# University of Muenster / University of Twente

### **Bachelor Thesis**

# The Role of Sensory Marketing in Driving Customer Loyalty – A Systematic Literature Review

Chair: Prof. Dr. Manfred Krafft

Chair of Marketing Management (IfM)

Marketing Center Muenster

Supervisor: M.Sc.Sertan Eravci (WWU), M.Sc. Nadine Eckel

(WWU), DR. MBA Loohuis (UT), DR. Yasin Sahhar

(UT)

Issuing Date: March 29<sup>th</sup>, 2023

Due Date: June 27<sup>th</sup>, 2023

Submitted by: Timo Michael Konniger

#### **Executive summary**

The main goal of this thesis was to research if brands can gain customer loyalty by implementing sensory marketing. To answer this question in this thesis there is chosen for a systematic literature review. Hereby previous principles and empirical evidence are bundled together to come to a conclusion.

During the extensive literature review I came to the conclusion that sensory marketing is linked to customer loyalty through brand experience and emotional attachment. Firstly I found that the stimulation of the human senses can lead to better brand experiences and more emotions. This is done by trying to affect multiple senses in one experience. In the research I found that every sense has his own characteristics and own contribution to the brand experiences and emotions of a customer.

These emotions and brand experiences can then give the customer the feeling of emotional attachment to the brand. This relationship between the brand and the customer is perceived quite strong because it is linked through emotions. This makes it also hard for a customer to separate from the brand and hence lead to repurchase at the brand.

The fear of separation from the brand results in long term commitment to the brand, what is better known as customer loyalty. Customer loyalty is shown an important role in the world of business. Especially now with high levels of competition and hence also a lot of products that seem to the customer identical. In this case a loyal customer can help your brand to survive the harsh circumstances in the competitive environment.

This research let me assume that brands can gain customer loyalty by implementing sensory marketing. Whereby I would suggest managers to build a strategy to let customers emotionally attach with their brand. In this strategy customers first need to be investigated properly, to see the needs and wishes of the customers and to balance the stimulus in the right way for them.

# **Table of contents**

List of figuresi	V
List of tables	v
1 Introduction	1
2 Theoretical background	2
2.1 Sensory marketing	2
2.2 Customer loyalty	2
2.3 Sensation and perception	3
3 Literature review	4
3.1 The shifting marketing world	5
3.2 The senses	6
3.2.1 Visual	7
3.2.2 Auditory	8
3.2.3 Olfactory	9
3.2.4 Tactile	.0
3.2.5 Gustative	.2
3.3 Sensory (brand) experience1	2
3.4 Emotional attachment / brand attachment	4
3.5 Emotional attachment relation to brand loyalty	5
4 Discussion	6
5 Implications and future research	7
6 Conclusion	8
References	8
Declarations	7

# List of figures

Figure 1: A conceptual framework of sensory marketing	. 3
Figure 2: Conceptual model of Shahid et al.	. 5

_	_	_		
•	104	of ta	hla	~
	/151	01111	1116	۰

# List of abbreviations

 $Customer\ relationship\ management = CRM$ 

Customer specific marketing = CSM

Need for touch = NFT

Artificial intelligence = AI

#### 1 Introduction

We are living in a dynamic world, where things keep changing around us. The marketing world is also undergoing major changes. Where we used to believe that marketing was based on transactions and exchange of goods, we are now moving to a more experience-based consumption perspective (Pine & Gilmore, 2008). In this newly evolved world the experience around the purchase is as important as the product it self (Moore et al., 2010). Krishna (2010) added to this that products are sensual in nature and thus we need to affect the five customer senses in our marketing. This has as a consequence that brands need to find a new way to attract customers by their senses.

For brands it also important that if they implement a new marketing method that it is beneficial for the company. Due to a high level of competition, products are getting more and more lookalikes (Brakus et al., 2009) and hence it is important to get a good relationship with your customer so he stays loyal to your brand. This customer loyalty helps the brand to keep receiving financial rewards in the long term. This is why it is important for brands, who want to know if they should implement sensory marketing, whether it creates customer loyalty.

For this reason the thesis has the following research question: 'Can brands gain customer loyalty from implementing sensory marketing'. I am going to research this by doing a literature research. This literature research is broken down into some sub-parts to give the thesis a better structure. In the first part I am going deeper into the evolution of the marketing world into an experience-based consumption perspective. After that I will analyse the five different senses of humans to see how they work and how brands can use them in their advantage. Then I will go on with the conceptual model of Shahid et al. (2022) and state how you get from sensory marketing cues and a brand experience into emotional attachment and finally into customer loyalty.

But first I will give a little theoretical background to sensory marketing, customer loyalty and the difference between sensation and perception. This will help the reader to better understand what we are addressing in the literature review.

#### 2 Theoretical background

If I want to create a proper literature review about the influence of sensory marketing on customer loyalty and also want to answer my research question if brands can gain customer loyalty by implementing sensory marketing, I first need to define the core concepts of the studies. For my study it is important to define what is sensory marketing, customer loyalty and the difference between a sensation and a perception

#### 2.1 Sensory marketing

If I want to answer my research question and thus do research to the influence of sensory marketing on customer loyalty, I first need to define and get to know what is meant by "sensory marketing".

Sensory marketing is a part of a revolutionary new trend in the field of marketing where marketers are looking to call upon emotions into the mind of the customer by using different marketing activities. This new trend is called experiential marketing (Hussain, 2018). The difference between experiential marketing and traditional marketing is that traditional marketing is focusing more on transferring product benefits to customers, while experiential marketing is trying to use the products and/or services to strengthen the emotions and sense stimuli of the customers (Wiedmann et al., 2018). Krishna (2010) gives the following definition of sensory marketing that is often used in subsequent studies: "marketing that engages the consumers' senses and affects their perception, judgment and behavior." In the senses of a human we mostly distinguish between five senses: visual, auditory, olfactory, tactile and gustative. Visual is related to what the customer sees, auditory is about the hearing of the customer, olfactory is connected trough smelling, tactile is about touch and finally gustative is about the tasting experience of the customer.

# 2.2 Customer loyalty

To understand the effect of sensory marketing on customer loyalty, I also first need to define what is meant by "customer loyalty".

Loyalty is a term that we hear and see a lot in the business world, but this term is often used in different forms and meanings. This is exactly why I first need to define what I am talking about when I am discussing customer loyalty. Reichheld

& Teal (1996) states that we can split up business loyalty into three dimensions: customer loyalty, employee loyalty, and investor loyalty. In this study I focus primarily on the customer loyalty and thus on the marketing side of the business. With customer loyalty Reichheld & Teal (1996) is denoting the long-term commitment of a customer to the brand.

