2007; Achar et al., 2016). In this study, there has been focused on both types of emotions. A reason for this choice was that integral emotions are experienced in relation to the object of judgment or decision (Pham, 2007), in this case a car, while incidental emotions are related to a person's personality (Achar et al., 2016). Moreover, integral emotions are the ones that play a role in a consumer's evaluation of and decisions about a product and therefore fit the aim of this research. Incidental emotions on the other hand, are valuable to consider seeing to what extent these emotions also influence the decision making. Emotions are known to be difficult to measure, therefore, the interview questions focused on being able to capture as much of this aspect as possible.

Lastly, there is the key construct of this study which is augmented reality. During the interviews, the augmented reality aspect was simulated by means of showing different scenarios of how the technology could be used for the product presentation of a car. As mentioned in Section 2.4, the product presentation can be either focused on providing information or focused on arousing emotions and providing an experience. Based on this, augmented reality could be used for informational or emotional purposes. Since it was expected that there would be a different effect on B2B and B2C regarding the use of augmented reality, there were two ways in which it has been simulated. In more detail, the influence of augmented reality on B2B was tested by means of showing scenarios where augmented reality is used to provide more detailed information regarding a product presentation and for B2C, the influence of augmented reality was tested by means of showing scenarios where augmented reality is used to arouse emotions and provide an experience regarding a product presentation. The scenario for the B2B sector was as follows: by scanning a QR code with an app, the most important information of a vehicle would be provided by means of augmented reality. This app would in turn open the camara and enable the consumer to see different features and numbers related to different parts of the vehicle. An example is that the consumer holds up the camera to the engine and sees what the horsepower and range is. So, the consumer can walk around the vehicle while being provided with the key information. For the B2C sector the same scenario was provided, but in this case, there is the possibility to change the color, add accessories, but also to go inside the vehicle and experience in more detail what it is like to drive it and what the different available options are when it comes to the interior. An example would be that the consumer holds the phone up to the seats and sees the possibilities for the upholstery or holds up the phone to the speakers and sees the details such as type of audio system and the bass level. Both scenarios have been simulated by showing pictures of the different possibilities via a PowerPoint presentation.

3.2 Data collection

As mentioned in Section 3.1, one of the primary data sources for a qualitative study are interviews (Bleijenbergh, 2015; Myers, 2013). This was also the case during this study. Since there had been chosen to explore the difference between consumers from the B2C and the B2B sector, the respondents were selected from these two groups. Due to the fact that the whole business-to-business (B2B) sector in the automotive industry is too extensive to measure as a whole, it was decided to use fleet managers as the representing group. There were several requirements for the fleet managers to be eligible for an interview. One of these

requirements was that the fleet managers have been working in this function for more than one year. Also, it was crucial that one of their responsibilities is to buy new vehicles for the fleet. As regards the business-to-consumer (B2C) sector in the automotive industry, this has been measured by using private consumers. For this group, the focus was on finding respondents with the following requirements: adults of middle age (between the age of 35 and 55 years), who are interested in, or in the process of, buying a car. The choice of middle-aged adults was based on the assumption that they have more to spend and have prior experience with buying a car. Only one person who has been interviewed fell outside this age group. However, she did have the required prior experience with buying a car.

The two consumer groups were represented by six consumers each to conduct an interview with. Beforehand, the expectation was that six interviews would provide sufficient information to formulate an answer to the research question. Besides, by conducting this number of interviews it was assumed that saturation would take place. In the end, this number of interviews was found to be satisfactory for providing the necessary information and saturation took place to the preferred extent. A higher number of interviews would have been preferred because this increases the validity and reliability of the research. Yet, because of time reasons, there was no possibility to conduct more than six interviews for each group.

The interviews

There are several types of interview structures which are: structured, semi-structured and unstructured (Bleijenbergh, 2015; Myers, 2013). In this case, semi-structured interviews were used. A semi-structured interview can be described as an interview in which the questions are formulated beforehand (Bleijenbergh, 2015), but does leave room for new questions emerging during the research (Myers, 2013). The latter is also one of the advantages of a semi-structured interview since the interviewer is able to add important new insights during the course of the conversation (Myers, 2013). Another advantage of semi-structured interviews is that the reliability is relatively high because all respondents are asked the same questions (Bleijenbergh, 2015). A possible downside is that the validity might be lower because there is not much room to go deeply into unexpected issues that might arise during the interview (Bleijenbergh, 2015). The primary reason why this study used a semi-structured interview is so that all respondents were asked the same questions which made it easier to compare the results between the two sectors and it increased the chance of saturation occurring.

A lot of attention went out to the formulation of the interview questions. As discussed by Bleijenbergh (2015) the interview questions should: be of relevance, reach the goal,

specify information, motivate, minimalize threat, and maximize empathy and recognition. All these aspects have been taken into account when formulating the questions. The information retrieved via the interviews was relevant and useful during the research. In addition, none of the respondents felt uncomfortable or unmotivated to provide an answer. The respondents felt at ease during the interviews and did not experience any manipulation caused by the questions. Lastly, the questions prevented the respondents to answer with a simple yes or no.

There had been developed an interview protocol in which everything, from the introduction to the ending is written out. Writing out the introduction and the closing part offers support for the interviewer, but also makes sure that the respondent knows where they stand and what is expected of them (Bleijenbergh, 2015). There were several crucial topics that have been addressed in the introduction. As regards the closing part, it was important to address how and in which way the interview would be used and to inform the respondent about the possibilities of reading through the transcript. This protocol also included the interview questions which had been formulated precisely while taking the aforementioned requirements for interview questions into account. There were made two protocols, one for the fleet managers and one for the private consumers. However, the only difference between the two are the questions. Both protocols have been added in Appendix 1.

Due to the current situation, most of the interviews took place via Zoom, Microsoft Teams or Google Meet. Only 2 of the 12 interviews were carried out in person and one interview took place via a phone call. For the latter, there was no possibility to show the scenario for augmented reality, but it was explained thoroughly instead. For this reason, there was no impact on the validity. Each respondent was familiar with the online setting and seemed to have no inconveniences. In addition, the ability to share the screen via these programs made it easier to show the respondents the scenarios via PowerPoint. So, the online setting had no impact on the outcomes of the interviews, nor on the validity and reliability.

3.3 Data analysis

When it comes to analyzing the data, there has been used a deductive approach. This approach is characterized by using constructs that have emerged from literature (Myers, 2013) and by having central dimensions and indicators during the coding process (Bleijenbergh, 2015). The primary reason for this approach is that certain constructs from the literature review were used to guide the interviews and, in that way, also guide the results. To be able to analyze the data, the interviews had first been transcribed. The interviews were conducted in Dutch, since this was the native language of most respondents. Therefore, the interviews had to be translated

whilst transcribing, which could have led to a decrease in validity and reliability. However, more information could be gathered because the interview was done in the native language of the respondent, since they felt more at ease and were able to respond more in-depth. The content of the answer is most important and therefore this weighs up against the possible decrease in reliability and validity. There was chosen to go for the clean verbatim transcript which leaves out the non-significant words and phrases that do not have a particular meaning and are therefore not of added value for the results. One of the main reasons for choosing this type of transcript was that it would not take up as much time as a verbatim transcript, but still preserved the key phrases and statements given in the interviews.

