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Master Thesis	**The influence of online brand community on brand loyalty and the role of brand commitment** How online brand community affects brand loyalty and what is the role of brand commitment in this constellation?
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Supervisor	Prof. Dr. Olivier Furrer
Period of processing	
Place, Date of submission	Fribourg, 24.01.16

Abstract

The aim of this master thesis is to contribute to the knowledge about online brand communities and their influence on brand loyalty. More specifically, it focuses on measuring the role of brand commitment, within online brand communities, on the brand loyalty.

This is done by adopting and adapting the model of Laroche et al. (2013) that explains the influence of online brand communities on brand loyalty. Brand commitment, considered by many authors as relevant in this constellation and left out by the author of the model, is included and measured. In order to do so, 127 participants, all members of a specific online brand community took part in a survey.

The results could not confirm the existence of brand commitment as such in the new model. In fact, the items used to measure this variable have been mixed with the items from the brand trust variable. Therefore, the existence and the influence of brand commitment could not be proven. However, there are encouraging signs that this variable plays a significant role in the model and future researches should integrate it.

Keywords: online brand community, brand trust, brand commitment, brand loyalty, social network

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1. Introduction

1.1. Context of the thesis

As social networks changed the way we communicate with each other, share memories and experiences, they also changed the way we interact with companies and brands around us. In fact, during the last few years, companies established themselves on social networks, developing new marketing strategies and communication channels.

There is an on going debate about placement of companies on social networks. On one hand, it represents an amazing opportunity for a company to affect millions of customers and use the leverage of social networks to promote their brands. Social networks offer a very fertile environment for marketers. On the other hand, some argue that the presence of brands on social networks represent a potential "crashing" factor as social networks loose their reason to exists by not connecting people anymore (Fournier & Avery, 2011, p. 193). Issues of this debate are still unknown and for sure, many changes are still waiting to happen.

Nowadays, branding remains an important subject in marketing and only little is known on the subject of branding on social networks. Therefore, this thesis intends to understand interactions between brands and customers in online brand communities. Specifically, it tries to understand the elements influencing customer's loyalty to a certain brand when he or she is a member of an online brand community.

1.2. Problem statement

In competitive markets with high exposure, growth, and technological developments, creation and maintenance of consumer's brand relations has become a critical success factor for companies. In order to be a successful, companies must create and manage durable relationships with their consumers. Creating and managing those relationships is not enough, so companies must also ensure that both parties can benefit from them. Therefore, lasting and mutually beneficial relationships are key for creating brand loyalty. For companies willing to increase their customers' brand loyalty, the creation of an online brand community represents a very good opportunity (Sung, Kim, Kwon, & Moon, 2010).

Yet, the focus of recent studies has shifted attention from traditional brand communities to online brand communities. Even if the subject gained more attention from researchers, there is sill a lack of empirical knowledge about the subject (Laroche et al. 2013, p. 76).

In fact, in the domain of brand community building, only three studies are really relevant: McAlexander et al. (2002), Muniz & O'Guinn (2001) and Laroche et al. (2013), and only the work of Laroche et al. is based on an empirical approach.

In addition to lack of empirical studies, brand commitment, considered in the literature as very important for brand loyalty, does not appear in any model in the literature.

Therefore, the goal of this thesis is twofold: on one hand it will contribute to enhance the knowledge about online brand community based on an empirical study. On the other hand, it will include brand commitment in the constellation of elements affecting customer's loyalty when interacting in an online brand community.

1.3. Research questions

Based on the aforementioned problem statements, the research questions for the thesis can be defined. Consequently, the research questions for this master thesis focuses on the role and influence of brand commitment on online brand community based on social networks, and more specifically, which role brand commitment plays when analyzing the influence of online brand community toward brand loyalty.

It must also be mentioned that the research questions intend to answer open questions and missing elements of previous researches. Therefore, most of the research done in this thesis is based on the work of Laroche et al. (2013) To be or not to be in social media: How brand loyalty is affected by social media?

The first research question must therefore focus on how brand commitment influences brand loyalty. Here, it is important to understand and clearly identify, from a theoretical point of view, the role of brand commitment in influencing brand loyalty.

Second research question must focus on the role of brand commitment on brand loyalty within the specific case of online brand communities based on social media. Goal here is to understand through observations, what role brand commitment plays

in the influence of brand loyalty by a brand community. This research question intends to discover a new construct in the model developed by Laroche et al. (2013).

Finally, the last research question intends to answer if brand commitment is effectively part of the model developed by Laroche et al. (2013) and if it can be statistically considered as relevant in it. The question intends to answer if brand commitment is a statistically significant variable of the model in explaining the influence of online brand communities on brand loyalty. How the model of "the effect of brand community on social media" of Laroche et al. (2013) reacts when the variable brand commitment is added (Laroche et al., 2013, p. 80)? Are these findings the identical? Is the new variable explaining one part of the influence? Is brand commitment a significant variable in the model of Laroche et al. (2013) ?

1.4. Methodology

In order to answer the aforementioned research questions, a literature review was revised in order to analyse the existing information on the main topics related to the research question. Then, the model of Laroche et al. (2013) has been modified in order to integrate the construct of brand commitment, leading to a new hypothesis to confirm.

In order to confirm those new hypotheses related to the modified model, a survey was conducted. Participants were selected based on their interactions on online brand community in order to obtain a homogenous sample of online brand community members.

In order to test the hypothesis, two statistical analyses have been conducted. First, an exploratory factor analysis (EFA) that generated constructs based on their statistical relations. After the EFA, a confirmatory factor analysis (CFA) has been executed in order to confirm the model obtained during the EFA.

Both analysis permit to test and assess the role and the influence of brand commitment on brand loyalty in the new model developed on the base of the previous model of Laroche et al. (2013).

2. Literature review

Goal of this chapter is to review the existing literature of the main subjects under investigation in this thesis. The first section focuses on online brand communities. Then, concepts of brand loyalty, brand trust and brand commitment are presented. In order to understand how those elements interact with each other, the fifth section presents main models and frameworks that explain and present those interactions.

2.1. Online brand community

2.1.1. Concepts of brand, community and brand community

In order to understand the concept of brand community, one has to first understand the concept of brand and the concept of community separately.

In strategic marketing, it is considered that brand plays an essential part in the creation of a product or service's value. In fact, a brand's name helps consumers identify a company, its products and services, as well as the expected quality. Kotler, Armstrong, Saunders & Wong (1999), give a general definition of what is a brand: "a brand is a name, term, sign, symbol, or design or a combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate from those of the competitor" (Kotler et al., 1999, p. 571). Kotler et al. (1999) use the following example to highlight the influence a brand has on consumers' behavior:

Many manufacturers can produce Cola drinks. However, only Coca-Cola can deliver the original product everybody knows as "Coca-Cola" (Kotler et al., 1999, p. 571).

This example emphasizes the impact a brand and more generally, the impact branding has on consumers and their perception as well as the way consumers identify themselves with a brand. Even if those consumers have the choice between different brands offering Cola drinks, Coca-Cola brand will still add more value to the product than other manufacturer because it is impregnated in consumers' mind that Coca-Cola is the "real Cola" (Kotler et al., 1999 p. 571). Branding therefore plays a central role in the field of marketing as it supports the value of a product towards its customers by representing brand's set of values.

Community is defined by three main elements: locality, social interaction and bond (Jang, Olfman, Ko, Koh & Kim, 2008, p. 58). Locality refers to the geographical region where the community is implanted and permits the community and its members to differentiate from other communities. Social interaction refers to the fact that community's members create relationships with other members of the community. Finally, bond means that being a member of a specific community gives a feeling of comfort and belonging. Thus, a community is defined by a location where members can meet and build relationships between themselves based on their interactions, collective identity or atmosphere of community.

Etzioni and Etzioni (1999) explain that a community has two central attributes: affect-laden relationships of the members and their commitment to shared values, meanings and an historical identity. Authors present the community as a group of persons working and interacting together, based on common values, ideas and sharing collective knowledge, history or experiences. In this sense, every community has its own framework that members understand and share allowing them to achieve specific work for the community (as cited in Jang et al. 2008, p. 58).

According to Gusfield (1975) there are two types of communities. The first type is traditional territorial or geographical communities in which belonging to a certain territory or place is the main factor that differentiates members from non-members like, for example, neighborhoods or towns. The second type is a relational community in which focus is on human relationships within the community. That kind of community is more focused on what members share with others like fan clubs, hobbies, religions and so on (as cited in Jang et al. 2008, p. 58).

To answer the question of what a brand community is, Muniz & O'Guinn (2001) give one element of the answer based on previous definitions (Muniz & O'Guinn, 2001, p.418). For the authors, brand communities are built around three core elements. The first core element is the consciousness of kind and is described by the authors as: "an intrinsic connection that members feel toward one another and difference from others not in the community. Members differentiate themselves from users of other brands or members of other communities" (Muniz & O'Guinn, 2001, p. 418). In this sense, the element that differentiates members from one brand community to another must be the brand. The second core element is the presence of shared

rituals and traditions that supports community's history, culture and consciousness (Muniz & O'Guinn, 2001, p. 421). In the context of brand community and modern marketing, this is supported by advertisement and story telling around the brand and its products. When based on shared or similar experiences among members, storytelling enhances connections between the community members and increase the feeling of belonging to the brand and the community. Furthermore, advertisement is essential to the community rituals and traditions as it materializes the image of the brand among members (Muniz & O'Guinn, 2001, p. 421). The third core element is: "a sense of moral responsibility, duty or obligation to the community as a whole and its individual members" (Muniz & O'Guinn, 2001, p. 424). It takes the form of support shared among the community members regarding problems encountered with the brand's product or it takes the form a sharing specific information related to the product or to the brand.

The authors Muniz & O'Guinn (2001) deepen their definition of brand community, describing it as: "specialized, non-geographically bound community, based on a structured set of social relations among admirers of the brand" (Muniz & O'Guinn, 2001, p. 412). In their work, McAlexander et al. (2002) define the brand community as being the constructs of "its member's entities and relationships among them" (McAlexander et al., 2002, p. 38). The authors also identify factors that define a community. Those factors are: "commonality, identification among the community's members, a leisure pursuit or devotion to a brand" (McAlexander et al., 2002, p. 38). Additionally, Muniz & O'Guinn (2001) identify that in consumption-based communities (communities that encourage a certain style of consumption), the community's members identify themselves towards the community based on their consumption behavior (Muniz & O'Guinn, 2001 p. 414). The brand community is also the virtual or physical place where members can exchange or share essential resources of different nature (cognitive resources, emotional resources or material resources) about the brand and its products.

Two models help describe the structures of a brand community: Muniz and O'Guinn (2001) Brand Community Triad presented in figure 1, the Customer-Centric Model of Brand Community introduced by McAlexander et al. (2002) presented in figure 2.

Figure 1: Brand community triad
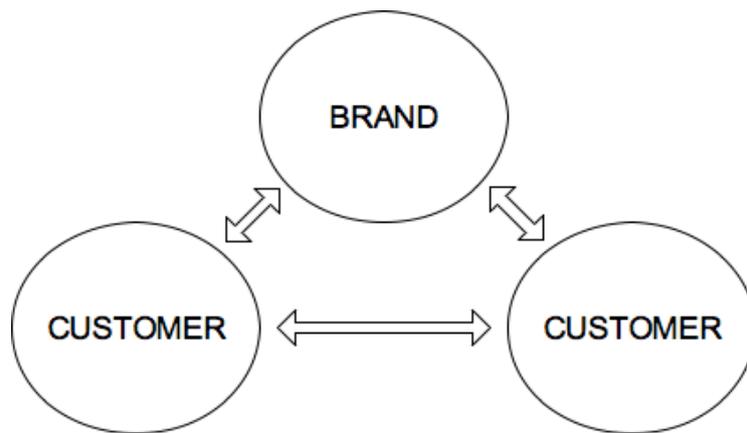
Source: Own illustration based on McAlexander et al. (2002, p. 39)

In Muniz and O'Guinn's model (2001), brand community is represented as a triad between customers and the brand. In this model, two types of relationships are highlighted: first, the relationship established between the brand and customers and second the one established among community members. In this model, the relation among members is vital for the success of the community. In fact, even if the relation with the brand remains an important aspect of the community, here, it is the relation that members build among themselves that define the value of the community (Muniz & O'Guinn, 2001 p. 414).

McAlexander et al.,'s model (2002), figure 2, is based on the aforementioned model. However, since judging the previous approach was limiting, the authors have extended it in order to create the model they called the Customer Centric Model of Brand Community. The model set the customer in the center of the model as it represents the community from its point of view. The additions to the previous model are the relationships between the customer and the firm and the relationships between the product and the customer. Therefore, the community relies not only on the customer and the brand, but also on the development of a corporate feeling (McAlexander et al., 2002, p. 39).

Figure 2: Customer-centric model of brand community
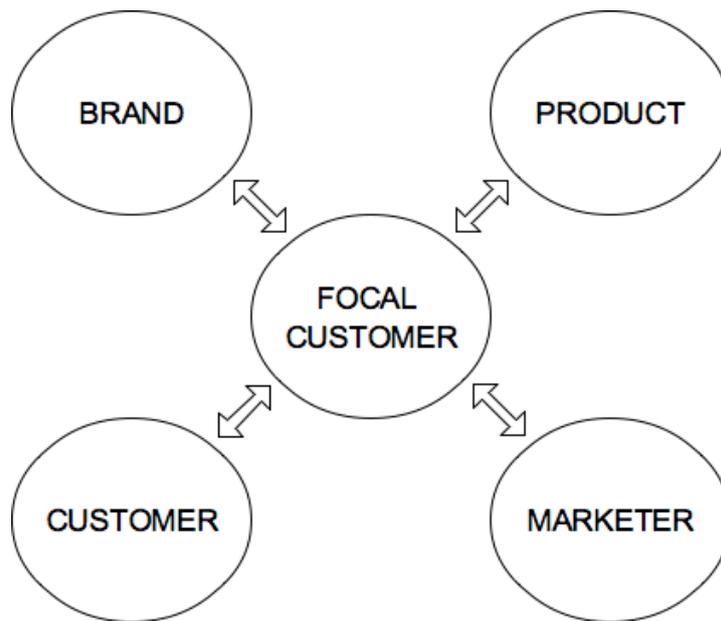
Source: Own illustration based on McAlexander et al. (2002, p. 39)

2.1.2. Online brand community

Online brand communities are actually brand communities located on the Internet. Even if the term 'virtual community' was introduced by one of the first Internet gurus, Howard Rheingold (1993), and it is still in use today, the term 'online community' is preferred in this work as it refers to the fact that those communities are located online, on the Internet. It must be noted that authors like Laroche, Habibi & Richard (2013) use the term 'social media based brand community' or 'brand community on social media'. In this thesis all those term will be handled without differences (Laroche et al., 2013, p. 77)

The nature of online brand communities does not necessarily vary from the aforementioned communities. However, for the purpose of this thesis, it is important to identify their particularities.

When a consumer uses the Internet and interacts with other consumers, it is very probable that those interactions will become more and more recurrent and in time, form a source of information and social interactions. The result of this mechanism is generically named online communities.

One characteristic remains common across all different definitions used in the literature to define online brand community; the fact that virtual brand communities are the result of people using the Internet in order to create relationship with other members having similar interests. From that common characteristic, definitions of online brand community vary in many aspects. In his study, Kozinets (1999) used the definition of Howard Rheingold (1993) who explains the meaning of online communities as "social aggregations that emerge from the net when enough people carry on... public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (as cited in Kozinets, 1999, p. 253).

