MBA GRADUATE DISSERTATION

A quantitative analysis of Consumer Behaviour in relation to Electronic Cars resulting in a new Green Marketing approach for the German car industry

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Supervisor: David Hurley

Attached by:

Julia Dieterich
Student Number: 1779797
Date of attachment: 23th May 2014
Declaration

I declare that the work described in this dissertation is, except where otherwise stated, entirely my own work and has not been submitted as any type of exercise for a degree at this or any other college/university.

Signed: Julia Dieterich

23th May 2014
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List of Abbreviations

% Per cent
BMW Bayerische Motoren Werke
BMWi E-car series of BMW
BMWi3 E-car of BMW
BMWi8 Sports E-car of BMW
bn Billion
CO2 Carbon dioxide
E-car Electronic car
eco ecological
EU European Union
EV electronic vehicle
LOHAS Lifestyle of Health and Sustainability
mil Millions
R&D Research and Development
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Abstract

This academic investigation for the Dublin Business School by Julia Dieterich, an MBA graduate in 2014, will discuss how to market effectively the innovative electronic car in the German automotive sector in relation to a green branding marketing approach. It could be proved that the demand for electronic cars is currently mildly growing and just will be increase in a long term. An optimized marketing approach should help to solve this current industrial problem. A quantitative survey will provide information about why the demand for electronic cars is low and how potential customers in Germany perceive current marketing activities. Based on the identified issues of marketing activities, valuable recommendations on how to market an electronic car successfully in Germany will be provided.
1. Justification of the Dissertation Topic

1.1 Academic Justification

The goal of this dissertation is to analyse the reasons behind the proved, mildly growing demand for E-cars and to provide valuable recommendations for an improved marketing strategy (Elektroauto, no date). These will be elaborated in due consideration of consumer behaviour theory, branding strategy theory and green branding theory, which will be discussed in the literature review. It needs to be analysed how the potential E-car consumer behaves during the purchase process in order to be able to influence this behaviour through targeted marketing activities. Additionally, it is necessary to investigate how the current marketing activities of German E-car brand manufacturers can be optimized. Hence, branding strategy theory has to be researched in order to understand how a brand should be communicated successfully. In this case, the E-car can be categorized as a ‘green branded product’, which needs to be marketed according to specific branding requirements. A ‘green brand’ is defined by a specific set of brand attributes and facilities related to a perceived environmentally friendly approach. Some studies deal with the perceived value of a green brand and ways to communicate green brands properly but not in relation to the marketing strategy of electronic cars (Hartmann, Apoalazalba’n’ez, ForcadaSainz, 2005, p. 10). Frank Dophreide, German marketing manager and CEO of a leading German marketing agency, pointed out that German E-car brands have to fulfil successfully the gap between a modern premium car and a new environmentally friendly concept (Steinkirchner, 2013). Therefore, green-branding rules in relation to E-cars will be discussed in the literature review. Valuable Green branding theory discussing how to market green branded product the best way can be adapted to branding strategy of E-cars. Green brands should no longer be perceived as a niche market trend, but rather as building environmental standards into mainstream brands. In the current century, consumption develops increasingly in the direction of individuality, innovation and sustainability, which proves the increasing consumer demand for green products. There is a trend of people returning to the older, more basic values and natural products instead of Americanised mass consumption (Gordon, 2002, p. 3).

The results of this academic paper should provide important information for the car industry regarding how to sell a green product minus the green brand image. The added value of this academical paper is to provide significant new knowledge regarding how to market E-cars in Germany successfully, while influencing consumers’ buying behaviour positively. Despite the proved, mildly growing demand for E-car today, further studies show that on a long term the demand for E-cars will rise significantly, what will be discussed in chapter ‘2.2.1. German E-car industry’. Therefore it is important to analyse current marketing strategies on the german E-car sector, how they can be optimize to influence the future demand positively.

For a successful investigation the dissertation follows a logical structure to facilitate the understanding for the reader of this dissertation, which will be described in the following (figure 1). The advanced research for this dissertation let the researcher identify a lack of literature, which is discussed in this chapter. The researcher identified the industrial problem of a mildly growing consumer demand for electronic cars. The researcher combines the academic literature in the fields of consumer behaviour, branding strategy and green branding strategy with the industrial literature to solve the problem of low demand and a lack of academic knowledge how to market E-cars properly. Through a quantitative survey the researcher wants to investigate the reasons for the low E-car demand in German also in relation to current marketing activities on German the E-car sector. Data findings and adapted academic theory, how to market green branded product successfully will lead to a new recommended marketing approach to optimize marketing activities on the German E-car sector in the future.
1.2 Industrial Justification

In recent years, the innovative electronic car has increasingly penetrated the German car industry (Bayme vbm, 2012, p. 14). The chairman of BMW pointed out that the electronic car will be the future means of transportation. He guaranteed technological improvement and innovative progress of the electronic vehicle (Prof. Dr. Jung et al., 2012, p. 4). An electronic car is defined as a general vehicle that is driven by an electromotor using electric energy. It is also called an electric vehicle (EV) or a zero emission vehicle, as it gets its energy from batteries. The charging process requires an average socket or a public charging station (Backhaus et al., 2011, p. 3). In comparison, hybrid cars are also electro-driven but have a combustion engine (VDA, 2013, p. 136). From a political and ecological perspective, it is important to increase the usage of electronic cars in order to achieve a reduction in environmentally damaging emissions, thereby additionally providing value for social welfare. Protecting the environment is a political goal as scientific studies show that the ozone is increasingly destroyed by ecological damage through, for example, automobile exhaust. The electronic car is a future mobility solution that does not pollute the environment and that, therefore, contributes towards reducing greenhouse gas emissions (VDA, 2013, p. 117). Statistics indicate that 70% of the population will live in cities in 2050. Urban environmentally friendly mobility thus becomes even more important. The Environmental Action Program of the EU commission, in force from 2013 to 2020, has set the future development goals for the car industry. The car industry has to produce and operate in a more resource-efficient and environmentally friendly manner. The EU government has set further goals for the reduction of CO2 pollution by 2020 after the introduction, in 2006, of strong regulations to produce cars that cause 18% less CO2 pollution. The EU commission has also introduced longer tax exemptions for electronic motor vehicles for over 10 years, to enforce positive development of the electronic car industry. Under these conditions, the German E-car sector is forced to invest in R&D, restructure processes and gaining additional expertise very fast to meet governmental requirements (VDA, 2013, p. 117).

The previously listed facts underline the importance of a successful marketing strategy for E-cars today in the German automobile sector. But the proven low private demand for E-cars in Germany is concerning (FOM, 2010, p. 72). In January 2014, 12,156 electro vehicles were registered by the German Federal Office for Motor Traffic (Elektroauto, no date).
To add new information to this research field, the current marketing campaign of BMW for its E-cars series, BMWi, will be analysed as a base for a critical analysis of how a customer reacts to E-car marketing campaigns and what can be improved further. The BMW Group is one of the most successful automobile and motorcycle manufacturers worldwide, and one of the largest industrial companies in Germany. BMW is also a pioneer of doing big, global marketing campaigns for their new E-car model in Germany in 2013. Hence, the BMW is chosen as representative for all German E-car brands (MarketLine, 2013, p. 4). The new premium E-car BMWi3, and the sports E-car BMWi8, were introduced in November 2013 at the IAA, the biggest German automobile exhibition. The integrated marketing strategy of the BMW i3 consists of print, online and TV campaigns. The main goal of the campaign is to create a positive emotion in relation to the product by encouraging potential customers to sign up for a driving experience. The campaign has an international and consistent online appearance with focus on the marketing movie. The campaign also includes activities in the area of social media, like the Facebook page with a configuration mode and the possibility to register for a BMWi3 test drive (OnetoOne, 2013). Frank Dophreide evaluated the BMW marketing strategy. BMW has to fulfil successfully the gap between a modern premium car and a new environmentally friendly concept. The electronic vehicle will be the car of the future and needs to be sold to a broad population in future. Thus, it is important that BMW sells its new E-cars like conventional cars. Public clichés—like, electronic cars are just for people from the eco-movement—must be prevented. The BMW brand symbolizes dynamic design and driving passion, which must extend to the new electronic car as well. The new sports E-car model, BMWi8, breaks the cliché of electronic cars with its sports car features. Since the model underlines the revolution of electronic cars, it was a good strategy to present both models at the same time. The public may expect a revolutionary campaign and product presentation, which BMW consciously wants to avoid. The concept of the electronic car itself is revolutionary enough. The marketing team of BMW feels that the more spectacular the staging of the E-car, the higher the entry barriers for customers. BMW wants to persuade customers to purchase the electronic car in a natural way. The most important marketing tool and the main goal of the campaign will be the personal driving experience. The customer can experience the E-car with all his senses, feeling the power and the driving fun. The customer should be curious and become familiarized with the E-car (Steinkirchner, 2013). The German car industry can remain successful when it takes part in the ecological revolution. The car should no longer be a status symbol; it must be reinvented (Heuser, Lamparter, Pinzler, 2011). This academic investigation analyses how successful the marketing campaign of BMW was through analysing how the consumer perceives the BMWi brand today and if they are willed to buy an E-car or if the marketing campaign influenced their consumer behaviour positive. From the analyses of the BMW marketing campaign 2013 for E-cars, valuable recommendations for German E-car brand manufacturer can be provided how to optimize marketing activities for E-cars in general.

1.3 Personal Justification

The researcher of this academic investigation has a bachelor’s degree in Business Administration and Economics and an advanced master’s degree in Business Administration, with both degrees focusing consistently on marketing. Furthermore, the researcher gathered important practical experience during one-year internships in the marketing departments of L’Oréal and Estée Lauder. Due to the educational and professional background of the researcher, he decided to provide significant new knowledge in the field of marketing. In recent years, the researcher has developed a particular interest in green marketing literature. Green marketing is a responsible management process that identifies and satisfies those stakeholder requirements that do not affect human or natural environmental well-being (Emery, 2012, p. 17). Due to the researcher’s personal interest in this field, he was interested in the BMW marketing campaign for the new premium electronic car series, BMWi, in Germany and the already discussed lack
of customer acceptance for E-cars (Steinkirchner, 2013). The researcher was interested in determining how to market green branded products successfully in relation to the new electronic car series of BMW.

2. Literature Review

2.1 Introduction

The literature review provides information about academic studies and theoretical result in the field of Consumer Behaviour, Branding Strategy and Green Marketing. It also provides contextual information about the German E-car industry and the German E-car producer BMW to give an overview of the actual status of the knowledge and progress in the marketing communication activities in the German E-car market.

2.2 Academic Review

2.2.1 Consumer Behaviour in the German E-car industry

In the following, the consumer behaviour of E-car consumers in Germany will be analysed to gain consumer knowledge about how to market an E-car in the most effective way.

2.2.1.1 Role of Marketing Communication in Consumer Behaviour Theory

Consumer behaviour is an important aspect of marketing and brand management. The science of consumer behaviour tries to analyse the intrinsic and extrinsic behaviour of consumers and provides guidance for the interface with the consumer (Kroeber-Riel, Gröppel-Klein, 2013, p. 3). Consumer behaviour is the study of the process and intensity of involvement of a consumer in the on-going purchasing process to satisfy his needs and desires (Salomon, 2013, p. 39). The consumer will go through the three stages of identifying his needs, making a purchase, which results in a disposal (Salomon, 2013, p. 39). A purchase can be defined as the exchange of money for goods and services between purchaser and vendor (McNeal, 2007, p. 51). During this process, cognitions, perceptions and learning will be developed, which are important to get deep insight into how the marketer can make positive changes to influence the purchasing process (Baines, 2011, p. 80). But in this study, understanding the concept of consumer behaviour is not just enough. It also has to be analysed how marketing communications can influence the buying behaviour. The theory of marketing communications tries to clarify how to influence positively the decision-making process of the consumer.

2.2.1.2 The Hierarchy of Effects model

The Hierarchy of Effects model clarifies how marketing communication can influence the decision-making process, which the consumer goes through, resulting in the purchase (Picktin, Broderick, 2004, p. 84). The Hierarchy of Effects model assumes that the consumer is highly involved in the purchase process and that he is an intelligent, rational, problem-solving human, who stores and evaluates information to make a reasoned decision (Picktin, Broderick, 2004, p. 70). There exists a verity of Hierarchy of Effects models, which follow the concept of the cognitive model and its influence factors on the purchase process, which is visualized in figure 7. Most cognitive models proceed from the stage of problem definition, where the consumer is influenced by external stimuli and develops his needs. The second stage is the information-seeking process, which results in the evaluation of the different alternatives. In this stage of problem-solving exists a high impact of influence. It comes to a purchase and post-purchase evaluation process, where the consumer evaluates whether his needs are satisfied or not (Picktin, Broderick, 2004, p. 84).
The most often cited Hierarchy of Effects model was developed by Lavidge and Steiner, which proposes seven steps of purchase process (Hoang Sinh, 2013, p. 92). The initial situation is that the consumer is completely unaware of the existence of the product or service. At the first cognitive level, the consumer becomes aware of the product and gains product knowledge to assess if the product can satisfy his needs. At the second level of affective process, the consumer develops a positive attitude towards the product leading to product preference. During the conative process, the consumer is convinced to buy the product, followed by purchase. The series of effects is managed in a successive order over a period of time whereby each step must be fulfilled before the consumer can proceed to the next step (Lavidge, Steiner, 1961, p. 137). The model has been regarded as measurement tool for the effectiveness of advertising (Hoang Sinh, 2013, p. 92). In 2000, Robert Heath criticized the Hierarchy of Effects model saying that it was not strong enough to affect the consumer actively. The information overflow aggravated the differentiation from competitor brands (Rainey, 2010). Moreover, Egan John added that the Hierarchy of Effects model does not prove that the consumer fulfils each stage and that he behaves interactively between different stages (Egan, 2007, p. 52). It can be also assessed that the Hierarchy of Effects model does not analyse the post-purchase process. In contrast, James McNeal separates the purchase process in pre-purchase, purchase and post-purchase actions towards a commercial object. McNeal describes the post-purchasing action as the most important because it will determine the future purchase for the same or similar type of product (McNeal, 2007, p. 51). Barry defends the Hierarchy of Effects model saying that it is an important and indicatory guideline for integrated marketing communication action. The measurement process of advertisement is highly complex and the model is rational and logical providing scope for further research in this field (Barry, 2002, p. 45). For a valuable theory research the ‘Consumer Proposition Acquisition Process Model’ will be discussed to complement the Hierarchy of Effects model, adding theory about the after-purchase process.

2.2.1.3 Consumer Proposition Acquisition Process Model

The importance of the post-purchase process model of the consumer proposition acquisition process underlines the importance of the re-evaluation phases and the interactivity between the single stages which means that in each stage of purchase, the consumer could go back to the previous stage or move forward in the process as it is visualised in the figure 3 (Baines, 2011, pp. 81).
Figure 3: Interpretation of the Hierarchy of Effects model and the Consumer Proposition Acquisition Process

The model ‘Consumer Proposition Acquisition Process’ is composed of six interactive stages of consumer experiences. In the first stage, the consumer identifies a problem of unsatisfied needs and builds a motivation for purchase. Therefore, he starts gathering information and determines different product criteria, ranking the products based irrational or rational thoughts. The stage of the proposition selection where the consumer assesses, which product fits best for his needs, results in a purchase. It can be differentiated between a routine purchase and a specialized purchase, where the consumer is more involved in the decision-making process. The phase of re-evaluation follows where the consumer re-organizes his beliefs, attitudes, opinions, or values to make sure of a right decision (Baines, 2011, pp. 81). The consumer checks the benefits against the costs. This is called cognitive dissonance, where the information conflicts with the desired outcome. Therefore, it is important for the marketer to minimize the cognitive dissonance and meet consumer needs (Picktin, Broderick, 2004, p. 82).