Once the interviews had transcribed, there was done a content analysis. In this study also referred to as coding, which can be defined as the application of concepts in the text as an aid to unravel, combine and interpret the data (Bleijenbergh, 2015). As described by Carson, Gilmore, Perry, and Gronhaug (2001), a content analysis codes groups of words in the transcripts into categories. These categories were determined based on the constructs that were found in the literature. The process of coding in this study consisted of the two phases as described by Carson et al. (2001), namely, (1) assigning codes to the data and (2) making comparisons and contrasts between the coded data. A useful aid in this process has been the codebook that involves the lists of codes and their definitions (Myers, 2013). The codes have been assigned to the data with a deductive approach. This means that the codes were derived from the central constructs of the study, which have been operationalized in Section 3.1. Yet, there were also codes which have been assigned inductively since these did not fit with the central constructs but were of interest for the results. After all the codes had been assigned, the data was compared and contrasted to each other in order to derive valuable results from it.

3.4 Research ethics

This research took into account the four practical ethical principles as defined by Myers (2013). These principles are truthfulness, thoroughness, objectivity and relevance. As mentioned in Section 1.2, this research is of relevance for the field and was not done for irrelevant reasons. As regards truthfulness and objectivity, it was one of the main objectives to stay truthful and not commit fraud. In addition, objectivity and honesty were maintained during the research and when analyzing the data. As regards the report itself, privacy of the respondents was maintained at all times. Their names have not been used in the results nor in the transcriptions. All respondents took part in the research voluntarily.

There were also some specific ethic principles that were taken into account when conducting the interviews. First of all, as discussed by Carson et al. (2001), the respondents were approached open and with honesty, since the same was expected from them. Second, all respondents were asked if they agree with recording the interview; none of them disagreed. Lastly, the interview stayed objective when asking the questions to avoid pointing the respondent into a certain direction and in that way receive the preferred answer. By doing so, the chances of decreasing the validity and reliability of the research were diminished.

4. Results

In this section the results from the interviews will be discussed. There have been conducted 12 interviews with people from the B2B and B2C sector in the automotive industry. Table 1 provides an overview of the respondents' gender, age (if applicable) and their job position.

Respondent	Gender	Age	Job position	Respondent	Gender	Job position
A – B2C	M	44	In between jobs	**U – B2B**	F	Fleet Manager at Baker Tilly
B – B2C	M	51	Production Manager	**V – B2B**	F	Office Manager at Assa Abloy
C – B2C	F	28	Intercedent	**W – B2B**	M	Purchaser/Contact Manager at Ricoh
D – B2C	M	46	Software Architect	**X – B2B**	F	Fleet Manager at Centric
E – B2C	M	56	Relation/Account Manager	**Y – B2B**	F	Fleet Manager at G4S
F – B2C	F	50	Owner of Prografici	**Z – B2B**	F	Lease Coordinator at BDO

Table 1. Overview respondents

4.1 The customer experience of the B2B and B2C sector

The interviews were focused on finding out what the current customer experience looks like for the B2B and B2C sector and how this experience could be changed by using augmented reality. The results help getting insight into what the differences and similarities are between both customer experiences and help gain an understanding as to why augmented reality might have more influence in one of the sectors. The level of involvement and emotion were also considered in these interviews, as well as how this could change by using augmented reality. These two aspects are discussed in the next sections.

For the B2C sector, the interviews started with asking the respondents more about the prepurchase stage of buying a car. All respondents had recently purchased or were in the process of looking for a new car. This included either a company car, an interesting lease deal by their employer, or a privately owned car. When it concerned a company car or an

interesting lease deal, there were no further implications on the choices for these respondents. Therefore, their prepurchase stage is comparable to that of the other respondents. One of the interview questions focused on how many years it takes before the respondents start looking for a new car or are allowed to choose one. The study by Abramson & Desai (1993) explained that a car is a durable product and consumers usually live with it for a number of years. Therefore, it was interesting to find out how many years the private consumers take before purchasing a new car. The interviews showed that the transit time of car for the respondents varied between 2 to 10 years, but on average the respondents take around 4 years before they start the process of looking for a new car.

Next, the interview dug deeper into the actual prepurchase stage and what this stage is like for the respondents. The respondents start by looking online on the websites of several brands or lease companies. Often, the comparison is made between brands and certain models of that brand, rarely between models of just one brand. Yet, there is also looked at other platforms than the websites of the brands, an example of this is driving tests on YouTube. In addition, this stage includes making a list with important characteristics for a car to have. The most important characteristics included on this list are automatic transmission, the type of upholstery, sound system, the amount of space, air-conditioning, and the safety systems. These should be easy to find on the website of the brand, however, the interviews showed that not everything is given by the brands. One of the respondents mentioned that it is hard to get all the technical and standard information since this is not always provided. Another respondent explained that she finds that certain brands should work on making their search function on the website more extensive.

Once there has been done research online, most respondents go to a dealer to either look in the showroom or to make a test drive. A test drive is found to be important by the respondents because it enables them to experience the car and see how it drives. It also allows them to get an impression of what it is like to sit in the car and how the seats feel. One of the respondents mentioned the following: '*It is always nice to check first, because maybe there is something you are not going to like.'* Another reason why the test drive is perceived important is because several respondents use the car for commuting and thus spent many hours in their car. Therefore, the seating and the other options such as sound- and navigation systems should be right. If it concerns an electric car, then the test drive is mostly done to find out if driving in that way is something they would like. Still, in some cases the test drive is only confirmatory because the extensive screening and researching is done online.

For the B2B sector the customer experience differs slightly from the B2C sector. In this case, the fleet managers are responsible for making agreements and arranging discounts with manufacturers, importers, dealers, and lease companies to buy or lease cars for their fleet. Moreover, as explained by the respondents, their job also consists of doing research on which new vehicles will enter the market, which vehicles are doing well for leasing, and writing up the policies regarding a company car. Depending on the size of the fleet and the organization the managers work for, managing the fleet is either a full-time job or an additional responsibility within their function.

The respondents lease the cars for their fleet from one or multiple lease companies, meaning that no personal or liquid assets of the organization are involved. When the lease contract of an employee is ending, which is often after 4 years, the employee will receive a notification or an email stating that they are allowed to pick out a new car. Often, the process of choosing a new car is done in the tool of the lease company. You see that in most organizations the employees either get assigned to a group with a budget attached to it or receive a car assigned to them by the organization. For the first group, there are differences in budget based on their function and they are free to choose in line with the policy. The second group, which often concerns people working in an operational or service function, gets a car assigned to them or must pick one from a very limited list. In some cases, an organization does not work with a budget, but with other arrangements of which a so-called 'car basket' is an example. In addition, each organization has its own policy when it comes to leasing a car. Such a policy includes information regarding the range of brands to choose from, the budget allowed to spend on accessories, information regarding driving electric vehicles and more. It might occur that organizations deviate from this policy when it concerns electric vehicles, meaning that employees have more freedom choosing a brand or receive extra benefits if they were to drive an electric car.

Additionally, the interview asked whether it is important if employees can experience a car by going to the showroom and/or making a test drive. Most organizations give their employees the freedom to visit a showroom and make a test drive. One respondent mentions the following: *'We advise everyone to make a test drive, or at least go sit in the car so you can see if the car ergonomically fits with you.'* You see that most employees prefer to see the car first, go sit in it and make a test drive. This is important for the experience and the feeling one has with a car. However, there are also people who do not have any preferences and do not mind which car they will drive and thus do not experience their car beforehand.

You see that there are both differences and similarities between the prepurchase stages of the customer experience for the B2B and B2C sector. The main difference is that the fleet managers are responsible for guiding the process for their employees and to guard matters such as the budget and policy, while the private consumers are free in that sense. Another difference between the two is that the fleet managers are closing agreements with importers and dealers for their organization, whereas the private consumers can close agreements with only the dealers and for themselves. In addition, the fleet managers lease their cars and do not have personal assets involved while private consumers do have personal assets involved regardless of buying or leasing a car. A similarity between the two sectors is the process of choosing a new car; both look online and afterwards book a test drive or go to the showroom.