Ridings, Gefen & Arinze (2002) offer a more modern definition as the author emphasis on the aspect that an online community is not bounded geographically. However, the location or the virtual location of the community is important, because it will serve as a place where members meet. Furthermore, from a technological point of view, this virtual location will also define the mechanism used by the members to communicate with each other. The authors state that an online community can be defined as: "groups of people with common interests and practices that communicate regularly and for some duration, in an organized way over the Internet through a common location or mechanism" (Ridings et al., 2002, p. 273). Another important aspect of online communities relies on the fact that content of online communities is mainly generated by users of the community through their virtual interactions. An online community is therefore a virtual space developed and shaped by the communication and the content shared by its members (Sicilia & Palazon, 2008, p. 257).

Online communities vary by the form of their organization. They are organized around various subjects, needs or consumption behaviors like sports, artists, or diet, but they can also focus different demographic segments or geographic regions like metropolitan areas or countries (Hagel, 1999, p. 57).

In comparison to offline communities, online ones are generally larger and more spread in space as well as in time. The aspect of dispersion in space concerns the fact that online communities are not geographically bounded or restricted. On the other side, the aspect of dispersion in time refers to the fact that members meeting online do not have to be virtually present at the same time in order to interact. The

communication system of online communities allows members to communicate in an unsynchronized way with each other. Moreover, online communities tend to be more densely knit, and regroup members with more heterogeneous social characteristics, such as category of age, gender, ethnicity, or socioeconomic status. However, despite their differences, the online community members tend to have more homogeneous attitudes (Ridings, et al., 2002, p. 273)

Online brand communities are very similar to offline brand communities described in the previous section. Sicilia & Palazon (2008) defined online brand communities as: "a group of individuals with common interests in a brand who communicate with each other electronically in a platform provided by the company which supports the brand" (Sicilia & Palazon, 2008, p. 257). The main differences between offline and online brand community are highlighted in the figure 3, refers to the removing of geographical barriers.

Figure 3: From offline-community to online virtual community
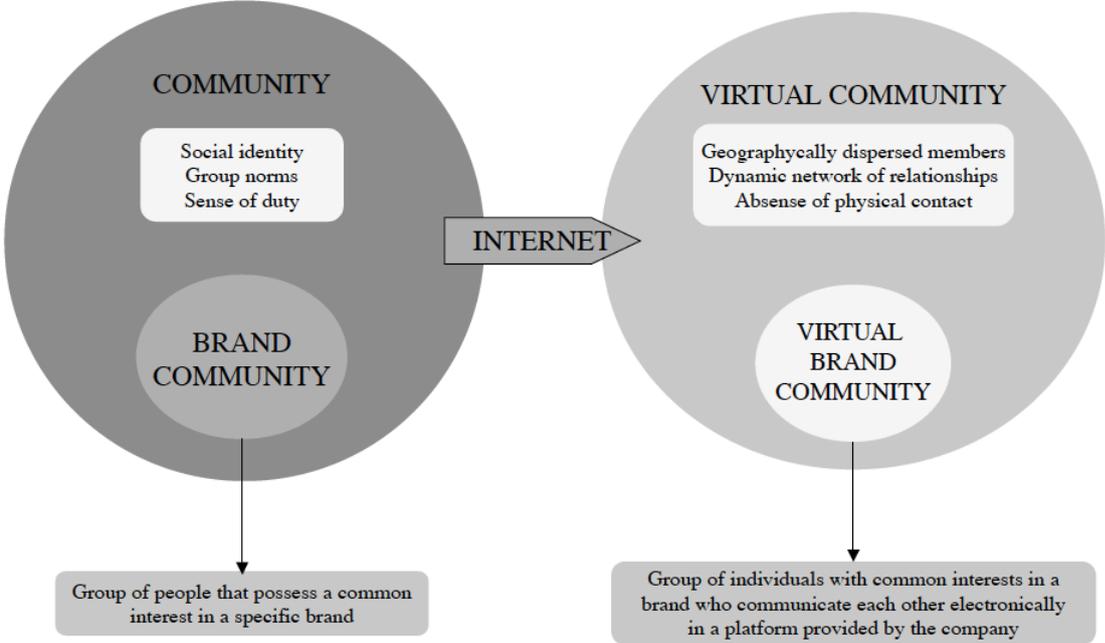
Source: Own illustration based on Sicilia & Palazon (2008, p. 258)

Online brand communities can be separated in two groups depending on the community's initiator: consumer initiated brand communities or company initiated brand communities. Consumer initiated brand communities are built on voluntary basis by consumers willing to share content about a specific brand. On the other

hand, company initiated brand communities are built by the company owner of the brand in order to establish a relationship with their consumers and to create a productive feedback mechanisms with the community's members (Jang et al., 2008, p. 60).

Bagozzi & Dholakia (2002) have defined five general characteristics of online brand communities. First, the community must be organized around a distinct interest which may refer to a certain product or a certain topic. Second, members must feel a sense of connection between themselves and a sense of separation regarding non-members. Third, online communities may follow distinctive norms of interaction, contain rituals or shared conventions. Fourth, it is the members who generate the content through active participation in the form of sharing content or discussion. Fifth, the members have freedom of expression, this mainly because virtual communities are relying on textual communication (Bagozzi & Dholakia, 2002, p. 5).

It is interesting to notice that online community share some similarities with traditional geographical communities. If online communities are relational communities, they still gather members in a specific place on the Internet, usually a website, or as it will be described in the next section on a specific place in a social network. This makes online communities look like geographical ones, because members have an attachment to the virtual place they use to interact with the community (McAlexander et al., 2002, p. 39).

2.1.3. Online brand community on social networks

According to Rakic & Rakic (2014), the rapid development and massive usage of the Internet resulted in creation of many social networks. Probably the most notorious and most used of them being Facebook (Rakic & Rakic, 2014, p. 179).

For the authors, even if the principal goal of social networks is to enable communication between its members, those platforms also developed tools that enable marketers to develop their marketing strategies and activities. Since, social networks and particularly Facebook have become a very attractive platform for many companies in order to create and develop their online marketing (Rakic & Rakic, 2014, p. 181).

Nowadays, the possibility to implement online marketing in the form of electronic word of mouth represents one of the main reasons to use marketing strategies based on social networks. Electronic word of mouth is particularly powerful, because users of social networks are connected to each other in a way that increase trustworthiness among them as interactions increase, increasing in turn the willingness to share content with other users of the social network. Value of online marketing activities resides in the fact that consumers relay opinions of other consumers propagating opinion in trusting messages shared between the social network's users (Rakic & Rakic, 2014, p. 179).

2.1.4. Types of online brand communities

Different classifications for online brand communities are listed in the literature, which describe several kinds of online brand communities. The first two types that can be identified are company initiated and consumer initiated brand communities (Jang et al., 2008, p.75). Company initiated online brand communities have been usually created by the firm in order to manage its relationships with customers. The second type of communities has been created by consumers in order to regroup around one brand. In literature, the terms member-initiated and organization-sponsored communities are also mentioned and refer to the same notion as presented above.

Markus (2002) offers a more detailed view of the online brand community types. The author differentiates the communities depending on their orientation and identifies three of them: social, professional and commercial oriented communities. As presented in figure 4, each main orientation is then divided in sub-orientations that are: relationship building, entertainment, expert network, learning, business-to-business and business-to-consumer.

Figure 4: Types of online brand communities
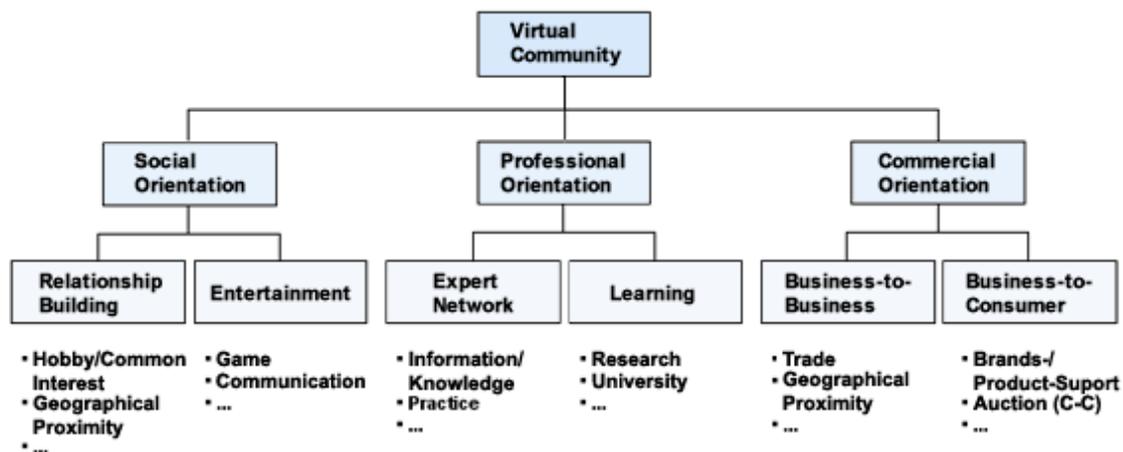
Relevant for this thesis are commercial oriented communities that are classified as business-to-consumer community. Goal of those communities according to Markus (2002) is to support a product or a brand. Therefore, members' interactions within such community are organized around a specific brand or its products/services.

Kozinets (1999) identifies one additional subtype of online community in the form of communities of consumption. This type of community is organized around consumption related thematic. The author defines those communities as: "affiliative groups whose online interactions are based upon shared enthusiasm for and knowledge of a specific activity or group of activities" (Kozinets, 1999, p. 259).

2.1.5. Types of members in online brand communities

Three kinds of classifications are used in literature in order to identify and differentiate members of an online brand community.

The first classification, introduced by Ridings et al. (2006), identifies two types of online brand community members: posters and lurkers. The authors explain: "posters are members that participate in the community by creating content. They participate in conversations, post new content and create new discussions". On the other hand, lurkers, are members that solely look for content within the community. Those members are not involved in creation of new content and do not participate in

conversations. Lurkers benefit from content generated by other members of the community (Ridings, et al., 2006, p. 331).

Second classification introduced by De Valck, Van Bruggen & Wierenga (2009) offers a more detailed panorama of online community members. Authors differentiate six categories of members active in online communities based on factors like the frequency of visitation, duration of the visits, the fact that they contribute to creation of information or if they do only search for information and if they discuss or not information given by the community (De Valck et al., 2009, p. 194). The first category is the *core members* and usually represents the smallest amount of members in a community. They are the most active within the community in term of visit and times spent per visit and are also members who interact the most with the community. Core members are the main users and suppliers of the community's information. They also take part in discussions held within the community. The second category is the *conversationalists.* It refers to users that frequently supply and discuss information within the community. Even if they spend less time being active in the community than the core members, involvement of conversationalists with the community remains high. Conversationalists are manly engaged in conversations with other members. The third category is the informationalists. Those members spend most of their time in the community searching for information and supplying new one. However their participation in discussions is relatively low. The fourth category is the hobbyists. This category of members usually spends a large amount of time with the community but do not interact in term of research or supply or information, and they do not participate extensively in community's discussions. Hobbyists are usually engaged with the community through their personal page where they upload personal content or write personal messages. The fifth category is the functionalists. Those members usually visit the community once per week in order to retrieve information that concerns their personal interests. Finally, the sixth category is the opportunists, referring to members that do not visit the community to participate but only to retrieve specific information. Opportunists are not regular visitors of the community and generally never interact with it (De Valck et al., 2009, p. 194).

A third type of classification introduced by Kozinets's (1999) focuses on two factors in order to differentiate the community's members: the first factor being the relationship that members have toward the brand and the second factor being the strength of the

social relationship among the community's members (Kozinets, 1999, p. 255). The author then identifies four types of members activity in online brand communities. The first type of members is the *tourists,* referring to members that do not tend to create strong social ties inside the community and that have only a limited interest towards community's content and the brand. Second type is the *minglers,* referring to members that tend to create and maintain strong social connections within the community. However, these members usually have only a limited interest towards the brand. The third type is the *devotees* and is contrary to the *minglers* as these members have a strong interest towards the brand but have a rather low interaction with others members of the community. They usually do not create social connections within the community. The fourth type is the *insiders*. These members tend to create strong connection with other members as well as the brand (Kozinets, 1999, p. 255).

2.1.6. *Why customers decide to be a part of an online brand community?*

There are numerous reasons that may motivate customers to become members of an online brand community. Being part of the community allows them to gain access to specific and valuable information or enable sharing specific information, generally about the brand, its products or services. Getting information from the community is simply an act of reading conversations, as well as soliciting information from other members by posting questions and comments. Sharing information, on the other hand, can be done by participating in conversation, either by directly responding to another member's post or by starting a new topic in the community (Ridings, Gefen & Arinze, 2002, p. 274).

However, motivations to be part of a brand community can be more complex than just access to information. Bagozzi & Dholakia (2002) argue that liberty of being part of a community or not is an important aspect. For the authors, if the members lose its interest for the community, the termination of membership could be easily done just by closing the web browser and not visiting the community anymore (Bagozzi & Dholakia, 2002, p. 6).

Being part of an online community also satisfies social and psychological needs. Porter, Donthu, Macelroy & Wydra (2001) classified seven types of needs that are fulfilled when a member is part of an online community (Porter et al., 2011, p. 81):

1) Information: members usually use the community as a source of information when they need to learn, solve problems or make decisions.

2) Relationship: the community is a potential place for creation of relationships among members.

3) Social identity and self-expression: through the community, members can fulfill self-awareness by expressing emotional and cognitive connection with the community.

4) Helping others: helping other members generates a feeling of satisfaction.

5) Enjoyment: members are looking for recreation and fun through their interactions within the community.

6) Belongingness: the satisfaction members have as being part of the community.

7) Status and influence: recognition and respect from other members when being part of the same community.

2.2. Brand loyalty

Brands are valuable for companies, and marketers are constantly trying to improve their visibility with consumers. For companies, creating customer loyalty to a brand is something primordial, especially in sectors where competition is high. However, it represents a constant challenge as it has become easier for customers to switch from one brand to another. Consequently, companies are trying to develop long-term relationships with their customers in order to increase their loyalty. In order to do so, companies have started using more innovative communication channels in order to interact with their customers. Brand community (online and offline) has emerged as a new communication channel offering companies a way to generate loyalty among customers.

In order to understand the term of brand loyalty in the context of online brand community, the term and dimension of brand loyalty and loyalty itself must be defined. According to Aaker (1996) loyalty is created when experiencing a preference for a certain brand. The author defines brand loyalty as: "the degree of a consumer emotional attachment to a brand". Loyalty can be bound to the brand but also the symbols or names (Aaker, 1996, p. 15). In Oliver's study (1999) brand loyalty is defined as: "a deeply held commitment to repurchase or patronize a preferred product or service consistently in the future, thereby causing repetitive, same brand or same set purchasing, despite situational influences and marketing efforts having

the potential to cause switching behavior" (Oliver, 1999, p. 34). Based on those two definitions, brand loyalty can be defined as a preference of costumers to repurchase a certain brand's product because of emotional attachment or commitment.

2.2.1. Brand loyalty in online community

Loyalty within the brand community is an important aspect in order to asses the level of influence a company has on its community members. In comparison, with brand commitment (defined in the next chapter), brand loyalty refers to a consumer that already has a certain degree of knowledge about the brand and the competition (Jang et al., 2008, p. 58). Brand loyalty is built on top of brand commitment as consumers usually have done a certain amount of brand interactions and brand switching. Brand's commitment in the form of positive word of mouth for example, might lead to brand loyalty, because it reflects a positive attitude towards the brand from its customers (Morgan & Hunt, 1994, p. 23).