2.2.1.4 Influence factors on the E-car Purchasing Decision Process

The consumer’s needs can arise either through habit or through a process of choosing a brand, which is called ‘picking process’. The ‘picking process’ is a selection of a product or service from a broad repertoire of alternatives. During this process the consumer is influenced by intrinsic evaluation, which can be divided into liking or disliking. Other influence factors could result from extrinsic evaluation like economical, technical, social, legalistic or adaptive reasons. This study will focus on the intrinsic factors of the consumer because these can be influenced by a marketer through a successful marketing communications strategy. According to the cognitive model of consumer buying behaviour described earlier, opinions are built on a cognitive level, attitudes are built on the affective level and values are linked with the conative process (Baines, 2011, pp. 81). The consumer’s opinion and attitude will be discussed in the following. How the consumer will develop value in relation to a brand will be considered in the theory part ‘The measurement framework of brand equity-the ValueDrivers model’.
2.2.1.4.1 Consumer Opinion leads to Consumer Attitude

The consumer’s opinion building about a product or service can be a salient, intrinsic process or result in an overt expression. Opinions, which are not expressed are often more important for the consumer. The opinion is mostly influenced externally and is built on a cognitive level where just a small number of facts can be kept in mind as the basis for a judgement (Blythe, 2013, p. 158). The consumer’s attitude is built on the basis of his opinion and behaviour. The long-term condition of attitude describes the feelings of a consumer for an objective attitude. The behaviour is an unpredictable condition in the future, which does not inevitably result in an action. The cognition is the subjective knowledge, which a consumer has from objective attitude. This is analysed with the ABC model, which describes the interaction between knowledge, emotion and action. After evaluating the product information, the consumer develops an emotion about the product. A positive emotion results in the consumption of the product (Solomon, 2013, p. 253). There are different levels of consumer attitudes, whereby the level of involvement is described as ‘internalisation’ (Solomon, 2013, p. 253). The electronic car, for example, is a high-involvement product because of the high price and the long durability (Bruhn, 2004, p. 1929). Influencing consumer’s attitude at this level is very difficult because the purchase is highly important for the consumer. The attitude is strongly connected with the values of the consumer. The marketer has to minimise the consumer’s dissonance by positively influencing his opinions and emotions. The consumer looks for a reinforcement of his purchasing action in his environment or focuses on his own previous buying behaviour. Therefore, it is important to support the consumer purchase decision also after the consumption (Solomon, 2013, p. 253). A positive purchase experience is likely to lead to further purchases and brand commitment. The stage of post-purchase represents the stage of a future purchase cycle in the communication process (Wijaya, 2011, p. 77). With the Rosenberg model, the consumer’s attitude can be measured. According to the model, the consumer’s attitude towards an object represents the degree and direction of the attitudinal effect arisen by the object. The attitude is built on two main components: the perceived instrumentality and the value importance. The perceived instrumentality is the subjective capacity of the object to attain the value in relation to usefulness. The value importance is what the consumer hopes to reach through the purchase and use of a product or service. These two components are useful to predict the consumer’s behaviour (Blythe, 2013, p. 160).

2.2.1.4.2 Rational and emotional driven Purchasing Process of an E-car

Considering the purchasing process of an E-car, the consumer makes his decisions based on rational and emotional motives. The consumer’s rational behaviour is influenced by the physical consumer performance and availability of a product. In contrast, his emotional behaviour describes a buying decision dependent on social and psychological influences. Rainey argues that successful green brands use essentially emotional appeals to engage consumers (Rainey, 2010). According to a broad argument by marketing experts, emotional messages and relationship building can have a high impact on the purchase decision of consumers (Heath, Feldwick, 2008, p. 4). In contrast, Fill added that emotion can also be used to provide information but the overriding approach is informational. However, in due consideration of the affective component, Fill pointed out that rational information is not enough to stimulate behaviour especially when a brand has a negative image. Emotional appeal can change the consumer’s mind. Unique and creative messages appealing to several senses achieve high awareness. For example, the government mostly uses informational campaigns to change people’s attitude in behaving in a more environmental-friendly way. The effectiveness of the message can be reinforced through dramatising the consequences of a particular behaviour to raise awareness. In Kotler’s opinion, the company can also use negative emotional appeal such as fear or shame to influence people positively in their behaviour (Kotler et al., 2008, p. 703). In consideration of the E-car purchasing process, the consumer has a strong requirement to identify with the E-car brand. The goal of BMW, for example, is to create a long-term, lasting and emotional identification and commitment with the brand.
Therefore, the E-car producer has to put in a lot of effort in the consumer loyalty programme to create a strong green brand commitment (Bruhn, 2004, p. 1929).

2.2.2 Branding Strategy in the German E-car industry

To analyse how to brand an E-car successfully in the German car industry, theory and actual study results will be considered.

2.2.2.1 Definition of a Brand

Branding is a primary function of advertising through which a company tries to reach its target audience. A brand can also be defined as the value in the mind of the consumer. It is also the output of marketing communication activities, which has to be managed throughout the brand life cycle. Moreover, a brand is a set of attributes that have a meaning to the consumer and create associations with the product or service (Picktin, Broderick, 2004, p. 250). According to Aaker, a brand is a name or a symbol to identify or differentiate goods or services from competitor brands (Aaker, 1991). For De Chernatony and Mc Donald, a brand is an identifiable product, service, person or place from which the consumer perceives relevant added value, meeting his needs to create a long-term competitive advantage (De Chernatony, Mc Donald, 1989, p. 83). The different definitions combine the fact that a brand identifies a product and is, therefore, timesaving and facilitates the decision-making process from a consumer perspective. The consumer trusts a brand because it ensures a specific level of quality and satisfaction. From a brand-owner’s perspective, branding can be a powerful defence strategy against competitors. However, it can also increase profit margins through premium pricing or reduce the threat of price war when a company gains brand loyalty (Picktin, Broderick, 2004, p. 252). According to the structure of Aaker (1996), a brand is built on different layers like an onion, starting with the core brand, building of the brand’s mission and the consumer’s benefits. The next layer of the brand is the brand value, which describes the brand and its message. The final layer is building of the value facets, which support the operationalization of the brand value. This holistic concept is the driving force for the brand world of the BMW Group (Bruhn, 2004. p. 1942). The BMW Group positions its new E-car brand BMWi under the corporate brand umbrella BMW. In the automobile industry, from a consumer’s perspective, a brand is especially perceived through products, communication and personal contact with the retailer. A corporate brand is built on personality, identity and image and is described as the soul, spirit and culture of an organisation (Picktin, Broderick, 2004, p. 245). It describes how the consumer should perceive and differentiate the brand under competition through its uniqueness (Bruhn, 2004. p. 1942).

2.2.2.2 Consumer-based perspective on Brand Equity

Aaker defines brand equity as a set of five categories of brand assets and liabilities linked to a brand, which provides value for the target group. The five sets of a brand asset are: brand loyalty, brand awareness, perceived quality, brand associations and other proprietary assets like patents, trademarks and distribution relationships (Aaker, 2006, pp. 194).
From a consumer’s perspective, a brand achieves equity when people are familiar with the brand, having positive and strong associations. Brand equity consists of two forms of brand-related knowledge: brand perception and brand image (Shimp, 2007, p. 36). To manage and control brand equity, the E-car producer BMW has to understand how the consumer perceives the brand and what are its strengths or weaknesses. Therefore, the marketer BMW has to analyse the brand perception and how the brand is perceived in comparison to the competitors (Bruhn, 2004, p. 1945).

2.2.2.2.1 Brand Perception

An important component of branding is the consumer’s perception. The marketer’s goal is to achieve the most favourable perception possible through a strong brand personality. The target group should connect specific characteristics with a brand, which trigger positive stimuli to create an overall strong brand image (Blythe, 2013, p. 109). The consumer’s perception is a process of individual selection, organisation and interpretation of several stimuli into a meaningful impression. The process is based on persons’ needs, values and expectations and is, therefore, highly individual (Schiffman et al., 2008, p.168). Perception occurs when a brand name comes to the consumer’s mind, thinking about particular associations with a brand. Brand perception is the basic element of brand equity. If the consumer is not aware of a brand, a brand cannot have equity. The ‘Managing brand equity’ model (figure 5) of Aaker shows the different levels of perception which the consumer experiences, beginning with the stage of unawareness and ending with the ‘Top of mind’, which is the target stage of each established brand. The pyramid visualises two stages of awareness: brand recognition and recall. Brand recognition reflects a
relatively superficial level of awareness whereas at the stage of brand recall a deeper level of awareness is achieved. The stage of unawareness can be equated with the failure of a brand (Shimp, 2007, p. 38).

Figure 5: Managing Brand Equity

![Managing Brand Equity](image)


The attitudes and behaviour of the staff of a company are, for example, main brand builders and a strong marketing communication tool, which transmit the corporate culture to the public. Therefore, inconsistency between staff behaviour and the companies’ culture has to be avoided. A difference between consumers’ expectations and perception can lead to dissatisfaction and negative effects on the brand image (Picktin, Broderick, 2004, p. 258).

2.2.2.2 Brand Image

The sum of all characteristics of a brand tries to profile the corporate personality. In turn, the corporate personality transmits the corporate identity, which is everything how a company is known and understood as. The perception of the companies’ target audience, which is created from the corporate identity is named corporate image. All marketing communication activities of the company help to build the corporate image through the consumers’ feelings, which become associated with thoughts. To ensure a desired and representative brand image, the brand has to be managed (Picktin, Broderick, 2004, p. 245). The brand image builds the second dimension of the brand knowledge, which is described earlier. Shimp describes the brand image as associations, which activate the memory, building positive links with the brand. All consumer thoughts and feelings are types of these associations. A high level of brand equity is reached if the consumer associates the brand with different benefits, resulting in a positive brand evaluation (Shimp, 2007, p. 39).

2.2.2.3 The ValueDrivers model

To measure the brand equity, the ValueDrivers model (figure 6), which maximises the financial value of brands is considered. Value drivers are different components to help increase the value of a brand. One key goal of this measurement framework is to deliver a meaningful brand experience to the consumer and maximize this moment. The framework regards two key issues influencing the brand management nowadays. On the one side, the market of consumer needs has become more complex and is fast changing. Therefore, the marketer has to focus on his communication, distribution and pricing activities to ensure a clear and unique brand profile. On the other side, go-to-market options have increased
heavily over the last few years through the transparency of Internet which is not time or space bound. The pressure of being innovative and reacting in real time to market changes has increased immensely.

Figure 6: The ValueDrivers model

In the first stage, the ValueDrivers model considers the definition of meaningful, differentiated brand experience, which can lead to price premium positioning or achieve a higher turnover. To create such an experience, the marketer has to be clear about the purpose of the brand, which should be significant and different from competitors. The most effective way to generate differentiation is to achieve resonance on an intrinsic level of consumer behaviour, encouraging all senses to create linked thoughts with the brand. In the best case, the marketer generates consumer awareness at an emotional and rational level. The consumer’s emotionality is most valuable. If the consumer creates a strong identification with the brand, this brings a significant added value to the consumer. Differentiation can also occur at an extrinsic level based on the feelings, which are developed during the brand and product experience. For example, social and environmental corporate responsibility can form extrinsic differentiation or a unique product design which the brand BMWi fulfils. The marketer has to address real consumer needs for a price that the customer is willing to pay through a clear marketing message delivery. In the second stage, the model focuses on the reinforcement of this experience in the context of a more widespread audience. According to the ValueDrivers model, findability, credibility, vitality, affordability and extendibility can amplify the meaningful difference of a brand. Findability means physical availability, which requires a well-managed distribution network. The product or service needs to be visible and should be easily identifiable for the target group. Optimized credibility can be achieved through consistent brand communication. A new product line like the BMW E-car series should be properly adjusted to the parent brand BMW concept, building unity. A brand can be perceived as vital if the brand is perceived in relation to activity and innovation. Social media is a good tool to manage creative and innovative marketing campaigns. Price management is also an important factor for adding value to a brand. The product or service has to be affordable and match the price the consumer is willing to pay. Moreover, extending the brand is a successful ValueDriver for growing brand value to cover new market segments. In the final and third stage of the model, a brand can generate value through four different ways. The marketer can extend the brand to gain a new consumer segment in the same product category or reach new geographical markets. The marketer could also create a premium-pricing concept
or focus on high turnover. All these ValueDrivers lead to a long-lasting brand value growth (Hollis, Pincott, 2013).

2.2.3 A Green Branding approach in relation to the German E-car industry

The result of this paper should provide important information for the E-car industry about how to market a green product. Therefore, the Green Branding theory will be examined in relation to the German E-car industry.

2.2.3.1 Definition of Green Branding

The Green Marketing approach is focused more on ecological issues than social and economic issues compared to the classic marketing approach (Emery, 2012, p.17). Fill argues that a green brand has to fulfil three strategic goals: differentiation, integration and added value to create strong, positive and lasting impressions (Fill, 2013, p. 11). A green brand is built according to the principles of sustainability and environmental friendliness, targeting a consumer group, which is willing to pay for these ethical brand values. The consequences of the financial crash and the Euro crises led people to think more about having enough money to drive a car than acting in an environmental-friendly way. When consumers are highly price-sensitive, companies have to provide low prices or real value. Ethical or green brands can create this value and can thus justify higher prices (Arnold, 2009, p. 70). According to Grant, 8 to 10% of people are classified as having a dark green lifestyle, 20 to 40% of people are up for light green changes and still 60 to 80% of people are not concerned about the environment (Arnold, 2009, p. 70). John Grant, the author of ‘The Green Marketing Manifesto’, questions: ‘Why can’t you just ‘green’ a conventional brand?’ The issue is that ‘green’ is not a simple image; it is more a factual and sceptical evaluation of a brand or a product (Arnold, 2009, p. 70). According to Holbrook, Lehman and O’Shaughnessy, a consumer has an intrinsic and extrinsic evaluation. The internal perspective is not only determined by thoughts or personality structures, it is also influenced by the opinion of people we trust (Baines, Fill, Page, 2011, p. 230).

2.2.3.2 Danger of Green Washing

Communication experts from the marketing consultancy OgilvyEarth published important Green Branding rules in 2009. Companies try to use green claims to improve the brand image, which is named ‘Green Washing’ (Williams, 2010). Green Washing is a misleading marketing claim by a company to conceal its abuse of the environment and present a positive image (Emery, 2012, p. 223). But Arnold argues that branding is not just about the image; it’s about how the brand is perceived from the consumer perspective (Arnold, 2009, p. 44). Further reports of the OgilvyEarth showed that 64% of Americans no longer trust sustainability-related marketing claims. The OgilvyEarth adviser, Ma Jun, announced that more and more local and multinational companies have to handle Green Wash violations from the public. Therefore, companies have to build high credibility for sustainability-related marketing. A survey identified a strong consumer movement to support green products (Williams, 2010). In 2009, Time magazine published that 38% of consumers over 18 years try to buy products from socially responsible companies. The change in public awareness shows a revolution of responsibility (Stengel, 2009). The United Nations Framework Convention on Climate Change in 2009 confirmed that a global citizen-consumer revolution developed to support sustainable future. The OgilvyEarth adviser, Jeunesse Park, identifies the authenticity of the company’s brand image as crucial. A further challenge for consumers is to understand the green health claims, according to adviser Andrew Winston. Green Wash claims can damage the company’s reputation, if consumers doubt the company’s developments (Williams, 2010). John Grant agrees that consumers do not trust companies, which make profit by green
taglines (Grant, 2008, p. 25). Negative clichés about eco products in consumers’ minds have to be removed (Williams, 2010).