4.2 The level of involvement during the customer experience

The literature review showed that there are many antecedents and sources of involvement (Laurent & Kapferer, 1985; Mittal & Lee, 1989; Zaichkowsky, 1986). In this study, personal relevance, perceived risk, and symbolic value are the three antecedents used to measure involvement for the respondents from the B2B and B2C sector. Several questions have been asked to find out whether the respondents feel involved with the product and if this involvement is high or low.

The level of involvement for the B2C sector

As mentioned in Section 4.1, the purchase of a car does already have personal relevance for the respondents because they need it for commuting or private matters. However, there are more aspects involved. Including accessories and additional features are two of those aspects since they make a car more to a person's liking and thus more personally relevant. Yet, you see that there are some differences in the extent to which the respondents add these extra options or accessories. Interestingly, the two female respondents did not add much and find the basics such as air-conditioning and Bluetooth sufficient. Still, a luxury interior is desired. For the male respondents, there are a bit more requirements regarding the car. These respondents like to add accessories to give the car a chicer appearance or they opt for a sportier look; luxury and business editions are also quite desired. To follow up, the respondents were asked about having prejudices when it comes to searching for a new car. Most of the respondents do have some kind of prejudices, but one more than the other. One of the prejudices that came forward was about the German car brands, due to their good reputation the respondent would not change quickly to non-German brand. Other prejudices

that were mentioned concerned what the car reflects towards others, what others say about the car and whether the car is known to perform well.

These prejudices indicate that respondents attach value to what others think of their car and see it as a product with symbolic value. Yet not everyone attaches value to what others will think of their car. Most respondents mention that they like it when others say something positive about their car. However, the choice is still made by the respondents themselves and not influenced much by family or friends. Another aspect of the symbolic value of a car is whether it reflects someone's class or social status. Only one respondent feels like this is not the case; he wants to focus more on what is important for his children and the environment. Yet, another respondent mentions the following: *'If you have something to spend then you will not go drive in a Ford Ka, then you are indeed going to look for a BMW, Audi or Mercedes.'* People are soon inclined to say that there is a relationship between a car and someone's class. This could be because people who drive a more luxury car often like to be seen in it, as others know what the price of such a car is. The following quote from one of the interviews explains well how the respondents are feeling about it: '*It is definitely a piece of identity, it could be.'*

As came forward in the literature review, risk is often associated with involvement. Therefore, the interview dug deeper into whether the respondents see the purchase of a car as one with a financial risk attached to it. The opinions are a bit divided on this subject. One interesting result is that the respondents who lease their car, do not attach a financial risk to it. A reason for this is that they know what they are getting into and pay a fixed amount per month. Therefore, it can be seen as a calculated risk because you are aware of the costs attached to it and what you can spend per month. However, the other respondents feel like a car does have a financial risk attached to it for several reasons. One of these reasons is that the residual value of a new car will quickly go down and the maintenance and taxes are also not cheap. This makes that a car can be seen as a bad investment. Yet, electric cars are interesting in this sense because the residual value will go up and thus could be a better investment.

The level of involvement for the B2B sector

For the B2B sector, the respondents were asked whether they feel personally involved or engaged with the product. There were only a few respondents who did not feel as personally involved with the product as compared to the majority of the fleet managers. The primary reason for this was that cars did not belong to their personal interests. However, now that the market is changing, it is becoming more interesting and attracting and makes these respondents feel like they are in the right place. The other respondents do feel involved with

the product and keep themselves up to date on the developments within the industry as well as the (new) products. A respondent gives the following reason for that: '*We must be of added value for when employees call us.'*

As regards the symbolic value of a car, you see that the respondents do not see a car as a product with a symbolic value attached to it. One of the respondents mentioned the following: *'I do not care how big your car is, if I like you or not.'* So, the fleet managers themselves do not attach much value to a car. However, the image the car will reflect for the organization is important. All respondents agree that the car should have a professional and business look, not be too showy, and must adhere to some restrictions regarding color and accessories. There is paid specific attention to the cars driven by the employees working in an operational function. These cars should also not be too showy and too expensive because these are used to visit clients or project sites. You see that even though these cars often include some kind of branding, the image it reflects must be kept professional and not give the wrong impressions. One respondent says the following about this: *'One knows who is paying that car, and then the client will feel like that they are paying too much.'* For the employees on the other hand, the respondents explain that a car is seen as a product with a high symbolic value. Yet, you see a division emerging within that. There is one group of employees, mostly men, who attach a high symbolic value to their car; it has to be bigger and better than the neighbors. For the other group of employees, mostly younger people, owning a car is becoming less important. In addition, the current situation where people work from home a lot has also contributed to this division. As mentioned by one of the respondents: '*The people are going to look critically at if they still need such an expensive car.'*

As regards the perceived risk, the respondents were asked to what extent they feel like the purchase of cars for the fleet has a high financial risk attached to it. The respondents' opinions are equally divided on this matter. An organization's fleet is seen as a high expense due to several factors of which the ability to re-use cars of former employees is one. At the same time, all organizations lease their cars and thus do not have liquid assets in their fleet, reducing the risk. If the occupancy rate is high and good agreements with importers, dealers and lease companies have been closed, the risk is perceived as low. If the occupancy rate is lower, the risk is perceived higher, also due to the changing preferences of the employees.

Based on what came forward during the interviews with the respondents of the B2C sector regarding personal relevance, perceived risk, and symbolic value, it can be stated that these respondents are involved with the product. The level of this involvement on the other hand, differs per respondent. Some have high involvement with the product while others also

have involved with the product but to a lower extent. Yet, when taken an overall view, it can be stated that the B2C consumers have high involvement with the product. For the B2B sector, you see that the respondents generally feel involved with the product. As regards the other antecedents, the symbolic value of a car is only acknowledged on an organization level and not on a personal level. The opinions regarding perceived risk also differ per respondent. So, as was expected based on the literature, the B2B sector does experience lower involvement with the product as compared to the B2C sector.

4.3 The level of emotion during the customer experience

Emotion is hard to measure because it concerns a mental state that arises from events or thoughts (Bagozzi et al., 1999), and thus mostly takes place in the consumers' heads. For this reason, there were not many questions within the interview that specifically captured emotion. However, most of the respondents did include the emotional aspect in their responses themselves. This could be because some questions had an underlying focus of capturing emotional attitude towards the product or on arousing emotion.

The level of emotion for the B2C sector

Most of the respondents from the B2C sector experience integral emotions elicited by a car, meaning that many of the opinions and preferences the respondents have are caused by this. Yet, you see that the incidental emotions, which are more linked to a person's personality, also play a role in the customer experience. Over the years, people have built up their preferences and do not quickly get of those which leads to certain feelings towards, but also expectations about, a car. To get more information about how the respondents feel towards the product, they were asked if the process of buying a new car makes them excited or if they see it as an obligation. All respondents mentioned that they get excited by the process. One aspect that was found to be important is the appearance of a car. The respondents do not want their car to be ugly but wish to be able to make a small impression with it. One respondent mentions the following: *'It must not be too showy, but it should be luxurious enough.*' You see that the respondents who are using the car mostly for work, like to drive and do have more emotion with it. For this reason, most respondents find it important to have a good car because of their (long) drive to work every day. It is perceived different when a car is bought with the intention of using it for doing groceries or paying visits. Given these statements it can be said that the integral emotions which are provoked by the car or features of it, have an important influence on the purchase intention.