## 2.3 Sensation and perception

To get a better understanding how sensory marketing can influence brand loyalty, it is important to first understand how sensory marketing influences individuals. Namely, before a sensory marketing activity reaches the mind of the customer, there is a whole process prior. Krishna (2012) states that you have stages of processing the senses (see Figure 1), he splits it up in "sensation" and "perception". If he talks about sensation in his study, he wants to relate to the biochemical and neurological natural process of receiving a stimulus. When a stimulus reaches a receptor cell of a sensory organ, we call it a sensation. Perception on the other hand is more about the brain of an individual, it is how the brain of the individual interprets the sensation. So the process of perception is how an individual is aware or understands the sensory information that is registered by the receptor cells on the sensory organs. This perception can then lead to an emotion or cognition. Which in turn can lead to an attitude, learning/memory or behaviour of an individual that received the sensual information.

SENSATION
Haptics
Olfaction
Audition
Taste
Vision

Grounded Emotion
EMOTION

Attitude

Learning/
Memory

Behavior

Figure 1: A conceptual framework of sensory marketing

Source: Krishna (2012), p. 335

#### 3 Literature review

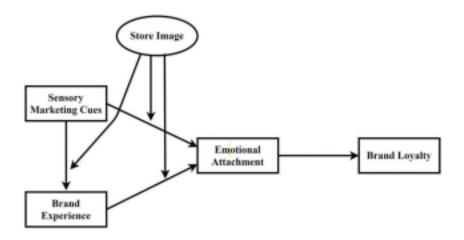
If I want to give a proper systemic literature review, it is of the highest essence to get a good systematic way of doing research. This literature review is there to investigate what underlying principles and empirical evidence have already been found by other researchers and give a overview of the key findings of this research.

At the start of writing this thesis, there were three scientific papers provided to get a starting point for your thesis. This was the baseline for most of the literature review. Because the method that was mainly used during this literature review was the well known snowball method. In this snowball method you start from the starting literature and identify relevant articles that are referred to in the article. You then read that paper and do the same process over and over again. When judging if a article is good to use, first thing to do was analysing if it is relevant for my research. When an article was judged relevant, it was important to check the quality of the journal, . I tried to focus on the C or higher rated journals on the VHB (n.d) rating, but since sensory marketing is quite an upcoming and happening concept sometimes I used a non-ranked journal or lower ranked journal because it was too relevant to leave it behind. Another method that was used is: searching on databases for relevant articles within my study area. The main search terms that were used were "sensory marketing" and "loyalty". The only problem in these search terms, is that some articles use the word loyalty in the broad sense, while others focus specifically on customer loyalty. In this thesis I focus mainly on the customer loyalty.

The main redline in this literature review is provided by a research from Shahid et al. (2022). Their research gave a conceptual model (See Figure 2) that provides an easy to understand path to view the relationship between sensory marketing cues and brand loyalty. In this model you have also some other concepts that influence the brand loyalty. I am going to discuss the intermediary role of emotional attachment and brand experience in the relationship between sensory marketing cues and brand loyalty. In the model there is also a moderator role for store image, but I am not going to discuss that because this highly depends on the type of business and would make the research a bit too broad. If you want to know more

about the moderating role of store image, I would advice you to read the paper of Shahid et al. (2022).

Figure 2: Conceptual model of Shahid et al.



Source: Shahid et al. (2022), p. 1401

# 3.1 The shifting marketing world

In the last decades we saw in big change in the world of marketing. Where we used to see marketing as a tool that focusses on transaction and exchange, the whole perception of marketing has moved more to a relational view over the last decades (Sheth & Parvatiyar, 1995). This is a more a micro marketing form where individuals are more personal focussed by customer relationship management (CRM) and customer specific marketing (CSM) (Hultén et al., 2009). But also this relational view is already outdated, we are now heading to a more experiencebased consumption perspective where customers want an engaging experience that is memorable (Pine & Gilmore, 2008). In this newly emerged environment the purchasing process is as important, for the customer, as the product itself and hence the stores play a key role in communicating the brand's strategy and beliefs (Moore et al., 2010). In this purchasing process individuals are interested in personal service, products and brands that are closely linked to their own lifestyle and identity. Customer also use brands as an way to express their identity and who they are and what they stand for (Keller et al., 2008). This effect can be created by giving the customer an experience through their five senses which is engaging (Hultén et al., 2009). This is exactly where sensory marketing enters the world of marketing, because this experience is created by affecting the human senses which is called sensory marketing and is the most recent evolution in the world of marketing (See Table 1). One of the reasons for this new way of thinking in the world of marketing is described by Krishna (2010), he stated that we need to understand that products are sensual by nature and as consequence we need to be affected through our five senses. But the importance of the experience in the purchasing process has been neglected for a long time in marketing initiatives (Hultén et al., 2009), although Kotler (1973) had already stated in the 1970s that sensorial cues can influence the decision making in purchasing. Sensory marketing can give this sensory experience that creates extra value for to the customer on top of the consumption itself (Hultén, 2011).

Table 1: From mass and relationship to sensory marketing

	MASS MARKETING	RELATIONSHIP MARKETING	SENSORY MARKETING
MARKETING	Goods logic Exchange perspective Transactional marketing	Service logic Relationship perspective Relational marketing	Experience logic Brand perspective Sensorial marketing
STRATEGIC MARKETING	Product focus Customer acquisition Transactional strategies	Customer focus Customer retention Relational strategies	Sense focus Customer treatment Sensorial strategies
TACTICAL MARKETING	Persuasion and promotion One-way communication Production technology	Interaction and interplay Two-way communication Information technology	Dialogue and online interactivity  Multidimensional communication  Digital technology

Source: Hultén et al., (2009), p. 5

#### 3.2 The senses

To get a better understanding of the influence of sensory marketing on customer loyalty, I first dive deeper into the senses that are receiving the sensory marketing initiatives. I am going to split this part up into five parts, one for every sense-visual, auditory, olfactory, tactile and gustative. This is to better understand how we could use the senses in the benefit of a brand and for what the brand needs to watch out.