2.2.3.3 Marketing Communications of a Green Brand
Arnold describes the problem saying that people have got immune to environmental claims. They realise the rising problem of the environmental conditions, but they do not feel personally responsible. The sense of security is not touched. Thus, there is a missing link between the stage of ‘think’ and ‘feel’ of the Hierarchy of Effects model. But the consumer behaviour can be changed if the company can make people feel and act (Arnold, 2009, p. 70). In relation to Green Marketing approach, consumers who do not feel responsible for the environment have to be convinced to buy an electronic car. The ecological aspect is one of several reasons to buy an E-car. People have to be convinced of the idea of making a significant change through the purchase, influencing the total impact (Grant, 2008, p. 25-27).

A successful way to create green brand perception is the communication of a negative issue followed by the solution providing the brand. In respect of electronic cars, the negative effect of pollution can be explained followed by the solution of the electronic car. This approach is highly credible because it reduces reporting bias and sceptical opinions (Soloman, 2013, p. 293). In Arnold’s opinion, consumers are not even able to understand a marketing message because they are too confusing and complicated creating uncertainty. In consequence, the personal involvement is low and the consumer cannot develop feelings, which results in not purchasing the product. Companies which communicate a clear and easily understandable marketing message can change people’s mind and, therefore, also the action of purchase process (Arnold, 2009, p.70). Ian Higgins agrees that environmental claims should be factual, specific and clear. According to the experts at OgilvyEarth, the environmental marketing message should be honest and tell the truth for creating authenticity and credibility. For providing true content, details should be explained in the integrated marketing strategy. Especially, content generalization and broad taglines should be avoided (Williams, 2010). Interbrand, the global leading brand consultancy and founder of the annual Best Global Brand Reports, analyses green brands of 2013. According to this study, green brands, which communicated transparent and clear message, could achieve more value in public. Also, the selection of appropriate media channels is important to reach the right target group at the right time and place, which is interested in the marketing message. The green marketing message should be aligned with the company’s performance to convince the consumer of its trustworthiness and brand honesty (Baines, Fill, Page, 2011, pp. 230).

2.2.3.4 Green Brand building of German E-car producers
The BMW is ranked as one of the top twenty sustainable brands in Germany. It was observed that automobile brands, which invested in the R&D sector and implemented sustainability in the corporate strategy, could achieve more value in customer perception. New product design and the use of light and sustainable materials can underline the environmental-friendly image. Technological E-car manufacturer brands have to especially optimise environmental-friendly performance and efficiency throughout the value chain (Pietig, 2013). A brand should look ethical as well as give the feeling of ethos (Arnold, 2009, p. 9). Leaving behind the mass and fast consuming generation, society’s buying behaviour seems to be turning back to old basic values. Brands, which do not adapt to the environmental changes and ethical performance, will fail (Arnold, 2009, p. 33). There is a significant gap between being profitable or profiteering. Trying to be a brand with a big ego and being the loudest and most profitable brand do not always establish good consumer perception. The brand is a reflection of personal contact with the stuff. Consumers want to be treated more as special and valued like a friend. Being number one does not mean consumer satisfaction or better service. Consumers could also perceive a top brand as greedy and arrogant. In this case, the target audience will not pay for overpriced products if they do not sympathise with the brand, losing respect and reputation. To avoid this negative green brand
image, the big players need to build up an ethical brand, treating the consumers and the environment with respect (Arnold, 2009, p. 9).

2.3 Contextual Review

2.3.1 German E-car industry

The German E-car industry will be considered to research about the evolution of the E-car sector and the consumer behaviour in this sector.

2.3.1.1 Evolution and Future Outlook of the German E-car industry

The German automobile industry is especially a very attractive market with a high growth potential in the future. In 2012, 128.2 bn Euro of total sales were generated in the German automobile sector (Statista, no date). Behind Japan, China and the USA, Germany is the fourth largest automobile producing nation (BWT, 2013). Over the last few years, the innovative E-car has penetrated more and more into the German car industry. On the one hand, some economical studies show clearly that the E-car is the future transport vehicle. Roland Berger predicts that 37% of cars will be E-cars in the European automobile market by 2025. McKinsey said that in 2030, two out of three cars will have an electric motor. According to the electro mobility index of McKinsey, which measures the successful implementation of E-cars, Germany is better placed than China for the first time (Bayme vbm, 2012, p. 15). A scientific study of the Böckler institution also supports the future development of E-cars, predicting an increasing sale of about 15% by 2030, which is low compared to hybrid cars which will increase by about 35% by 2030. In contrast, combustion engine cars will decrease by about 40% (Prof. Dr. Ing. Spath et al., 2012, p. 18). The main increase of E-cars is predicted between 2020 and 2030 and visualized in Figure 7.

Figure 7: Evolution of Demand of E-cars

![Figure 7: Evolution of Demand of E-cars](source: Prof. Dr Ing. Spath et al., 2012.)
2.3.1.2 Reasons for the actual low Consumer Demand of E-cars in Germany

After proving the increasing demand of E-cars on a long term, it is even more surprisingly that demand today is mildly growing, which is visualized (FOM, 2010, p. 72). The study of NPW is visualized that the demand of E-cars in Germany increases slowly, which is explained through low market capacity and low supply (figure 8). In January 2014, just 12,156 electro vehicles were registered by the German Federal Office for Motor Traffic. McKinsey presents every three months an Electric Vehicle Index. In international comparison, the demand for E-cars is even slightly decreasing in Germany. McKinsey predicts 0.7% share of E-cars on the German car market in 2017, which is a slightly decreasing value in comparison with the last results of the Electric Vehicle Index (Elektroauto, no date).

Figure 8: Development of Demand of E-cars till 2020

Source: Adapted to a study of NPW, 2012.

In a study of the statistical institute FOM in Germany conducted in 2010, 763 participants were surveyed (FOM, 2010, p. 72). It was proved that there are some product features of the E-car which negatively influenced the consumers’ demand for E-cars. There was further proof that the consumers perceived the E-car to be expensive compared to a motorcar (Study CarIT, 2012). A study of Aral in 2011 showed that 59% of the respondents are not willing to pay more for an E-car. The younger consumer group especially under 40 is not just ready to pay 1.466 Euro more. This is an important fact in contrast to the opinion of the car producers who think that the younger people are more willing to buy an EV (Meyer, 2013, pp. 127). The marketing activities for E-cars should also focus more on the topic of tax reductions and inform about cost advantages compared to motorcars. Moreover, the government has to introduce subsidies, which make the EV more attractive. According to Bayme vbm, the subsidies must be low to reach the planned governmental goal (Study CarIT, 2012). The most discussed marketing topic in relation to E-cars is environment. However, the consumer needs to be informed first about the important technological aspects to reduce uncertainty and a lack of information in relation to E-cars (Study CarIT, 2012). Of the sample, 60% have difficulties with the less reach of an E-car compared to a motorcar. Forty per cent of the respondents accept 5-30 min charging time of the E-car and just 11% accept three to six-hour-long charging time. Fifty-five per cent of the respondents could accept a 1-5 km distance to the next E-car charging station. It could be determined that the acceptance of EVs rises when the EV is a second car in the household (FOM, 2010, pp. 72). A study proved that there is a positive correlation between a well-informed consumer and the willingness to pay more for an E-car (Backhaus et al. 2011, p. 85). Marketing expert Björn Sprung, the director of the international...
Marketing agency ‘Nielsen’, underlines that the marketing strategy of German automobile companies needs to focus more on sales arguments, which are important for the consumers. If marketing is targeted in relation to consumer needs, the demand for E cars can be accelerated (Study CarIT, 2012). These problems can be solved with the progress and innovation over time.

2.3.2 E-car Brand Strategy of BMW

2.3.2.1 Brand Strategy of BMW

The German automobile sector comprises multi-brand companies whereby the supply will be extended through buying-in of different brands (Bruhn, 2004. p. 1929). A multi-branding strategy is defined as the supply of multiple brands in the same product segment. Also, the BMW Group drives a cost-orientated multi-branding strategy based on the future-driven overall corporate strategy ‘Number One’, which is discussed in detail in the appendix A (Picktin, Broderick, 2004, p. 254). But it has to be assessed that the most successful German car manufacturers like BMW, Hyundai, Peugeot, Porsche and Toyota, focus on just few brands (GENIOS WirtschaftsWissen, 2004). On one side, the German car producer uses a strong corporate brand whereby the company’s name is synonymous with the total BMW product class and a strong brand portfolio, which is discussed in detail in the appendix F. Corporate branding is used when a company operates in a tightly defined market like the automobile sector, which brings advantage for the advertising of related products like the new BMWi series. The strategy helps to avoid confusion and diversification during the purchasing process (Laforet, Saunder, 1994). On the other side, BMW uses house brands like MINI and Rollys Royce to cover different market segments (Laforet, Saunder, 1994). The BMW Group wants to target especially a younger consumer group with the MINI and the luxury segment with the Rollys Royce (BMW Group, nd date). The company tries consciously to differentiate the products of the three premium brands from each other. The subsidiaries should operate independently from the parent brand, which allows focusing on their own business. This can also bring promotional advantage by creating something new and providing a more targeted advertisement (Laforet, Saunder, 1994). Looking at the brand BMW, it is observed that the Group drives an umbrella branding strategy which is a management approach whereby the parent brand name is used across a range of products, benefiting from the consistent and clear parent brand identity (Millward Brown Knowledge Point, 2008). Umbrella branding and extending the brand lead to a complex product portfolio, which is direction giving for all marketing activities and is quite advantageous (Aaker and Keller, 1990). The consumer can perceive familiarity, credibility and associations with the corporate brand when he buys one product from the product range. This effect is called ‘halo effect’, which is not always guaranteed. A study by the Millward Brown Institution in 2008 found that around one quarter of advertising activities in relation to umbrella branding shows a significant halo effect for products of the parent brand portfolio (Millward Brown Knowledge Point, 2008).

2.3.2.2 Goal of the Brand Strategy of the BMW Group

For the BMW Group it is important not to extend the brand portfolio too much to keep the brand authenticity. The customer has to be given the possibility of individual identification but at the same time the degree of standardisation has to be kept because of synergy effects. Each brand has a clearly defined profile and a system of values so that a broad brand portfolio without any overlaps can be provided (Bruhn, 2004. p. 1935). The brand BMW tries to differentiate from other brands to gain competitive edge, which is challenging because in the premium car segment, the consumer has detailed product knowledge through multi-channel media. The long-term marketing messages and values have also to be adapted to the changes in society. The rational consumer behaviour is about price and the emotional consumer behaviour is about the willingness to pay more for a premium product (Bruhn,
2004. p. 1935). The premium brands make business from the consumers’ emotionality, which the BMW describes as the ‘joy of driving’. This results in a long-lasting consumer commitment (Bruhn, 2004. p. 1935). The BMW is the core brand, which stands for joy of driving, high quality and successful history on the racecourse (Bruhn, 2004. p. 1935). Brands awareness is built in the mind of the consumer and can influence his perception. The consumer’s subjective attitude about a brand is crucial for brand success. Therefore, the marketing of the BMW is focused on the communication and strategy to increase the brand value (Bruhn, 2004. p.1942). The BMW creates its brand portfolio according to the principle: the more a brand is focused on a defined gratuitous promise the more marketing message can be targeted to the consumer. The goal of the BMW’s branding strategy is to create consumer trust on an emotional level and create a strong brand image, which is a long-term competitive advantage (Bruhn, 2004. p. 1929).

2.3.2.3 Communicated Brand Image in the Marketing Campaign of the brand BMWi

The BMW is a pioneer of managing a global, market-introducing campaign for E-cars, which will be analysed in the following (MarketLine, 2013, p. 4). The new premium E-cars BMWi3 and the sports E-car BMWi8 were introduced in November 2013 on the IAA, the biggest German automobile exhibition. The integrated marketing strategy of the BMWi3 consists of a print, online and TV campaign. The main goal of the campaign is to encourage a potential consumer for a driving experience to create a positive emotion in relation to the product. The campaign has an international and consistent online presence focusing on an innovative marketing movie. The campaign also includes activities in the area of social media like the Facebook with configuration mode and the possibility to register for a driving experience with the BMWi3. The BMWi-App is constructed with the same functions and a 360 angular degree visualisation function (OnetoOne, 2013).

The German marketing manager, Frank Dophreide, CEO of a leading German marketing agency, evaluated the BMW marketing strategy. The BMW has to successfully fulfil the gap between a modern premium car and a new environmental-friendly concept. The electronic vehicle will be the car of the future and needs to be sold to a large segment of the population in the future. Thus, it is important that the BMW sold the new E-cars series like conventional cars. Clichés like electronic cars are just for people supporting the eco-movement have to be prevented. The brand BMW symbolises dynamic design and driving passion, which have to be combined in the new electronic car. The new sports E-car model BMWi8 breaks the cliché of electronic cars with its features of a sports car. The model underlines the revolution of electronic cars and thus it was a good strategy to present both the models at the same time. The BMW marketing campaign for E-cars is conventionally designed. The public may expect a revolutionary campaign and product presentation, which the BMW wants to avoid consciously. The concept of the electronic car itself is revolution enough. The BMW’s marketing team thinks the more spectacularly the car is launched, the higher will be the barriers for the consumer. The BMW wants to promote that the electronic car be perceived as natural. The most important marketing tool and the campaign’s main goal will be the personal driving experience. The consumer can feel the power and experience the fun of driving. The consumer should be curious and get more familiarised with the car (Steinkirchner, 2013). The German car industry can remain successful when it takes part in the ecological revolution. The car should no longer be a status symbol; it has to be invented new (Heuser, Lamparter, Pinzler, 2011).

2.4 Conclusion

The consumer behaviour theory discussed in the academic review explained how advertising works and how the consumer can be effectively influenced. The study results in the field of branding from a classical perspective and from a green marketing perspective providing important information on how to brand a green product like the E-car and what has to be avoided. The contextual review proved that the
demand of E-cars is at the moment growing slowly. Additional, the branding strategy of BMW was analysed to explain the goal of BMW, how to brand its new E-car series. The discussed literature review helps to reach the goal of this study, providing significant information on how to improve the marketing strategy of German E-car manufacturers.

3. Research Methodology and Methods

3.1 Introduction

The researcher follows a specific research strategy to provide reliable data and research knowledge for adding value to this research field. Research philosophy is a system of belief that guides the study in relation to techniques and different research process approaches. The researcher has to decide, which methods he wants to choose as part of the research strategy influencing the academic study significantly. A helpful instrument is the research onion, which gives an overview of the multiple decision-making steps the researcher can choose and adapt to his topic and purpose. Decisions will be made in relation to different approaches, strategies, choices, time horizons and techniques (Saunders, Lewis, Thornwill, 2007, p. 106). Johnson and Clark argue that it is not so important how much the study will be philosophically informed. But, it is important to reflect upon the philosophical choices and defences in relation to the alternative decisions the researcher could have made (Johnson and Clark, 2006, p. 103).

3.2 Overall Quantitative Research Objectives

In this investigation the overall quantitative research question is:

What is the reason for low consumer demand for E-cars in Germany and how can these issues be positively influenced from a marketing point of view?

It is proved that the demand of E-cars is growing slowly, which is discussed in ‘2.2.1 The German E-car industry’. The detailed analysis of the reasons will be provided through a quantitative survey. After analysing the reasons, an adapted and problem-solving marketing strategy will be elaborated in due consideration of consumer behaviour, branding strategy and green branding theory, which were discussed in the literature review. The dissertation will evaluate critically the observations of experts in these fields to work out significant new content as to how to market E-cars in Germany successfully. The proposed study will survey potential E-car buyers in Germany to figure out consumer perceptions and attitude of German E-cars brand manufacturers. As a result, recommendations for future marketing strategies for E-cars will be provided, which will influence the consumer buying behaviour positively.