As came forward in Section 4.1, all respondents have extensively looked online for a car which is part of the prepurchase stage. However, this extensive looking online can also be linked back to emotion. If someone does not experience any kind of emotion while screening and researching online, it would not be done to such an extent. For example, some respondents like to watch driving tests online to get a better look of a car without having to sit in it themselves. This also enables them to determine beforehand if the car would be suited. However, making a test drive in person is also important for the respondents to get a feeling of the car. One respondent mentioned she finds the test drive important because it can make you feel more comfortable with the fact that you are spending so much money. This is where the incidental emotions come into play since these influence how a consumer decides. All respondents place a high value on sitting in the car and feeling it before making the actual purchase. You see that the feeling someone has with a car should be right, as well as the emotion it evokes. Someone should have the right feeling on the inside, referring to how important it is to have the right feeling on the inside of the car regarding the seats and the look of the interior. When in fact, it is also important to have the right feeling in the inside of your body; that you feel comfortable in the car and that it is making you happy.

The level of emotion for the B2B sector

Most respondents from the B2B sector experience integral emotions, elicited by both a car and their job. Some respondents on the other hand, do not necessarily feel a lot of emotion when working with cars. The outcomes of the interviews show that the respondents are passionate about their work and get energy out of it, making them enthusiastic, but when it comes to personal life and being able to choose a car for themselves, this enthusiasm fades. In this case, you see that the integral emotions are influenced by a person's personality and experiences or in other words, the incidental emotions.

The contact with the manufacturers, importers and dealers is one of the aspects that makes the respondents passionate and enthusiastic. One of the respondents mentioned the following about this: *'From the dealers I would sometimes get a demo model like: go try it out. Well, that makes me excited.*' For most of the respondents this contact with importers and dealers takes place at least once a year, where they get informed about the new models and what is coming into the market. The respondents find being aware of the new models, accessories, and trends in the market very important. One of the respondents sees herself as an important addition because she is able to help employees make a better choice and advise them on what would be best in their (personal) situation. Moreover, the respondents enjoy

giving their employees the news that they are allowed to pick out a new car. They notice that the employees get very excited when given that news; *'Our colleagues are always very happy that they can drive a nice car.'* You see that the extensive contact the managers have with both their employees and the other parties is highly valued and causes a rise in integral emotions. The incidental emotions on the other hand, are less evident for these respondents. A reason for this could be that decisions are not made based on or influenced by their personality but more focused on what is best for the organization.

On the whole, the respondents from the B2C sector have shown to experience emotion during the customer experience. Their personality determines what kind of car is chosen and to what extent accessories and additional features are added. Meaning that the incidental emotions show to be of importance when buying a car. In addition, the respondents get excited by making a test drive and searching online for a new car in which the look and feel of the car were found to be key. Therefore, it can be said that these respondents do experience a high level of emotion during the customer experience. As regards the B2B sector, you see that the respondents also experience emotion during the customer experience. The contact they have with the different parties is an important factor causing this emotion. However, the incidental emotions are less obvious in this sector, indicating that the B2C consumers indeed experience a higher level of emotion than the B2B consumers during the customer experience.

Interestingly, it is not the case that B2C consumers who experience a higher level of involvement during the customer experience also have a higher level of emotion. During the interviews and the coding process it came forth that the level of emotion lies higher than the level of involvement. Most of the respondents from the B2C sector experience more emotion than involvement with their car. Several respondents indicated that a car has some symbolic value for them which makes that is arouses certain emotions when looking for and purchasing a new car. You see that this is not always the case with involvement. The extent to which the respondents feel involved differs highly because there are many aspects that play a role in whether the respondents feel high or low involved, with emotion this is less. For example, the female respondents showed to have lower personal relevance with the car than the male respondents. In addition, the degree of perceived risk for the respondents did also depend on the situation in which they were in. All in all, it was quite clear that the respondents felt a high level of emotion, but more factors should be included to better determine the level of involvement for the respondents and to explore the relationship between a high level of involvement resulting in a high level of emotion for B2C consumers.

4.4 The influence of augmented reality during the customer experience

Augmented reality is an innovative tool that superimposes virtual objects on the user's real environment which adds a completely new experience (Kowalczuk et al., 2021). It is known for its interactivity and the possibility to combine virtual and physical worlds (Carmigniani et al., 2011; Rauschnabel et al., 2019), making the technology more practical and easier to use by both organizations and consumers. To explore the effects of the technology on the customer experience, the respondents were asked whether the use of augmented reality would lead to an increase in their level of involvement and emotion and if it would cause a decrease in the financial risk they associate with a car.

4.4.1 The influence of augmented reality on emotion

The literature review showed that a customer might experience more emotions or more positive feelings when encountered with augmented reality (Javornik, 2016). For this reason, it was expected that the use of augmented reality would increase the level of emotion during the customer experience. In order to explore this, the respondents were asked if they felt like the use of augmented reality for the product presentation of a car would lead to an increase in the emotion they feel when looking for a new car. For the B2C sector the use of augmented reality was focused on the emotional purposes whereas for the B2B sector the use of augmented reality was focused on the informational purposes. Yet, using the new technique is the same for both purposes and can therefore be regarded as the same for determining the influence on the level of emotion during the customer experience.

For the B2C sector, all the respondents feel like the use of augmented reality in this way would lead to an increase in their level of emotion. One of the reasons for this is that it enables the respondents to feel like they already own the car because they can experience it. Besides, it increases their enthusiasm because they can already experience the look and feel of a car. Moreover, the possibility to add accessories and change colors in such an interactive way is what makes the respondents excited. It gives them a certain level of independency which seems to arouse emotions such as enthusiasm. According to one of the respondents, using augmented reality in such a way would suit him because he likes the independent part of it. Due to this independence, the need for a salesman to guide a consumer will become less by using augmented reality. This was also acknowledged by some of the respondents; they feel like the need for a salesman to buy a car is decreasing. Normally, the salesman would guide a consumer through the car but with augmented reality the consumer is able to do this themselves. When being able to make use of this technology themselves, the engagement and

trust the respondents have in a brand will also become higher. So, the use of augmented reality does arouse different types of emotions for the B2C sector.

For the B2B sector, half of the respondents feel like the use of augmented reality would lead to an increase in the level of emotion. To use augmented reality in this way would allow the consumers to look along themselves and get them enthusiastic beforehand. In addition, one respondent mentions she likes that you could walk around in the showroom yourself when using this. Besides, consumers who are more introvert and less inclined to ask the salesman for help, might be more at ease using augmented reality. The salesman would have a less prominent role, creating space for consumers to explore the car themselves while still receiving all necessary information. The latter will also make sure that consumers will not be disappointed because some important information might be missing. The respondents who feel like using augmented reality would not lead to an increase in the level of emotion gave several reasons for this as well. One of those reasons is the following: '*People that are quite fan of cars might become more enthusiastic by this, but if you do not care about cars, then you will not suddenly become more enthusiastic by this, it would not win you over.'* You see that those respondents consider the chances small that once there is already enthusiasm present at the consumers, using augmented reality would increase this more.

Taking together the points of view from the B2B and the B2C sector, you see that only a few respondents do not feel like the use of augmented reality will increase their emotion during the customer experience. The other respondents agree that using such a technology as augmented reality will increase their emotion due to the independence when using it and the diminishing role of the salesman.

4.4.2 The influence of augmented reality on involvement

Augmented reality is expected to also influence the level of involvement during the customer experience. A reason for this is that augmented reality provides consumers with a more interactive and fun experience (Park & Yoo, 2020). It is known that the level of involvement also has an influence on how interactive features are comprehended (Macias, 2003). So, the respondents were asked if they felt like the use of augmented reality for the product presentation of a car would lead to an increase in the involvement they feel during the customer experience. For the B2C sector the use of augmented reality was focused on the emotional purposes whereas for the B2B sector the use of augmented reality was focused on the informational purposes. Yet, using the new technique is the same for both purposes and

can therefore be regarded as the same for determining the influence on the level of involvement during the process of looking for a car.