#### **3.2.1 Visual**

The visual sense is often described as the sense that is the most enticing among the five senses (Lindstrom, 2006). This enticing ability from our sight sense is also the reason why we often see our vision sense as the most dominant and most important sense (Valberg, 2005), although we only have four receptors in our eyes to capture a sensation (Krishna, 2012). The vision sense is sometimes so dominant that can even mislead the customer, like the orange juice example of Hoegg & Alba (2007). Building on that, marketeers should use graphical information to pop out of the bulk of competition according to Krishna (2010), since it has a positive impact on the consideration of the customer to buy your product. In branding, critical visual stimuli have a broad range of concepts, you could think of product design, names, packaging, logos, store design etc. and it is stated that it is of highest essence that a brand includes these visual stimuli in their branding strategy (Henderson et al., 2003). He also showed the importance of visual stimuli if verbal stimuli are lacking, since then visual stimuli is creating the quality perception and thus also has a direct impact on the brand. Messaris (1997) also marks the importance of the visual sense, he states that the sight sense has not only the role of gathering attention but it can also generate an emotion towards a service, product or brand. We will see later on that creating an emotion is an essential for the creation of customer loyalty.

There are some points where the visual sense has some strange characteristics. For instance visual perception biases. Hereby the visual sensation and perception differ from each other, this is not only a conceptual problem but the misjudgements can also have an influence on the actual consumption or purchasing (Krishna, 2012). Another example is the relation between visual salience and consumption, Chandon and Wansink are two researchers who did a lot of research to this relation so if you want to know more about this relation, you could read their work but here we will give one example that shows how marketers can influence the customer's consumption behaviour by using smart visual marketing activities. They showed that if a fast-food restaurant is giving the visual label to their brand that they are healthy against not communicating that, customers are more likely to think that the main dishes have less calories than they actually have, resulting often in the choice for a high-calorie side dish

(Chandon & Wansink, 2007). There is also some sensory conflict between vision and other senses, although there is not a lot of research yet to sensory conflicts in the marketing sector, we know that the phenomenon is there (Krishna, 2012). For vision there is for instance the vision-touch discrepancy, where vision has the dominance over touch (Miller, 1972). All these examples show how complex the visual sense is and that we need to have a proper look at how and what we want to communicate to the visual sense.

# 3.2.2 Auditory

The auditory human sense is a very impressive sense, since it has a insane frequency range with more than nine octaves and as a consequence is a very sensitive sense (Rossing et al., 2002). The sense of sound is not able to be shut down which means that human beings always need to live with the sounds around them (Hultén et al., 2009). Sounds are coming from a vibration of an object that are then send through the air in waves and arrive in our ears as a sensation (Lindstrom, 2006). It is also known that individuals perceive the same sound differently and thus we can also respond differently to the same sound (Rossing et al., 2002). According to Rossing et al. (2002) children can perceive a bigger range of noises which they can also better memorize.

Sound can help us a lot in perceiving the world around us. Wallin (1991) had stated that sound can help us understand the world around us, by letting us evaluate it by mostly emotion but also memory, attention and learning. We also see this back in the marketing world, where a lot of the marketing communication we know nowadays is auditory by nature (Krishna, 2012) and can influence the mood and behaviour of the customer (Alpert et al., 2005). Most people would then think about the use of music in advertising or in creating ambient. Music is indeed used to trigger emotional responses from customers and to influence their mood and perception towards the brand's products or the brand itself (Kellaris & Kent, 1993). According to Cameron et al. (2003) it is important for brands to decide which music they play because it can influence the experience of the customer, Hul et al. (1997) supports this by stating that the individuals music preference can decide if the marketing initiatives are perceived positive by the customer or not. This makes it important for marketers to investigate their customers and potential customers to find what their music preference is. Also the tempo is important for

the experience, fast tempo is often evaluated as happy and pleasant, while slow tempo awake more sentimental feelings to the customers (Bruner, 1990). The music in the store (also called ambient music) is also influencing the shopping pace of the customers, slower music for instance let people shop slower and results in more purchases (Milliman, 1982).

Although Most people would think of (ambient) music if we talk about the auditory sense in the marketing world but there are more marketing concepts linked to our hearing. Think for instance about sound symbolism: this means that people attach a meaning to a word, when they hear the sound of a word (Krishna, 2012). Lowrey & Shrum (2007) did research to the role of sound symbolism in the world of branding, hereby they came to findings that a brand has positive evaluations when a brand name sounds compatible with the expectations. Also the language used in branding or advertising can influence the perception of a product or brand and can make the responses of customers different while they get the same message (Krishna, 2012).

The last concept we would like to discuss in the domain of the auditory sense, is the one of the human voice. The voice of a human is not only about language but about all sounds that come out of the mouth of the person (Sonnenschein, 2001). According to Sonnenschein (2001) the characteristics of the voice, like pitch and speed, let people interpret the emotions of the speaker. This makes our voice different from other sounds, because our voice can message emotions and personality that affects the original message that the sender wants to communicate (Hultén et al., 2009).

This all together shows that sound has an impact on a big part of the customer journey, from the brand experience to the advertisement evaluation and has to be managed with care.

# 3.2.3 Olfactory

The olfactory sense of the human is often also called scent and is one that is not so typically used in marketing as visual and auditory. But it has a great impact on our emotions and emotional memory. Namely the olfactory bulb has very fast synaptic interchange with the amygdala and hippocampus (Herz & Engen, 1996). The amygdala is important for our emotions and the memory of them, where the

hippocampus is even more important for the memory (Cahill et al., 1995; Eichenbaum, 1996). So the olfactory sense is a really special one, since it has a direct connection to the memory (Krishna, 2012). Krishna (2012) also proved by his research that this memory is also not quickly forgotten, especially if you compare it with the other senses of the human being. But this is not the only impressive property of the olfactory sense. With our olfactory sense we can recognize over 10.000 scent combinations (Buck & Axel, 1991), although we experience difficulties with identifying scents by name (Lawless & Engen, 1977).

Scents can also have a big influence on the business world with the impressive properties it owns. First thing to discuss is the ambient scent of the store, researchers have shown opposites results. According to Morrin & Ratneshwar (2003) ambient scent can improve the recall and recognition of brands that the customer has seen. But on the other hand Mitchell et al. (1995) did not found an effect of a ambient scent versus no ambient scent on memory, they only found that a congruent scent has higher memory results than an incongruent scent. But ambient scent is not the only scent a brand can use for marketing, they can also use product scent. Krishna et al (2010) showed that product scent can increase the memory of the information that is associated with the product. Mitchell et al. (1995) also showed that pleasant scents can lead to more variety-seeking behaviour.