2.2.2. Behavioural and attitudinal loyalty

Two types of loyalty: behavioral (also called purchase) and attitudinal loyalty, are introduced in Oliver's article (Oliver, 1999, p. 35). According to Chaudhuri & Holbrook (2001), behavioral or purchase loyalty, can be defined as: "a repeated process of purchasing the brand", while attitudinal loyalty is: "degree of dispositional commitment in terms of some unique value associated with the brand" (Chaudhuri & Holbrook, 2001, p. 82). Meaning that behavioural loyalty is when a customer becomes loyal to a brand because it has repeated many purchases and developed some kind of habituation to the brand. It may also be developed because customer has knowledge about other products and brands, and finds this particular one more attractive because it offers him more value. As on the other hand, attitudinal loyalty is related to the emotional part of customer brand relation. Customer might develop an emotional tie with the brand because of diverse reasons and will therefore have greater commitment in the form of attitudinal loyalty toward the brand and its products (Chaudhuri & Holbrook, 2001, p. 82).

2.2.3. Four phases of brand loyalty

Oliver (1999) proposes a framework that encompasses four phases of brand loyalty: cognitive loyalty, affective loyalty, conative loyalty and action loyalty (Oliver, 1999, p. 36). At each level of loyalty of the model, the consumers is loyal to the brand and it is

supposed that the consumer's loyalty towards the brand will evolve following those four phases.

Cognitive loyalty phase - During this phase, consumer's preferences toward a brand are only based on brand's attribute's information available to him (Harris & Goode, 2004, p. 141). At this stage, the preference towards a specific brand is directed because of the brand's attributes like performances compared to other brand's, price, costs or any other characteristics. Consumer's decision is mainly based on beliefs that brand is preferable to others. Usually at this stage, consumer has no past experience with the brand and therefore has no real experience. Also, at this stage there is a high level of brand switching due to a lack of bond with the brand. From a company perspective, consumers at the cognitive phase are not profitable in a long-term horizon.

Affective loyalty phase - Consumers come to this second phase after repeated positive and satisfactory usages of the brand's product/service and they are favorable toward the brand (Harris & Goode, 2004 p. 141). Consumer starts to develop a pleasure dimension associated with the brand. At this stage, consumer's brand loyalty is defined by the degree of affection for the brand. In comparison to the previous phase, where cognitive loyalty can be unsettled by argumentation, affective loyalty is more anchored in consumer's mind. However, they remain vulnerable to competitor's incentives like promotions. At this stage, the company has an opportunity to influence and strengthen relationships with these customers.

Conative loyalty phase - During this next phase, customer's decision is influenced by repeated positive interactions with the brand that develop a deeper level of commitment (Harris & Goode, 2004, p. 141). At this stage, consumer is committed to repurchase the brand and is usually very well educated about the brand's advantages. Commitment is deeply anchored in the customer's mind and motivates repurchases of the brand's product/service. However, it is not guaranteed that the customer will not switch the brand. Consequently, the company must continue to invest in the existing relationship.

Action loyalty phase - In this phase, the customer's intentions are converted to actions or readiness to act (Harris & Goode, 2004, p. 141). Consumer is ready to act

or in certain case, to overcome the obstacle that might be preventing his actions. At this stage, brand switching is minimized as the consumer is already aware the brand is the most suitable one compared to other alternatives.

2.3. Brand trust

Trust, from a business point of view, is defined by Morgan & Hunt (1994) as: "when one party has confidence in an exchange partner's reliability and integrity" (Morgan & Hunt, 1999, p. 23). Other group of authors Moorman, Deshpande & Zaltman (1992) define it as: "the willingness to rely on an exchange partner in whom one has confidence" (Moorman, Deshpande & Zaltman, 1992, p. 315). These two definitions highlight the importance of reliance, integrity and trustworthiness of the parties involved in an exchange.

Brand trust, is defined by Moorman, Deshpande & Zaltman (1992) as: "the willingness of a consumer to rely on the ability of the brand to perform its stated function" (Moorman, Deshpande & Zaltman, 1992, p. 315).

From customer's point of view, trust can be seen as expectations about the company's trustworthiness that results from its skills, reliability or intentions. Moorman et al. (1992) highlight the importance of trust and define it as determinant for the relationship's quality between the parties involved (Moorman et al., 1992, p. 315). When customers build trust toward a brand or a company, they also create positive thoughts and feelings. For their next purchases, customers rely on their previous experiences and trust plays an important role influencing the purchase behavior. Additionally, Delgado-Ballester (2004) defined brand trust as "the feeling of security held by the consumer in his/ her interaction with the brand, that is based on the perceptions that the brand is reliable and responsible for the interests and welfare of the consumer" (Delgado-Ballester, 2004, p.575). This highlighted the fact that trusts towards a certain brand or product is build during the time and is subject to developments.

Doney & Cannon's (1997) present another aspect of trust that is interesting for this thesis. The authors present trust in two forms. In the first one, trust relies on the fact that exchange partners provide a verbal or written proof that other partner can trust. For the second form, called benevolence, it means that a partner is interested in the

other partner's prosperity (Doney & Cannon, 1997, p. 36). This leads to the concept of trust, a sense of bi-directionality where both parties, the consumer and the brand for example, have their part to play in the other party's well being.

2.3.1. Brand trust in online community

In online brand communities, trust is particularly important as rules are usually absent (Ridings et al., 2002, p. 275). Therefore, trust is essential for the well-being and the productivity of the community. In fact, it is demonstrated that members of a community (in this case a traditional one) will cooperate and work better with other members if they trust them. On the other hand, they will actively avoid other members with whom they could not create a trustful relationship.

In order to create those relationships based on trust, Ba's (2001) argues that three main elements must be present among the partners in a community (Ba, 2001, p. 324):

1) The reliability of the partners, allowing all parties involved to be able to rely on the word and promises from other partners.
2) The predictability of the partners, meaning that the exchange partners behave in a way that equitably protects the welfare of both parties involved.
3) The fairness of the partners, when it comes to uncertainty and vulnerability.

Additionally, Ba's (2001) argues that in order to create and grow relationships among community members, information must be shared inside the group based on previous experiences. The fact that members relay on information received from another member, is a base for creating trust among the whole group. When members create trust between each other, it diminishes the uncertainty and risk of relationships. Therefore, with a frequent exchange of information and observation of other member's preferences and behaviors the levels of trust among the group or the community is likely to increase (Ba, 2001, p. 325).

Furthermore, in some cases trust can be used as a main factor to reduce the lack of information or uncertainty between partners. Study from Laroche et al. (2013) explains that when lacking information in an exchange, customers are relying on their previous experiences, especially when those experiences have been generating trust for the customer (Laroche et al., 2013, p. 78). When customers experience trust with

a brand or company, it influences the future exchanges between the two parties. Trust leads to positive influence, which leads to good expectations for future transactions. Therefore, it is vital for the company to maintain trust among its customers.

2.3.2. Trust and loyalty

Brand trust has a significant impact on brand loyalty. According to Berry (1993): "trust is the basis for the loyalty" (Berry 1993, p. 1). Therefore, trust is likely to lead to higher levels of loyalty among the partners. Sung and Kim (2010) add to this view that two components of brand trust have an impact on brand loyalty: expertise and trustworthiness. Here, trustworthiness must be understood as: "consumer's confidence in the brand quality performance" and expertise as: "extent to which a brand is perceived to be skillful and knowledgeable" (Sung & Kim, 2010, p. 644). Those two components arise from experiences that the consumers have with the brand and its products/services, and through time and repetition it will influence the loyalty of the consumers toward the brand.

This concept of loyalty based on trust is also present in the work of Chaudhuri & Holbrook (2001) where the authors mention that trust can be considered as an antecedent of loyalty (Chaudhuri & Holbrook, 2001, p. 83). Furthermore, and this will be explained in a more detailed way in the next chapter, brand trust can be considered as an important link between brand loyalty or brand commitment.

Trust in online brand community has also an impact on the brand loyalty. For Laroche et al. (2013) trust can play the role of a mediator in order to canalize the community effects into brand loyalty (Laroche et al., 2013, p. 83). This follow the previous idea that brand trust leads to brand loyalty. Trust must therefore be instrumentalized as a mediator between members of the community and the brand itself. Laroche et al. (2013) advance that: "building and enhancing brand communities and consumer experience within the context of brand community is to make customers loyal to the brand" (Laroche et al., 2013, p. 78). They also present two factors essential to increase brand trust and consequently improve brand loyalty: the constant exchanges of information and a long-term relationship between consumers and the brand.

2.3.3. Trust and commitment

It is important in this chapter to develop the relation between trust and commitment. Commitment and brand commitment will be explained in detail in the next chapter, in this one, the impact of trust on this particular aspect is developed. As McDonald (1981) states: "mistrust breeds mistrust and as such would also serve to decrease commitment in the relationship" (McDonald, 1981,p. 834). This highlights the fact that trust is an important factor for commitment toward a brand.

Morgan & Hunt (1994) explain relations between trust and commitment with five major precursors (Morgan & Hunt, 1994, p. 24):

1) *The relationship termination costs*. Terminating a business relationship will engender switching cost for both sides. Therefore, there is an incentive for the parties involved to manage a long-term relationship leading to higher level of commitment. The switching costs and the uncertainty of the environment leads to dependence, generally from buyer's point of view, and thus increases commitment to the relationship.

2) *Relationship benefits*. Because of competitive aspects of the marketplace and the environment, companies must look for relationships allowing them to generate the best outputs given the options they have. When two partners identify relationship's benefits in comparison to the alternatives in the marketplace, they have an incentive to commit to the relationship. When a partner receives superior benefits from a relationship, they will be more committed to that relationship in comparison to alternatives given to them.

3) *Shared values*. When both partners share common values like, what behavior to have, which goals to set, what policies must be implemented or what is right or wrong, there is a better chance that those parties will generate commitment and trust between themselves. Shared values support the emergence of trust and commitment in a relationship.

4) *Communication.* Here the term communication must be understood as: "formal, as well as informal sharing of meaningful and timely information" (Anderson & Narus, 1990 p. 44). As such, communication increases trust between the parties involved in a relationship. Interestingly, trust will also lead to better communication. Reason is that past communication is generally linked with trust and past trust enables

better communication. In other words, communication is the glue that holds partners together.

5) *Opportunistic behavior*. When a party engages itself in a transaction, seeking for opportunistic behavior in the form of self-interest or bad behavior, it is very likely to have a bad effect on the trust aspect of the relationship. It is therefore negative for trust, if one party believes that the other one is engaged in a relationship with an opportunistic behavior. Unlike the four other elements, the opportunistic behavior is set to have a negative impact on the relationship.

2.4. Brand commitment

Concept of commitment can be described as: "an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum effort at maintaining it; that is, the committed party believes relationship is worth working on to ensure that it endures indefinitely" (Morgan & Hunt, 1994, p. 23). This definition underlines the value of a relationship, as well as willingness to maintain it as long as possible, or at least as long as it is valuable for the parties involved. It also insists on the fact that parties are willing to work at maintaining the relationship. Interestingly, Berry and Parasuraman (1991) states that: "Relationships are built on the foundation of mutual commitment" which highlight the fact that commitment goes in both ways in a relationship (Berry & Parasuraman, 1991, p. 139).

Commitment also plays an important role in brand loyalty as some authors, like Assael (1987), state that brand loyalty is a form of "commitment to a certain brand" that manifests itself when there is a positive attitude towards the brand (Assael, 1987, p. 665). Morgan & Hunt (1994) place commitment in the middle of "all relational exchanges between the firm and its various partners" (Morgan & Hunt, 1994, p. 23).

Morgan & Hunt (1994) argue that commitment is a crucial aspect of a business because of the way it inspires and helps managers, by firstly preserving relationship investments by cooperating with the current exchange partners. Second, resisting attractive short-term alternatives in favor of the expected long tern benefits of staying with exchange partners. And finally, by helping to avoid high-risk actions thanks to the belief that partners will not act opportunistically (Morgan & Hunt, 1994, p. 22).

2.4.1. Brand commitment in online brand community

In brand communities, commitment, as mentioned by Staw (1980) can take two distinct forms: attitudinal or behavioral. Attitudinal commitment implies some emotional attachment from members toward the community. This form of commitment creates a strong feeling of membership with the community. On the other hand, behavioral commitment outdoes the simple emotional attachment as it relates to what members actually, and concretely act within the community (Staw, 1980, p. 257).

In communities, commitment arises when members gain value from their relations with other members. Jang et al. (2008) states that: "interactive communication facilitates a positive attitude among members toward the community operator, as well as the community, and this, in turn, enhances the level of commitment to the community" (Jang et al., 2008, p. 61). This highlights the fact that commitment in a community arises from value of relationships members have among themselves, when value of those relationships is mainly created through interactivity of the communication within the community.

Also, the type of online brand community has an impact on members' commitment. As Jang et al. (2008, p. 62) states: "In a company-initiated online brand community, customers' participation in building their opinions and managing their continuing experiences can be easily monitored and controlled by the company". The consequence being that in such communities, it is harder to develop the customer's commitment toward the brand and the community. One of the reasons is that firms are monitoring their online communities because consumers will base their opinions on other members' thoughts and information posted online, and may have therefore an incentive to filter comments and discussions (Jang et al., 2008, p. 67). On the other hand, the authors state that: "in a consumer-initiated online brand community, costumers voluntarily participate in building information about good features of the product and valuable experiences with it. Uncontrolled feedback from fellow members helps members trust their community and strengthen their commitment". It is therefore more likely to find more committed community members, when the community is not company-initiated (Jang et al., 2008, p. 62).

Generating commitment in an online brand community represents a critical success factor for a firm's online strategy. However, it remains a complex exercise because of the limited level of control the firm has on the community, and also because online communities are purely digital places where real contacts between the firm and the consumers cannot happen.

2.4.2. Brand commitment and brand loyalty

As found by Jang et al. (2008), a higher level of commitment from community members will increase brand loyalty. In their results, the authors state that a company can improve its financial results if it can increase the level of commitment in their communities (Jang et al., 2008, p. 75). Higher level of commitment will lead to consumer rephrasing, and online, as well as offline word of mouth. Therefore, community management as an option of increasing commitment in order to increase customers' loyalty may be a meaningful online strategy for companies.

2.5. Models of online brand communities

Two models present in literature help to understand the interaction and the complexity of online brand communities. The first model is a customer centric model of brand community developed by McAlexander et al. (2002) identifies the main identities interacting within brand communities. The second is the model of effect of a brand community on brand loyalty from Laroche et al. (2013) that is based on the model of McAlexander et al. (2002) It includes the concepts of brand trust and brand loyalty.

2.5.1. Customer centric model of brand community

The customer centric model of brand community has been developed by McAlexander et al. (McAlexander et al., 2002, p. 39) and is particularly important for this thesis, as it is the basis for the model developed for this research. The model is build on top of previous models that were only considering relations between the customers, as members of the community, and between the members and the brand. The customer centric model presented in figure 2, present the entities that are related to online brand communities and integrates the product, the marketer and the focal customer in addition to brand and customer that were already present in previous models.

The model is based on the fact that online brand communities are a place where those entities interact with each other and develop and share meaningful consumption experiences (McAlexander et al., 2002, p. 39). For the author, the model is dynamic and synergic, meaning that an interaction between two entities shared in the community will reinforce the relations of others entities. In their work, Laroche et al. (2013) give an example: "when a member log on a social media platform and explores the brand page, comments, shares a photo or experience, interacts with marketers, asks questions about the brand or the product or answers comments, that members is participating in the community activities and the invisible community becomes visible (Laroche et al., 2013, p. 77). In these interactions resources are being exchanged, information and value are being shared among members, so that the ties could be cemented in such communities". McAlexander et al. (2002) adds that: "sharing meaningful consumption experiences strengthens interpersonal ties and enhances mutual appreciation for the product, the brand and facilitating marketers" (McAlexander et al., 2002, p. 44). As a consequence, virtual relationships become real and strengthen the ties between the entities. The authors conclude that: "consumer centric relationships with different entities in the brand community might be cumulative or even synergistic in forming a single construct akin customer loyalty" (McAlexander et al., 2002, p. 44).