For the B2C sector, there is only one respondent that does not feel like the use of augmented reality leads to an increase in the level of involvement. The other respondents feel like augmented reality would influence their level of involvement. Consumers can put together their own car with just a few clicks, giving them a bit of responsibility and making them feel more involved with the product. Most of the respondents will not only feel more engaged with the product but also with the brand that would be offering this. A respondent mentions the following: *'You have this feeling that you already experience something with this brand. It makes you closer, like you feel more connected with the brand.'* In that case, it means that offering augmented reality as an organization could have benefits for other aspects than just sales. An example would be that an organization links it to their CRM system. As regards the influence of augmented reality on the perceived risk, the opinions are divided. Most of the respondents do not feel like augmented reality will lead to a decrease in the financial risk they attach to a car. One respondent feels like the financial risk will only become bigger when using augmented reality, since you may be more inclined to add accessories and features you otherwise would not. The respondents who do not feel like the financial risk would decrease, link this to the fact that you can experience the car beforehand and are more aware of what you buy.

For the B2B sector, the respondents have dividing opinions regarding the influence of augmented reality on their level of involvement. Half of the respondents do not feel like it influences their involved with the product. Interestingly, these are not the exact same respondents who also felt like it would not influence their level of emotion. According to these respondents, most consumers already have an idea in their head when going to the showroom, so, the involvement one feels with the product would already be there. One respondent mentions the following about it: *'I think that should be more a connection with the salesman, I feel.'* Even though most consumers already have an idea about what they want when going to the showroom, using augmented reality in this way could give them the feeling that it is more their own car, because they are able to customize it. Moreover, consumers are able to better evaluate whether certain accessories or options will be of added value for them. The possibility to make a bad purchase could also decrease because of this. Yet, if you do not know much about cars, there is the risk that you would add accessories or options you would not necessarily need or use. In general, the respondents feel like the financial risk could be pressed by using augmented reality because of the ability to better evaluate the car.

The results show that only a few respondents feel like the use of augmented reality would not have an influence on their level of involvement. These respondents, all from the B2B sector, have a different customer experience and have a less symbolic value and personal relevance with the car, making that their involvement could already be low beforehand. Yet, the possibility of using the technology does allow consumers to evaluate different options and accessories independently and makes them engage more with the product and in the end makes them feel more involved.

4.5 The use of augmented reality during the customer experience

In this study, there has been chosen to focus on the use of augmented reality for the product presentation of a car and see how consumers react to this. A distinction was made between using augmented reality for emotional purposes (B2C) and for informational purposes (B2B). During the interviews one of the two ways had been sketched by means of a scenario. Based on this scenario there were several questions that asked about the respondents' opinion regarding the use of augmented reality.

4.5.1 The use of augmented reality for emotional purposes

The use of augmented reality for emotional purposes is characterized by its focus on providing an experience and arousing emotions. During the interviews with the B2C respondents, a scenario was provided which explained how augmented reality can be used in this way within the automotive industry. An excerpt from this scenario: *'There will be the possibility to change the color of the car, as well as add the available accessories such as other rims, a bicycle carrier or regular styling accessories such as a trunk finisher, mirror caps or styling bars.'* This part was focused on the possibilities regarding the exterior of the car, as regards the interior, the options were described in a similar way. All respondents reacted very positively to this scenario and the use of augmented reality in this way. Most of their reactions included words such as cool, super, very convenient, great, and really nice.

When the respondents were asked whether they find this of added value for the product presentation, the positivity continued. All the respondents find the use of augmented reality for the product presentation of a car for emotional purposes of added value. It would help them to get a better look at what they would get because it creates an image of what the car looks like and goes one step further than just images on a website. The ability to directly see what a certain color, type of rims, or type of upholstery would look like on a car was found very valuable compared to going through a catalog. One of the respondents mentioned

the following: *'It opens up your mind a little more because you can see all the different options which maybe you did not think about.'* It could also help to react faster and anticipate. Many car brands do already offer the possibility to customize a car online, but according to the respondents, by using augmented reality it would become clearer what certain accessories or colors look like. It would make a difference, also in comparison to the showroom. In the showroom there is often only one version of a model available, usually the most expensive one, but now you can up- or downgrade that showroom model. It would make the respondents feel like that everything is available when generally that is not the case. In addition, it would be reassuring for them and enable them to get a better feeling of what the car would look like in front of their house.

The interviews also included the question how the B2C respondents would feel if augmented reality would be used to provide the more technical and standard information of a car. The respondents would not mind if this information was included, but their reactions were less enthusiastic as compared to the emotional purposes of augmented reality. However, one respondent mentions that she feels like this would be even better because it is important information and enables you to compare better with other brands and find the best option for yourself. Another respondent would be interested in the information regarding the measurements and the space in the trunk, but information on the technique would leave him cold. As aforementioned, this type of information is not always given by brands. When a brand would provide this information by means of augmented reality, some of the respondents will definitely check it. Yet, one thing for organizations to keep in mind is to make sure that the correct information is provided. Once there is a mistake, this could have a negative effect on how the customers feel and experience augmented reality.

You see that overall, the respondents feel like the use of augmented reality for informational purposes would contribute something by making the picture complete, but the real excitement as with the emotional purposes is lagging. The respondents reacted more excited and interested in using augmented reality for emotional purposes. In addition, their reactions indicate that their level of involvement would be influenced by this as well.

4.4.4 The use of augmented reality for informational purposes

The use of augmented reality for informational purposes is focused on providing information instead of creating an experience. During the interviews with the B2B respondents, a scenario was provided which explained how augmented reality can be used in this way within the automotive industry. An excerpt from this scenario: '*For the interior, it will for example be*

possible to see what the average usage will be or what would be the differences between an automatic and a manual vehicle as well as the available accessories for the inside.' This part focused on the options regarding the interior of a car. For the exterior, the focus of augmented reality is on providing information about the measurements and the engine, such as the horsepower. All respondents reacted positively to this scenario and are curious about it. Most of the respondents used words as fantastic, very beautiful, a good option, and helpful.

The respondents find the use of augmented reality for informational purposes of added value for the product presentation of a car for several reasons. One of those reasons is that they would be curious about how such a technology would work in practice. A respondent mentions the following: *'I would be curious, especially because I work with cars a lot, like how does this work and what does it look like.'* Another reason is that the standard and technical information is perceived as most important by several respondents. It would make a difference in the showroom, especially as preparation for consumers to have a good look of the car in advance. Having the opportunity to receive a quotation afterwards would make it even more valuable according to some respondents. Moreover, now that brochures and catalogs are slowly disappearing from the showroom, using augmented reality in this way could be the perfect replacement for it. In particular because consumers will be able to see the information and possibilities in real life, and not just on paper. Besides, there is no need to ask the salesman for help or information because the information will be provided by augmented reality. The respondents will be more engaged with the car than when purely looking online; '*I personally really like this way of looking at things.'* Additionally, it could also lower the threshold for consumers to go the showroom.

The respondents from this sector were also asked how they would feel if augmented reality would be used to provide more information on the options regarding color, upholstery, rims, and accessories. One respondent explains that it would be an addition, but it is also already possible to do that online and would mean you are only moving it to real life. Still, using augmented reality for it would provide a better explanation for certain options. You see that using augmented reality for emotional purposes would make the picture more complete for the respondents. Besides, the respondents would find it a big step ahead if you are able to see the color directly changing on your phone or tablet. However, according to several respondents, it depends on whether you are a regular consumer or not. Regular consumers might be less familiar with configuring a car online as compared to fleet managers, meaning that for them it would be a great addition to do it via augmented reality.

The respondents agree that the use of augmented reality for the product presentation of a car would be a good addition. There were signs of excitement when the respondents were asked about what they think of using augmented reality for informational purposes. It became clear that in the eyes of the respondents the informational purposes have more benefits as compared to the emotional purposes. For this reason, it is evident that the respondents feel like the use of augmented reality for informational purposes would have a positive influence on their level of emotion and involvement during the customer experience.