We thus see that scents can have a big influence on the memory of experiences, products and brands. These memories can lead to recall of product or brand experiences and if they pleasant than scents are an effective manner to get customers back at your brand.

#### 3.2.4 Tactile

The tactile sense, often referred to as the sense of touch, is often stated as the most sensitive one among all the five senses (Montagu, 1986). The tactile sense is even the first one to develop, before we even born, and the last one that we lose in our lives (Field, 2001). We receive tactile senses through our skin, this organ is our largest organ and let us be in physical contact with the world around us. We mostly use our fingers to get in contact with world around us, this is also logical since our fingers are very sensible to tactile stimulation (Birznieks, 2003). Rolls

(1999) stated that with a tactile stimulation a human can create a rewarding feeling of pleasure that can lead to an impact on our feelings and behaviour. This rewarding feeling do we see back in the need for touch (NFT), where we distinguish between two types of NFT: the functional NFT called 'instrumental' and when you only touch for the touch NFT called autoletic (Peck & Childers, 2003a). In another research from Peck & Childers (2003b) they found that customers with a high NFT felt more confidence and less frustration about their product evaluation than when they could not feel the product, while people with a low NFT it did not made a difference if they could touch the product or not. McCabe & Nowlis (2003) are also stating that customers in general are optimistic towards evaluation of product and getting information about the product by using their sense of touch, but it does depend from individual to individual how significant it is for them because of their NFT. Touch is not only in relation with a product but also with other humans. Morhenn et al. (2008) proved with the levels of oxytocin, that a touch from another person can result in greater generosity towards a strangers, but this touch needs to be followed with an 'intentional act of trust'. Another special phenomenon is proved by (Williams & Bargh, 2008), they proved by an experiment with cold and hot coffee that physical warmth also awakens interpersonal warmth. Until now we only gave positive examples of touch, but when products touch products it can lead to disgust and thus also negative influences. Some products are perceived by people as disgusting and when they touch a general product it makes the general product less attractive (Krishna, 2012). This only happens when the product touches it and not when it is close to the general product, this is because of the law of contagion, where it is believed that if a object touches another object it will contaminate it and this will go on even after the touch (Rozin & Nemeroff, 1990). This contamination effect also works from persons on products, what Argo et al. (2006) showed by there consumer contamination experiment, where a product that was touched by another consumer was less attractive.

All these examples and theories show us that touch can significantly influence the behaviour and the feelings of a customer towards a product or a brand. But it also showed that it the importance can differ from customer to customer.

#### 3.2.5 Gustative

The last human sense that I am discussing over here is the sense of gustative, better known as taste. Human beings can detect five basic different tastes: bitter, salty, sour, sweet and the latest discovery umami. Umami has been discovered by the Japanese chemist Ikeda and means translated something like 'savory' or 'deliciousness' (Ikeda, 2002). If we taste something we do not only use the gustative sense but all the five senses and with only the gustative sense we find it quite hard to distinguish products from each other, the other senses we use on the following manner: tactile for temperature, texture and painfulness, olfactory to smell the food, visual to judge how it looks and audition for the sounds from the food when you for instance bite in it (Krishna, 2012). For this reason it is important for marketers of products related to taste, that they also think how they can address the other senses. Krishna, Elder, et al. (2010) showed that also in advertising this multi-sensory sensation can result in better taste perception than olfactory could do alone. Hoch & Ha (1986) also agree on this importance, they stated that a lot of external factors can influence the perception of taste, like physical attributes, brand name, product packaging, advertising etc. For instance naming the ingredients in front of consumption can influence the taste of the product (Lee et al., 2006) and that positive advertisement after a taste can better the taste perception in the memories than it really was (Braun, 1999).

In the sense of gustative we have thus seen that it massively depend on the other senses. This already shows us the importance of a multi sensory experience and hence the need for sensory marketing where not only one sense is addressed. In the next subchapters I am going to discuss how all these senses I have just spoken about can help us to gather customer loyalty.

# 3.3 Sensory (brand) experience

The main goal of sensory marketing is to deepen the relationship between a (potential) customer and brand by sending sensations to one or a combination of the five senses (Shahid et al., 2022). This especially important because we live in a dynamic world that let people feel the need for a connection with a brand, this makes it for brands important to support, commit and engage with the customers (Fournier and Lee, 2009). Hultén et al. (2009) are sharing this opinion and think

that brands should seek a closer relationship to the customer, since customers want a more individualized lifestyle. Sensory marketing hereby provides customers with a memorable (brand) experience that creates an image of the brand and can help to foster a specific behaviour of the customers (Pelletier & Collier, 2018). Brakus et al. (2009, p. 52) are giving a definition for brand experience: "sensations, feelings, cognitions, and behavioural responses evoked by brandrelated stimuli that are part of a brand's design, identity, packaging, communications, and environment". This experience is also more unique than the experiences created by other marketing strategies, since these sensory stimuli create simultaneously a more sturdy link between the customer and the brand (Hultén, 2011). Furthermore according to Rodrigues et al (2011) brands need to provide customers with multi-sensory brand experience to satisfy the cognitive and emotional needs. This multi-sensory brand experience is an experience where a customer gets more than one sensory perception during the consumption experience (Hultén, 2011), for example they do not only see the product but also smell it. With this sensory experience there is a new opportunity for brands to appeal customers in a more personalized manner by generating an emotion, but also a memory that is created or activated (if there is already a memory linked to the brand) (Hultén et al., 2009). Shahid et al. (2022) also states that a positive sensory stimuli can stimulate a broad range of behavioural consumer responses, if the sensory stimuli are send correctly to the customer. According to Soars (2009) the more senses you consistently stimulate, the higher the quality of the experience. But brand managers have to watch out for sensory overload. This is when a customer gets to many sensory stimulus so that some important parts of the experience are missed because of the overflow of sensations (Krishna, 2012). This has as a result that we do not have to see sensory marketing as the more stimulus the better, but more as a project to find the right amount of stimulus. This gives managers the job to balance and manage the sensory input, to give the customers a outstanding experience that creates impact on them (Wiedmann et al., 2018). After all the stimulus and experiences the customer received during the consumption and purchasing process, the brain of the customer will combine it to come to a holistic brand experience (Hultén, 2011). This memorable brand experience created by sensory sensations is connecting people to the brand emotionally (Smilansky, 2017). This emotional attachment is often also called

brand attachment in the literature. In the next subchapter we will go deeper on what emotional attachment is and how it is linked to sensory marketing.

