

# **ELECTRIFYING CAR BRANDS: “TAKING BRANDS INTO CONSIDERATION IN THE IDEA GENERATION PHASE”**

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## **ABSTRACT**

The separation between the field of marketing strategy and marketing action (creating new products) is longstanding. Still, product development may become a key element for branding because it serves as a cohesive factor for all elements that configure brand personality and experience. This paper investigates the effect of introducing different ideas for emotional electric car designs as extensions of existing car brands that differ with respect to brand personalities and brand experiences. Students from the first master class collaborated in a 6 steps experimental research leading up to a main experiment in which the interaction between existing car brand personalities and experiences and different types of emotional electric car design propositions is studied. Drawing upon schema and categorization theory, the effect of the fit between existing car brand images in terms of personality and experiential associations on the one hand, and a new electric car model extension on the other, are investigated. The result of this exercise is a design briefing that offers an input for a product designer to create different concept cards for the branded cars.

*Keywords: Idea generation, brand personality, brand experience, brand extension*

## **1 A LINE EXTENSION EXERCISE**

During the master class marketing management, we wanted the students to experience how the adding of a new product proposition to the product line of existing brands, with existing brand personalities and experiences, affects the perception and responses to these brands. The electric car was taken as an example, since this product innovation is largely accepted to be sufficiently new and of importance in the debate for reaching more sustainability through product development [1], [2]. To launch a ‘branded’ electric car, one needs to really understand what the consumer product proposition is, while simultaneously understanding that the brand is the psychological carrier system for this product proposition. We wanted the students to understand how the proposition and the brand interact and whether they really fit one another.

The present paper describes an idea generation that is linked to existing car brands. It especially considers the interaction between existing car brand personalities and experiences and emotionally product ideas for the electric car variants.

## **2 PRESENTING A FRAMEWORK**

As an introduction to the exercise, we offered our students some theory on line extensions, the components of branding and brand design.

### **2.1 Line extension fit, extension evaluation and parent brand feedback effects**

Adding an electric car model to a line of models of an existing car brand is an example of a line extension. The two factors that have emerged as most important in determining extension evaluation are positive parent brand associations, and the perceived fit or congruency between an extension and the parent brand [5]. Based on categorization theory (e.g., [6]) and schema theory [7], it can be concluded that the perceived fit between a parent brand and its extensions is of great importance for the evaluation of both the extension itself and the parent brand, especially for high involvement products. Moreover, in case of product categories such as cars, the perception of fit will be more based

on symbolic associations than on concrete utilitarian attributes. Two important dimensions of symbolic schema are brand personality and brand experience.

## **2.2 Brand personality and brand experience**

We offered our students a theoretical background, based on scientific articles about branding. Brand equity is the current and future potential value that has been created by what the exercise of branding has managed to achieve [8]. Brand identity and brand image are important cornerstones of brand equity. Brand personality forms a major symbolic component of brand identity, which is defined as a brand's meaning, put forward by the firm. Brand image is the consumers' perception and interpretation of this brand identity, including brand personality. 'Brand personality is the set of human personality traits that are both applicable to and relevant for brands' [9, p. 151]. The work of Aaker [10] inspired the majority of the research on brand personality to date. In recent research [11] Geuens, Weijters and De Wulf have developed a scale that consists of only personality dimensions and is therefore a better representation of the brand personality concept. The scale consists of five factors that show an affinity with the Big Five human personality dimensions: Responsibility, Activity, Aggressiveness, Simplicity and Emotionality.

In addition, brand experience is an important cornerstone of symbolic brand identity and brand image. Brakus [12] showed that brand experience affects consumer satisfaction and loyalty. Positive brand experience not only affects past satisfaction judgments but also future directed use intentions. He conceptualizes brand experience as subjective consumer responses that are evoked by specific brand-related experiential attributes. They demonstrate that brand experience can be broken down into four dimensions: sensory, affective, intellectual and behavioral, which are differentially evoked by various brands.

the impact of existing brand experience and brand personality on the 'electric car extension' The master students learned about scientific literature on brand research as an input for investigating introduced by these brands and on the evaluation of the parent brands introducing this electric car extension.

## **2.3 The design of an electric car**

Design is an unequivocal source of differentiation and has become a key element for branding; not only because aesthetically pleasing products and services compete better for consumers' short attention span, but also because design may serve as a cohesive factor for all elements that configure brand personality and experience. Earlier research revealed that the product proposition 'sustainability' and 'ecological responsibility' is not enough to convince a large target group. Car markets and driving decisions are not simply about rational economic choices, but are as much about aesthetic, emotional, and sensory responses. Norman [13] claims that psychological aspects of ergonomics have become increasingly important in the pursuit of products that are not only safe and efficient, but also pleasurable to use and arousing. He argues that the emotional reactions to design and/or to an existing or new product are related to three emotional processing levels: visceral, behavioral and reflective.

The first level, i.e. visceral affect, is perception-based and relates to visceral aspects that are related to product appearance. The second level, i.e. behavioral emotion, is expectation-based and corresponds with behavioral aspects that have to do with the pleasure and effectiveness of use. The third level i.e. reflective emotion is intellectually based and corresponds with reflective dimensions that are concerned with self-image, personal satisfaction and memories.

Anticipated emotional experiences are relatively abstract car attributes. This study explores how design students can make these abstract product attributes actionable, with the focus on the development of a branded electric car. One aim is to create branded electric car descriptions that evoke different types of emotions. The result of this description is a design briefing for concept boards. These will be tested in experimental research to investigate how these different types of products interact with existing brand personalities and experiences, and how they are related to the adoption intention of the electric car.