Customer centric model of brand community presents four relationships that occur through the online brand community (McAlexander et al., 2002, pp. 49):

1) *Customer – Product relationship*, refers to the exposure a customer will encounter in the online community toward products. This exposure may motivate customers to purchase or repurchase new or improved products.

2) *Customer – Brand relationship*, refers to the exposure the customer has with the brand in form of marketing material like video or online contents.

3) *Customer – Company relationship*, refers to the relationship that is built between the customer and the company, as an entity that is approachable. Through online community, the company might be perceived in a different way by it's customers. This could be on the image level where a company can display another attitude as its traditional marketing/communication, but it also refers to the relationship the company is able to build with its customers. For the later, it might be that customers get connected with real people working for the company. This gives the

company an opportunity to give to their customers a personal feeling of its entity, whereas companies are often perceived as impersonal and bureaucratic.

4) *Customer – Customer relationship*, refers to the relationship members and customers will create among themselves, focused around the usage and consumption of products.

The underlying effect of this model is that online brand community, by providing the platform for the aforementioned relationships, will enhance interactions among the entities and therefore increase customer loyalty (McAlexander et al., 2002, p. 51). This is mainly because customers that are integrated and involved with the brand community are likely to be more involved emotionally with the company and are willing to contribute to its success.

2.5.2. Model of effect of brand community on brand loyalty

The model of effect of brand community on brand loyalty from Laroche et al. (2013, p. 80) has been developed on the basis of the customer centric model of brand community and the result of research of McAlexander et al. (2002).

As presented in figure 6, the model postulates that brand community through the four kind of relationships presented in the customer centric model of brand community will influence brand trust, which in turn influences brand loyalty. As the authors states: "brand communities operating on social media can enhance brand trust and loyalty by improving customer relationship with the brand, other consumers, the company and the products" (Laroche et al. 2013, p. 80). All relationships presented in this model have a significant influence on brand trust and brand loyalty, making this model a robust starting point in order to develop further constructs in this field.

Figure 5: Model of the effects of brand community
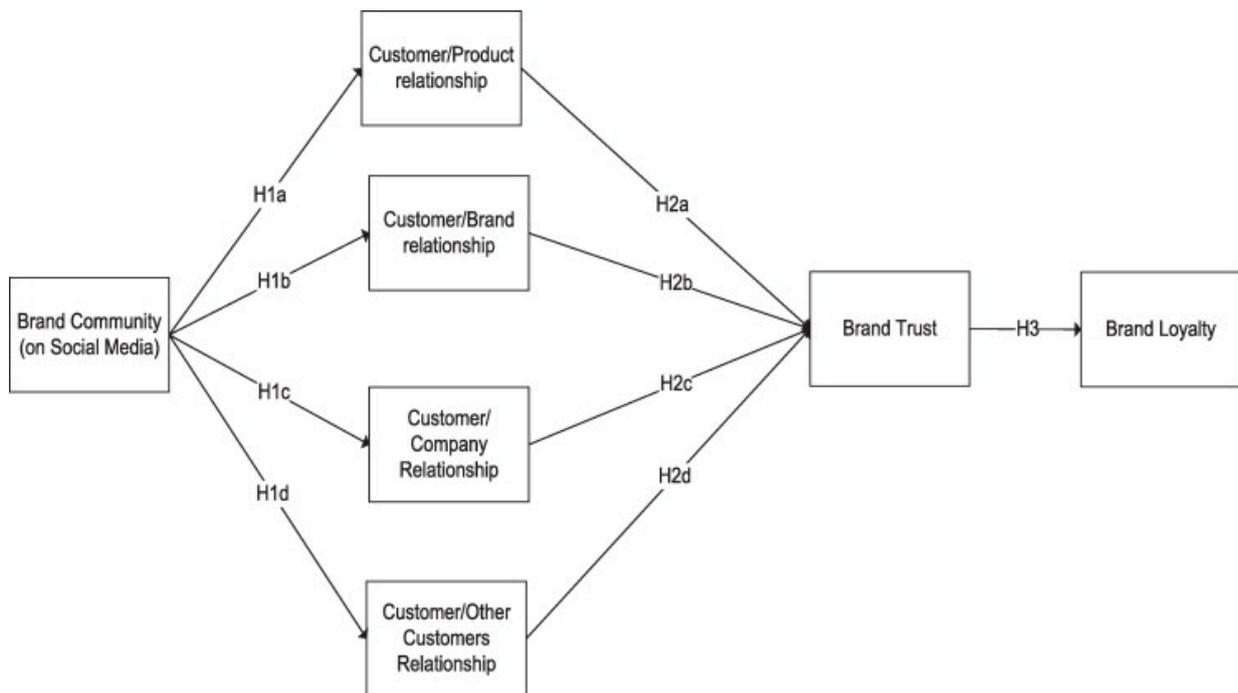
Source: Own illustration based on Laroche et al., (2013, p. 80)

An interesting aspect that emerges from this model is the fact that relationships of members with other members have the most influence (Laroche et al., 2013, p. 80). This underlines the aspect that social medias are the peoples' media and that interaction between people on social media remains the strongest relation. This highlights the fact that marketers or online brand community managers should enhance the relationships between members, among all other relationships, if they are willing to increase brand loyalty.

3. Research model and hypothesis

This chapter presents the research model developed for this thesis and the hypothesis to which the empirical research will try to answer.

The research model and hypothesis developed for this thesis are based on the previous works of McAlexander et al. (2002) and Laroche et al. (2013). The research model presented here is in fact an addition to Laroche et al. model presented in the previous chapter. As shown in figure 7, brand commitment has been added in the model based on the theory. In fact, it is assumed that the customer centric model will have an influence on brand commitment, which in turn will influence brand loyalty.

Figure 6: The research model
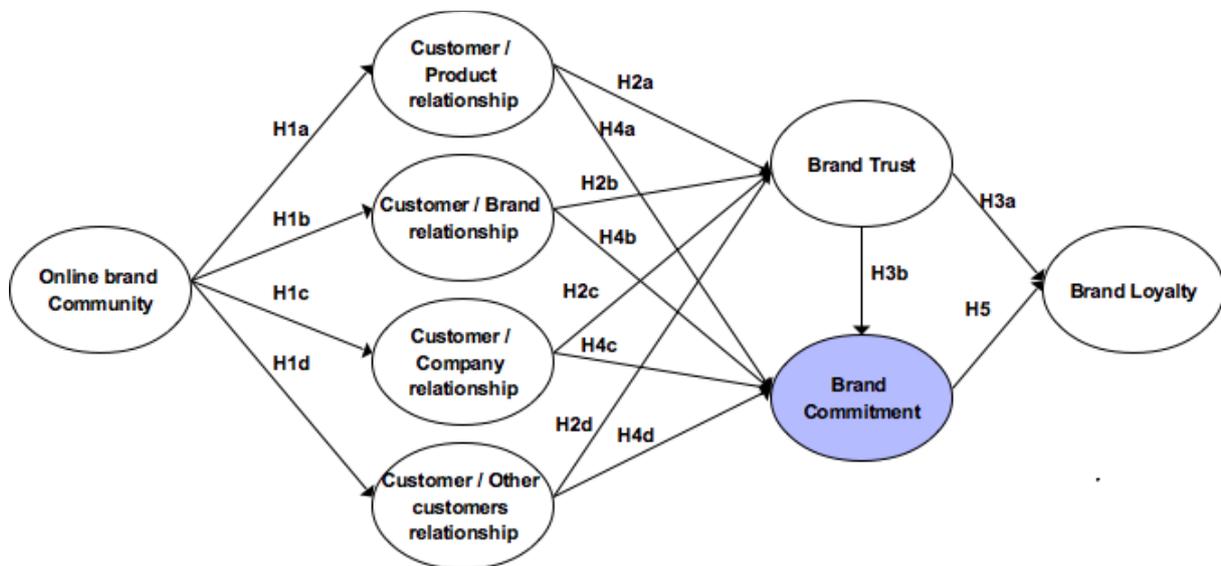
Source: Own illustration

The model also shows the influence between its different elements. Each arrow represents a relationship, which is then considered in the research as a hypothesis. The hypothesis H1a, H1b, H1c, H1d, H2a, H2b, H2c, H2d and H3a are all based on the study of Laroche et al. (2013). The fact of adding the brand commitment in the model requires new a hypothesis. H4a, H4b, H4c, H4d, H3b and H5 have all be added to the model. Follow, the hypothesis and their theoretical foundation:

The first group of hypothesis represents the effect of brand community based on social network on the customer's relationships:

H1a. Social network based brand communities have positive effects on the customer / product relationship

H1b. Social network based brand communities have positive effects on the customer / brand relationship

H1c. Social network based brand communities have positive effects on the customer / company relationship

H1d. Social network based brand communities have positive effects on the customer / other customers' relationship

This first group of hypothesis is based on Laroche et al. (2013) and is therefore included in the new model. They represent the impact of an online brand community on the different relations of the customers when he interacts on it.

The second group of hypothesis represents the effect of customer's relationships on the brand trust:

H2a. The customer / product relationship has a direct positive effect on brand trust

H2b. The customer / brand relationship has a direct positive effect on brand trust

H2c. The customer / company relationship has a direct positive effect on brand trust

H2d. The customer / other customers have a direct positive effect on brand trust

This second group of hypothesis is also based on Laroche et al. (2013) and supports the fact that through its interactions on the online brand community, trust will increase from customer's point of view. Repeated interactions, and interaction over a long period of time, are the two effects under scrutiny here.

The third group of hypothesis accounts for the effect of brand trust on brand loyalty and brand commitment. The hypothesis H3a. of this group is based on Laroche et al. (2013). However, the hypothesis H3b. is added to the model:

H3a. Brand trust positively influences brand loyalty

H3b. Brand trust positively influences brand commitment

Based on the theory presented previously, it is possible to assume that brand trust has a positive impact on brand commitment (McDonald, 1981 and Morgan & Hunt, 1994). H3b represents this motivation to maintain a valued relationship between partners based on the trust built along the whole relationship.

The fourth group of hypothesis represents the effect of customer's relationships on brand commitment:

H4a. Customer/product relationship has a direct positive effect on brand commitment

H4b. Customer/brand relationship has a direct positive effect on brand commitment

H4c. Customer/company relationship has a direct positive effect on brand commitment

H4d Customer/other customers has a direct positive effect on brand commitment

As mentioned by Jang et al. (2008), online brand communities, by supporting and generating interactions between customers and the brand, customers with other customers, customers and the company and between customers and the product, have a positive effect on brand commitment.

The fifth group refers to the effect of brand commitment on brand loyalty and contains one hypothesis:

H5. Brand commitment positively influences brand loyalty

This hypothesis is based on Jang et al. (2008) findings that higher level of commitment within the community has a positive impact on the brand loyalty.

4. Methodology

The goal of this chapter is to present the methodology used in order to conduct the research. The chapter begins with the research design where the main idea is presented. It then moves to the operationalization of the construct that presents clearly how different constructs are measured. It finally presents the analysis methods used in order to conduct the different statistical analysis needed to ensure good reliability.

4.1. Research design

The research design implemented for this thesis is, descripto-explanatory, as the goal of the research is to describe interaction and the role of commitment in an online brand community and intends to explain the role of commitment within the relationships present in an online brand community. As mentioned by Robson (2002), a descriptive research is appropriate when the researcher is willing to: "portray an accurate profile of persons, events or situations" (Robson, 2002, p. 59). The descriptive part of the study focuses on brand commitment and its influence in an online brand community.

Explanatory researches are appropriate in order to clarify causal relationships between two variables in a situation or phenomenon (Kumar, 2011, p. 66). The emphasis here is on studying the causal relationships between the brand community and brand loyalty, through all elements identified in a brand community, plus an added element; brand commitment. More specifically, the research tries to explain the impact of brand commitment on brand loyalty through interactions of the community's entities within a given community.

By combining the two types of research in a descripto-explanatory study, descriptions are precursors of explanations. Most of the descriptive part is already present in the literature review, where the role of commitment is explained based on the existing literature and serve as the basis for the explanatory research.

4.1.1. Types of data

Types of data collected for the study are solely quantitative, primary data, obtained through an online survey. The decision for quantitative data is motivated by the data analysis methods selected for the study, which are all relying on quantitative data analysis. Quantitative data is important for this research's purposes as it focuses on the causal effect of brand commitment on brand loyalty measured with statistical instruments.

4.1.2. Data collection method

In order to obtain the necessary data for the quantitative analysis, an online survey has been developed using the platform www.surveymonkey.com.

The decision to use an online survey is based on the fact that maximum flexibility was needed in order to have enough relevant participants for the study. In fact, and this will be explained in a more detailed way in the next section, as participants where selected based on their interaction on Facebook page of Nike, the communication with them was established through the messaging interface of Facebook. The fact that if was not possible to establish a direct contact with the participants had to be compensated with a way to collect data in a convenient way.

The online survey offers an advantage that makes it possible to transmit questionnaires to participants around the world using a simple link to survey. Furthermore, the participants can rapidly answer questions and submit through the platform. It also limits the interaction between the researcher and the participants, as there is no need to exchange e-mails or files.

4.1.3. Sampling method

Sampling technique used in this thesis is the purposive sampling method with a focus on a homogenous sample. As mentioned by Saunders, Lewis & Thornhill (2009) the purposive sampling technique allows the researcher to use their "judgment to select cases that will best enable you to answer your research question(s) and to meet your objectives" (Saunders, et al., 2009, p. 237). Usually purposive samples are used when working with a very small or limited number or participants. The advantage of this method is that it allows a relevant selection for the study's purposes. On the other hand, such samples cannot be considered to be statistically representative of

the total population.

The focus of the purposive sampling has been set on members of the Nike community page on Facebook (link: https://www.facebook.com/nike/), that have been interacting with the community in form of: sharing, liking or commenting a specific post. Nike uses this Facebook page to present its newest products figures 8 and 9. One post from 11th of May 2012, presenting a new model of Nike shoes called Flyknit, has been retained as it generated 20'433 likes, 3'155 shares and 435 comments (https://www.facebook.com/nike/). People having liked, shared or commented on this post have been randomly selected in order to participate to the study. Each participant has been contacted via the messaging interface of Facebook and a link to the questionnaire was given in the message.