#### 3.4 Emotional attachment / brand attachment

As mentioned in the subchapter before, brands managers or marketers can use the five senses of the customers to communicate their brand and generate a emotional connection towards the brand or a product (Shimul et al., 2019). Söderlund (2003) states that nowadays marketeers use different types of advertising to get individuals in a certain emotional state. By putting people in a specific emotional state through a specific marketing method, we can better understand their consumer behaviour and thus also how this is related to brand loyalty (Lindstrom, 2006). An emotion is a subjective experience in that is only experienced by the individual that perceives that specific emotion, all these emotions are managed in the right side of our brain (Gainotti, 2020). Söderlund (2003) again builds further on this by saying that also previous experienced emotions (emotional memory) can be connected to the just felt emotion created by a new experience and this can make individuals who get the same experience react and behave on different way. Philippe et al. (2009) stated that an emotional memory is a memory that is created by a previous experience and has been emotionally triggering, so that it generated a memory being stored. Their research also concluded that over our lifetime we build up our sensory memory and because of the connection between new experiences and the one in our memory, the sensory memory will have a big impact on how we react on future experiences and thus also behave. Söderlund (2003) stated also that our responses to emotional stimuli are the most critical decider in our day to day decision making, this again confirms the importance of creating an experience that attaches a customer emotionally to a brand. Hultén (2007) agrees on this part and states that brands must lay more importance on creating a brand strategy that stimulates customers to create an emotional bond with the brand. According to Lindstrom (2006) marketers can extensively influence the emotions of the customers by using sensory cues and thus let the customer emotional attach to the brand. With sensory cues marketers can also better relate to the always emerging customer on an emotional level and thus communicate better with the customer (Walsh et al., 2011). An excellent sensory marketing initiative can create a strong relationship and also an emotional

attachment to a service or product (Haase et al., 2020). According to Nair (2018) brands should focus on the emotional bonding with customers who live and shop for the brand experience and so build up a relationship with these customers. Mingione et al. (2020) also states the importance of the brand experience, namely if the brand creates a superior brand experience for the customer, it can lead to a emotional bond between the brand and the customer and thus lead to a good relationship. But to come back to my main goal of this research to see the link between sensory marketing and customer loyalty, it is not only about getting the customers emotional attached to brand but also about making them loyal to your brand- the last link in the conceptual model of Shahid et al. (See Figure 2). In the next subchapter I will lay the link between emotional attachment and brand loyalty.

# 3.5 Emotional attachment relation to brand loyalty

When I talk about emotional attachment, I talk about the bond between a customer and a brand (Hussain, 2018), but if I address brand loyalty or customer loyalty I aim on the long-term commitment of a customer to a brand (Reichheld & Teal, 1996). These two terms have thus two different meanings and can not be mixed up. Although they are related to each other. Grisaffe & Nguyen (2011) states that if a company develops a strong emotional bond with the customer, it can lead to repurchase and thus customer loyalty. According to Oliver (1999) the root of loyalty lie in the commitment of the customer, this commitment is described as very emotional with devotion, affection and adoration. According to Grisaffe & Nguyen (2011) emotional attachment is also the basis of loyalty from psychology reasons, since bonding gives the feeling of proximity towards the attachment figure and gives the feeling of care, protection and survival. While disconnection gives the opposite results, like anxiety and distress. In the business context the desire to emotional attachment towards brands gives a secure feeling to the connection and makes customers want to avoid separation with the brand. This all makes the customer not wanting to switch and let them repurchase. Grisaffe & Nguyen (2011) came for this to the conclusion that marketers can try to build a emotional attachment strategy to gather loyalty from their customers. Park et al. (2010) also believe that a positive brand experience creates, via a psychological emotional bond with the brand, brand loyalty. Thomson et al. (2005) are agreeing

on the influence of emotional attachment towards customer loyalty, they state that customers have a higher chance to stay committed to a brand for a long period, if they are effectively emotional attached.

Shahid et al. (2022) did a research to 'the role of sensory marketing and brand experience in building emotional attachment and brand loyalty in luxury retail stores', were they came to the conclusion that brand experience and sensory marketing cues indeed influence emotional attachment and that emotional attachment again influences brand loyalty. They state in their research that customers who are emotionally attached to a brand, remain loyal to the brand they are attached to and are up to three times more valuable. The last findings that is quite important is that found a difference between a luxury store environment and a non-luxury store environment. In the luxury store environment customers conveyed stronger sensory marketing cues, brand experience, emotional attachment and brand loyalty than in the non-luxury store environment.

#### 4 Discussion

Through extensive literature research of academic papers and journals, I assume that I have enough evidence to say that brands can gain more customer loyalty if they are implementing sensory marketing.

I build this statement on first researching how the individual senses work and how a brand can use it in their advantage. I hereby found that all senses have their own specific need of implementation and also their own influences on the customer behaviour. Vision is important for pulling attention and awakening emotions from the customer. The auditory sense is also important for the creation of customer emotions, this can be by voice, music or other sounds. Then the olfactory sense is extremely important for the (emotional) memory, we saw that this was because of the composition of our brain. For the tactile human sense I found out that it was used often in the evaluation of products, but that the importance depends on the NFT. The last sense I discussed was the gustative hereby we saw that sense was highly dependent on the other senses and that it can lead to a better experience if all the senses are well included.

If I look then to the complete picture I see that a lot of the senses have an impact on the brand experiences and the emotions of the customers, which they again use for their consumption decisions and behaviour. Regarding this brand experience it was shown that the use of the senses in a brand experience can lead to a more unique and personalized brand experience, which brings extra value next to the consumption value. All the experiences a person gets from a brand will be connected to a holistic brand experience, which will emotionally connect them with the specific brand, especially if this is a superior brand experience. This emotional attachment to the brand is stronger than traditional marketing methods, since the sensory marketing methods awakens more emotions. This strong emotional attachment created by sensory marketing methods also leads to fear of disconnection and thus customers are more willing to repurchase at your brand. This repurchasing is what in the end brings customer loyalty, because customers are longer committed to your brand.

# 5 Implications and future research

The first thing to mention is that a lot of the research to sensory marketing and their relation to sensory marketing is often quite specific to the environment and the store type. There is for instance a lot of research to the food industry and their retailers, but for some branches there is research lacking. So in the future it would be good to have more experiments in different segments.

Another thing where I think there are opportunities to do more research is the sensory overload principle. In a lot of papers it is stated that people have to watch out for sensory overload, because it can lower the results of sensory marketing. Although the presence of the sensory overload problem is proven, the reasons and the origins are still not well researched.