5. Conclusion and discussion

5.1 Conclusion

The aim of this research was to provide an in-depth understanding of which consumer groups are more likely to engage with augmented reality and how it improves decision making for two main consumers groups (B2B and B2C). A qualitative research has been carried out to come up with an answer to the main research question if augmented reality influences the level of emotion and involvement, and the purchase intention during the customer experience and if this influence differs for B2C vs B2B in the automotive industry. For both consumer groups, there have been conducted 6 interviews each, which provided interesting results for answering the main question.

The first part of the research question focused on the influence of augmented reality on two aspects. The results have shown that augmented reality indeed has an influence on the level of emotion and involvement during the customer experience. This influence is caused by several characteristics of the technology and the opportunities it provides. The independency when using the technology is highly valued and would cause an increase in both emotion and involvement. The ability to see, choose and evaluate different options and features in real life makes the consumers more involved with the product. Moreover, being able to experience the car and receive the information in an interactive way arouses different emotions for both consumer groups. Given that the level of involvement and emotion are related to the purchase intention, it is evident that this will be influenced by augmented reality as well.

The second part of the research question focused on whether the influence of augmented reality differs for the B2C vs B2B sector. As came forth in the results, there is a noticeable difference between the two. For the first group, the B2C sector, the influence of augmented reality on both involvement and emotion is clear and does not fluctuate much between consumers. For the second group, the B2B sector, augmented reality would influence the level of involvement and emotion but does fluctuate for each consumer. For each group

there is a different use of augmented reality that would be most suited. As expected, the use of augmented reality for informational purposes would suit the B2B sector better, whereas the use of augmented reality for emotional purposes would be best suited for the B2C sector.

On the whole, augmented reality influences the level of emotion and involvement for consumers from the B2B and B2C sector. In the eyes of the consumers there are different characteristics that make the interactive technology of added value. Each consumer group has its preferences and own view on the deployment and effects of the technology. Overall, the opinions are highly positive making the implementation of augmented reality a must for organizations to preserve satisfaction and trust.

5.2 Discussion

This section will dive deeper into the assumptions and expectations that were made in the literature review. The results from Section 4 are put into perspective and will determine whether the assumptions and expectations from literature can been supported by this research.

It was assumed that augmented reality would have an influence on the customer experience and purchase intention of consumers. Due to the rise of new technologies, organizations experience a challenge to keep control over creating and managing the customer experience. Currently, there are several touch points with a brand for the consumer during the prepurchase stage. However, the results showed that including augmented reality would not increase this number. Many respondents would see the use of augmented reality as a replacement for both the brochures and catalogs, as well as the salesman. Therefore, the touch points in the prepurchase stage of the customer experience would not increase but will be modified to new and more relevant ones. As described by Nasution et al. (2014), the experiences of consumers during the prepurchase stage are crucial for deciding whether to continue the customer experience or not. The use of augmented reality has a high chance of providing the consumers with a positive experience making them eager to continue the customer experience with the organization. In addition, some respondents would have more trust in a brand and feel more engaged. In this way, going to the showroom and choosing a car becomes more of a co-creation process. This confirms what has been found in the study by Flavián et al. (2019), who state that new technologies allow for consumers to have a more dynamic and autonomous role in their experience. Moreover, the consumers will know better what they are buying, which options and features are present and how these work. Therefore, their knowledge on the product increases, which as described by Park & Yoo (2020), and Hoyer et al. (2020) is a result of using augmented reality in the customer experience.

As found in the study by Park & Yoo (2020), using augmented reality would increase consumer involvement. The results of this study have shown to confirm that finding; most of the respondents would feel more involved with the product and brand. The implementation of augmented reality could therefore lead to an increase in product involvement and brand involvement for an organization. For the B2C sector, the level of involvement was found to be high. These respondents look extensively online, make a test drive, and have certain prejudices about cars. In other words, these consumers have an extensive choice process and perform active search which are characteristics of consumers who have high involvement as mentioned by Laurent and Kapferer (1985) and Kassarjian (1981). For the B2B sector, the involvement was found to be lower. Still, the finding by Zaichkowsky (1985) saying that consumers with low involvement do no hold strong beliefs about product attributes does not apply to this study. Most of the respondents from this sector, who experience lower involvement, do have beliefs about the product's attributes, even though the symbolic value of a car is not acknowledged. Yet, the assumption that a car does have lower personal relevance for this group can be supported. In addition, these respondents saw the purchase of a car as one with a lower perceived risk which is also as expected. Interestingly, the respondents who experience high involvement with the product, did not necessarily experience high perceived risk as well. This relates to what Dholakia (1997) has found in his study, namely that risk inherently associated with a product is perceived differently by each individual consumer.

For the level of emotion there were also several expectations derived from literature. One of these expectations was that consumers with a high level of emotion will search for more information on a product, process this information extensively and use this to evaluate their decisions (Bagozzi et al., 1999). As aforementioned, this happened to be the case for the B2C respondents, which were confirmed to have a high level of emotion during the customer experience. As expected, the consumer's prejudices, previous experiences and perceptions play a role in the level of emotion and influence their decision. Abramson and Desai (1993) describe that a car is a high expense and considered a durable product because consumers usually live with it for a number of years. For some respondents of the B2C sector this is a reason why the purchase of a car evokes emotion for them, especially because many have to drive it for approximately four years or longer. Respondents from the B2B sector on the other hand, were expected to have a low level of emotion. These consumers work with the product on a daily basis and have the goal to get the best deal from importers and dealers. This has indeed been one of the reasons why these consumers experience a lower level of emotion and are less invested during the customer experience.

Several studies have covered the influence of augmented reality when used for product presentations. One of these studies is the one by Choi and Choi (2020) and mentions that using this technology would enable consumers to better understand products and feel more confident when making a decision. During this current study, it came forward that this finding can be confirmed. The ability to experience the car beforehand would make consumers more aware of what they are buying. So, the use of augmented reality would indeed improve the ability to evaluate the product as found by Hilken et al. (2021). Regarding the 'wow factor' augmented reality is assumed to have (Gankhuyag et al., 2015), you see that this is appealing to both sectors and not just the B2C sector. This translates itself, as assumed, in an influence on the level of involvement and emotion. Based on a finding by the study of Javornik (2016), it was assumed that a consumer may experience more emotions when encountered with AR. This was also found to be the case during this study; the B2C sector and most of the B2B sector would experience more emotions when encountered with the technology. The fact that augmented reality provides consumers with a more interactive experience cannot be denied and thus confirms what has been said in other literature before. The interactivity and independence the technology creates for the consumers increases their feeling of involvement. However, it does not decrease the financial risk they attach to a car, while this was expected to be the case.

As regards the purposes of augmented reality, which as derived from literature could either be informational or emotional, there were some expectations as well. The B2B sector, as mentioned by Dibb et al. (2019) is usually better informed about the product, buys in larger quantities, and has longer negotiations. Moreover, a car seems to have less personal relevance and symbolic value for this sector. These factors have shown to play part as why the consumers from this sector are more interested in the informational purposes of augmented reality. The same study described that consumers from the B2C sector are influenced by culture, family and social classes which play a role in their decision-making process (Dibb et al., 2019). It turned out that the only factor really influencing the decision-making process is the symbolic value of a car. The other factors are present but show to have little to no influence. The interactivity the technology provides has shown to be very attractive for the B2C sector which is in line with the study by Macias (2003). As a result, the emotional purposes were found to have a positive influence due to the (interactive) experience it creates.