Figure 7: Online Nike brand community on Facebook

Source: Nike (2016), Facebook page Nike. Accessed on 7.1. 2016, on:

https://www.facebook.com/nike/
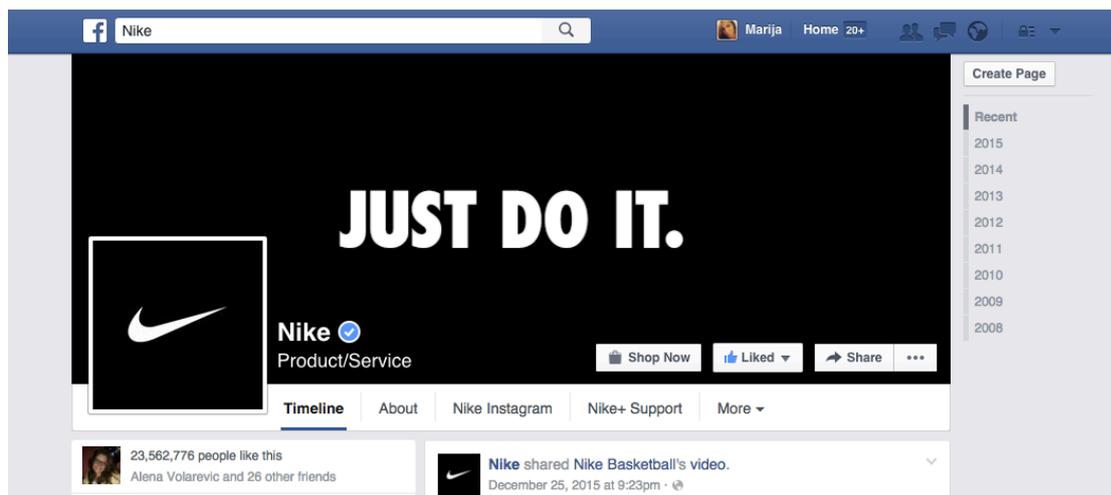
Figure 8: Flyknits shoes on Nike online brand community

Source: Nike (2016), Facebook page Nike. Accessed on 7.1. 2016, on:
https://www.facebook.com/nike/photos/pb.15087023444.-
2207520000.1451661301./10151107294153445/?type=3&theater
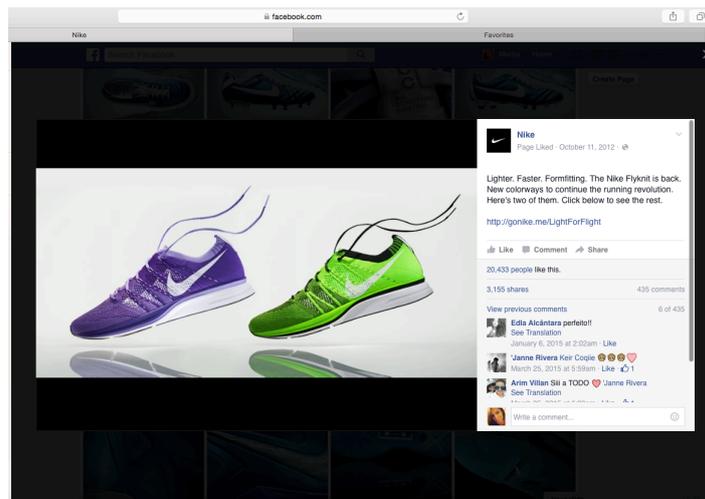
Focusing on the Nike community on Facebook is motivated by two arguments. First, Facebook is actually the largest and most used social network in the world by individuals and companies representing the best potential to observe online communities and their members (Facebook report first quarter of 2015). Second, Nike, with its page has around 23,5 million members, which is one of the largest online brand community registered on a social network.

4.2. Credibility of research

As defined by Saunders et al. (2009), ensuring the credibility of the research is important because it reduces the possibility of collecting answers that are not relevant for the subject under study (Saunders et al. 2009, p. 157). In other words, credibility aims to ensure that questions measure what they are supposed to measure (Sreejesh, Mohapatra & Anusree 2013, p. 116). Two aspects of the research design must be analyzed: the validity and the reliability.

The validity refers to the fact that findings must relate in the real world. For example, finding a causal relationship between two variables in a statistical way does not mean there is a real causal relationship. Validity of the study also ensures that the methods used, measure accurately what they are supposed to measure (Saunders et al., 2009, p. 157). In this thesis, every question asked is based on adaptation and adoption from previous researches. The necessary modifications were only concerning situations like Facebook, and the Nike community, but from a structural

point of view they remain identical to the source. On this point the research is valid.

The reliability of the research refers to the extent of which the data collection techniques or analysis procedures will produce consistent findings. There are four threats to research reliability that must be hedged (Robson, 2002, p. 339):

1) *Subject of participant error*; are errors inducted by the participants' state of mind at the time of the study. For example, the level of enthusiasm concerning a certain subject may vary during the week and therefore leads to different outputs. The researcher must find the most neutral time to conduct their study.

2) *Subject or participant's bias*; this kind of bias occurs when participant is not totally honest in ways he or she answers the questions. This may be due to a multitude of factors and must be hedged with a guarantee of anonymity from participants' point of view.

3) *Observer error*; refers to errors that can occur from the observer. Structured questionnaires lead to less errors from observers and increase reliability.

4) *Observer bias*; refers to how the observer will interpret the answers. The observer's analysis may be influenced by a quantity of bias.

In the research indented in this thesis, the main threat to reliability is on the participants' side as it is impossible to ensure that all participants understand the questions and answer honestly. However, by testing the questionnaire with a pilot test, it was already possible to ensure that questions were understandable and that they were not leading to misunderstandings. In order to ensure that respondents had a minimum of errors, self-administered survey has been chosen which allowed subjects to decide when it was the best moment to answer the questions. Plus, the Likert-scale design of questions reduces the chance to record errors. From observer's point of view, the reliability is ensured as the questionnaire is structured and no direct observations were necessary.

4.3. Operationalization of the research construct

4.3.1. Measures and scales

In order to measure the variables, rating questions have been used in the survey. In fact, rating questions are a good way to collect opinion data (Saunders et al., 2009, p. 378). The rating questions have been combined with the Likert-style rating scale in

which the respondents were asked how strongly they agree or disagree with a given case on a seven-point rating scale.

Table 1, presents the measures used in the questionnaire. Each construct developed in the research is measured by a number of items. In the research there are 8 constructs measured by 32 items.

Table 1: Construct measurements and sources

Constructs	Items	Label	Adapted form (source)
Brand Community	3	BC1-BC3	Laroche et al. (2013)
Product	4	P1-P4	Laroche et al. (2013)
Brand	3	B1-B3	Laroche et al. (2013)
Company	2	CP1-CP2	Laroche et al. (2013)
Other customers	3	OC1-OC3	Laroche et al. (2013)
Brand loyalty	7	BL1-BL3 BL4- BL7	Laroche et al. (2013) Bobalca et al. (2012)
Brand Trust	3	BT1-BT3	Laroche et al. (2013)
Brand Commitment	7	BCM1-BCM2 BCM3-BCM5 BCM6 BCM7	Zhou et al. (2012) Punniyamoorthy & Raj, 2007 Turri et al. (2013) Bobalca et al. (2012)

Source: Own illustration

All items presented in the previous table are drawn from existing literature and can therefore be clearly considered as valid. All items use the Likert-scale as measurement system, which is an interval scale commonly used by marketing researchers (Burns & Bush 2013, p. 208). The end points of the Likert-scale are «strongly agree» and «strongly disagree», and the respondents are asked to indicate to which level they agree with a given statement (Burns & Bush 2013, p. 208; Malhotra, 2012, p. 308). Likert-scale based questionnaire are advantageous when conducted on an online platform as they are easy to administer, and easy for the respondent to understand (Malhotra, 2012, p. 309).

Every item used to measure constructs is measured using the Likert-scale in following levels: [1] strongly disagree, [2] disagree, [3] somewhat disagree, [4] neither disagree nor agree, [5] somewhat agree, [6] agree, [7] strongly agree.

4.3.2. Constructs and items measurements

The survey used to collect the data has been separated in two sections. The first section is dedicated to the measurement of 32 items necessary for the analysis of independent and dependent variables. The items were separated in 8 main subjects that represent different constructs of the model. The second section is asking participants to give some information about themselves (the full version of the questionnaire is presented in Appendix A.

The table 2, present the items used in the questionnaire as indicator or measurement. All those items are based on indicators used in previous researches.

Table 2:Indicators/ Measurement Items

Latent Constructs	Label	Indicators/Measurement Items
Brand Community (BC)	BC1	The members of this community benefit from the community.
	BC2	The members share a common bond with other members of the community.
	BC3	The members are strongly affiliated with other members.
Product (P)	P1	I love the product of the brand.
	P2	I am proud of the product.
	P3	The product is one of my priced possession.
	P4	The product is fun to use.
Brand (B)	B1	I value the heritage of the brand.
	B2	If I were to replace the product, I would replace it with another product of the same brand.
	B3	My brand is of the highest quality.
Company (CP)	CP1	The company understands my needs.
	CP2	The company cares about my opinions.
Other Customers (OC)	OC1	I have met wonderful people because of the community.
	OC2	I have a feeling of kindship with the other owners.
	OC3	I have an interest in the community because of the other owners of the brands.
Brand Loyalty (BL)	BL1	I consider myself to be loyal to the brand.
	BL2	If the brand is not available at the same store, I would buy the same brand from some other store.
	BL3	I am willing to pay more for my brand.
	BL4	I bought this brand because I really like it.
	BL5	I feel more attached to this brand than to other brands.
	BL6	I intend to buy this brand in the future, too.
	BL7	I recommend this brand those who ask my advice.
Brand Trust (BT)	BT1	My brand gives me everything that I expect out of the product.
	BT2	I relay on my brand.
	BT3	My brand never disappoints me.
Brand Commitment (BCM)	BCM1	If Nike were not available, it would make little difference to me if I had to choose another brand.
	BCM2	I will more likely purchase a brand that is on sale than to purchase Nike.
	BCM3	I have strong preference for this brand.
	BCM4	To change my preference from this brand would require huge rethinking.
	BCM5	Even if close friends recommend another brand, I would not

		change my preference.
	BCM6	I feel strong sense of belonging to this brand.
	BCM7	In the future I see myself being committed to the Nike.

Here are the construct and the theoretical foundations of the related items:

Brand Community (BC1, BC2, BC3); the three items are derived from the study of Laroche et al. and aim to measure: "the degree to which members feel bonded to each other, share information and experiences and the extent to which they find these exchanges useful" (Laroche et al. 2013, p. 81).

Product (P1, P2, P3, P4); the four items are adopted and adapted from the study of Laroche et al. (Laroche et al., 2013, p. 81) and aims to measure the customer/product relationship.

Brand (B1, B2, B3); the three items are used the measure the customer/brand relationship are adapted from Laroche et al. (Laroche et al., 2013, p. 81).

Company (CP1, CP2); the two items measuring the customer/brand relationship are adapted from Laroche et al. (Laroche et al., 2013, p. 81).

Other Customers (OC1, OC2, OC3); the three items used to measure the customer/other customer relationship are adapted from Laroche et al. (Laroche et al., 2013, p. 81).

Brand Loyalty (BL1, BL2, BL3, BL4, BL5, BL6, BL7); the first three items used to measure the member's brand loyalty are adapted from Laroche et al. (Laroche et al., 2013, p. 81) and the next four are adapted form Bobalca et al. (2012) (Bobalca et al., 2012, p. 627).

Brand Trust (BT1, BT2, BT3); the three items used to measure the brand trust of the community member are all adapted from authors Laroche et al. (2013, p. 81).

Brand Commitment (BT1, BT2, BT3, BT4, BT5, BT6, BT7); the first two items used to measure the brand commitment are adapted from Zhou, Zhang, Su & Zhou (Zhou et al., 2012, p. 839), the items BT3, BT4, BT5, are adapted from Punniyamoorthy & Mohan Raj (2007, p. 229) and the last two items are adapted from Turri, Smith & Kemp (Turri et al., 2013, p. 224).

4.3.3. Pilot test

In order to ensure that the questions are interpreted in the right way by the participants, a pilot test has been executed as indicated by Saunders et al., (2009) in order to ensure that respondents have no problem answering the questions, and that the online survey platform records the data in the right way (Saunders et al., (2009, p. 394). Plus, the pilot test respondents were asked to mention if any questions were ambiguous or difficult to understand. In the way the questionnaire is designed, the respondents had no problems filling the answers. However, the meaning of some questions was sometimes hard to understand and based on the feedback from the pilot test, questions concerning brand commitment and brand loyalty were modified in order to make them more understandable.

4.4. Analysis methods

Three main analysis methods used in order to analyze research results are: first the reliability analysis using Cronbach's Alfa, then the exploratory factor analysis (EFA), and finally the confirmatory factor analysis (CFA).

4.4.1. Reliability analysis using Cronbach's alfa and bivariate analysis

The reliability analysis using Cronbach's alpha or bivariate helps to determine the degree at which different measures are consistent in order to measure one variable (Malhotra, 2012, p. 317). When two measure are used to measure one variable, the bivariate method must be used, and when more than two measures are used, the Cronbach's alpha is the adequate tool.

The bivariate is simply an analysis of the empirical relationship of two variables that vary between 0 and 1 based on a correlation coefficient (Babbie, 2009, p. 436). Usually, bivariate of more than .6 indicates that the two measures are reliable enough to measure one variable.

The Cronbach's alpha varies between 0 and 1 and is based on a correlation matrix. A Cronbach's alpha higher than .7 is considered as reliable, meaning that all measures used to measure one variable are reliable in measuring this variable (Leech, Barret & Morgan, 2005, p. 65).

It must be taken in account that the coefficient tends to increase when the number of measures increases. This means that the coefficient could be artificially influenced by

using several items that measure exactly the same effect instead of measuring whole spectrum of a construct's dimensions (Malhotra, 1993, p. 308). Therefore, when designing the questionnaire, it must be verified that two or more items do not measure the same dimension of one construct.

When analysing the coefficient of the Cronbach's alpha, if:

- lower than 0,7, the items that lead to a "higher coefficient if deleted" can be removed from the data. If after repeated elimination the coefficient is still lower than 0,7, the items cannot be averaged into one single measure.
- higher than 0,7 an elimination of items will purpose to increase alpha further is not necessary and the averaged scale can be calculated immediately.

4.4.2. Exploratory factors analysis

The EFA is a method used in order to explore a certain field and discover constructs or dimensions. It is usually the first method used for investigating complex subjects (Kline, 1994, p. 7). EFA is particularly useful for researches where the subject is complex and where the role of variables is uncertain or undefined.

As defined by Brown (2006): "EFA is a data-driven approach such that no specifications are made in regard to the number of latent factors (initially) or to the pattern of relationships between the common factors and the indicators (i.e., the factor loadings) (Brown, 2006, p. 13). Rather, the researcher employs EFA as an exploratory or descriptive technique to determine the appropriate number of common factors and to uncover which measured variables are reasonable indicators of the various latent dimensions (e.g., by the size and differential magnitude of factor loadings)".

The EFA used in an exploratory mode helps to determine how and to what extent the observed variables are linked to their underlying factors. With the EFA it is possible to determine the factors that lead to the covariance among the observed variables (Byrne, 2010, p.5). The EFA was fully performed using the statistical software SPSS.

4.4.3. Confirmatory factor analysis

The second stage of factor analysis is performed using a *structural equation modelling (SEM)* in the sense of a "statistical methodology that takes a confirmatory

(hypothesis-testing) approach to the analysis of a structural theory bearing on some phenomenon" as defined by Byrne (Byrne, 2010, p. 3). As the main characteristic of SEM, the hypothesised model could be examined using statistics in simultaneous analysis of the entire system of variables, to determine the extent to which it is consistent with the data. As Byrne (2010) states: "the term structural equation modeling conveys two important aspects of the procedure: (a) that the causal processes under study are represented by a series of structural (i.e., regression) equations, and (b) that these structural relations can be modeled pictorially to enable a clearer conceptualization of the theory under study (Byrne, 2010, p. 3). The hypothesized model can then be tested statistically in a simultaneous analysis of the entire system of variables to determine the extent to which it is consistent with the data. If goodness-of-fit is adequate, the model argues for the plausibility of postulated relations among variables; if it is inadequate, the tenability of such relations is rejected".

The purpose of the CFA is similar to the EFA as it intends to identify the latent factors that lead to variation and co-variation among a set of items. Usually, both EFA and CFA rely on the same factor model. The difference is that the EFA is a descriptive or exploratory procedure allowing to research among all factors independently from knowing how they vary and influence each other. Fort the CFA, it is necessary to pre-specify the aspects of the model like the number of factors or the factor loadings. Therefore, the CFA relies on the strong empirical and conceptual foundations. As Brown explains: "EFA is typically used earlier in the process of scale development and construct validation, whereas CFA is used in later phases after the underlying structure has been established on prior empirical EFA and theoretical grounds" (Brown, 2006, p. 40).