With the increasing development in technology, I think that it would also be beneficial to do more research to the increasing number of online shoppers and how we could deal with sensory marketing there. Also the new trend of artificial intelligence (AI) could give us new opportunities beyond the abilities of a normal human being.

The last theoretical implication I want to address is the findings of one of the most used researcher in this literature review, Shahid et al. He stated that there is a difference in the effects of sensory marketing cues on brand experience, emotional

attachment and brand loyalty between luxury stores and non-luxury stores. I think that this difference is also quite important to further investigate.

Now I go further to the managerial implications. Brands can thus gain customer loyalty if they implement sensory marketing. Hereby it is of big importance that the managers make a strategy to let customer emotional attach with the brand, since this will lead to brand loyalty. But for a good implementation of sensory marketing, the managers need to do proper research to their customers. Customers can namely differ a lot in their sensual preferences, think for instance about NFT or the music style. The full potential of sensory marketing can only be reached if it fits the customers needs and wishes and the stimulus are well balanced.

#### **6 Conclusion**

In this literature review, I tried to answer the question if sensory marketing can help brands to get their customer loyal. I answered this question by doing a literature review, where I indeed found evidence that brands can make their customers more loyal by implementing sensory marketing. Hereby it is important to create an outstanding brand experience for the customer by stimulating him with sensual triggers. The holistic brand experience, that is made up out of all the experiences and stimulus received from the brand, is making the customer emotional attached to the brand. Customers that are emotionally attached to a brand are more committed to the brand and it's products. This commitment makes them loyal to the brand. This study can provide brand managers, who want to grow their customer loyalty, a helping hand.

#### References

- Alpert, M. I., Alpert, J. I., & Maltz, E. N. (2005). Purchase occasion influence on the role of music in advertising. *Journal of Business Research*, *58*(3), 369–376. https://doi.org/10.1016/S0148-2963(03)00101-2
- Argo, J. J., Dahl, D. W., & Morales, A. C. (2006). Consumer Contamination: How Consumers React to Products Touched by Others. *Journal of Marketing*, 70(2), 81–94. https://doi.org/10.1509/jmkg.70.2.081
- Birznieks, I. (2003), Tactile Sensory Control of Dexterous Manipulation in Humans. Umeå University Medical Dissertations, New series, No 822.

- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand Experience: What is It? How is it Measured? Does it Affect Loyalty? *Journal of Marketing*, 73(3), 52–68. https://doi.org/10.1509/jmkg.73.3.052
- Braun, K. A. (1999). Postexperience Advertising Effects on Consumer Memory. *Journal of Consumer Research*, 25(4), 319–334. https://doi.org/10.1086/209542
- Bruner, G. C. (1990). Music, Mood, and Marketing. *Journal of Marketing*, *54*(4), 94–104. https://doi.org/10.1177/002224299005400408
- Buck, L., & Axel, R. (1991). A novel multigene family may encode odorant receptors: A molecular basis for odor recognition. *Cell*, *65*(1), 175–187. https://doi.org/10.1016/0092-8674(91)90418-X
- Cahill, L., Babinsky, R., Markowitsch, H. J., & McGaugh, J. L. (1995). The amygdala and emotional memory. *Nature*, *377*(6547), 295–296. https://doi.org/10.1038/377295a0
- Cameron, M. A., Baker, J., Peterson, M., & Braunsberger, K. (2003). The effects of music, wait-length evaluation, and mood on a low-cost wait experience. *Journal of Business Research*, 56(6), 421–430. https://doi.org/10.1016/S0148-2963(01)00244-2
- Chandon, P., & Wansink, B. (2007). The Biasing Health Halos of Fast-Food
  Restaurant Health Claims: Lower Calorie Estimates and Higher Side-Dish
  Consumption Intentions. *Journal of Consumer Research*, 34(3), 301–314.
  https://doi.org/10.1086/519499
- Eichenbaum, H. (1996). Olfactory perception and memory. In R. R. Llinas, & R. Smith Churchland (Eds.), The mind-brain continuum (pp. 173–202). Cambridge, MA: MIT Press.
- Field, T. (2001). Touch. MIT Press.
- Fournier, S. and Lee, L. (2009), Getting Brand Communities Right: Embrace conflict, resist the urge to control, forget opinion leaders and build your brand. Harvard Business Review (April), 105-111.

- Gainotti, G. (2020). *Emotions and the Right Side of the Brain*. Springer International Publishing. https://doi.org/10.1007/978-3-030-34090-2
- Grisaffe, D. B., & Nguyen, H. P. (2011). Antecedents of emotional attachment to brands. *Journal of Business Research*, *64*(10), 1052–1059. https://doi.org/10.1016/j.jbusres.2010.11.002
- Haase, J., Wiedmann, K.-P., & Bettels, J. (2020). Sensory imagery in advertising: How the senses affect perceived product design and consumer attitude. *Journal of Marketing Communications*, 26(5), 475–487. https://doi.org/10.1080/13527266.2018.1518257
- Henderson, P. W., Cote, J. A., Leong, S. M., & Schmitt, B. (2003). Building strong brands in Asia: Selecting the visual components of image to maximize brand strength. *International Journal of Research in Marketing*, 20(4), 297–313. https://doi.org/10.1016/j.ijresmar.2003.03.001
- Herz, R. S., & Engen, T. (1996). Odor memory: Review and analysis.

  \*Psychonomic Bulletin & Review, 3(3), 300–313.

  https://doi.org/10.3758/BF03210754
- Hoch, S. J., & Ha, Y.-W. (1986). Consumer Learning: Advertising and the Ambiguity of Product Experience. *Journal of Consumer Research*, 13(2), 221. https://doi.org/10.1086/209062
- Hoegg, J., & Alba, J. W. (2007). Taste Perception: More than Meets the Tongue. *Journal of Consumer Research*, 33(4), 490–498. https://doi.org/10.1086/510222
- Hul, M. K., Dube, L., & Chebat, J.-C. (1997). The impact of music on consumers' reactions to waiting for services. *Journal of Retailing*, 73(1), 87–104. https://doi.org/10.1016/S0022-4359(97)90016-6
- Hultén, B. (2007). Customer segmentation: The concepts of trust, commitment and relationships. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(4), 256–269. https://doi.org/10.1057/palgrave.jt.5750051
- Hultén, B. (2011). Sensory marketing: The multi-sensory brand-experience concept. *European Business Review*, *23*(3), 256–273. https://doi.org/10.1108/09555341111130245