3.3 Positivism

In this academic study, the positivism research approach is chosen and used in general by natural scientists. Positivism is a natural theoretical approach that assumes that the findings are based on positive facts rather than on impressions. Everything, which is not observable and cannot be proved through scientific experiment or ethical and theological questioning is against the positivism approach. From the observed part of society, which will be surveyed during the research process, a generalisation of the whole society can be made. The research strategy of collecting data should be built on existing theory. This was discussed in the previous literature review to develop the research hypothesis, which will be proved or refuted. If the hypotheses are refuted, further theory has to be tested. Moreover, the positivism approach assumes an on-going scientific progress and a value-free attitude of the researcher. For the researcher, it is a challenge to stay value free because of the developing feelings during the research process in relation to personal opinions or empathy with people who were surveyed for sample.
Moreover, the researcher is independent of the research subject and in turn he also does not influence the research subject (Saunders, Lewis, Thornwill, 2007, p. 105).

3.4 Deductive Method

In the second research development stage, the deductive approach is chosen. According to this approach, a theory and hypothesis will be developed, followed by designing a research strategy to test the hypothesis. The hypothesis should clarify testable proposition about the relationship between several concepts (Saunders, Lewis, Thornwill, 2007, p. 105). The deductive approach is chosen due to the planned quantitative survey, which will indirectly measure the reasons for a low demand of E-cars in Germany. It is assumed that reasons for the lack of consumer demand are related to each other. The indirect measurement will be done by several variables and when combined they become a construct, which will be described later. Variables are the observable and measurable characteristics in a conceptual map and are directly linked to observable facts. Variables can also be distinguished between an independent variable, which is a measureable characteristic and a dependent variable, which is influenced by the independent variable. Thus, the independent variable gives the reason for the dependant variable (Hair, et al., 2007, p. 144).

3.5 Hypotheses

The hypotheses will be derived from the discussed academic theory in the literature review and divided into the fields of consumer behaviour, branding strategy and green branding strategy. In the field of consumer behaviour, the Hierarchy of Effects model was discussed, which describes three dimensions of the E-car purchasing process. In the first cognitive dimension, the consumer’s perception is formed from the product knowledge. This leads to the development of needs, which the consumer wants to satisfy. The consumer’s attitude is built on the second affective dimension. On this level, the consumer develops a liking or disliking for the product. In the third conative stage of purchase, the consumer is convinced to purchase, influenced by his personal values. According to these three stages, the hypotheses are generated to determine at which stage of purchase the potential E-car consumer has a problem, which leads to a non-purchase of an E-car. To make analyses possible, a known E-car brand BMWi and its marketing activities are chosen, representative of an example of a German E-car brand. The hypotheses will be tested to clarify why the demand of E-cars is low and what are the reasons.

Hypothesis 1:

The consumer’s perception of the brand BMWi is low.

The literature review discussed, that product information, brand personality and associations influence the brand perception. Therefore, the following construct and hypothesis were deduced.

Construct 1: Consumer’s perception of German E-car brand manufacturers

<table>
<thead>
<tr>
<th>Rational</th>
<th>Identifying strengths and weaknesses of the BMWi brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
<td>Consumer’s brand perception of BMWi</td>
</tr>
<tr>
<td>Independent variable</td>
<td>Product information, brand personality, brand associations</td>
</tr>
</tbody>
</table>
Hypothesis 2:

<table>
<thead>
<tr>
<th>Rational</th>
<th>Identifying strengths and weaknesses of the BMWi brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
<td>Consumer’s brand attitude of BMWi</td>
</tr>
<tr>
<td>Independent variable</td>
<td>Consumer’s perceived instrumentality of the E-car, consumer’s perceived value in relation to usefulness of the E-car</td>
</tr>
</tbody>
</table>

In the literature review, it was discussed that the consumer’s attitude is measured by the Rosenberg model through two components: the perceived instrumentality and the value in relation to usefulness which the consumer hopes to enjoy through the purchase.

Construct 2: Consumer’s attitude of German E-car brand manufacturers

Hypothesis 3:

<table>
<thead>
<tr>
<th>Rational</th>
<th>Identifying strengths and weaknesses of the BMWi brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
<td>Consumer’s trust in the brand BMWi</td>
</tr>
<tr>
<td>Independent variable</td>
<td>Purpose of the BMWi marketing campaign, trust in the expertise of BMW</td>
</tr>
</tbody>
</table>

The marketing activities of the BMWi brand are not trustworthy enough.

According to marketing expert Frank Dophreide, the German E-car industry has to fulfil the gap between a traditional car manufacturer brand and an eco-product brand, which are in contrast to each other. The traditional car brand is more likely to be seen as not being environmental-friendly and specialised in racing engines; in contrast a green E-car brand which is more likely to be perceived as specialised in environmental-friendly engines and less focused on speed and design (Steinkirchner, 2013). Therefore, it will be investigated if an E-car brand, like BMWi, should be marketed under the umbrella of the traditional engine car brand BMW.

Construct 3: Consumer’s trust in the German E-car brand manufacturers
Hypothesis 4

The brand equity of BMWi is not strong enough.

In the literature review, the ValueDrivers model, which measures the brand equity, was discussed in chapter ‘2.2.3.3 The ValueDrivers model’. The model analyses how meaningful a brand experience is for a widespread target audience and the degree of differentiation of a brand from its competitors. Differentiation can be achieved through intrinsic or extrinsic variables, which influence the consumer behaviour.

Construct 4: The brand equity of German E-car brand manufacturers

<table>
<thead>
<tr>
<th>Rational</th>
<th>Identifying strengths and weaknesses of the BMWi brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
<td>Reinforcement of a meaningful and different brand experience</td>
</tr>
<tr>
<td>Independent variable</td>
<td>Consumer’s identification with the brand, intrinsic emotion building in relation to associations, extrinsic emotion building during brand experience or for product design</td>
</tr>
</tbody>
</table>

3.6 Survey

Suitable to the deductive approach, a quantitative, descriptive survey research technique is proposed to generate representative findings for the entire population according to a mono method. Moreover, the survey is time-bound because the researcher has only 12 weeks to write the academic paper and, therefore, a self-conducted paper-based questionnaire method is chosen. A self conducted, paper-based questionnaire will provide several questions, which will help to answer the research question and test the hypotheses (Hair, et al., 2007, p. 155). Using standardized data is a good basis for comparisons to explain relationship between variables (Saunders, Lewis, Thornwill, 2007, p. 135). For each hypothesis, several questions will be asked to ensure the proper testing of the hypotheses. The survey will generate data on how potential consumers perceive German E-car brands at a particular point of time (Saunders, Lewis, Thornwill, 2007, p. 148). The advantage of a personal conducted survey is that misunderstandings of questions can be removed through explanations and people will not answer questions wrong or skip questions. The E-car is a new innovative product and thus it could be that respondents do not have enough knowledge to answer the survey questions. A further advantage is that the survey will be conducted as long as one hundred responses are generated, thus having control over the survey (Saunders, Lewis, Thornwill, 2007, pp. 361).

3.7 Non-Probability Sampling

The non-probability sampling method is used if a complete suitable sampling frame is not available and if it is not possible to specify the probability that any case will be included in the sample. A sampling frame is a complete list of all cases in the population from which the sample is built. In this investigation, there is no access to such a sampling frame as well as the probability of each case being selected from the population is not known, which justifies the use of the non-probability samples method. Through the non-probability sampling technique, samples based on subjective judgement can
be selected. To answer the research question, a small sample will be surveyed to gain theoretical insight (Saunders, Lewis, Thornwill, 2007, p. 226).

3.8 Quota Sampling

In the next step, it has to be decided which sampling method will be used in this investigation. The data from the entire population cannot be collected and there is no need to make statistical interferences from the sample. According to the previously described conditions, the quota sampling is a suitable non-random method to divide the populations into specific groups according to quota variables, which represents the entire population. The concept can be conducted under the premise that the variability in the sample for different quota variables is the same as for the population (Saunders, Lewis, Thornwill, 2007, p. 227). Therefore, a common set of characteristics has to be selected to represent the entire population. Thus all elements in the sample must share the same characteristics. A quota will be calculated for each group based on relevant and accessible data (Hair, et al., 2007, p. 170). The interviewer needs to conduct the targeted survey and needs to control the composition of the sample to fulfil the criteria of a representative sample. One hundred responses are calculated as sufficient to generate the calculated number of answers needed for each quota group for statistical analyses. The advantages of this technique are low costs and quick conduct (Saunders, Lewis, Thornwill, 2007, p. 236).

3.9 Sample and Quota groups

The sample unit is used to estimate the characteristics of the German inhabitants, who could be potential future E-car purchasers (Hair, et al., 2007, p. 170). One hundred respondents will be surveyed to analyse the consumer behaviour and to provide information of consumer’s perception of E-car brands. The sample was first divided into a user group and a non-user group of over 18 years because people who have driving licence are classified as potential E-car users. Moreover, it can be specifically analysed why the non-users are not convinced to purchase an E-car. The user group can be analysed based on why they are convinced and what are the advantages of the E-car. However, the following calculation shows that a quota for user and non-user is not representative of the entire population because the percentage of the usage is almost zero (table 1). The proportional relation between user and non-user is too big to be representative for the entire population and thus a scientific analysis of E-car users is not possible.

Table 1: User and Non User quota

<table>
<thead>
<tr>
<th>Usage</th>
<th>Age Group</th>
<th>Population</th>
<th>Quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>Over 18</td>
<td>15.390 (99,02%)</td>
<td>0,02  = 0</td>
</tr>
<tr>
<td>Non-User</td>
<td>Over 18</td>
<td>69.305.342 (99,98%)</td>
<td>99,98</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69.320.732</td>
<td>100</td>
</tr>
</tbody>
</table>

As a solution, the quota was newly defined as a user group over 18, divided into male (32.377) and female (34.293) making up a population of 66.670 over 18 years according to Bpb (2013). Analysing different gender groups can give new insights about the preferences of the different quota groups. The
male and female target groups can be targeted with marketing messages according to their needs.

According to the previous quota calculation, the German population can be seen as non E-car users and thus both quota groups can be seen as non-E-car users. According to the calculation, 49 male respondents have to be surveyed and 51 female respondents have to be selected to have a representative sample of the German population (table 2).

<table>
<thead>
<tr>
<th>Non-User</th>
<th>Population</th>
<th>Percentage</th>
<th>Quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 18, male</td>
<td>32.377</td>
<td>48.56%</td>
<td>48.56=49</td>
</tr>
<tr>
<td>Over female</td>
<td>34.293</td>
<td>51.44%</td>
<td>51.44=51</td>
</tr>
<tr>
<td>66.670</td>
<td>100%</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Male and female quota

3.9 Quantitative data collection and sampling tool

There are two ways of data collection. On the one side, the qualitative data collection is concerned with generating non-numerical data through interviews. On the other side, the quantitative data collection generates numerical data through questionnaires and is suitable if a high amount of data from a large sample group has to be collected as in this investigation. As a sampling tool, a quantitative self-completion, paper-based survey will be conducted to analyse the consumer’s perception in relation to German E-car brands as well as the consumer behaviour. To ensure the response of one hundred people and having influence on the quota distribution, the survey will be handed out at an electronic car exhibition (appendix B) (Elektroautonews, no date). The self-completion questionnaires will be used to collect the primary data on a location where the possibility to meet people who have the motivation to answer the questionnaire (Hair, et al., 2007, p. 203). The data of the completed questionnaires will then be transferred to the survey software ‘surveymonkey’, which will automatically transform the results into statistical charts and reports. The service will be used for one month, which costs 25 Euro (surveymonkey, 2013). It is the responsibility of the researcher to ensure the validation of the questionnaire (Hair, et al., 2007, p. 203).

3.10 Data Analysing

For analysing the generated data of the survey, categorical data will be used, which values cannot be measured numerically but can be classified into categories. Partly the data can be classified into more than two sets, which can be ranked. Descriptive data count the number of occurrences in each category of a variable to identify, which category has the most cases and allocation of the cases (Saunders, Lewis, Thornwill, 2007, p. 408). For valuable analyses the software tool surveymonkey and excel were used, visualizing the research findings in form of diagrams and tables to identify interdependences and compare proportions, trends and conjunctions. During the analyses process, it will be focused on the data distribution, specific values and highest or lowest values (Saunders, Lewis, Thornwill, 2007, pp. 423).

3.11 Methodology Plan

3.11.1 Limitations

Through handing out a self-administered questionnaire, a quantitative analysis is possible through collecting the answers of each person who have to respond to the same set of questions. The researcher
has to ensure that he creates a specific and clear questionnaire, which will answer the research question. The researcher has to be clear about not having the possibility of going back to the respondents because the survey is anonymous and conducted just once. If the researcher hands out the questionnaires in person, he can be sure that he reaches the right respondents who will complete the questionnaire personally without any external influences and, therefore, the generation of reliable data is ensured (Saunders, Lewis, Thornwill, 2007, p. 361). The researcher can also ask if the respondent knows what an E-car is or if he knows the brand BMWi, which is a premise to answer the questionnaire. The researcher can explain everything the respondent has to know to answer the questionnaire. There is, for example, the possibility that a significantly higher number of male respondents than female respondents will visit the exhibition where the survey will be conducted because of the technical topic. This would then be difficult because the required percentage have to complete the questionnaire to achieve the quota (Hewson et al. 2003). The finding results are expected to answer the hypothesized relationships and provide value for the existing theory. If the hypotheses cannot be proved, the researcher has to go back to theory to reformulate the hypotheses, which also needs to be considered in the time planning (Hair, et al., 2007, p. 42). The researcher aims to analyse the consumer behaviour of the German population in relation to E-cars. Therefore, it is reasonable to survey only German consumers. So the questionnaire will be provided in German language to avoid language issues (Saunders, Lewis, Thornwill, 2007, pp. 361). Within this data collection process, there can be differentiation between three variables: opinion, behaviour and attribute. The stage of ‘opinion’ is about the thinking and feeling of a person whereby in contrast the stages of ‘behaviour’ and ‘attitude’ are about what the respondent does and how he is defined through age, gender and marital status (Saunders, Lewis, Thornwill, 2007, p. 361). The personal attitude towards the research topic can lead to personal bias. The researcher is well informed about E-cars and he could erroneously assume that the respondent is also well informed about the product and thus provides a lack of information in the survey. Moreover, personal beliefs, values and prejudices can lead to wrong assumptions, which can subconsciously lead to a non-objective research. The researcher has to obtain an objective perspective at any time. This means that he has to avoid selectivity during the analysing process to change the results according to his own expectations (Saunders, Lewis, Thornwill, 2007, p. 187).

3.11.2 Ethical Implications

During the research process where personal data of individuals are demanded, data are stored and deducted to answer a specific research question. It is highly important to be ethically and morally correct throughout the entire research process. In the context of research, ethics is defined as appropriate behaviour with the people, who come in touch with the investigation or are affected by it (Saunders, Lewis, Thornwill, 2007, p. 183). Cooper and Schindler define ethics as norms and standards, which influence the moral dimension in the behaviour (Cooper and Schindler, 2008, p. 195). In the field of business and management research, there are two dominant philosophical standpoints. The first one is the deontology view, which argues that the achievement of generating new research knowledge should never be reached by deception. The second one is the teleological view, which weighs the benefits of research findings and the costs of unethical behaviour to reach this result against each other. This approach ends mostly in an ethical dilemma because it is difficult to justify a disadvantage for a group to reach an advantage for the other group. To summarize, deviation should be avoided and in case it has to be used during the research process, it has to be justified extremely carefully and with a good reason. Consider the risk of distortion: under time pressure it can happen that a respondent does not even read through the questions and just ticks randomly; it can also not be ensured how honestly the respondent answers the questionnaires (Saunders, Lewis, Thornwill, 2007, p. 188). There are different ethical issues, which have to be considered. If the researcher asks visitors of the exhibition to participate in the survey, the privacy of the participants has to be ensured and the respondents are to be informed that the
participation is voluntary with the right to withdrawal at any time. A respectful treatment of the respondent is important to avoid pressure, stress discomfort, pain or harm. If the visitor of the exhibition wants to participate, he will be asked to sign participation consent and will be informed how many minutes the survey will take (appendix A) (Saunders, Lewis, Thornwill, 2007, p. 170). While conducting a scientific survey, the respondent has to be informed for what the generated data will be used and assured that the data will not be used for any other purposes according to moral principles of business research. All data has to be tested confidentially and kept anonymous. The way in which the researcher collects and stores data of individuals has to be aligned with the data protection legislation, which is in detail discussed in the appendix D (Saunders, Lewis, Thornwill, 2007, p. 183).