As Brown (2006) explains: "the researcher can specify the number of factors and the pattern of indicator factor loadings in advance, as well as other parameters such as those bearing on the independence or covariance of the factors and indicator unique variances (Brown, 2006, p. 13). The pre-specified factor's solution is evaluated in terms of how well it reproduces the sample correlation (covariance) matrix of the measured variables". The need to use a CFA in this thesis relies on its capability to assess relationships between observed measures or indicators (e.g. test items, test scores, behavioural observation ratings) and latent variables or factors. The CFA is

hypothesis- driven and helps to confirm or reject the hypothesis raised in this work (Brown, 2006, p.1). Structural equation modeling (SEM) is a statistical methodology that takes a confirmatory (i.e., hypothesis-testing) approach to the analysis of a structural theory bearing on some phenomenon. Typically, this theory represents "causal" processes that generate observations on multiple variables (Bentler, 1990, p. 238). The CFA in this thesis has been performed using EQS measurement model using the statistical program AMOS.

5. Results

5.1. Description of the sample

The minimum of 100 participants was needed for this particular research. At the end of the questionnaire phase, 127 persons had participated and answered the questionnaire. Due to the design of the questionnaire, no questions could be left empty resulting in fully analysable data.

The respondents are composed of 33.1% males and 66.9% females. Only 3.9% of the respondents were less than 18 years old, a majority of them, 61.4%, were aged between 18-28 years and 34.6% were over 28 years old.

Table 3: Gender of participants

	Group	Frequency	Percent
	Female	85	66.9
Gender	Male	42	33.1
	Total	**127**	**100**

Source: Own illustration

Table 4: Age of participants

	Group	Frequency	Percent
	Under 18	5	3.9
Age	18-28	78	61.4
	Over 28	44	34.6
	Total	**127**	**100**

Source: Own illustration

5.2. Reliability Analysis using Cronbach's alpha and bivariate analysis

For the reliability analysis of the items used to measure the constructs, Cronbach's alpha and bivariate method were used. All constructs' reliability coefficients have been calculated with Cronbach's alpha, with the exception of the Company construct, where only two items have been used for the measurement. Therefore the bivariate method was needed. The table 5, contains all coefficients resulting from the reliability analysis.

All Conbach's alpha coefficients are higher than 0.7. Therefore, the items used to measure the constructs can be considered as reliable as their internal consistency is sufficient. No items had to be removed, as all coefficients were higher than the threshold. The Company construct has a bivariate coefficient of 0.515 and therefore

the items used for this measurement cannot be considered as reliable enough (Gliem & Gliem, 2003, p. 87).

Table 5: Constructs, number of items, items and Cronbach's Alpha

Constructs	Nbr. Of Items	Items	Cronbach's Alpha / Bivariate
Brand Community	3	BC1 BC2 BC3	0.815
Product	4	P1 P2 P3 P4	0.842
Brand	3	B1 B2 B3	0.739
Company	2	CP1 CP2	0.515
Other Customers	3	OC1 OC2 OC3	0.853
Brand Loyalty	7	BL1 BL2 BL3 BL4 BL5 BL6 BL7	0.876
Brand Trust	3	BT1 BT2 BT3	0.820
Brand Commitment	7	BCM1 BCM2 BCM3 BCM4 BCM5 BCM6 BCM7	0.758

Source: Own illustration

5.3. Exploratory Factor analysis

The EFA was performed including all 32 items used to measure the 8 constructs. EFA was performed with SPSS including all items and using a Varimax rotation (assuming that extracted factors are independent).

First, part of the analysis is the KMO and Bartlett's test, presented in table 6. The test shows that items are suitable for performing a factor analysis as the KMO value of .809 is bigger than .7, and items can be grouped into smaller set of underlying factors, as the Bartlett's test significant value .0 is less than 0.05.

Table 6: KMO and Bartlett's test

Measures		Values
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.809
Bartlett's Test of Sphericity	Approx. Chi-Square	2618.105
	df	496
	Sig.	.000

Source: KMO and Bartletts's Test results for first order EFA

The table 7, presents the commonalities, indicating if the items are suitable for the EFA. All of the items have an extraction factor higher than .5 which indicates that none of the items need to be removed before performing the EFA.

Table 7: Communality of the questions

Indicators	Initial	Extraction
BC1	1.000	.833
BC2	1.000	.855
BC3	1.000	.682
P1	1.000	.809
P2	1.000	.738
P3	1.000	.777
P4	1.000	.785
B1	1.000	.725
B2	1.000	.559
B3	1.000	.628
CP1	1.000	.746
CP2	1.000	.643
OC1	1.000	.727
OC2	1.000	.743
OC3	1.000	.643
BL1	1.000	.733
BL2	1.000	.648
BL3	1.000	.619
BL4	1.000	.718
BL5	1.000	.686
BL6	1.000	.680
BL7	1.000	.622
BT1	1.000	.810
BT2	1.000	.699
BT3	1.000	.591
BCM1	1.000	.829
BCM2	1.000	.758
BCM3	1.000	.628
BCM4	1.000	.639
BCM5	1.000	.619
BCM6	1.000	.710
BCM7	1.000	.584

Extraction method: Principal Component Analysis

The next part of the analysis, represented in table 8, concerns the total variance explanation. The total variance explanation table shows that 70.202% of the variance is explained by 8 factors: factor 1, 34.801% which accounted for considerably more

variance than the remaining seven factors, factor 2, 6.928%, factor 3, 6.245%, factor 4, 5.566%, factor 5, 5.123% and factor 6, 4.343 %. The factors' variance is also displayed on the Scree Plot on figure 9. As the Scree Plot do not allows to select a certain number on factors based on a visual analysis, factor with an Eigenvalue higher than 1 will be extracted based on the total explained variance table.

Table 8: Total explained variance

Compo.	Initial Eigenvalues			Extraction Sums of Squared Loadings			RSSL
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	11.136	34.801	34.801	11.136	34.801	34.801	3.921
2	2.217	6.928	41.729	2.217	6.928	41.729	3.896
3	1.999	6.245	47.975	1.999	6.245	47.975	3.185
4	1.781	5.566	53.540	1.781	5.566	53.540	3.066
5	1.639	5.123	58.663	1.639	5.123	58.663	2.707
6	1.390	4.345	63.008	1.390	4.345	63.008	2.258
7	1.259	3.935	66.942	1.259	3.935	66.942	1.934
8	1.043	3.260	70.202	1.043	3.260	70.202	1.497
9	.984	3.074	73.276				
10	.921	2.877	76.153				
11	.888	2.775	78.928				
12	.812	2.536	81.464				
13	.664	2.074	83.539				
14	.616	1.926	85.465				
15	.536	1.674	87.138				
16	.505	1.579	88.717				
17	.398	1.243	89.960				
18	.372	1.161	91.121				
19	.348	1.087	92.208				
20	.327	1.021	93.229				
21	.320	1.000	94.229				
22	.264	.824	95.053				
23	.251	.785	95.838				
24	.235	.733	96.571				
25	.223	.696	97.267				
26	.187	.584	97.851				
27	.167	.523	98.374				
28	.131	.411	98.784				
29	.120	.376	99.160				
30	.106	.332	99.493				
31	.098	.305	99.798				
32	.065	.202	100.000				

Extraction method: Principal Component Analysis.

Table 9: Scree plot
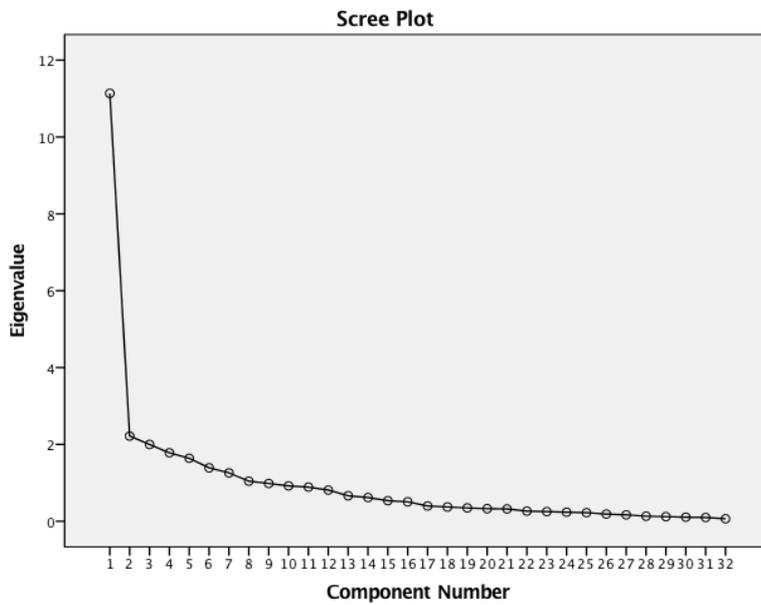
Table 10, represents the rotated components matrix generated with the Varimax rotation method. The Varimax method is used here because it is assumed that the eight extracted factors are independent from each other. Based on these results, it is possible to group the items per extracted factors (highlighted in color) based on the factor loading indicators.

Table 10: Rotated component matrix using the Varimax rotation method

		1	2	3	4	5	6	7	8
	BCM5	.714	.190	.139	.120	.092	.004	.014	.174
	BT1	.703	.209	.036	.283	.194	-.004	.251	-.300
	BT2	.690	.253	.045	.188	.102	.241	.219	-.080
1	BCM4	.675	.010	.277	.316	.074	.028	-.012	.006
	BCM3	.608	.388	.153	.085	.162	.083	.200	.068
	BCM6	.537	.184	.402	.082	.154	.020	-.232	.376
	BCM7	.537	.316	.225	-.072	.035	.017	-.205	.311
	BT3	.528	.298	.294	.075	.076	.266	.168	.164
	BL4	.192	.739	-.083	.162	.207	.212	.057	.101
	BL6	.226	.725	-.042	.200	.214	.086	.090	-.021
	BL5	.203	.717	.099	.105	.139	.266	-.098	.099
2	BL7	.317	.682	.099	.123	.144	-.055	.057	.070
	BL3	.070	.616	.311	.332	.083	.107	.024	.093
	BL2	.153	.552	.361	.412	.038	-.033	.106	-.080
	OC1	.314	-.022	.753	.126	.051	.121	.131	.102
3	OC3	.125	.099	.736	.001	.172	.134	.146	.083
	OC2	.310	.063	.688	.170	.322	.174	.073	.033
	BL1	.083	.443	.590	.388	.086	.127	.067	.061
	B1	.172	.220	.171	.773	.099	.058	-.004	-.082
4	CP1	.210	.205	.044	.687	.165	.122	.011	.379
	B2	.142	.212	.268	.624	.085	.157	-.010	-.028
	B3	.167	.200	-.217	.615	.239	.250	.043	.118

		1	2	3	4	5	6	7	8
	CP2	.158	.169	.360	.481	-.043	-.003	.145	.453
5	P4	.157	.162	.040	.224	.798	.042	-.053	-.204
	P3	.177	.187	.325	.100	.761	.099	-.049	-.054
	P1	.054	.220	.049	.059	.705	.161	.099	.467
	P2	.137	.239	.240	.091	.669	.138	.130	.337
6	BC1	.046	.154	.219	.082	.115	.859	.049	-.011
	BC2	.119	.173	.094	.205	.116	.857	.062	.088
7	BCM1	.146	.076	.087	.100	.058	.052	.881	.052
	BCM2	.056	.029	.171	-.054	-.023	.082	.845	.020
8	BC3	.142	.062	.196	.205	.117	.509	.156	.529

Extraction method: Principal Component Analysis.
Rotation method: Varimax with Kaiser Normalization.Rotation converged in 8 iterations.

The rotated matrix is showing which items or questions are loaded in which factor. The goal now is to understand if questions loaded in the same factor represent a common theme and a construct related to the real world as the table shows only a statistical representation of the constructs.

Table 11, shows the identified factors grouped and named regarding what they represent. Plus, the table displays the reliability analysis of each factor using a Cronbach's alpha. In other words, it assesses how good the items in the extracted factors are at measuring it. The Cronbach's alpha, being relatively high, it is possible to deduct that the items selected in each factor are particularly good at measuring it.

From the previous analysis, two factors had to be removed (Factor 7 and Factor 8). In fact, Factor 7 was loaded with two items from Brand Commitment and as a factor 1 was already loaded with most of the items, it is not possible to create a second factor measuring the same construct. For Factor 8, the deletion was due to the fact that the factor loaded only one item, which is not enough to be kept for further analysis.

The table shows that Factor 1 is loaded with both, "brand trust" and "brand commitment" items. This factor is therefore named Brand Trust & Commitment. Factor 2 loaded most the "Brand Loyalty" items and is consequently named "Brand Loyalty". Factor 3 loaded three items related to "Other customers" and can therefore be named so as well. Factor 4 is split between the "Brand" and "the Company" items. In this case the factor is named "Brand" as is represented with more items than the company's one. Factor 5 is loaded with all the items related to "Product" and finally the Factor 6 is related to the "Brand Community" items.

**Table 11: Factors identified and reliability analysis**

Constructs	N of Items	Items	Mean Value	Standard deviation	Cronbach's α Bivariate
Factor 1 Brand Trust & Commitment	8	BCM5	3.86	1.78	0.875
		BT1	3.20	1.80	
		BT2	3.40	1.78	
		BCM4	3.84	1.76	
		BCM3	3.76	1.78	
		BCM6	3.92	1.80	
		BCM7	4.07	1.91	
		BT3	3.58	1.79	
Factor 2 Brand Loyalty	6	BL4	3.51	1.75	0.866
		BL6	3.59	1.86	
		BL5	3.81	1.89	
		BL7	3.88	1.88	
		BL3	3.59	1.77	
		BL2	3.47	1.82	
Factor 3 Other Customers	4	OC1	3.82	2.07	0.839
		OC3	4.25	1.98	
		OC2	3.88	1.94	
		BL1	3.48	1.89	
Factor 4 Brand	5	B1	3.08	1.73	0.810
		CP1	3.23	1.73	
		B2	3.24	1.74	
		B3	3.70	1.71	
		CP2	3.63	1.78	
Factor 5 Product	4	P4	3.94	1.86	0.842
		P3	4.02	1.87	
		P1	3.62	2.06	
		P2	3.88	1.93	
Factor 6 Brand Community	2	BC1			0.754
		BC2			

Source: Own illustration

5.4. Confirmatory factor analysis

The goal of the CFA is to test the six constructs discovered during the EFA presented in the previous chapter. The CFA intends to determine if the model designed after the EFA presents a good fit. This means that all factors and indicators discovered and grouped in the EFA are built together in order to form a hypothetical model. Then the model is tested and the indicators that do not fit the model are removed until a fitting model appears (Byrne, 2010, p. 66). The model determined by the CFA is presented in the figure 10, from 29 indicators in the initial phase, remain 26 of them that can be considered a fitting.