- Hultén, B., Broweus, N., & van Dijk, M. (2009). *Sensory Marketing*. Palgrave Macmillan UK. https://doi.org/10.1057/9780230237049
- Hussain, S. (2018). Brand Image and Customer Loyalty Through Sensory

  Marketing Strategies—A Study on International Fast Food Chain

  Restaurants. *International Journal of Management Studies*, V(2(7)), 32. https://doi.org/10.18843/ijms/v5i2(7)/05
- Ikeda, K. (2002). New Seasonings. *Chemical Senses*, *27*(9), 847–849. https://doi.org/10.1093/chemse/27.9.847
- Kellaris, J. J., & Kent, R. J. (1993). An exploratory investigation of responses elicited by music varying in tempo, tonality, and texture. *Journal of Consumer Psychology*, 2(4), 381–401. https://doi.org/10.1016/S1057-7408(08)80068-X
- Keller, K. L., Apéria, T., & Georgson, M. (2008). *Strategic brand management: A European perspective*. Prentice Hall Financial Times.
- Kotler, P. (1973). Atmospherics as a marketing tool. Journal of retailing, 49(4), 48-64.
- Krishna, A. (Ed.). (2010). Sensory marketing: Research on the sensuality of products. Routledge.
- Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, 22(3), 332–351. https://doi.org/10.1016/j.jcps.2011.08.003
- Krishna, A., Elder, R. S., & Caldara, C. (2010). Feminine to smell but masculine to touch? Multisensory congruence and its effect on the aesthetic experience☆. *Journal of Consumer Psychology*, 20(4), 410–418. https://doi.org/10.1016/j.jcps.2010.06.010
- Krishna, A., Lwin, M. O., & Morrin, M. (2010). Product Scent and Memory. *Journal of Consumer Research*, *37*(1), 57–67.

  https://doi.org/10.1086/649909
- Lawless, H., & Engen, T. (1977). Associations to odors: Interference, mnemonics, and verbal labeling. *Journal of Experimental Psychology: Human*

- Learning and Memory, 3(1), 52–59. https://doi.org/10.1037/0278-7393.3.1.52
- Lee, L., Frederick, S., & Ariely, D. (2006). Try It, You'll Like It: The Influence of Expectation, Consumption, and Revelation on Preferences for Beer.

  \*Psychological Science\*, 17(12), 1054–1058. https://doi.org/10.1111/j.1467-9280.2006.01829.x
- Lindstrom, M. (2006). Brand Sense: How to Build Powerful Brands Through Touch, Taste, Smell, Sight and Sound. *Strategic Direction*, 22(2). https://doi.org/10.1108/sd.2006.05622bae.001
- Lowrey, T. M., & Shrum, L. J. (2007). Phonetic Symbolism and Brand Name Preference. *Journal of Consumer Research*, *34*(3), 406–414. https://doi.org/10.1086/518530
- McCabe, D. B., & Nowlis, S. M. (2003). The Effect of Examining Actual Products or Product Descriptions on Consumer Preference. *Journal of Consumer Psychology*, 13(4), 431–439. https://doi.org/10.1207/S15327663JCP1304\_10
- Messaris, P. (1997). Visual persuasion: The role of images in advertising. Sage Publications.
- Miller, E. A. (1972). Interaction of vision and touch in conflict and nonconflict form perception tasks. *Journal of Experimental Psychology*, *96*(1), 114–123. https://doi.org/10.1037/h0033468
- Milliman, R. E. (1982). Using Background Music to Affect the Behavior of Supermarket Shoppers. *Journal of Marketing*, 46(3), 86–91. https://doi.org/10.1177/002224298204600313
- Mingione, M., Cristofaro, M., & Mondi, D. (2020). 'If I give you my emotion, what do I get?' Conceptualizing and measuring the co-created emotional value of the brand. *Journal of Business Research*, *109*, 310–320. https://doi.org/10.1016/j.jbusres.2019.11.071
- Mitchell, D. J., Kahn, B. E., & Knasko, S. C. (1995). There's Something in the Air: Effects of Congruent or Incongruent Ambient Odor on Consumer

- Decision Making. *Journal of Consumer Research*, 22(2), 229. https://doi.org/10.1086/209447
- Montagu, A. (1986). *Touching: The human significance of the skin* (3rd ed). Perennial Library.
- Moore, C. M., Doherty, A. M., & Doyle, S. A. (2010). Flagship stores as a market entry method: The perspective of luxury fashion retailing. *European Journal of Marketing*, 44(1/2), 139–161. https://doi.org/10.1108/03090561011008646
- Morhenn, V., Park, J., Piper, E., & Zak, P. (2008). Monetary sacrifice among strangers is mediated by endogenous oxytocin release after physical contact. *Evolution and Human Behavior*, *29*(6), 375–383. https://doi.org/10.1016/j.evolhumbehav.2008.04.004
- Morrin, M., & Ratneshwar, S. (2003). Does it Make Sense to Use Scents to Enhance Brand Memory? *Journal of Marketing Research*, 40(1), 10–25. https://doi.org/10.1509/jmkr.40.1.10.19128
- Nair, S. R. (2018). Analyzing the relationship between store attributes, satisfaction, patronage-intention and lifestyle in food and grocery store choice behavior. *International Journal of Retail & Distribution Management*, 46(1), 70–89. https://doi.org/10.1108/IJRDM-06-2016-0102
- Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of Marketing*, 63(4\_suppl1), 33–44. https://doi.org/10.1177/00222429990634s105
- Park, C. W., Macinnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D.
  (2010). Brand Attachment and Brand Attitude Strength: Conceptual and
  Empirical Differentiation of Two Critical Brand Equity Drivers. *Journal of Marketing*, 74(6), 1–17. https://doi.org/10.1509/jmkg.74.6.1
- Peck, J., & Childers, T. L. (2003a). Individual Differences in Haptic Information Processing: The "Need for Touch" Scale. *Journal of Consumer Research*, 30(3), 430–442. https://doi.org/10.1086/378619
- Peck, J., & Childers, T. L. (2003b). To have and to Hold: The Influence of Haptic Information on Product Judgments. *Journal of Marketing*, 67(2), 35–48. https://doi.org/10.1509/jmkg.67.2.35.18612