3.11.3 Time Allocation

The cross-sectional approach is chosen for the research method that is analysing a particular phenomenon at a particular time, starting with the master thesis officially on the 1st of March 2014 till the 23rd of May 2014 (Saunders, Lewis, Thornwill, 2007, p. 148). It has to be mentioned that a previous proposal about the master thesis was generated so the researcher had the possibility to get a deeper insight into the topic and had time to research for secondary data. Because of the 12 weeks time constraint, the investigation has to be planned precisely and be realistic to avoid time management problems. After the first meeting with the supervisor on the 13th of March 2014, a time framework was generated.

Table 3: Time Allocation Overview

<table>
<thead>
<tr>
<th>Activity</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching and reading for secondary data</td>
<td>15th July 2013</td>
<td>10th March 2014</td>
</tr>
<tr>
<td>Writing the Literature Review</td>
<td>13th March 2014</td>
<td>01th April 2014</td>
</tr>
<tr>
<td>Writing the Methodology part and create the questionnaire</td>
<td>01th April 2014</td>
<td>18th April 2014</td>
</tr>
<tr>
<td>Conducting the survey at the electronic car exhibition</td>
<td>18th of April 2014</td>
<td>1th of May 2014</td>
</tr>
<tr>
<td>Analysing primary data</td>
<td>1th of May 2014</td>
<td>5th of May 2014</td>
</tr>
<tr>
<td>Writing the Data Analysis part and Recommendations</td>
<td>5th of May 2014</td>
<td>12th of May 2014</td>
</tr>
<tr>
<td>Writing the conclusion and justification part</td>
<td>12th of May 2014</td>
<td>16th of May 2014</td>
</tr>
<tr>
<td>Time Puffer for unexpected occurrences and revision on drafts</td>
<td>16th of April 2014</td>
<td>20th of May 2014</td>
</tr>
<tr>
<td>Printing and binding and handing in</td>
<td>20th of April 2014</td>
<td>23th of May 2014</td>
</tr>
</tbody>
</table>

3.12 Conclusion

To generate quantitative data to prove the four hypotheses of this investigation, a quantitative, self-conducting, paper-based questionnaire is proposed. The questionnaire will be divided into five parts: the part of sample profiling and four parts to test the hypotheses. Each hypothesis is tested with indirect variables and these indirect variables will be tested through several question types.
4. Data Analysis

4.1 Introduction

The quantitative data, which will be analysed in the following chapter, were generated from a questionnaire made up of 25 questions in total, taking five minutes to fulfil on an average, including a marketing movie of the BMWi3 with the last question. In general, it wants to investigate how the brand BMWi3 is perceived from a consumer’s point of view. To analyse the perception in this investigation, it will be focused on the product BMWi3, the average E-car of the BMWi, and not on the sports E-car BMWi8. Both E-cars together make up the brand BMWi, an umbrella brand of BMW (BMW, no date). Consumer’s perceptions and associations with the BMWi3 will be considered as representative for the whole brand BMWi.

4.2 Data Analysis of the Sample

The first part is composed of seven questions to give background information of the sample and to profile a potential E-car consumer.

Question 1: What gender are you?

One hundred respondents were selected randomly. As the figure 9 shows, the sample is selected according to the calculated quota, being representative of the entire German population. According to the calculated quota, 49 male and 51 female respondents were selected and asked to participate in the survey. One respondent skipped the question.

Figure 9: Gender of the Sample

Question 2: How old are you?

From the sampled population, the highest number (36.36%) is between 36 and 45 years old; 20.20% are 26-35 years old and 28.28% are 46-55 years old (figure 10). One respondent skipped the question.
Question 3: What is your highest education level?

50.51% of the sample has a University degree. 24.24% of the sampled people have a High-School diploma and 20.20% of the respondents have a Masters Degree (figure 11). From these results it can be deduced that the most of the respondents are very well educated. One respondent skipped the question.
Question 4: What is your net monthly net income?

The sample population was asked about their net monthly income. 40% of the respondents declared that they have a net income of 1.100€-2.000€ a month. Almost a third of the respondents (28%) earn 2.100€-2.500€ a month (figure 12). The E-car BMWi3 costs about 34.950 € in Germany. To buy an E-car like the BMWi3, a potential consumer has to save 2.913€ a month for one year. In 5 years, the consumer has to save 583€ a month to buy this E-car. In comparison to the evaluated net monthly income of the sample, the E-car seems to be a very high investment, which can be a reason that 94% of the respondents do not own an E-car or are recently planning to buy one figure 13. 91% of the sample could not even imagine considering an E-car as the next future car purchase. Only 9% of the questioned population could see an E-car as an option as a future car compared to 6% of the respondents who do not own or want to buy an E-car in the near future. This means that 3% of the sample does not want to buy an E-car in the near future but they may do it later. One respondent skipped the question.

Figure 12: Net Income of the Sample
Question 5: Do you own an E-car or do you want to buy an E-car presently?

Figure 13: Present Demand of E-cars

<table>
<thead>
<tr>
<th>Yes</th>
<th>6.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>94.00%</td>
</tr>
</tbody>
</table>

Question 6: When you buy your next car, is an E-car an option?

Figure 14: Future Demand of E-cars

<table>
<thead>
<tr>
<th>Yes</th>
<th>9.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>91.00%</td>
</tr>
</tbody>
</table>

Question 7: If you would NOT buy an E-car, please write down the most important reason.

From 91% of the respondents, who cannot even imagine considering an E-car as an option for the next car-purchase, were asked in an open question to write down the most important reason for a non-purchase in the future. Most people (37%) do not want to buy an E-car because it is too expensive. The second named reason (21%) is the dislike of the car design and 17% of the sample has doubts if they are independent enough to buy an E-car (figure 15).
To resume the research findings of the previous questions, which should analyse the consumer behaviour of the sample, most respondents are between 25 and 55 and are very well-educated. The main share of the sampled population has a net monthly income of 1.110€-2.500€. 94% of the respondents do not own an E-car or are not recently planning to buy one and 91% of the sample could also not even imagine considering an E-car for the next car purchase. The most often named reason for not buying an E-car is the high price and the design and doubts if the E-car would be sufficient in relation to reach. Consequently it could be proved that the majority of the German population do not buy an E-car and is also not planning to buy one in the future. This identified problem justifies again the reason for this investigation, which is to find out about the reasons and how this problem can be solved in relation to marketing communication activities in the German automobile industry.

4.3 Data Analysis for Hypothesis 1

The consumer’s perception of the brand BMWi is low.

To test these hypotheses the independent variables were used:

- Product information
- Brand personality
- Brand associations

4.3.1 Product Information

Question 8: What do you think is the costs of an average mid-range E-car like the BMWi3?

34% of the respondents estimate the price of the E-car BMWi3 in Germany to be about 41.000€ to 45.000€. This price range is 17% to 29% more than the real price of the E-car BMWi3 in Germany with 34.950€. 30% of the sample estimates the BMWi3 to be cheap and 45% estimate the BMWi3 to be too expensive. Just 24% of the sample ranked the E-car BMWi3 in the right price category (figure 16).
cannot be assessed if the answer was given because of prior knowledge or sheer coincidence. But it can be determined that 76% of the respondents gave the wrong answer. Consequently, more than half of the respondents do not know the real price of the BMWi3.

Figure 16: Estimated costs of the BMWi3

Question 9: How fast do you think can the BMWi3 be charged?

The answers of the question, ‘How fast can a BMWi3 be charged?’ is relatively consistent. The correct answer of this question is that the normal charging process with an average socket takes 6-7 hours, which was answered right by 17% of the sample (BMW, no date). 16% of the respondents think that the E-car BMWi3 needs 8-9 hours to be charged which is 2-3 hours longer than it takes in reality. The majority of the sample (68%) thinks that the charging process takes longer than 6-7 hours and 16% think that the charging process takes less than 6-7 hours. To summarise 17% of the sample answered the question right and 84% answered the question wrong (figure 17).
Question 10: What do you think is the reach of the BMWi3 with a fully charged battery?

For this question 98 answers were given. The right answer to this question ‘What is the reach of the BMWi3 with a fully charged battery?’ is: 160km (BMW, no date). 28.57% of the sample answered correctly (figure 18). More than the half of the sample (60%) thinks that the reach is 51-150km, which is an underestimation. Just 8% of the respondents think that the reach is higher than in reality. Consequently, it can be assessed that the reach of the BMWi3 is estimated significantly low than it is in reality.
Question 11: What acceleration does the BMWi3 have in 3.7 seconds?

38% of the respondents guess that the acceleration of the BMWi3 is about 0-50km/h, 25% think the E-car has an acceleration of 0-40 km/h and 19% decided for 0-60km/h, which is the correct answer for this question (figure 19). In total comparison, 72% think the E-car BMWi3 has a lower acceleration and 9% think that the BMWi3 has a faster acceleration. All in all, the BMWi3 is perceived as lower performer than it is in reality. Acceleration is an important technical data about a car, which indicates the technical power of the engine.
Summarizing the research findings in relation to product information about the BMWi3, more than half of the respondents do not know the real price of the BMWi3 and 69% of the questioned population could not give the correct answer for the question ‘How fast can an BMWi3 be charged?’. Besides, it can be assessed that the reach of the BMWi3 is estimated significantly lower than it is in reality. Also, the acceleration of the E-car is underestimated by a significant majority of the sample population. All in all, it can be assessed that the potential consumer is not sufficiently informed about the E-car. According to the Hierarchy of Effects model the consumer collects information to create a positive association and assess if the product can satisfy its needs on the first stage of conative processes. The second level of affective process and conative process will follow. Each stage must be fulfilled before the consumer can proceed with the next step (Lavidge, Steiner, 1961, pp. 137). The model has been regarded as a measurement tool for the effectiveness of advertising (Hoang Sinh, 2013, p. 92). Consequently, the lack of product information is a proof of the ineffective advertising process of the BMW.

4.3.2 Brand Personality

Question 12: Which product attributes do you associate with the BMWi3?

It was asked, which kind of product features the potential consumer associates with the BMWi3. Since the respondent could choose several answers, they are expressed in absolute numbers. Fourteen product features were listed from which six attributes meet the brand image of BMWi3 and seven attributes, which the BMW wants to avoid, are associated with the BMWi3. In chapter ‘2.3.2.5 Communicated Brand Image in the Marketing Campaign of the BMWi’, it was discussed how the BMW wants the new E-car brand BMWi to be positioned in the minds of potential consumers. The new premium E-car BMWi3 has to fulfil successfully the gap between a modern premium car and a new environmental-friendly concept. The German car manufacturer wants to combine traditional brand values of BMW like dynamism, design and driving passion with the new generation of E-cars. Therefore, product attributes like environmental-friendly, modern, dynamism, unique design should be associated with the brand BMWi. Negative clichés like E-cars are just for people supporting the eco-movement or E-cars don’t have the same power like engine cars has to be avoided. The figures 21 and 22 show how much the
consumers associate the brand with the planned (positive) and unplanned (negative) product attributes. The most oft-named product attributes, which were associated with the BMWi3 are: environmental-friendly (75 votes), modern (48 votes) and practical (33 votes). The minority voted for positive product attributes like sporty, easy to handle, dynamic and stylish. The negative product attributes, like eco (73 votes), not stylish (25 votes) and old-fashioned (25 votes) were associated with the BMWi3.

Figure 20: Associated Product Attributes with the BMWi3
4.3.3 Product Associations

Question 13: If you consider the BMWi3 as a status symbol, which attribute do you associate the most with it?

According to the Oxford dictionary, a status symbol indicates a ‘person’s wealth or high social or professional status’ (Oxford University Press, no date). Half of the respondents (50.51%) ranked the BMWi3 suitable for a person who has average success in life. 26.26% of the sample ranked the E-car as ‘understatement’ which describes a person who does not want to show his success in public (figure 23). All in all, the E-car is not perceived as a car, which indicates a status symbol in society. One respondent skipped the question.
Question 14: Which lifestyle do you associate with the BMWi3?

John Grant, who wrote ‘The Green Marketing Manifesto’, explained the negative image of a brand, which is linked to the word ‘eco’ or ‘green’. It is not a simple image; it is more a factual and sceptical evaluation of a brand or a product (Arnold, 2009, pp.70). An ‘eco’ product is linked with the consumer class, which is called LOHAS, which is explained in the appendix C. Almost half of the respondents (53%) would rank the BMWi3 as an ‘Eco-car’. This does not go with the aim of the BMW, which is to make the consumer perceive that the E-car is normal like every other car. 18% of the sampled population perceives the E-car as a trend. A trend becomes successful in a special time frame, which is also not the goal of the BMW. The company wants to implement the E-car on a long-term basis as an everyday car of the future. But, the BMWi3 is not perceived as an everyday car by the sample. Almost one-third (29%) of the respondents categorized the BMWi3 as a family car (figure 24).
Figure 24: Associated Lifestyle with the BMWi3

Question 15: With which gender would you associate the BMWi3?

According to the majority, potential E-car consumers perceived the BMWi3 appropriate for women (63%) instead of men (19%), visualized in figure 25.

Figure 25: Associated Gender with the BMWi3
Question 16: Which age would you associate with the BMWi3?

More than half of the sample (62%) perceived the BMWi3 as an E-car for adults; 21% ranked the E-car for young adults and 17% ranked the BMWi3 as a car for pensioners (figure 26). It was found that the BMW’s marketing campaign is already targeted to adults and younger people with a modern and trendy design.

Figure 26: Associated Consumer Age with the BMWi3

![Graph showing consumer age distribution with percentages.]

Question 17: If the BMWi3 would be a person, with which characteristics would you associate this person?

Several answers could be selected for this question. Eleven different characteristics, which could be divided into positive and negative characteristics, were used to investigate which perceived brand personality the brand BMWi has. The BMW aims that its E-car brand be perceived and described with a positive brand personality. The traditional engine car brand BMW symbolizes dynamism, unique design and driving passion, which has to be combined with the new electronic car. The BMW’s main goal is to create a feeling of driving fun, curiosity and a feeling of familiarization with the new E-car (Steinkirchner, 2013). Most of all, the brand is perceived as sympathetic (71 votes), honest (57 votes), funny (55 votes) creative (41 votes) and impulsive (34 votes). Negative characteristics like dishonesty, eccentric and unsympathetic were almost not voted (figure 27).
To come to a conclusion in relation to the product associations, the BMWi3 is perceived as an E-car for
an average successful person or for someone whose success is understated. Therefore, it is not
categorized as status symbol. Almost half of the respondents ranked the BMWi3 as an ‘Eco-car’, which
does not aligned with the BMW’s aim that the consumer perceives the E-car as normal. Moreover, the
E-car is categorized as a trend-car and as a family car but not as an everyday car like it wants to be
achieved by the BMW. It can be summarized that the BMW achieved on the one side a positive brand
image of the BMWi3 with the attributes they wanted to communicate. But, on the other side, the people
also associate some negative attributes with the E-car, which indicate that the BMWi3 does not have a
modern and sufficiently good-looking design. For example, the word ‘eco’ is a more negative word in
the German society and, therefore, should not be associated with the BMWi3. The sample also
associates the brand more with the female gender (63%) instead of the male gender (19%). Moreover,
the BMWi3 is associated with young adults and adults. For the majority, the brand is associated with
characteristics like sympathy, honesty, funny, creativity and impulsive. Consequently, the brand is
perceived as positive.