5.3 Theoretical implications

From a theoretical perspective, this study has contributed to the field in several ways. First of all, this research has provided a deeper understanding of which consumers are likely to engage with AR and how it can improve decision making, which was indicated as a field for future research by Hilken et al. (2017) and Hoyer et al. (2020). Consumers from both the B2B and B2C sector are eager to use augmented reality because it would help them in making a (better) decision and evaluating the options. Second, as described by the same studies, a better understanding was required of how consumers react to this new technology and how they would experience it. By providing a scenario on how augmented reality can be used, it became clear that the consumers react positively to this technology and would experience it as added value. Third, the relationship of augmented reality on emotion of a certain consumer group within a specific industry was not yet thoroughly explored. This study has contributed to the literature and filled a gap by exploring the relationship between augmented reality and the level of emotion for the B2B and B2C sector of the automotive industry. Fourth, it has provided an in-depth understanding of the influence augmented reality could have on the customer experience within the automotive industry. This study contributes to the literature by describing the influence of augmented reality within the automotive industry by means of two aspects namely, the level of involvement and the level of emotion. The use of this technology in the automotive sector would lead to an increase on both aspects and could as a consequence create competitive advantages. Lastly, contributions have been made to theory by confirming several findings from previous studies on certain topics addressed within this research. Moreover, this study has resulted in new findings that could be added to the current literature.

5.4 Managerial implications

The results from this research provide several managerial implications that could be of interest for marketing and customer experience managers (from the automotive industry). A first implication for managers is to implement the use of augmented reality for the product presentation of a car in showrooms. Considering the increase in excitement and involvement it causes should help managers decide whether to implement this. If an organization was to do so, it would have benefits for their customers' level of involvement with both the product and the brand. In addition, it could lead to a higher sales percentage on cars, accessories, and additional options. Besides, it would make consumers engage more with the brand by means of co-creation. An alternative to implementing augmented reality would be to update the website, specifically the search function. A more extensive search function would enable

consumers to find everything they desire. The ability to add accessories and change the colors should become more advanced as well, for consumers to see and evaluate their choices better.

A second implication for managers working in the automotive industry would be to link the application used for augmented reality to their CRM system or any other system able to provide data to the organization's database. By doing this, the organization is able to send out an email to the consumer including the car they have chosen by means of augmented reality. In addition, it will keep the consumer connected and the engagement with the brand will be maintained. It would aid in keeping the consumer with the organization during the whole customer experience by prolonging the contact with them.

A third implication, as found in the data of the interviews, is the diminishing role of the salesman in the showroom. Many respondents acknowledge that in their eyes the role of the salesman would become less when being able to use augmented reality. The technology would provide most of the information which a salesman would normally do. For this reason, managers should be taking this possible effect of implementing the technology into account. The salesman's role should be evaluated and changed where necessary to keep it relevant for themselves and the consumers. An example would be to train the salesman on how to use the technology and make them aware of the different consumer groups that might be using it. If the salesman would be able to provide an experience by using augmented reality adjusted to the type of consumer, the experience would become more personalized.

A last implication for managers is to be aware that developing and implementing a new technology such as augmented reality takes time and expertise. Once an app or something similar has been created enabling consumers to use augmented reality, it is important to take in mind what comes with this. Managers should consider the amount of maintenance and updates required for such a technology. If there is a new model available, it should be added to it, the same holds for new accessories or colors. Important in this is that all the information should be correct and the options work as they should. If there is a mistake in information or consumers might not be able to add a color, then it could have a negative effect on their experience and might cause an ending to their journey with the organization.

5.5 Limitations and future research

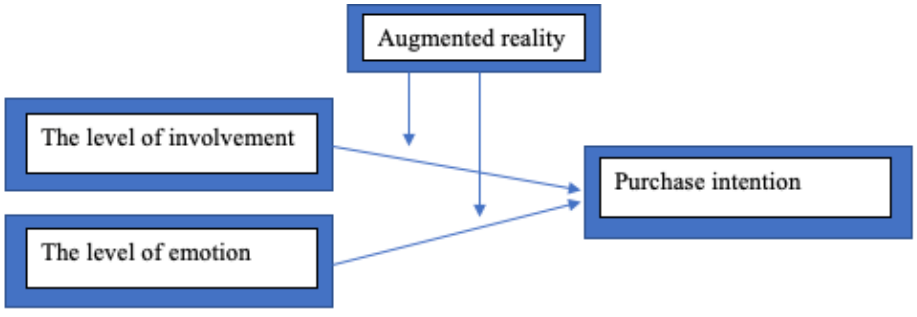
This research has some limitations to it which should be held in mind when interpreting the results. A first limitation of the study is that it was carried out within the automotive industry in the Netherlands. Therefore, the results cannot be generalized to other industries and countries which makes that the findings should be interpreted with caution. Future research

could focus on the influence of augmented reality on the customer experience in other industries or countries that for example already experience more digitization. This could lead to interesting results since this technology might be less distinctive in such an industry or country. Another limitation is that the influence of augmented reality has only been tested for cars, not for other products within the industry. An opportunity for future research could be to focus on vans and trucks as well, to provide a complete picture of what the implementation of augmented reality for product presentations could mean for the whole industry. The same limitation holds for the B2B consumer group, in this research fleet managers have been used to represent the sector. An interesting opportunity for future research would be to include the importers or dealers as the representing group for this sector. Other limitations are the use of involvement and emotion in relation to the customer experience. There could have been taken more, or perhaps other, constructs and items into account. The same applies to the purchase intention, one of the many outcomes of the customer experience. In future research, the whole customer experience could be considered or other stages of it.

When it comes to augmented reality, one of the limitations is that there could not be provided a full-on simulation for the respondents to try out. This would have been preferred. The respondents were provided with a scenario via PowerPoint, showing pictures of how augmented reality could be used. A full-on simulation might have led to more results regarding the emotional aspect because of the opportunity to conduct observations of the respondents using the technology. For a future study, a simulation might already be available or could be developed. A second limitation regarding augmented reality in this study is the use for the product presentation a car. There are other possibilities to use augmented reality within this industry which could be explored within future research.

This study has been qualitative in nature and focused on exploring the relationship between augmented reality and its influence on the customer experience of the B2C and B2B sector by conducting interviews. It has provided interesting results that could help with creating a conceptual framework and for formulating future hypotheses. The latter could be tested in future research by means of an experiment. Figure 1 shows the conceptual framework that was developed based on the findings from this current study.

Figure 1



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Appendices

Appendix 1. Interview protocols

Interview protocol – B2C: private consumers

Introduction

My name is Chayenne Hooijer, and I am currently writing my master's thesis on the topic of augmented reality in the B2B versus the B2C sector of the automotive industry at the Radboud University. More concrete, I am investigating how the use of augmented reality influences the level of involvement and emotion in the customer experience of B2B versus B2C in the automotive industry. Therefore, I am conducting interviews in order to come up with the data that is necessary to compare the different consumer groups and see what effect augmented reality has on their experience. You have been selected to take part in this interview because you belong to the sample determined for this research. There will be done several interviews with other private consumers and fleet managers as well. If you have no objection, I would like to record this interview in order to listen back to it at a later moment to get the best results out of it. The outcomes of this interview will be used to compare and contrast with other interviews and to come up with interesting results for my thesis. The thesis is for educational purposes only and will not be shared with anyone outside of the university. Yet, if you are interested in the outcomes, I am open to share these with you once finished. If there are no further questions or uncertainties, I suggest we get started with the interview.

Interview questions

I would like to start with some questions on the process of looking for and buying a car. These will be focused on how this process currently takes place and how you experience this.