Figure 9: The final CFA model
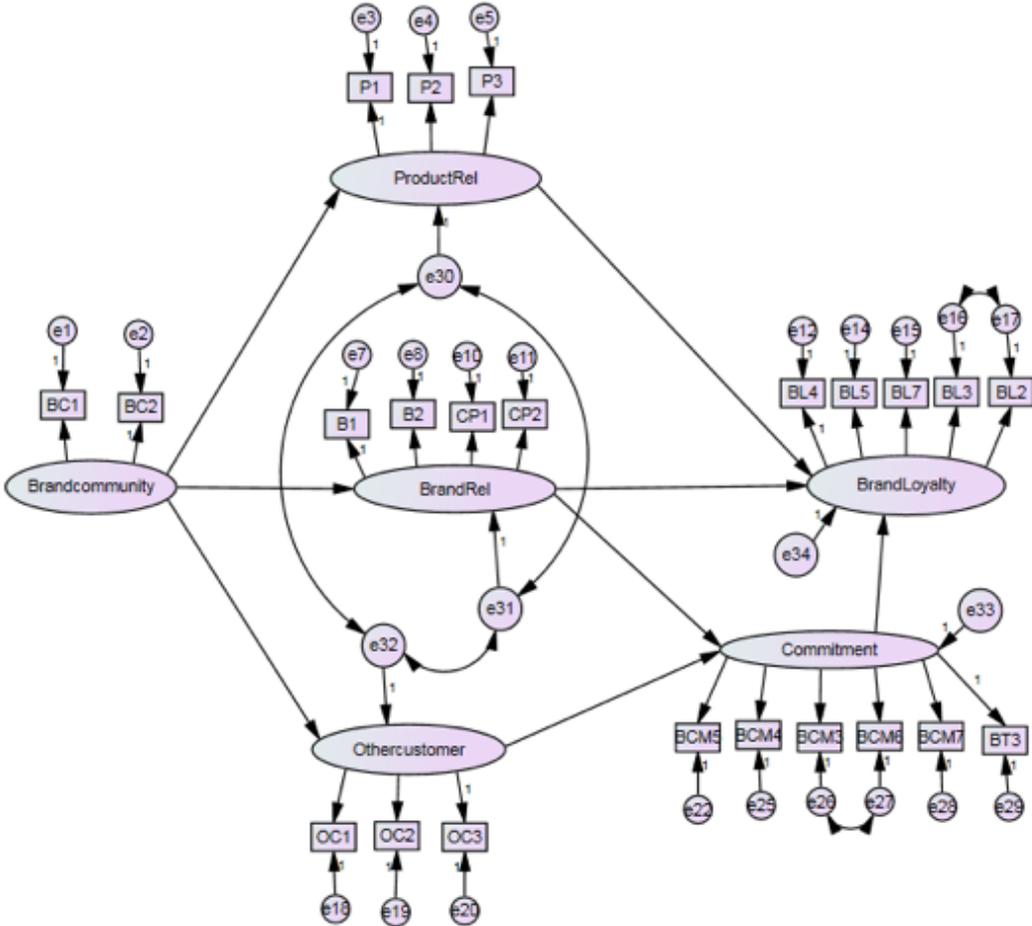
Source: Own illustration

Based on the CFA, it is possible to advance that the model presented above adequately describes the sample data observed in this research. Because the initial CFA model that included all 29 indicators did not had the desirable statistical fit, three indicators had to be removed due to their low factor loadings and commonalities.

5.4.1. Validity of the model

The first step of the analysis after the optimization of indicators is to measure the fit of the model. The model fit Chi-square, presented in table 12, indicates that the overall Chi-square (X^2) value is 353.038 with a degree of freedom at 217 and a probability level of .000. According to these results, the model cannot be validated as significant (higher than the threshold of 252.365 at .05 and 217 degree of freedom). However, the Chi-square is intended to be used only as a quick overview for the model fit. Indeed, AMOS provides other statistical analysis of the model fit (Byrne, 2010, p. 76).

Table 12: model fit Chi-square

Chi-square	= 353.038
Degrees of freedom	= 217
Probability level	= .000

Source: Own illustration

5.4.2. Fit indicators

In order to asses the fit of the model it is necessary to analysis other indicators. The most appropriate one are the CMIN, the RMR, GFI, baseline comparison and the RMSEA values, presented in table 13 (Byrne, 2010, p. 176).

Table 13: Selected AMOS output for hypothesized CFA model

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	59	**353.038**	**217**	**.000**	**1.627**
Saturated model	276	.000	0		
Independence model	23	1932.912	253	.000	7.640

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.236	**.806**	.754	.634
Saturated model	.000	1.000		
Independence model	1.271	.220	.149	.201

Baseline Comparison

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.817	.787	.921	**.906**	**.919**
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	**.073**	**.059**	**.086**	**.005**
Independence model	.237	.227	.247	.000

Source: Model fit summary

For each indicator, the table is split in three rows, the first presents the *hypothesized* model under test; the second, the *saturated* model and the third, the *independence* model (Byrne, 2010, p. 73).

The first indicator to analyze is the CMIN, which indicates discrepancy of the covariance matrix in the model. The observed value of CMIN is 353.038 and the

degree of freedom is 217. The ratio that must be analysed is the CMIN/DF observed at 1.627 which is acceptable (should not be superior than 3) (Byrne, 2010, p. 75). The test of hypothesized model yielded a X^2 value 353.038, with 217 degrees of freedom, and probability level less than .000 (< .05). Those results suggest that the fit of the data to the hypothesised model is not entirely adequate and the proposed hypothesis for the model of the study should be rejected (Byrne, 2010, p.76). However, this indicator is not the most relevant to measure fit of the model (Byrne, 2010, p. 76). Therefore further analyses are required.

The next indicator that was analyzed is the Goodness-of-Fit Index (GFI), which measures the relative amount of variance and covariance in the model (Byrne, 2010, p. 77). Based on the GFI observed value of .806 it can be concluded that the value is lower than the threshold, which is at .9 and must therefore be reported as a problem (Byrne, 2010, p.77).

Next to the GFI, the Comparative Fit Index has to be analyzed. The CFI's values are derived from a comparison of the model and a hypothesized one. The observed value of the CFI is at .919, which cannot be considered as fitting for the model as it is lower than the threshold of .95 usually used. As indicated by Byrne (2010) values higher than .95 are good indicators for a fitting model (Byrne, 2010, p. 78).

The Tucker-Lewis Index (TLI) observed here is also not high enough to be considered as a good fit. The observed value for the TLI is at .906, which is lower than the threshold of .95 that indicates a good fit. Based on the observed values the model based on the TLI is not presenting a good enough fit (Byrne, 2010, p. 79).

The next statistics focuses on the root mean square error of approximation (RMSEA). Values of less than 0.05 indicate good fit, values near .08 represent reasonable fit values higher than .08 indicate a mediocre fit, and greater than .10 indicate a poor fit (Byrne, 2010, p.80). The observed RMSEA is .073 and enters the mediocre fit category. A RMSEA of .06 tends to indicate a good fit and a small sample size may to over reject fit of the model (Byrne, 2010, p. 81).

The table 14, resumes the most important indicators from the table 13. As already explained, those indicators indicate that the model is not fitting sufficiently well to be accepted. This point will be discussed in the section discussing the limits of this

study.

Table 14: Value of parameters of the model

Measure	Value	Measure	Value
Chi- square	353.038	TLI (>0.95)	.906
Degrees of freedom	217	CFI	.919
CMIN/df	1.627	RMSEA (<0.08)	.073
HI90	0.086	GFI (>0.9)	.806

Source: Own illustration

5.4.3. Test of the hypothesis

The next step of the CFA is to test the hypothesis. The table 15, shows the relationships between the constructs and their statistical significance in the form of standardised regression and degree of dependence. Those relationships are also presented on figure 11, on the AMOS model. The estimates are displayed on the arrows linking the constructs with each other.

Table 15: Constructs' relationships and statistical significance

Relationship between constructs		P- Value	Regression	R^2
BC (brand community)	➔ B (brand)	.36***	.513	
BC (brand community)	➔OC (other customers)	.39***	.394	
BC (brand community)	➔ P (product)	.5***	.364	
B (brand)	➔ BCM (brand commitment)	.40***	.399	.263
OC (other customers)	➔ BCM (brand commitment)	.39***	.392	.155
BCM (brand commitment)	**➔ BL (brand loyalty)**	**.002**	**.329**	**.473**
P (product)	**➔ BL (brand loyalty)**	**.021**	**.198**	**.132**
B (brand)	➔ BL (brand loyalty)	.40***	.398	.59

Source: Own illustration; **Note:** Path significance: *p<.01; ** p<.005; ***p <.001

Two of eight relationships were not significant enough to be supported and are therefore rejects. It is the brand commitment (BCM) influence on brand loyalty (BL) and the product relationship (P) on brand loyalty (BL). Regarding the latter, this was not a hypothesis based on the theory but proposed by AMOS during the CFA.

All other relationships are significant at the .001 level and positive according to the theory. However, none of the relationships can be interpreted as really strong based on the regression. They tend to indicate a medium level of support between the constructs.

The squared multiple correlation coefficients (R^2) were not particularly high .590 for brand loyalty (BL), .473 for brand commitment (BC), .263 for brand (B), .155 for other customers (OC), .132 for product (P).

There is a relationship between brand community (BC) and product (P), brand (B), other customers (OC), which confirms hypothesis H1a, H1b and H1d. It is not surprising that the strongest relationship was found in these three variables because their effect was already mentioned in previous literature. The other relationships between brand (B) and brand commitment (BC) and other customers (OC) and brand commitment (BC) are quite weak but still positive and significant. This means there is support for hypothesis H4b and H4d.

Figure 10: The standardized graphic output
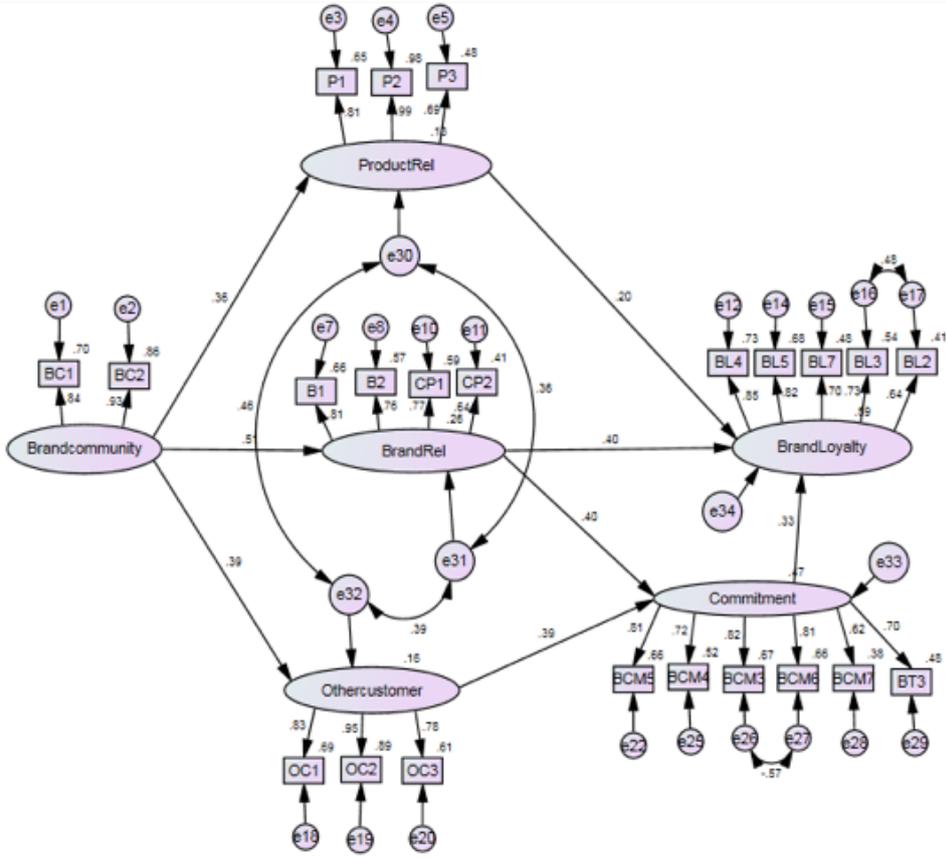
Source: Own illustration

6. Discussion of the results

The purpose of this thesis was to examine the effect of brand commitment on brand loyalty in online brand community located on social network. To examine this effect, brand commitment has been added to the existing and already tested model of Laroche et al. (2013). This particular effect has been tested on the members of the online brand community from Nike, based on their interactions within the community.

In order to examine this effect, an empirical study quantitatively assessed the relationships between online brand community, the customers' relationships, brand trust, brand commitment and brand loyalty. The empirical study first searched factors through and exploratory factors analyse. Once the factors were identified, they have been tested as a model in a confirmatory factor analysis.

Unfortunately, the results obtained through the confirmatory factor analysis were not robust enough to validate the model. Table 16, summarises the hypothesis tested in this study the results obtained.

Table 16: Summary of the tested hypotheses

Hypothesis	
The effect of online brand community on social network	
H1a customer / product relationship.	Supported
H1b customer / brand relationship.	Supported
H1c customer / company relationship.	Not tested
H1d customer / other customers relationship.	Supported
The effect of customer's relationships on the brand trust	
H2a customer / product relationship has a direct positive effect on brand trust.	Not tested
H2b customer / brand relationship has a direct positive effect on brand trust.	Not tested
H2c customer / company relationship has a direct positive effect on brand trust.	Not tested
H2d customer / other customers relationship have direct positive effects on brand trust.	Not tested
The effect of brand trust on brand commitment and on brand loyalty	
H3a brand loyalty	Not tested
H3b brand commitment.	Not tested
The effect of customer's relationships on the brand commitment	
H4a customer / product relationship has a direct positive effect on brand commitment.	Not tested
H4b customer / company relationship has a direct positive effect on brand commitment	Supported
H4c customer / company relationship has a direct positive effect on brand commitment.	Not tested
H4d customer / other customers relationship have direct positive effects on brand commitment.	Supported
The effect of brand commitment on brand loyalty	
H5 brand commitment positively influences on brand loyalty.	Not supported

Source: Own illustration

Even if the overall fit of the model was not robust enough to be validated, some elements are interesting to analyse. First, the CFA confirmed the influence of online brand community based on social network on the customer's relationships based on the customer centric model. In Fact, the relationships between brand community and the customer / brand relationship (H1a), the customer / other customer relationship (H1b) and the customer / product relationship (H1d) were all reported positive and statistically significant. The last relationship of the customer with the company has not been included in the AMOS model as a variable, due to a low factor loading during the EFA. However, the items measuring this element were added to the brand relationships variable, as during the EFA they were not identified as being part of a single factor. This may be due to the fact that only two items were used to measure the construct customer / company relations. Another possibility is that the construct of brand and company were too similar. With the exception of this last relationship, the results confirm that online brand communities on social networks have an impact on the customers' relations within the community. Those findings are aligned and match the findings reported in Laroche et al.'s study from 2013 (Laroche et al., 2013, p. 80).

The second finding that must be reported is the misconceptions of brand trust and brand commitments that have been considered as one factor after the EFA. Based on the EFA it was therefore not possible to identify brand trust or brand commitment as almost all items used to measure those constructs have been grouped in the same factor. In the CFA, most of the items used for brand trust have been removed when optimising the model. Even after this operation, it was not possible to observe a relation between brand commitment (the variable kept in the CFA) and brand loyalty. However, the CFA has reported an influence from the customer / brand relationship and the customer / other customer relationship on the brand commitment construct. The reason for this, is that maybe brand trust and brand commitment constructs were too similar and hard to interpret from the respondent's point of view. They might have been able to clearly identify their trust or commitment toward the brand.

Due to this, the hypothesis H2a, H2b, H2c and H2d could not have been tested by the CFA and are therefore reported here as not tested as well as H3a and H3b.

Considering the influence of customer's relationships on brand commitment, two of four relations have been supported by the CFA, the customer / other customers and the customer / brand relationships. Those observed relations indicate that commitment has certainly a part to play in this model. However, due to mixing of brand trust and brand commitment, it is complicated to clearly define how commitment influences the model.