The three indirect variables were tested and it can be assessed that the degree of product information is
too low; indeed the brand personality is positive on the one side but on the other side too many negative
characteristics are also associated with the E-car. In contrast, the brand association is described with
positive attributes. In consequence, two of three variables could not be confirmed and, therefore, the
consumer’s perception of the brand BMWi has to be improved and the hypotheses 1 can thus be
confirmed.
4.3 Data Analysis for Hypothesis 2

The consumer’s attitude of German E-car brand manufacturers is positive.

To test the hypotheses the independent variables were used:

- Perceived instrumentality
- Value of the instrumentality for the consumer

These two variables measure the consumer’s brand attitude of BMWi according to the Rosenberg model.

Question 18: Which added value of the BMWi3 do you perceive?

The sample was asked which added value of the BMWi3 is perceived, choosing among three answers and ranking these according to personal importance. All listed instrumentalities represent added value to the E-car BMWi3. It has to be investigated that from these instrumentalities, which were selected and how important were these for the sample. Three hundred votes are widespread between the different answer possibilities. Considering the first factor of the Rosenberg model, perceived value adding instrumentalities, all the votes show almost a uniform distribution without clear tendencies (table 4). Consequently, individual needs of instrumentality are widespread and different from person to person. This survey shows no clear result, which instrumentality adds the most value to a distinct majority. The second factor of the Rosenberg model is the perceived instrumentality and the degree of importance for the respondents, what is visualized in figures 28 to 31. The more instrumentalities can be associated with the BMWi3, the better for the brand because then the brand is perceived as value adding in several categories. The seven possible answers were all nominated with almost no votes for ‘not important’. Almost all instrumentalities have the most votes in the category ‘very important’ and ‘indispensable’. Consequently, if someone selected an instrumentality, it was at the same time very important and indispensable for the respondent. Interesting for the BMW is the category ‘indispensable’: the sample voted the most for ‘known brand’ (20%) and ‘high degree of safety’ (18%) (figure 32). All in all, the brand attitude of BMWi3 measured by the Rosenberg model is in general positive and value adding in all categories. Therefore, the hypothesis 2 ‘The consumer’s attitude of German E-car brand manufacturers is positive’, can be confirmed.
Table 4: Perceived added Value of the BMWi3

<table>
<thead>
<tr>
<th>Spalte1</th>
<th>Spalte2</th>
<th>Spalte3</th>
<th>Spalte4</th>
<th>Spalte5</th>
<th>Spalte6</th>
<th>Spalte7</th>
<th>total in absolute numbers</th>
</tr>
</thead>
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<td>not important</td>
<td>important</td>
<td>very important</td>
<td>indispensable</td>
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<td>12</td>
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<td>9</td>
<td>11</td>
<td>17</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>less environmental damage from exhaust</td>
<td>3</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>no fuel costs</td>
<td>2</td>
<td>6</td>
<td>11</td>
<td>10</td>
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<td>high degree of quality</td>
<td>2</td>
<td>12</td>
<td>21</td>
<td>10</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>high comfort</td>
<td>2</td>
<td>6</td>
<td>16</td>
<td>8</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>good price/quality ratio</td>
<td>1</td>
<td>7</td>
<td>21</td>
<td>7</td>
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<td>6</td>
<td>12</td>
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<td>120</td>
<td>91</td>
<td>300</td>
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</table>
Figure 28: Perceived added value of the BMWi3 in total

**Total number of votes**
- Known brand
- less environmental damage from exhaust
- high degree of quality
- good price/quality ratio
- good acceleration

**Figure 29: Perceived added value of the BMWi3, which is not important**

**Not Important**
- Known brand
- less environmental damage from exhaust
- high degree of quality
- good price/quality ratio
- good acceleration

Figure 30: Perceived added value of the BMWi3, which is important

**Important**

- Known brand
- less environmental damage from exhaust
- high degree of quality
- good price/quality ratio
- good acceleration

![Pie chart](chart1.png)

Figure 31: Perceived added value of the BMWi3, which is very important

**Very Important**

- Known brand
- less environmental damage from exhaust
- high degree of quality
- good price/quality ratio
- good acceleration

![Pie chart](chart2.png)
4.4 Data Analysis for Hypothesis 3

The marketing activities of the BMWi brand are not trustworthy enough.

To test these hypotheses the independent variables were used:

- Purpose of the BMWi marketing campaign
- Trust in the BMW expertise

According to marketing expert Frank Dophreide, the German E-car industry has to fulfil the gap between a traditional car manufacturer brand and an eco-product brand, which are in contrast to each other. The traditional car brand is more likely seen as being not environmental-friendly and as specialized in racing engines; in contrast, a green E-car brand is more likely to be perceived as specialized in environmental friendly engines and less focused on speed and design (Steinkirchner, 2013). Therefore, it will be investigated if an E-car brand, like BMWi, should be marked under the umbrella of a traditional car brand.
Question 19: Do you have trust in the expertise of BMW, a traditional engine car manufacturer, in producing E-cars?

Several questions were designed to find out how trustworthy the sample perceives the brand BMWi. The sample was asked if they trust in the expertise of BMW, in producing E-cars although its expertise is actually in producing traditional engine cars. The majority (69.70%) stated that they do not trust the brand and in contrast 30.30% of the people say they trusted the brand. One respondent skipped the question (figure 33).

Figure 33: Trusting the car manufacturer BMW

![Bar chart showing 30.30% Yes, 69.70% No, 0% Perhaps]

Question 20: If you consider the images of the marketing campaign of the BMWi3 below, do you believe that the BMW is honestly interested in reducing CO2 emissions to be environmental friendly?

The majority (73.74%) said that they do not believe that the brand BMWi is honestly interested in reducing CO2 emissions to be environmental friendly in relation to the marketing campaign (figure 34). Almost a quarter of the sample (24.24%) believed in the honest marketing story of BMWi and 2.02% of the people were not sure about it. One respondent skipped the answer.

Figure 34: Believe in Honesty of the BMW

![Bar chart showing 24.24% Yes, 73.74% No, 2.02% Perhaps]
Question 21: Do you understand the marketing message of BMWi?

In the next question, the sample was asked if they understood the marketing message. 47.47% answered the question with ‘yes’ and 37.37% felt they were not sure about it. The two categories ‘I feel confused’ and ‘I don’t get the message’ can be considered as misunderstanding the question, which made up a total of 15.15% of the respondents (figure 35).

Figure 35: Understanding the Marketing Message of the BMW

Question 22: Do you think the BMWi3 will be successfully sold in the future?

62.24% of the sample thought that the BMWi3 will not be successfully sold in the future, 33.67% thought the BMWi3 will be successfully sold and 4.08% were not sure about it (figure 36). One respondent skipped the answer.

Figure 36: Believe in the Success of the BMWi3
To sum up, the majority does not have trust in the expertise of BMWi in producing E-cars. This means the gap between a traditional car engine producer and an E-car producer is not fulfilled successfully. The majority also think that the BMW is not honest about how to target the reduction of the CO2 emissions for being environmental friendly. The marketing campaign is not convincing enough. What is alarming is that just half of the respondents understood the BMW’s marketing message clearly; the other half was not sure about it. They were confused or didn’t get the message at all.

4.5 Data analysis for Hypothesis 4

The brand equity of BMWi is not strong enough.

The brand equity of BMWi will be measured by the ValueDrivers model. The model analyses how meaningful a brand experience is for a widespread target audience and the degree of differentiation of a brand from its competitors. Differentiation can be achieved through intrinsic or extrinsic variables, which influence consumer behaviour (Hollis, Pincott, 2013).

The hypothesis will be tested by independent variables:

- Consumer’s identification with the brand
- Intrinsic emotion building in relation to associations
- Extrinsic emotion building during brand experience or for product design

Question 23: Can you identify with the brand BMWi?

Almost half of the sample (55%) could identify a little with the brand BMWi; in contrast, 36% could not identify with the E-car brand. Only 9% could identify totally with the brand BMWi (figure 37).

Figure 37: Identification with the brand BMWi
Question 24: Which feeling do you have when you think of the brand BMWi?

To test the intrinsic emotion building in relation to associations of the sample, the respondents were asked to select several listed emotions associated with the BMWi3. Three hundred thirty-two votes were given which means on an average one respondent gave three answers. Seven negative emotions were listed which should not be associated with the BMWi3 and there were six positive emotions, which should be linked with the BMWi3. Considering figure 39, the black-marked shares are positive feelings, which form together the majority. The positive emotions were: fun (19%), liking (18%), interest (15%), excitement (8%), trustworthiness (5%) and curiosity (9%). Negative emotions, which were named in relation to the BMWi3 were: uncertainty (10%), unfamiliarity (10%), and lack of interest (4%). Negative emotions, which got almost no votes were: dishonesty, disliking and confusion.

Figure 38: Associated feelings with the brand BMWi
Figure 39: Associated Intrinsic Emotions with the brand BMWi
Question 25: Watching the BMWi marketing movie, what kind of emotions do you feel?

To test the extrinsic emotion building in relation to associations with the BMWi3, the same list of emotions as in the previous question 24 were presented to the sample. It was to be evaluated if the respondents changed feelings after being confronted with the marketing movie of the BMWi3, which can be accessed at the official BMW homepage (http://www.bmw.com/com/en/newvehicles/i/i3/2013/showroom/images_and_videos.html#c=1&i=1).

The BMW could achieve 58% of positive emotions (black-marked in figure 41), which were linked with the E-car, but 42% of the extrinsic feeling were negative. The negative feelings, which got most votes were: uncertainty (12%), curiosity (11%) and unfamiliarity (9%). Even after the marketing movie, the E-car was still perceived as unfamiliar, which could be related to the totally new product and which had to be presented to the sample. Considering figure 42, it can be evaluated if the feeling of the respondents had changed after watching the BMWi3 marketing movie. The respondents were even more uncertain about the E-car after watching the movie and more curious. At the same time he gained an emotion of excitement and more fun.

Figure 40: Associated Emotions with the brand BMWi when watching the Marketing Movie
Figure 41: Associated Extrinsic Emotions with the brand BMWi
To conclude, the BMW has to think seriously about the fact that 36% of the sample could not identify with the brand. Negative intrinsic feelings like uncertainty, unfamiliarity, curiosity and lack of interest in relation to the BMWi3 should be avoided. The increased uncertainty and curiosity as well as the dwindling interest of the respondents after watching the marketing movie, were important indicators for the BMW as to how the company’s marketing movie has to be improved. The high percentage of negative feelings in the intrinsic and extrinsic emotion building leads to the assumption that a strong differentiation of the brand BMWi cannot be achieved. The lack of identification and differentiation, the two important ValueDrivers of the brand equity, according to the ValueDrivers model, lead to the assumption that the brand equity of BMWi is not strong enough to positively influence the purchase behaviour. The hypothesis that the brand equity of BMWi is not strong enough can thus be confirmed.

4.6 Recommendations

The following paragraph is divided in the segment of ‘Future academic study’ and the segment of ‘Recommendations for industry’. The recommendations are based on the research findings and the knowledge of the discussed literature review.

4.6.1 Future Academic Study

Academic papers about marketing strategy for electronic cars in the German automobile sector are surprisingly rare. Doing research on this field showed that there are some studies and market research papers to analyse if the E-car can be successfully be implemented or not, providing future scenarios, which were discussed in the literature review.

To fulfil a research gap, this academic investigation analyses the reasons behind a proven low consumer demand for E-cars in Germany and consumer behaviour after the actual global marketing campaign of BMW for the BMWi E-car series. The reasons for low demand were investigated in relation to the
consumer’s perception of and attitude towards the BMWi brand in an attempt to gain valuable customer knowledge. At the end of the investigation, the following four hypotheses could be confirmed and will be explained in detail in section ‘4.6.2. Recommendations for the industry’:

Hypothesis 1: The customer’s perception of the brand BMWi is low.

Hypothesis 2: The customer’s attitude of German E-car brand manufacturers is positive.

Hypothesis 3: The marketing activities of the BMWi brand are not trustworthy enough.

Hypothesis 4: The brand equity of BMWi is not strong enough.

This investigation provides an overview of how to improve marketing activities in relation to green branding theory. But more research is needed in this field. From the perspective of customer relationship management based on customer knowledge, valuable customer interaction can be generated, which leads to customer satisfaction and thereon to customer value (figure 43). In the fields of customer interaction, customer value and customer satisfaction, further research is needed to provide a deeper insight into different perspectives in this investigation on how to optimize marketing strategies for electronic cars. In order to generate valuable customer knowledge, the data of potential customers will be selected. Then, an average customer profile will be generated; based on this, different customer segments can be identified. On the level of customer interaction, customer care relationship programmes and integrated channel management systems were implemented while not profitable customer segments were rejected. Through the increased effectiveness of marketing, customer loyalty and customer acquisition increase, thereby generating customer value. If the next level of customer satisfaction is reached, high profit margins are ensured (Zumstein, 2005, p. 11).
4.6.2 Recommendations for the Industry

The result of the research findings in the field of marketing strategies for E-car will also bring value for the German automotive sector. Marketing specialists, product and brand managers and market researchers working in the German automotive sector can use the new approach to adapt its targeted green branded strategy successfully.

4.6.2.1 Recommendations for the Consumer Behaviour

Regarding consumer behaviour it could be ascertained that over 90% of the sample do not own an E-car, are not recently planning to buy one and are also not willing to consider an E-car as an option in relation to the next car purchase. Reasons for this were the high price, the design and the reach of the E-car. The research findings of this investigation go with the opinion of some experts, who are sceptical if the E-car can be implemented properly in the German automobile market. Prof. Dr. Hans-Peter Lenz said: ‘The combustion engine is more in progress than the battery in relation to the power density’ (Bayme vbm, 2012, p. 14). The reasons for the high price of E-cars are discussed in detail in the appendix G. If these reasons will be communicated through marketing activities, the willingness to buy an E-car can be influenced positively. It is presumed that the design of the BMW i3 (appendix E) is too different from the normal engine cars and thus the E-car manufacturer has to improve the design. Concerns about the reach of the E-car can be counteracted with marketing campaigns, which communicate the fact that the German government is planning to make high investments in the standardization of the infrastructure for the E-car charging process. With more charging possibilities, concerns about the reach can be minimized. Government action can strengthen the trust in the future implementation of the E-car (Backhaus et al. 2011, pp.14). The marketing expert, Björn Sprung, director of the international Marketing agency “Nielsen”, underlines that the marketing strategy of German automobile companies need to focus more on sales arguments, which are important for the customer. If the marketing will be targeted in relation to customer needs the demand for E-cars can be accelerated (Study CarIT, 2012). The most communicated marketing topic in relation to E-cars is at this stage the environment. But the consumer needs in first line to be informed about important technological aspects to reduce uncertainty and a lack of information in relation to E-cars (Study CarIT, 2012).
4.6.2.2 Recommendations for Hypothesis 1

According to the previous findings, the BMWi3 has an image issue. The E-car is not perceived as a status symbol linked with a successful person; rather, it is perceived as an eco-car, trend car and family car but not as an everyday car, which is what BMW would like to achieve. Frank Dophreide pointed out that public clichés; for example, electronic cars are only for people from the eco-movement must be prevented. Besides, BMW needs to achieve a change in the customer’s mind: Customers should begin to perceive the E-car as any other conventional car from everyday life (Steinkirchner, 2013). Furthermore, negative product attributes (figure 22) like eco (73 votes), not stylish (25 votes) and old-fashioned (25 votes) were associated with the BMWi3. Consequently, BMW could not achieve the right product and brand associations through its marketing campaign. Further studies must investigate why the E-car has a negative image. BMW is a pioneer in presenting a sports E-car model, BMWi8, which breaks the cliché of electronic cars with its sports car features. The model underlines the revolution of electronic cars. Hence, it was a good marketing strategy of BMW to present both models at the same time (Steinkirchner, 2013). BMW has to ensure that its E-car brand will be perceived and described as having a positive brand personality. The traditional engine car brand, BMW, symbolizes dynamic design and driving passion, which must now be extended to the new electronic car. Positive brand personality attributes were linked with the brand but negative associations have to be dissolved. The main goal of BMW is to create a feeling of driving fun, curiosity and familiarization with the new E-car, but this goal is yet to be fully achieved (Steinkirchner, 2013). BMW should focus its marketing communication activities on the instrumentality categories, which are perceived as very important or indispensable for the majority. For example, within the category ‘indispensable’, the sample voted the most for ‘known brand’ (20%) and ‘high degree of safety’ (18%) (figure 32). In the category ‘very important’, the maximum votes are in ‘high degree of quality’ (18%) and ‘good quality price/ratio’ (18%).