1. Are you currently interested in or in the process of buying a new car?
2. What have you done up till now, have you visited a dealership yet or have you only been orienting online?
    a. Have you made a list of important characteristics you look for?
    b. Have you made a list with the options?
    c. Have you been comparing different brands or just different models of one brand?
3. Would you say you have any prejudices when it comes to searching for a car? Such as that electric cars are boring, or that BMW and Mercedes are luxurious brands?
4. What do you think of the process of buying a new car? Does it make you excited or do you see it more as an obligation?

5. To what extent is the purchase of a car of importance to you? For example, do you find it important because it enables you to go anywhere you want?
6. What is the average number of years you own a car before you start looking for a new one?
7. To what extent are the suggestions of others, such as close family and friends, important when you buy a new car?
    a. Do you place any value on what those others will think about your new car?
8. Do you feel like a car reflects a persons' status or social class?
9. Do you see the purchase of a car as one with a high financial risk? If so/not, why?
10. To what extent do you add accessories or other additional options to make a car more to your own liking?
11. How important is experiencing a car before making the actual purchase for you? In other words, do you make a test drive or just look thoroughly in the showroom?

Now I would like to show you some pictures that display how augmented reality can be used for the product presentation of a car. The idea is as follows: you will open up an app and scan the QR code, which will be on the standard display with information such as the price next to the car. Once the code has been scanned, the app will open up the camera of your phone and enable you to see more information of the car. There will be the possibility to change the color of the car, as well as add the available accessories such as other rims, a bicycle carrier or regular styling accessories such as a trunk finisher, mirror caps or styling bars. You are also able to go inside the car and see the different options for the interior such as how to use AppleCarPlay, see the details of the sound system, or add accessories such as a kid's table attached to the seats.

12. What do you think of using augmented reality in such a way?
    a. Do you think using augmented reality in such a way will help you make better choices?
13. To what extent do you feel like this is of added value for the product presentation?
14. Do you feel like the use of augmented reality, for enhancing the customer experience, will lead to:
    a. A decrease in financial risk associated with the car?
    b. An increase in the excitement you feel when looking for a new car?
    c. An increase in involvement you feel with the product?
    d. A more special and customized customer experience?

15. How would you feel like if augmented reality would be used to provide more technical and standard information? Such as the measurements, the average range, and the horsepower?
16. Do you think augmented reality could better be used in another way to experience the car?

Closing

As discussed during the start of the interview, it will be used for my master's thesis and will not be shared outside the university. If you are open to it, I could send the transcript of the interview for you to go over and share the results once I have finished the research. Then, I would like to thank you for your time and your valuable contribution to this research, it will definitely be of use.

Interview protocol – B2B: fleet managers

Introduction

My name is Chayenne Hooijer, and I am currently writing my master's thesis on the topic of augmented reality in the B2B versus the B2C sector of the automotive industry at the Radboud University. More concrete, I am investigating how the use of augmented reality influences the level of involvement and emotion in the customer experience of B2B versus B2C in the automotive industry. Therefore, I am conducting interviews in order to come up with the data that is necessary to compare the different consumer groups and see what effect augmented reality has on their experience. You have been selected to take part in this interview because you belong to the sample determined for this research. There will be done several interviews with other private consumers and fleet managers as well. If you have no objection, I would like to record this interview in order to listen back to it at a later moment to get the best results out of it. The outcomes of this interview will be used to compare and contrast with other interviews and to come up with interesting results for my thesis. The thesis is for educational purposes only and will not be shared with anyone outside of the university. Yet, if you are interested in the outcomes, I am open to share these with you once finished. If there are no further questions or uncertainties, I suggest we get started with the interview.

Interview questions

I would like to start with some questions on the process of looking for and buying a vehicle. These will be focused on how this process currently takes place and how you experience this.

1. Could you explain something about your job? What does a day in your working life look like?
2. What does the process of looking for and buying new vehicles for the organization's fleet look like?
3. Which features/characteristics are most important when looking for/purchasing a vehicle?
4. Are there any obligations from the organization when it comes to the fleet? Do the vehicles for example need to be electric or hybrid, or from one specific brand?
    a. Do you add accessories, such as a tow bar?
    b. Are you free to choose the colors or do they have to be the same for all vehicles?
    c. Do the vehicles need to have some branding from the organization on it?
5. Do you make deals with dealerships or brands for buying vehicles from them?

    a. If so, how do you experience closing such deals?
6. What do you think of the process of looking for new vehicles? Does it still make you excited or has it become a common practice?
7. How important is experiencing a vehicle before making the actual purchase? Do you go to showrooms or do you only search and compare online?
8. To what extent do you feel personally involved or engaged with the product?
9. To what extent do you feel like the purchase of new vehicles for the fleet has a high financial risk attached to it?
10. Would you say a vehicle has a high symbolic value attached to it? If so/not, why?
    a. To what extent do you think about what image the vehicle will reflect for the organization?

Now I would like to show you some pictures that display how augmented reality can be used for the product presentation of a vehicle. The idea is as follows: you will open up an app and scan the QR code, which will be on the standard display with information such as the price next to the vehicle. Once the code has been scanned, the app will open up the camera of your phone and enable you to see more information of the vehicle. You could for example hold up the camera to the engine and see what its horsepower is, as well as the average range. Other information that could be provided are the measurements of the trunk and the details regarding a tow bar. For the interior, it will for example be possible to see what the average (gas) usage will be or what would be the differences between an automatic and a manual vehicle as well as the available accessories for the inside.

11. What do you think of using augmented reality in such a way?
    a. Do you think using augmented reality in such a way will help you make better choices?
    b. In case you did not have a deal with a brand, would you be more triggered to buy cars from a brand who would offer this way of using augmented reality?
12. To what extent do you feel like this is of added value for the product presentation?
13. Do you feel like the use of augmented reality, for enhancing the customer experience, will lead to:
    a. A decrease in financial risk associated with the vehicle?
    b. An increase in the excitement you feel when looking for a new vehicle?
    c. An increase in involvement you feel with the product?

14. How would you feel like if augmented reality would be used to provide more information on which accessories can be added to both the exterior and interior, what the different available colors look like, or some details of for example the sound system?
15. Do you think augmented reality could better be used in another way to experience the car?

Closing

As discussed during the start of the interview, it will be used for my master's thesis and will not be shared outside the university. If you are open to it, I could send the transcript of the interview for you to go over and share the results once I have finished the research. Then, I would like to thank you for your time and your valuable contribution to this research, it will definitely be of use.

Appendix 2. Interview transcriptions

If desired, the interview transcriptions and/or the recordings can be provided by the author.

Appendix 3. Codebook

This codebook provides the codes that have been used for the content analysis of the interviews. The codes have been assigned via a deductive approach, meaning that the codes have been derived from the central constructs of the study. The central constructs of this study and how they are measured have been thoroughly explained in Section 3.1. Based on that section, the codes have been formulated. There are dimensions, which are equal to the central constructs, and indicators which are equal to how the items used to measure the constructs. In the transcripts of the interview, words or sentences were marked which relate to one of the indicators. After this, all indicators have been assigned to the dimensions. There were also assigned codes to other words or sentences that did not fit with the predefined codebook but were of relevance for the results. These have been assigned with an indicator and dimension inductively and after the coding was completed. The coding of the interviews has been included in Appendix 4.

Dimensions	Indicators
Customer experience	Purchase intention
	Nonhuman actor
	Prepurchase stage
Involvement	Personal relevance
	Perceived risk
	Symbolic value
Emotion	Integral emotions
	Incidental emotions
Augmented reality	Emotional purposes
	Informational purposes

Each dimension has a corresponding color which is used to keep the coding within the interviews clear. The color and their corresponding dimension are as follows:

- Customer experience = yellow
- Involvement = green
- Emotion = blue
- Augmented reality = red
- Other = grey
- Personal/job information = pink

Appendix 4. Coding schemes

If desired, the coding schemes can be provided by the author.