- Pelletier, M. J., & Collier, J. E. (2018). Experiential Purchase Quality: Exploring the Dimensions and Outcomes of Highly Memorable Experiential Purchases. *Journal of Service Research*, *21*(4), 456–473. https://doi.org/10.1177/1094670518770042
- Philippe, F. L., Lecours, S., & Beaulieu-Pelletier, G. (2009). Resilience and positive emotions: Examining the role of emotional memories. *Journal of Personality*, 77(1), 139–175. https://doi.org/10.1111/j.1467-6494.2008.00541.x
- Pine, B. J., & Gilmore, J. H. (2008). The eight principles of strategic authenticity. Strategy & Leadership, 36(3), 35–40. https://doi.org/10.1108/10878570810870776
- Reichheld, F. F., & Teal, T. (1996). *The loyalty effect: The hidden force behind growth, profits, and lasting value*. Harvard Business School Press.
- Rodrigues, C., Hultén, B. and Brito, C. (2011), Sensorial strategies for value cocreation. Innovative Marketing, Vol. 7, No. 2, 47-54.
- Rolls, E. T. (1999). *The brain and emotion*. Oxford University Press.
- Rossing, T. D., Wheeler, P., & Moore, F. R. (2002). *The science of sound* (3rd ed). Addison Wesley.
- Rozin, P., & Nemeroff, C. (1990). The laws of sympathetic magic: A psychological analysis of similarity and contagion. In J. W. Stigler, R. A. Schweder, & G. Herdt (Eds.), *Cultural Psychology* (1st ed., pp. 205–232). Cambridge University Press. https://doi.org/10.1017/CBO9781139173728.006
- Shahid, S., Paul, J., Gilal, F. G., & Ansari, S. (2022). The role of sensory marketing and brand experience in building emotional attachment and brand loyalty in luxury retail stores. *Psychology & Marketing*, *39*(7), 1398–1412. https://doi.org/10.1002/mar.21661
- Sheth, J. N., & Parvatiyar, A. (1995). The evolution of relationship marketing.

  \*International Business Review, 4(4), 397–418.

  https://doi.org/10.1016/0969-5931(95)00018-6

- Shimul, A. S., Phau, I., & Lwin, M. (2019). Conceptualising luxury brand attachment: Scale development and validation. *Journal of Brand Management*, 26(6), 675–690. https://doi.org/10.1057/s41262-019-00158-6
- Smilansky, S. (2017). Experiential marketing: A practical guide to interactive brand experiences (2nd Edition). Kogan Page Ltd.
- Soars, B. (2009). Driving sales through shoppers' sense of sound, sight, smell and touch. *International Journal of Retail & Distribution Management*, *37*(3), 286–298. https://doi.org/10.1108/09590550910941535
- Söderlund, M. (2003), Emotionsladdad marknadsföring. Malmö: Liber, AB.
- Sonnenschein, D. (2001). Sound design: The expressive power of music, voice, and sound effects in cinema. Michael Wiese Productions.
- Thomson, M., MacInnis, D. J., & Whan Park, C. (2005). The Ties That Bind:

  Measuring the Strength of Consumers' Emotional Attachments to Brands.

  Journal of Consumer Psychology, 15(1), 77–91.

  https://doi.org/10.1207/s15327663jcp1501\_10
- Valberg, A. (2005). Light vision color. John Wiley & Sons.
- VHB. (n.d.). Complete list vhbonline.de. https://vhbonline.org/en/vhb4you/vhb-jourqual-3/complete-list
- Wallin, N. L. (1991). Biomusicology: Neurophysiological, neuropsychological, and evolutionary perspectives on the origins and purposes of music.

  Pendragon Press.
- Walsh, G., Shiu, E., Hassan, L. M., Michaelidou, N., & Beatty, S. E. (2011). Emotions, store-environmental cues, store-choice criteria, and marketing outcomes. *Journal of Business Research*, *64*(7), 737–744. https://doi.org/10.1016/j.jbusres.2010.07.008
- Wiedmann, K.-P., Labenz, F., Haase, J., & Hennigs, N. (2018). The power of experiential marketing: Exploring the causal relationships among multisensory marketing, brand experience, customer perceived value and brand strength. *Journal of Brand Management*, 25(2), 101–118. https://doi.org/10.1057/s41262-017-0061-5

Williams, L. E., & Bargh, J. A. (2008). Experiencing Physical Warmth Promotes Interpersonal Warmth. *Science*, *322*(5901), 606–607. https://doi.org/10.1126/science.1162548

# **Declarations**

Ich versichere hiermit, dass ich meine Bachelor-/Master-/Seminararbeit

# (Thema der Arbeit)

selbständig und ohne fremde Hilfe angefertigt habe, und dass ich alle von anderen Autoren wörtlich übernommenen Stellen wie auch die sich an die Gedankengänge anderer Autoren eng anlehnenden Ausführungen meiner Arbeit besonders gekennzeichnet und die Quellen zitiert habe.

Münster, den \_\_\_27.06.2023





# Consent Form for the use of plagiarism detection software to check my thesis

Last name: Konniger	First name: Timo	
Student number: 531424	Course of study: Business Administration	
Address: Venderinklanden 33, 7542N	AL Enschede, The Netherlands	
Title of the thesis: The Role of Sensor	v Marketing in Driving Customer Lovalty	

# What is plagiarism?

Plagiarism is defined as submitting someone else's work or ideas as your own without a complete indication of the source. It is hereby irrelevant whether the work of others is copied word by word without acknowledgment of the source, text structures (e.g. line of argumentation or outline) are borrowed or texts are translated from a foreign language.

# Use of plagiarism detection software

The examination office uses plagiarism software to check each submitted bachelor and master thesis for plagiarism. For that purpose the thesis is electronically forwarded to a software service provider where the software checks for potential matches between the submitted work and work from other sources. For future comparisons with other theses, your thesis will be permanently stored in a database. Only the School of Business and Economics of the University of Münster is allowed to access your stored thesis. The student agrees that his or her thesis may be stored and reproduced only for the purpose of plagiarism assessment. The first examiner of the thesis will be advised on the outcome of the plagiarism assessment.

#### Sanctions

Each case of plagiarism constitutes an attempt to deceive in terms of the examination regulations and will lead to the thesis being graded as "failed". This will be communicated to the examination office where your case will be documented. In the event of a serious case of deception the examinee can be generally excluded from any further examination. This can lead to the exmatriculation of the student. Even after completion of the examination procedure and graduation from university, plagiarism can result in a withdrawal of the awarded academic degree.

I confirm that I have read and understood the information in this document. I agree to the outlined procedure for plagiarism assessment and potential sanctioning.

Date and signature of the student