Marketing communication activities must be strengthened. A marketing campaign where successful and well-dressed people drive the BMWi3 could strengthen the brand personality. The sum of all characteristics of a brand forms its brand personality. A change in perception can lead to a brand image change (Picktin, Broderick, 2004, p. 245). According to the Hierarchy of Effects model, influencing a customer’s attitude on a cognitive level is very difficult because the purchase is of prime importance for the customer. BMW has to minimize customer dissonance by influencing customer opinions and emotions positively. During the E-car purchase, the customer will orientate on the purchase behaviour of his environment, because it is assumed that the customer has never bought an E-car before. Opinion leaders are important factors that can influence the purchase process positively. Thus, BMW has to focus on the after-purchase process of an E-car to ensure that no dissonances develop and the customer is satisfied, which will lead to word-of-mouth propaganda (Solomon, 2013, p. 253). Using these positive influence factors, the customer’s perception of the brand BMWi can be influenced positively.

4.6.2.3 Recommendations for Hypothesis 2

It could be assessed that the customer’s attitude towards the German E-car brand, BMWi, is positive. According to the hierarchy of effects model, opinions are built on a cognitive level, attitudes are built on the affective level and values are linked with the conative process (Baines, 2011, p. 81). Consequently, it can be assessed that, on the affective level, no issues were developed in relation to the purchase process. But the Hierarchy of Effects model works only if the levels were experienced one after the other, thereby leading to a purchase.
4.6.2.4 Recommendations for Hypothesis 3

It could be confirmed that the marketing activities of the BMWi brand are not sufficiently trustworthy. A successful way to create green brand perception is by communicating a negative issue and then presenting the solution offered by the brand. With regard to electronic cars, the negative effects of pollution can be presented first, followed by the solution offered by the electronic car. This approach is highly credible because it reduces reporting bias and sceptical opinions (Soloman, 2013, p. 293). In Arnold’s opinion, consumers are often unable to understand marketing messages because they are too confusing, and complicated communication raises uncertainty. Consequently, personal involvement is low and the costumer cannot develop the necessary positive feelings, which results in their not purchasing the product. Companies that communicate clear and easily understandable marketing messages can change people’s minds and, therefore, even the action of the purchase process (Arnold, 2009, p. 70). The advice of experts at OgilvyEarth is that the environmental marketing message should be honest and truthful in order to create authenticity and credibility. In order to provide truthful content, the details should be explained in the integrated marketing strategy. In particular, content generalization and excessively broad taglines should be avoided (Williams, 2010). Another possible assessment is that the majority does not trust the current expertise of BMWi to produce E-cars. BMW must communicate more on how they achieved this expertise and how innovative and qualitative the technology of the BMWi3 is. The customer needs to gain trust in BMW having collected enough expertise and in the brand’s willingness to invest enough to sell the BMWi3 to ensure long-term future success. More than half of the respondents currently think that the BMWi3 will not be sold successfully in the future. BMW could publish interviews on a regular basis to reassure the customer and ensure that he is steadily informed about the technological progress of BMW in this context. These measures could increase the trustworthiness of the BMWi brand.

4.6.2.5 Recommendations for Hypothesis 4

It could be confirmed that the brand equity of the BMWi brand is not strong enough to lead to an E-car purchase. The measured share of negative extrinsic feelings from the customer is too high. The customer needs to become familiar with the product through more information providing, test-driving experiences and, for example, the recommendations of opinion leaders of their environment. The customer needs to develop trust in the product and be informed about all the technological challenges that are unfamiliar like, for example, the charging process, the reach, the acceleration and the sound of the E-car. A high level of brand equity is reached if the consumer associates the brand with different benefits. This would result in a positive brand evaluation (Shimp, 2007, p. 39).

4.7 Conclusion

After analysing the generated data it can be summed up, that in general the attitude of consumers toward the brand BMWi is positive. But the majority of the sample does not demand an E-car currently or in future, which aligned with the researched industrial theory. Most often named reasons for the low demand were price, design and reach. It was recommended that BMW has to underline the product advantages of the BMWi3 also in comparison in the marketing campaign to reduce the number of potential consumer which are low informed about the product, which leads also to uncertainty. Additional the consumer does not trust in the brand BMWi. Adapting green branding theory, the BMW should communicate easy understandable, truth telling, factual and specific marketing messages to create authenticity and credibility.
5. Overall Conclusion

Extensive research was carried out in the fields of consumer behaviour, branding strategy and green branding strategy as well as the industrial evolution of the German E-car sector in order to ascertain how to market an electronic car successfully in the German automobile market. It could be assessed that the private demand for E-cars in Germany is growing only mildly at present. In addition, there is no academic theory on how to market a green product like the E-car through the traditional brand image of an engine car manufacturer. Therefore, the goal of this academic paper is to provide valuable knowledge for the German automobile industry and marketing experts regarding how to sell a green product without using a green brand image. Reasons for a mildly growing consumer demand of E-cars in the Germany needs to be analysed. The successful implementation of the innovative E-car is very important from political, ecological and social perspectives, because the E-car is a future mobility solution, which does not pollute the environment with greenhouse gas emissions as do engine cars.

Since BMW is a pioneer in creating integrated, global marketing campaigns for premium E-cars, the E-car brand, BMWi, was selected to analyse the current success of the marketing activities of the German E-car brand manufacturer in the German automobile market. Therefore, profile data of potential future E-car consumers was collected and four hypotheses were tested, all of which could be confirmed by analysing the research findings of the survey. The analysed data of a quantitative survey provided valuable consumer behaviour knowledge in the German automobile sector. Summarizing the results of the research findings, it could be assessed that on the one side the general customer’s attitude towards German E-car brand manufacturers is in general positive, which builds a good base for reinforcing positive perceptions regarding German E-car brands. But on the other side customer’s perception of German E-car brands is low. Therefore, German E-car brand manufacturers need to change their perceptions and with it the brand image. This can be achieved by minimizing customer dissonance after purchasing the product by influencing customer opinions and emotions positively. When a consumer buys an E-car, he is highly involved in the process; therefore, the consumer’s perception and attitude is difficult to change. It could be investigated that marketing activities of German E-car brands are not trustworthy enough to communicate credible marketing messages. With respect to green branding theory, experts advise communicating environmental claims in a factual, specific and clear manner. E-car marketers should be honest in order to create authenticity and credibility, which can be achieved by providing detailed information about the product and brand. Green brands that communicate in a transparent and clear manner are proven to achieve more value in public. The German E-car industry has to fulfil the gap between a traditional car manufacturer brand and an eco-product brand, which are in contrast to each other. The engine car brands are more likely seen as being not environmental-friendly and as specialized in racing engines; in contrast, green E-car brands are more likely to be perceived as specialized in environmental friendly engines and less focused on speed and design. The BMW marketed its new E-car series BMWi under the umbrella brand BMW, trying to profit from the halo effect, which means that a new sub brand can profit from the success of its umbrella brand. But in this case of the BMW, the halo effect was not given. It should be considered to separate the E-car brand BMWi consciously from its umbrella engine car brand BMW, to make a clear difference between the two different brand images and to increase the trust in the car manufacturers expertise. Furthermore, research findings have confirmed the hypothesis that the brand equity of a German E-car brand manufacturer is not strong enough to convince the consumer to buy an E-car. A high level of brand equity can be reached if the consumer associates the brand with different benefits, resulting in a positive brand evaluation, which can be achieved through a deeper familiarisation with the product. Familiarisation can be increased through providing more clear and specific product information, providing deep insights into new technology and the product benefits of an E-car. The consumer needs to get familiar with the product with more information, test-driving, and recommendations of opinion formers of their environment. The strategy of the BMW is to provide test-
driving with E-cars for everyone and also implement the E-car in the car-sharing project ‘Drive Now’ of BMW.

The Hierarchy of Effects model was discussed in the literature review, which describes three dimensions of the E-car purchasing process. In the first cognitive dimension, the consumer’s perception is formed from the product knowledge and brand personality. This leads to the development of needs, which the consumer wants to satisfy. Considering the research findings, the reason of the not purchase of E-car in Germany can be identified as confirmed consumer’s lack of information, not strong enough brand personality an thus a weak brand image as well as a not high enough brand equity of German E-car brands. These issues can lead to consumer’s unawareness of the product E-car and can thus the consumer cannot develop needs to buy an E-car. If this issue could be overcome the potential E-car consumer could achieve the second affective stage of the purchasing process. On this stage, the consumer develops a liking or disliking for the product based on brand attitude. The research findings confirmed that the perceived attitude of potential E-car consumers in Germany in relation to E-car brands, is positive. Therefore, the consumer can achieve the third conative stage of purchase, whereby the consumer is convinced to purchase an E-car, influenced by his personal values.

The data ascertainment of this dissertation provides highly valuable consumer knowledge, which forms the base of future successful marketing campaigns for German E-car brand manufacturer and provide valuable knowledge for marketing experts to make further investigations in this academic field. The valuable consumer behaviour knowledge makes targeted marketing activities possible, which enables the brand to reach the right potential E-car consumer with a suitable marketing message at the right time, at the right place. Additional, divergence losses can be minimized and a higher customer satisfaction can be reached. Therefore, this is a valuable contribution to a recommendation how to market E-cars successfully in the German automobile industry, supporting the political, ecological and social goals to reduce CO2 emissions.

6. Self Reflection on Own Learning and Performance

6.1. Introduction

The MBA program at the Dublin Business School provided me different learning outcomes and let me develop further academic and personal strengths. In the following paragraph will be discussed several learning outcomes and the personal added value I achieved through the studies. In the first part theoretical learning developments and how I could adapt the theory to my personal learning outcomes will be discussed. The second part will present personal achievements and the third part will examine the issues I have struggled with. The fourth part talks about my personal added values, which I achieved during the MBA programme and the fifth part presents the action plan for implementing my personal learning.

6.2. Learning Style Theories

To analyse my personal learning process the learning cycle of Kolb will be considered (figure 43) (Dixon, 1999, p. 40). The cycle of Kolb’s consist of four different stages, starting with the first stage of ‘concret experience’, what Kolb describes as experiencing the world through its senses. To learn from these experiences the occurrence needs to be reflected in the second stage of ‘reflective observation’. The process of reflection is selective and influenced by our expectations and our existing meaning. In the third step of the learning cycle named ‘abstract conceptualization’, sense and meaning were built of what we experience. The final stage of Kolb’s learning cycle of active experimentation, the meaning is tested out, which was constructed of experience. It differs from person to person at which stage of the cycle a specific proficient is developed, developing an individual leaning style preference. An individual learning process is defined, whereby knowledge is generated through the transformation of experience.
Considering my personal learning process during this academic investigation, when I started doing broad research on the field of green marketing, I read several books, papers, and articles, which inspired me in several directions. I tested several ideas and directions of topics for the dissertation. It happened that there existed already research findings on the topic I was planning to write about, which led to deeper research till I found an interesting topic, which could be perfect combined with a green marketing approach. I learned fast how to do research and how to skim articles for the right information. I learned how to use online searching tools effective and how to organize my sources and what I kept from the sources. I often did mind maps when I was struggling with some complex topics, which helped me to organize my thoughts. Also discussing with my family or friends about my master thesis topic helped me to see the goal of the master thesis and connections of sub topics more clearly. I read literature on how to write a dissertation and so I learned how to do things I never did before, what was a great achievement.

I determined that I learn the most from doing things wrong. If something did not work I reflected the failure and realized that I have to change my strategy or approach. It tested if another approach would lead to success and through this whole process my personal individual learning cycle developed. Adapting my personal learning to the learning cycle of Kolb, considering for example the action of ‘Research for literature’, I try to find literature in the way I think it might work (Active Experimentation). If I fail, I experience that it does not work in this way (Concrete experience). I reflect what I did and how I might improve the action (Reflective Observation) and if I could improve my performance, I learned something actively (Abstract conceptualisation). This learning process is an ongoing process, which can be optimized if I am aware of my learning style. I reflect my stage of learning, which can accelerate the learning process. Additional, the self-reflection will lead to a higher level of persistence and ambition to solve a problem, because it can be realized that a failure just means to learn and not abandoning.

Figure 43: Learning Cycle of Kolb

According to Honey and Mumford there exist four different learning styles. The activist learns by doing, the reflector learns by observing and thinking about occurrences, the theorist tries to understand the theories behind actions and the pragmatist experiments the theory in the future (figure 44) (Honey, Mumford, 1986, pp. 139). Considering my described personal learning process, I would categorize myself, as ‘Activist’ according to Honey and Mumford. I learn by doing things, which means experiencing something to understand theory. When I practice or interactive discuss about theory the learning effect is even higher. This learning process was for example also used when I designed a questionnaire and analysed data with excel for the first time. Knowing which type of learning style I can categorize myself means to focus on this individual strength to achieve the best possible learning effect.

6.3. Personal Achievements

The MBA program challenged me in different ways. It was my first study in English in a multicultural environment. Furthermore, it was also a new experience for me to write a lot of assignments in team or self-responsible. The learning process in multicultural teams was especially challenging, because different skills, different learning approaches and communication difficulties aggravated the teamwork. Furthermore, I had the role of the MBA class representative, being contact person for the whole MBA stream, organising events, taking part on meetings and support students if they had difficulties in school or personal.

These challenges led to personal achievements. I met a lot of people from other cultures, which led to a more open attitude for new learning approaches and cultural aspects. Furthermore, I learned how to behave in multinational groups and respect other cultures. As class representative I developed conflict solving and negotiation skills, strong speaking skills in front of people and I got used to the function as intermediary. As class representative I developed a high degree of responsibility and empathy for my environment. This function will help be later as team player in a company to understand how to support team member, how to organize a team and how to communicate in the team. I will also be prepared to express my opinion but also to listen to the advice of others. My social skills were improved significantly through this role as MBA class representative. Furthermore, I learned how to write assignments in relation to timing, structuring, researching, referencing and plagiarism, which helped me a lot to write this master thesis. Furthermore, my developed English language skills in writing and
speaking helped me because I also wrote the master thesis in English. Through interactive lessons I also developed analytical and logical skills, which helped me to analyse research findings. A great support was the one-year preparation course 'Research Analysis Skills', where I learned how to write a master thesis in detail. I decided to specialize in the field of marketing during the MBA program because of previous marketing focused bachelor study and working experience in the marketing field. In future I am planning to make career also in the marketing sector. Therefore, I visited two marketing classes, which provided me fundamental knowledge, which were deepened significantly for a long term through learning for an exam, having classes, preparing case studies and presentations. But even more important was the sum of all courses in different fields, to develop deep economic knowledge. With this preparation I feel very good prepared to start a career in the marketing sector. This dissertation about marketing strategies for E-cars in the German automobile sector will be my individual expertise. Companies in the automobile market but also manufacturer of green products could consider this dissertation as highly valuable expertise, which will increase my market value as applicant.