The third finding that is important to report here is the fact that influence between brand commitment on brand loyalty (H5) was not supported by the CFA. This is surprising because of strong indications in the literature that brand commitment has influence on brand loyalty. The reason for it might be that selection of participants based on their involvement with the brand community was too restrictive and could not permit to observe a larger population. Also, people selected for the study were already committed to the online brand community as they interacted with it, in form of comment, like or share. A more heterogeneous sample could have lead to different results here.

6.1. Comparison with previous studies

Results obtained with this study show that model of Laroche et al. (2013) is still relevant for explaining the impact of online brand community based on social media on the brand commitment, trust and loyalty. Even if all the relations could not be validated, there is some evidence that commitment might also be added to this model.

6.2. Theoretical and managerial contributions

The study presented in this thesis contributes to the literature and researches on online brand community on social network. Even if the impact on brand loyalty could not be demonstrated, the role of commitment within online brand commitment has to be taken in account.

The results show some good signs that customers' interactions on online brand communities based on social networks, do result in a positive influence on brand commitment (for two or four relationships).

6.3. Limits of the study

This study contains some limitations that might explain the lack of results from the analysis.

First limitation to be reported, is the measurement of complex constructs like brand commitment, brand trust and brand loyalty with a Likert-scale questions. The Likert-scale questions were the most suited for the research purpose but has proven to be limited when measuring those constructs. It might have been more suited to conduct an interview based on a more qualitative approach in order to observe other aspects of customer's relations and the brand commitment, trust and loyalty. Also, it is possible that respondents might not have been able to fully understand and asset their commitment, loyalty and trust toward the brand.

Another limit is that the sample used for the study was too restrictive, as only members interacting on one post of Nike Facebook page have been chosen. This might have restricted the chance to understand some other effects of the model. Plus, it would have been interesting to compare the three constructs aforementioned with members and non-members of an online brand community in order to understand the impact communities have on customers. Furthermore, the sample was relatively small, with 127 participants. A larger and more heterogeneous sample could have benefited the study.

6.4. Recommendations for the future study

For future studies in this domain, it could be recommended not only to use quantitative analysis, but also some qualitative ones. As mentioned in the previous section, it is possible that complex constructs are hard to understand in an online questionnaire where no interaction takes place between the researcher and the respondent. An approach with more interactions could be interesting, especially when measuring such constructs.

In addition, further research could find answers to the question if there were some cultural differences that should have been taken into consideration when customer's commitment and loyalty are created through online brand community on social media.

In order to increase the theoretical knowledge about social network and brand community, it would be interesting to conduct a study across different social networks (YouTube, Twitter, Instagram or Tumblr) in order to see if they differ in the way they influence the customers' commitment, trust and brand loyalty.

7. Conclusion

The main goal of this master thesis was to contribute to the general knowledge about online brand communities and their influence on brand loyalty. The design used for the research was specifically addressing the lack of empirical studies conducted in this field. Even if many authors explained the role of brand trust and brand commitment on brand loyalty, none of them conducted empirical researches combining those variables together.

Even if the model developed in this thesis could not be fully supported by the statistical analysis, the results show that there are good signs that those aforementioned variables do influence the brand loyalty. I therefore recommend for future researches to keep considering brand commitment as being part of the model. However the methods used to measure this aspect should be modified, as it appears that consumers do not fully distinguish between brand commitment and brand trust. I also recommend developing new items aiming to measure this variable.

Researches and marketers should continue their efforts to understand better the role of brand communities in influencing the customers' brand loyalty. In an economy where consumers are not only connected with others consumers but with a multitude of entities through social networks, understanding the roles of those connections and their impact on the consumers will certainly create a competitive advantage. Even if brand communities might appears to be a threat for certain companies, they are an opportunity for companies willing to increase their brand loyalty. In fact, this master thesis as well as the results of Laroche et al. (2013) confirms that brand communities have a positive impact on brand loyalty. Therefore, companies should invest in understanding how to be present on social networks.

8. Bibliography

Aaker, D. (1996). *Building strong brands.* New York, NY: Free Press.

Anderson, J. C. & Narus, J. A. (1990). A model of distribution firm and manufacturer working partners. *Journal of Marketing , 54* (1), 42-58.

Assael, H. (1987). *Consumer behaviour and marketing action* (3rd ed.). Boston: Kent Publishing Company .

Burns, A.C., & Bush, R.F. (2013). *Marketing research* (7th ed.). Pearson.

Byrne, B. (2010). *Structural equation modeling with AMOS. Basic concepts, applications and programming.* New York, NY: Routledge.

Ba, S. (2001). Establishing online trust through a community responsibility system. *Decision Support Systems* (31), 323-336.

Babbie, E. (2009). *The practice of social research* (12th edition ed.). Wadsworth Publishing .

Bagozzi, R. P., & Dholakia, U.M. (2002). Intentional social action in virtual communities. *Journal of interactive marketing , 16* (2), 2-21.

Bentler, P. (1990). Quantitative methods in psychology. Comparative fit indexes in structrual models. *Psychological Bulletin , 107* (2), pp. 238-246.

Berry, L. L. (1993). Playing fair in retailing. *Arthur Anderson retailing Issues newsletter* (5,2).

Berry, L. L., & Parasuraman, A. (1991). *Marketing services: Competing Through Quality.* New York, NY, USA: Free press.

Bobalca, C., Gatej Bradu, C., & Ciobanu, O. (2012). Emerging markets queries in finance and business. Developing a scale to measure brand loyalty. *Procedia Economics and Finance* (3), 623-628.

Brown, T. A. (2006). *Confirmatory factor analysis for applied research.* New York, NY: The Guilford Press.

Chaudhuri, A., & Holbrook, M.B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *The source of Marketing , 65* (2), 81-93.

Cortina, J.M. (1993). What is coefficient alpha? An examination of theory and application. *Journal of Applied Psychology , 78* (1), 98-104.

Etzioni, A. &. Etzioni, O. (1999). Face-to-face and computer- mediated communities: A comparative analysis. *Information Society , 15* (4), 241-248.

De Valck, K., Van Bruggen, G.H., & Wierenga, B. (2009). Virtual communities: A marketing perspective. *Decision Support Systems* (47), 185-203.

Delgado-Ballester, E. &. Manuera-Alleman, J.L. (2001). Brand trust in the context of consumer loyalty. *European Journal of Marketing* (135 11/12), 1238-1258.

Delgado-Ballester, E. (2004). Applicability of brand trust scale across product categories. A multigroup invariance analysis. *European Journal of Marketing , 38* (5/6), 573-592.

Delgado-Ballester, E., & Manuera-Alleman, J.L. (2005). Does brand trust matter to brand equity? *Journal of Product & Brand Management* (14/3), 187-196.

Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing , 61*, 35-61.

Facebook. (205, March 31st). Retrieved January 10th, 2016, from Investor relations.

Field, A. (2005). *Discovering statistics using SPSS* (3rd ed.). London: SAGE Publications Ltd.

Gusifield,J. (1975). *The community: A critical response.* New York: Harper Colophon.

Gliem, J.A., & Gliem, R.R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. *Midwest research to practice conference in adult, continuing and community education.*

Hu. L., &. B. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling , 6* (1), 1-55.

Hutcheson, G. &. (1999). *The multivariate social scientist.* London: Sage Publication .

Hagel, J. (1999). Net gain: Expanding markets through virtual communities. *Journal of Interactive Marketing , 13* (1), 55-65.

Hagel, J. (1999). Net gain: Expanding markets through virtual communities. *13* (1), 55-65.

Harris, L. C. & Goode, M.M.H. (2004). The four levels of loyalty and the pivotal role of trust: a study of online service dynamics. *Journal of Retailing , 80* (2), 139-158.

Jacoby, J. W. & Chestnut, R.W. (1978). *Brand loyalty measurement and management.* New York: Wiley.

Jang, H., Olfman, L., Ko I., Koh, J. & Kim, K. (2008). The influence of online brand community characteristics on community commitment and brand loyalty . *International journal of electronic commerce , 12* (3), 57-80.

Kumar, R. (2011). *Research methodology. A step-by-step guide for beginners* (3rd ed.). London: Sage Publications Inc.

Kline, P. (1994). *An easy guide to factor analysis.* New York, USA: Routledge.

Kozinets, R.V.(1999). E- tribalized Marketing? The startegic implications of virtual communities of consumption. *European Management Journal , 17* (3), 252-164.

Kotler P., Armstrong, G., Saunders J. & Wong, V. (1999). *Principles of marketing.* New Jersey, USA: Prentice Hall Europe.

Laroche, M. Habibi, M.R, & Richard, M.O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? *International Journal of Information Management* (33), 76-82.

Leech, N. L., Barett, K.C., & Morgan, G.A. (2005). *SPSS for intermediate statistics: Use and interpretation* (2nd ed.). New Jersey: Lawrence erlbaum associates, publishers.

Nike Product/Service. (2016, January 7). Retrieved January 7, 2016, from Facebook: www.facebook.com/nike/

Muniz, M.A., & O'Guinn, C.T. (2001). Brand community. *Journal of consumer research* 27(4), 412-432.

Malhotra, N.K. (1993). *Marketing Research: An applied orientation* . New Jersey : Prentice Hall Inc.

Malhotra, N.K. (2012). *Basic marketing research: an applied orientation.* New Jersey: Prentice Hall. Inc.

Malhotra, N.K., Birks, D.F., & Wills, P.A. (2013). *Essentials of marketing research.* Pearson.

McAlexander,J.H.,Schouten,W.J., & Koening,F.H. (2002). Building brand community. *Journal of marketing* 66 (1), 38-54.

McDonald, G.W. (1981). Structural exchange and marital interaction. *Journal of Marriage and Family, 43* (4), 825-839.

Moorman, C. Z. (1992). Relationship between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research, 29* (3), 314-328.

Morgan, R. M., & Hunt., S. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing, 58* (3), 20-38.

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing, Fundamental Issues and Directions for Marketing, (63)*, 33-44.

Punniyamoorthy, M., & Prasanna Mohan Raj, M. (2007). An empirical model for brand loyalty measurement. *Journal of Targeting, Measurement and Analysis for Marketing , 15* (4), 222-233.

Porter, C.E., Donthu, N., Macelroy, W. H., & Wydra, D. (2011). How to foster and sustain engagement in virtual communities. *California management review* 53 (4), 80-110.

Sung, Y. &. (2010). Effects of brand personality on brand trust and brand affect. *Psychology & Marketing , 27* (7), 639-661.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research method for business students* (Fifth edition ed.). Edinburgh, Harlow, England: Pearson Education Limited.

Sicilia, M., & Palazon, M. (2008). Brand communities on the internet. A case study of Coca-Cola's Spanish virtual community . *International Journal , 13* (3), 255- 270.

Srejeesh, S., Mohapatra, S., & Anusree, M.R. (2013). *Business research methods. An applied orientation.* USA: Springer .

Staw, B. (1980). The consequences of trunover. *Journal of Occupational Behaviour , 1* (4), 253-273.

Rakic, M. & Rakic. B. (2014). Viral marketing. *Scientific Review Article , 60* (4), 179-187.

Ridings, C.M., Gefen, D., & Arinze, B. (2006). Psychological barriers: Lurker and poster motivation and behaviour in online communities. *Communications of AIS* (18), 329-354.

Rheingold, H. (1991). A slice of my life in my virtual community. (I. L. Harasim, Ed.) 57-80.

Robson, C. (2002). *Real world research: A resource for social scinetist and practioner- researchers* (2nd ed.). Blackwell Publishing.

Turri, A. M., Smith, K. H., & Kemp, E. (2013). Developing affective brand commitment through social media. *Journal of Electronic Commerce Research , 14* (3).

Zikimund, W., & Babin, B. J. *Exploring marketing research* (9th ed.). Ohio: Thomson Learning.

Zhou, Z., Zhang, Q., Su, C., & Zhou, N. (2012). How do brand communities generate brand relationships? Intermediate mechanisms. *Journal of Business Research* (65), 890-895.

Appendix A- Questionnaire

For my Master Thesis in the field of Marketing, I would like to invite you to participate in this small research regarding Nike online brand community on Facebook.

Purpose of this research is to test brand trust, brand commitment and loyalty from members from online brand community in this particular case- Nike online brand community.

The data gathered from this survey will be anonymous. We kindly ask you to follow the structure of the questionnaire and to answer all the questions in an honest and spontaneous way.

Please grade your level of agreement with following statements 1-7, 1 being the lowest, 7 being the highest.

✱Please first indicate your opinion with the following statements considering the Nike brand community on Facebook

	Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly agree
The members of this community benefit from the community.	◯	◯	◯	◯	◯	◯	◯
The members share a common bond with other members of the community.	◯	◯	◯	◯	◯	◯	◯
The members are strongly affiliated with other members.	◯	◯	◯	◯	◯	◯	◯

✱Please indicate your opinion with the following statements considering using product (running- shoes Flyknit)

	Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly agree
I love the product of the brand.	◯	◯	◯	◯	◯	◯	◯
I am proud of the product.	◯	◯	◯	◯	◯	◯	◯
The product is one of my priced possession.	◯	◯	◯	◯	◯	◯	◯
The product is fun to use.	◯	◯	◯	◯	◯	◯	◯

* Please indicate your opinion with the following statements considering Nike brand

	Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly agree
I value the heritage of the brand.	O	O	O	O	O	O	O
If I were to replace the product, I would replace it with another product of the same brand.	O	O	O	O	O	O	O
My brand is of the highest quality.	O	O	O	O	O	O	O

* Please indicate your opinion with the following statements considering the Nike Company

	Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly agree
The company understands my needs.	O	O	O	O	O	O	O
The company cares about my opinions.	O	O	O	O	O	O	O

* Please indicate your opinion with the following statements considering the other customers from Online Brand Community

	Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly agree
I have met wonderful people because of the community.	O	O	O	O	O	O	O
I have a feeling of kindship with the other owners.	O	O	O	O	O	O	O
I have an interest in the community because of the other owners of the brands.	O	O	O	O	O	O	O

✱ Please indicate your opinion with the following statements considering the brand loyalty

	Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly agree
I consider myself to be loyal to the brand.	○	○	○	○	○	○	○
If the brand is not available at the same store, I would buy the same brand from some other store.	○	○	○	○	○	○	○
I am willing to pay more for my brand.	○	○	○	○	○	○	○
I bought this brand because I really like it.	○	○	○	○	○	○	○
I feel more attached to this brand than to other brands.	○	○	○	○	○	○	○
I intend to buy this brand in the future, too.	○	○	○	○	○	○	○
I recommend this brand those who ask my advice.	○	○	○	○	○	○	○

✱ Please indicate your opinion with the following statements considering the brand trust

	Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly agree
My brand gives me everything that I expect out of the product.	○	○	○	○	○	○	○
I relay on my brand.	○	○	○	○	○	○	○
My brand never disappoints me.	○	○	○	○	○	○	○

* Please indicate your opinion with the following statements considering the brand commitment

	Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly agree
If Nike was not available, it would make little difference to me if I had to choose another brand.	O	O	O	O	O	O	O
I will more likely purchase a brand that is on sale than to purchase Nike.	O	O	O	O	O	O	O
I have strong preference for this brand.	O	O	O	O	O	O	O
To change my preference from this brand would require huge rethinking.	O	O	O	O	O	O	O
Even if close friends recommend another brand, I would not change my preference.	O	O	O	O	O	O	O
I feel strong sense of belonging to this brand.	O	O	O	O	O	O	O
In the future I see myself being committed to the Nike.	O	O	O	O	O	O	O

* Can you give some information about yourself?

Age

Occupation

Gender