6.4. Problems encountered

During three months of dissertation writing some issues arose. I wrote the thesis back in my home country Germany and therefore I had no personal contact with my supervisor just via telephone and I did not have access to the Dublin Business School library. Through weekly good structured and organized phone call meetings with my supervisor I could overcome not to meet my supervisor in person. Electronic books, which were provided from the Dublin Business School, just a small amount of books was useful for writing my master thesis. So I needed to find access for a library in Germany, which also provide English sources with specific literature about green marketing and electronic cars. I needed a lot of time to find the right access and suitable sources. Furthermore, the topic of electronic is very actually and therefore it was also difficult to get deep academic papers about this new developing topic. Moreover, the master thesis topic is limited for the German automobile industry, thus I often just found sources in German, which were suitable for my master thesis topic. All in all, these not calculated factors, which influenced the time scheduling significantly, challenged me. But I calculated a time buffer for such occurrences and therefore I could overcome these issues. When challenges and issues arose during the process of master thesis writing; I developed a high level of personal persistence and ambition. Sometimes I was worried about some outcomes of the master theses and if I am doing everything the right way. The advice and support of my supervisor showed me the right direction and I grew personal as well as my portfolio of skills. I learned stopping to worry and starting to trust in my skills and that I can handle every issue, that will arise. Even when I started to analyse data of the questionnaire, what I never experienced before I trust in myself that I can handle this new situation.

6.6. Action plan for a life long Learning Process

I realized how much I learned and how far I developed during the one year of the MBA program. I reached goals I would never have dreamed of, like my over average grade point average and my developed responsibility as class representative of the MBA stream. During the master thesis writing I started doing interviews for a job in Germany and I realized how helpful all the knowledge and skills are, which I have gained from the MBA study, presenting my self in the best shape. I reached my goal, getting a job as management consultant focused on marketing in one of the ten best business consultancies worldwide. This achievement confirmed my personal development through the MBA program at the Dublin Business School. I will keep a life long learning process in different fields, because I learned that knowledge is a high valuable good, which can change your life and can never be taken from you. In my spear time I will continue to read daily news papers, academic papers in my graduated field, reading about the latest, global market developments and much more to keep the level
of personal intellectual progress. I identified my personal learning style as predominant activist learning style, thus I am planning to improve my theorist learning style by trying to understand the theories behind actions.

6.7. Conclusion

This part of self-reflection let me realize of the value of personal learning progress as base for being successfully in the future career. It is important to reflect how issues can be overcome and how much I can trust in my skills and ambition to reach an over average performance. I am aware of the progress and success of the one year MBA programme, which is direction giving for the next year as career entrant. My personal goal is to improve different learning styles to reach the best possible education my whole life long.
7. Appendices

Appendix A: The BMW overall corporate strategy ‘Number One’

Over the last years, the BMW Group has become one of the leading providers of premium series for individual mobility (BMW Group, 2013). In 2007, CEO Norbert Reithofer unveiled the new company strategy, called ‘Number One’. The BMW will be the market leader of individual mobility in the premium segment worldwide. The focus is on electronic mobility and car-sharing projects. The BMW collaborates, for example, with Sixxt, a German car-leasing provider to create new car-sharing solutions and a new navigation system. New car-leasing solutions for corporate fleet management were developed with an affiliated leasing company Alphabet. In the motorcycle segment also, the BMW offers E-scooter. Moreover, the BMW found a new start-up named ‘i Venture’ in New York collaborating with the start-up ‘My City Way’ in Munich which is responsible both for the development of intelligent mobile applications, facilitating the future mobility through information provided in real time public transport, parking lots and charging stations. The strategy is based on the concept of a full solution provider from product to an integrated service package (Schlesig, Seiwert, 2011). The BMW Group enters new market segments through strategic collaborations to secure long-term access to technologies and consumers. Moreover, the BMW is a strong brand because of its huge international manufacturing and distribution network, which ensures the premium character of the BMW products (BMW Group, 2012, p. 4-8). To satisfy the consumer needs on a long-term basis, the company tries to maintain the introduction and growth by penetrating the market with new or improved vehicle models every five years (Stealing Share, 2013). The strategy seems to be successful as the BMW pointed out in the annual report of 2013 that the demand for the new electronic car models is higher than expected (BMW Group, 2013).
Appendix B: Questionnaire

Dear Sir and Madame,

This is a survey for the master's thesis on the topic, 'A quantitative investigation for optimization of marketing strategies of E-cars in the German automobile market', conducted by Julia Dieterich, an MBA student of the Dublin Business School.

If you agree to allow your data to be used for the purpose of this market research project, we will trade your data anonymously. The data will not be used for other reasons or given to third parties. The data will be processed into meaningful information in order to represent the consumer behaviour of German inhabitants in relation to E-cars.

Please note that this survey is voluntary and participation can be withdrawn at any time.

1) I have read and understood the previous information and was given the opportunity to clarify doubts.
2) I understand that participation is voluntary and that I can withdraw from the survey at any time.
3) I agree to participate in this survey and permit my data to be used for the purpose of academic investigation.

Date, Signature (Participant)

05.05.2014, Signature (Researcher)

Thank you for participating.
1. What gender are you?
   - Male
   - Female

2. How old are you?
   - <18
   - 19-25
   - 26-35
   - 36-45
   - 46-55
   - >55

3. What is your highest education level?
   - Lower secondary education
   - High-school diploma
   - University degree
   - Masters Degree
   - Phd

4. What is your monthly net income?
   - <500 €
   - 600€-1000€
   - 1.100€-2000€
   - 2100€-2500€
   - >2500€

5. Do you own an E-car or do you want to buy a E-car presently?
   - Yes
   - No

6. When you buy your next car, is an E-car an option?
   - Yes
   - No
7. If you would NOT buy an E-car, please write down the most important reason.

8. What do you think is the cost of an average mid-range E-car like the BMWi3?
   - <10.000€
   - 11.000€-15.000€
   - 16.000€-20.000€
   - 21.000€-25.000€
   - 26.000€-30.000€
   - 31.000€-35.000€
   - 36.000€-40.000€
   - 41.000€-45.000€
   - 45.000€-50.000€
   - >50.000€

9. How fast can the BMWi3 be charged?
   - < 2 hours
   - 2-3 hours
   - 4-5 hours
   - 6-7 hours
   - 8-9 hours
   - 10-11 hours
   - 12-13 hours
   - > 13 hours

10. What do you think is the reach of the BMWi3 with a full charged battery?
    - < 50 km
    - 51-100 km
    - 101-150 km
    - 151-200 km
    - 201-250 km
    - > 250 km
11. What acceleration does the BMWi3 have in 3,7 seconds?

- [ ] from 0 to 30km/h
- [ ] from 0 to 40km/h
- [ ] from 0 to 50km/h
- [ ] from 0 to 60km/h
- [ ] from 0 to 70km/h
- [ ] from 0 to 80km/h

12. Which product attributes do you associate with the BMWi3? You can choose several answers.

- [ ] dynamic
- [ ] complicated technology
- [ ] elegant
- [ ] not stylish
- [ ] stylish
- [ ] sportiv
- [ ] slow
- [ ] practical
- [ ] environmental friendly
- [ ] not environmental friendly
- [ ] modern
- [ ] easy to handle
- [ ] old-fashioned
- [ ] eco

13. If you consider the BMWi3 as a status symbol, which attribute do you associate the most with it? Please choose one answer.

- [ ] not successful
- [ ] average successful
- [ ] very successful
- [ ] understatement
- [ ] swanky

14. Which lifestyle do you associate with the BMWi3? Please just select one suitable answer.

- [ ] Business car
- [ ] Family car
- [ ] Eco car
- [ ] Trend car
- [ ] Sports car
- [ ] Every-Day car
- [ ] Not allocatable
15. With which gender would you associate the BMWi3?

☐ Male
☐ Female
☐ can not decide

16. Which age would you associate with the BMWi3? You can select several answers.

☐ Students
☐ Young Adults
☐ Adults
☐ Pensioner
☐ Every Age

17. If the BMWi3 would be a person, with which characteristics would you associate this person? You can choose several answers.

☐ sympathetic
☐ unsympathic
☐ cheeky
☐ creative
☐ funny
☐ extrovert
☐ introvert
☐ eccentric
☐ impulsive
☐ honest
☐ dishonest

18. Which added value of the BMWi3 do you perceive? Please choose THREE value adding functions from the list and rank these according to importance for you (0 = not important, 1 = important, 2 = very important, 3 = indispensable)

<table>
<thead>
<tr>
<th>Function</th>
<th>not important</th>
<th>important</th>
<th>very important</th>
<th>indispensable</th>
</tr>
</thead>
<tbody>
<tr>
<td>high degree of safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>high comfort</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less environmental damage from exhaust</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no fuel costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>good acceleration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>high degree of quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>known brand</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>good price/quality ratio</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>great product design</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
19. Do you have trust in the expertise of BMW, a traditional engine car manufacturer, in producing E-cars?

☐ Yes
☐ No

20. If you consider the images of the marketing campaign of the BMWi3 below, do you believe that BMW is honestly interested in reducing CO2 emissions to be environmentally friendly?

☐ Yes
☐ No
☐ Perhaps

BMWi3

EIN ELEKTRISIERENDES FAHRERLEBNIS.
Emissionsfreier Antrieb für urbane Mobilität.

Mobilität neu zu erfinden bedeutet, weit über umweltbewusstes und agiles Fahren hinauszudenken. Der innovative BMW eDrive Antrieb ist nicht nur lokal emissionsfrei und bietet unvergleichbare Fahrfreude, sondern gleichzeitig ein entspannendes, nahezu lautloses Fahrerlebnis.
21. Do you understand the marketing message of BMWi?
- Yes, it is clear
- Im not sure
- I feel confused
- I don't get the message

22. Do you think the BMWi3 will be successfully sold in the future?
- Yes
- No
- Perhaps

23. Can you identify with the brand BMWi?
- Not at all
- A little bit
- Yes, totally

24. Which feelings do you have when you think of the brand BMWi? You can choose several answers.
- trustworthiness
- unhonesty
- excitement
- uncertainty
- curiosity
- disliking
- liking
- fun
- unfamiliar
- lack of interest
- interest
- confused

25. Watching the BMWi marketing movie, what kind of emotions do you feel? Please take the IPad you got and press play (duration=1minute). You can choose several answers.
- trustworthiness
- unhonesty
- excitement
- uncertainty
- curiosity
- disliking
- liking
- fun
- unfamiliar
- lack of interest
- interest
- confused

Thank you for your time and participation!
Appendix C: The target group LOHAS

The LOHAS is concerned about the environmental, social and economical health (Emerich, 2011, p. 5). It describes a specific consumer group, who lives according to the principle of ‘Lifestyle of Health and Sustainability’. In general, the highly influential LOHAS is interested in more sustainable and ethical consumption. But the mainstream cannot identify with this, which is often perceived as extreme and exaggerated attitude (Meyer, 2013, p. 127).

Appendix D: EU Data Protection Legislation

The researcher has to keep the data protection law of the EU, that is written down in ‘Directive 95/46/EC’. It talks about free movement of data within the EU. Each EU member state has to set up an independent national institution to protect personal data on a high level. The law determines that the data has to be fairly collected for a legitimate purpose. According to this law, it is forbidden to process personal data in relation to ‘racial or ethnic origin, political opinions, religious or philosophical beliefs, trade-union membership, and the processing of data concerning health or sex life.’ Moreover, it is stipulated that the researcher has to provide information about the reason of the survey and follow appropriate measures ‘to protect personal data against accidental or unlawful destruction or accidental loss, alteration, unauthorized disclosure or access’ (European Union, no date). According to the German law, the respondent has to sign that he agrees that his data will just be used for academic research and not for any other purpose. The respondent will also be informed that his data will not be stored. Instead the data will be used anonymously to generate a statement of the total behaviour, opinion and perception of the German population, which may be published to create scientific value (Bundesministerium für Justiz und Verbraucherschutz, no date).

Appendix E: BMWi3 Marketing campaign in Germany
Appendix F: Brand portfolio of BMW

The BMW Group is one of the most successful manufacturers of automobiles and motorcycles worldwide and one of the largest companies in Germany. The company’s automobile sales increased to 6.4% in 2013 compared to the previous years. The BMW’s core business is premium vehicles and premium services for individual mobility. Its business is divided into four segments: vehicles, motorcycles, financial services and other entities (MarketLine, 2013, p.1-4). The corporate brand BMW Group is divided into three premium brands BMW, MINI and Rolls-Royce to address different consumer groups with different needs (BMW Group, no date). The car producer tries to lure consumers through emotions focussed on sport, performance and innovation. The innovative and emotional brand BMW is created for a dynamic and enthusiastic consumer profile, which has a passion for cars (Bruhn, 2004. p. 1935). The brand MINI serves the younger consumer, which should be perceived as exciting, unconventional and creative. The luxury brand Rolls-Royse stands for supreme quality and exquisite hand craftsmanship. The BMW brand is related to passion, dynamism, design and innovative technology (BMW Group, no date). The three brands generated total sales revenue of 76.8 bn Euro in 2012 (BMW, 2012c). The brand MINI increased 1.2%, Rolls-Royce increased 1.5% and the BMW brand increased 7.5% in 2013. The total value of the three brands went up 0.6% in 2013, which come from the brand portfolio extension. This success justifies the title of the top automobile brand in the premium segment worldwide (BMW Group, 2013). This academic study will thus focus on E-car BMWi, being representative for all German E-car brand manufacturers.

The BMW Group used the corporate brand BMW to sell two different product portfolios: BMWi and BMW M which together provide 33 different car models. The brand BMW M represents a brand image of innovative and powerful racing engines and unique full-vehicle-concepts, which correlates with the traditional brand image since 1972. The new brand BMWi is an innovative and sustainable mobility concept presenting two new car models: the full electronic driven BMWi3 designed for an emission-free urban driving and the BMWi8, the future of sports E-car. The two connected components of visionary electronic car and complex mobility service, inspiring design and an understanding of a new sustainable premium product of the BMWi brand. The BMW Group has long since positioned itself as a pioneer in the field of sustainable mobility and was awarded several rankings for its sustainability concept along the value chain, with the long-term goal to reduce emissions and increase the joy of driving (BMW Group, no date). The BMWi series provides a stunning service package and numerous collaborations in the energy sector to create a sustainable charging infrastructure for the product of the future in the EU with 8000 charging stations (BMW Group, 2013).

Appendix G: Reasons for the high price of E-cars

High battery costs and R&D costs are the reasons for the high E-car prices. An additional cost driver is the sales tax, which is perceptual, adding to the higher manufacturing costs. But studies show that the price of E-cars will decrease on an average of 9.000 Euro till 2020 due to technological progress. A price difference between conventional cars and E-cars is estimated at about 5.000 Euro in the long term (Backhaus et al. 2011, p. 38). Furthermore, the acceleration of an engine car like the BMW1 is 0-100km/h in 12.2 seconds and the BMWi3 is 0-100 km/h in 7.2 seconds. This shows the high performance of the E-car BMWi3 in comparison to an engine car from the same brand. This valuable advantage of the BMWi3 should be clearly underlined in the marketing communication. The fact that 79% of the respondents are not informed about the E-car’s great acceleration performance is an indicator for a need of more marketing communications in relation to E-car product feature facts. A motor vehicle has an annual fuel consumption of 1.700 litre with a driving performance of 22.000 km. Replacing the motor vehicle with an E-car can bring a saving of 1.980 Euro a year (Backhaus et al. 2011, p. 40). E-cars have less maintenance costs compared to motor vehicles because E-cars have slight wastage of the vehicle components and, therefore, have longer durability. This fact reduces the
maintenance costs on an average of 10 Euro a month. Additionally, for the E-car consumer does not have to pay car taxes in the first five years in Germany (Backhaus et al. 2011, p. 44).
8. Bibliography

8) Bayme vbm (2012). *Qualifizierung für die Elektromobilität*.