### **3 AN EXERCISE IN 6 STEPS**

The aim of the exercise is twofold. We wanted the students to get some insights in the link between product design and branding, but we also wanted them to get some experience in research methodology throughout this process. The present paper describes a series of pretests in which the students participated to prepare the main experiment, in order to select appropriate car brands and preparing concepts of electric car types. Finally, the design of the main study is described in the subsequent 'further research' section.

#### **3.1 Step One: segmentation of the market**

The students first adopted some segmentation theory on the large car market and made a reduced list - of relevant car brands to take along in the study.

##### *Method and procedure*

From the internet (a literature study and a brainstorm with the students) all possible car brands were listed and 39 brands that produce family cars were selected. Twelve respondents were selected to participate in an individual interview. The sample consisted of different age categories, six male and six female respondents, all of which drove a family car. This last criterion was taken into account because people who drove special cars (roadsters, small cars, SUV's) might have a different opinion on the car types we wanted to consider in further research. An earlier study revealed a link between owning a family car and the intention to adopt an electric car. Hence, we focused on this car segment.

##### *Results*

The respondents were asked to categorize the brands on the basis of their personality, using the five personality items as proposed by Geuens [11]: responsible, active, aggressive, simple, and emotional. Twelve brands that were associated most often with only one, personality trait were selected for further research: Alfa, Audi, BMW, Ford, Mercedes, Nissan, Opel, Renault, Saab, Toyota, Volkswagen, and Volvo.

#### **3.2 Step Two: reduction of the brand list**

The purpose of the second step was to narrow down the list of 12 brands to a list of three car brands to be used in the main experiment; brands which were as different as possible with respect to their brand personalities and brand experiences. Students learn to adopt some of the theory on branding and learn to involve consumers in this decision process.

##### *Method and procedure*

An online questionnaire was sent to a sample of 100 family car drivers. Thirty eight respondents, as well men (45%) as women (55%), filled out the questionnaire. The sample consisted of respondents of different ages (11% 18-25 years, 18% 25-35 years, 26% 35-45%; 42% 45-65 years; 3% >65 years).

For each of the 12 car brands that remained from the first step of the research, the respondents were asked which of the five personality traits suited the most and which one the least to the brand : responsible, active, aggressive, simple, emotional. The same was done for the four brand experience dimensions: sensitive, affective, behavioral and reflective.

##### *Results*

The three most differentiated brands -taking into account brand personalities and brand experiences- were Saab, BMW and Toyota. Saab is most frequently and more often than other brands in the list associated with an emotional brand personality (35%) and with sensitive (36%) and affective (32%) brand experience dimensions. At the same time, Saab is least associated with the brand personality dimension 'simple' (53%) and with reflective experiences (47%). BMW is most strongly associated with the brand personality dimension 'aggressive' (49%) and as well with affective (41%) as behavioral (41%) brand experience dimensions. BMW is least associated with the brand personality characteristics 'simple' (73%) and with reflective experiences (47%). Toyota is strongly associated with simple (58%). It is least associated with aggressive (46%). It has not a very pronounced brand experience profile. Consequently, the development of the design stimuli will be based on the Saab, BMW and Toyota brands.

### **3.3 Step Three: Qualitative check of the results of step 2 and exploring the effect of the attribute 'electric' on the brand personality and the brand experience**

Step three is an exercise in qualitative research. The purpose is a diagnostic check of the previous quantitative study. Additionally, we explored to what extent the selected brands were different with respect to their suitability for an electric car variant, and to what extent we could expect the brand personality and the brand experience to change when we added the product attribute 'electric'.

#### *Method and procedure*

For each brand, five to six students were engaged in a group discussion (a total of nine discussions, three for each brand). Each group started with exploring the brand personality and the evoked brand experience of one of the selected brands (either Saab, BMW or Toyota). First, they spontaneously discussed what the brand meant to them. Then, they were allowed to revisit brand communications on the internet and in magazines. After this introduction phase, projective and creative techniques were used to make it easier to communicate on the more abstract product attributes. The groups discussed the kind of person the car brand would be, with which animal they associated the car brand, and which planet the car brand should be on. To conclude, they were asked to make a 'mood board' about the brand. The same exercise was done for the 'electric' variant of the brand.

#### *Results*

The results of the qualitative research largely confirmed the brand personalities we found in the previous step. Moreover, adding the attribute 'electric' appeared to have a differential effect on the three brands. 'Electric' seemed to match best with Saab and Toyota and less with BMW, and affected brand personalities differently. Steps 2 and 3 lead to the conclusion that the three brands are sufficiently different in terms of brand personality, brand experience and fit with the attribute 'electric' to warrant their inclusion in the main experiment.

### **3.4 Step Four: Looking for product features that are linked to the three emotional product experience levels**

The next question was how to evoke experiences as suggested by Norman by manipulating the product features, i.e. the design of the car. In this fourth step we thus try to establish which product features can evoke an anticipated emotional experience at the three product processing levels: visceral, behavioral and reflective. Traditional models such as the Quality function deployment model [14] and the means-end model of quality [15] were explained to the students. They argue that consumer attributes can be grouped into a hierarchy of higher order abstract attributes and lower level concrete attributes. Abstract attributes, such as the evoked emotions and experiences, are not easily related to concrete attributes. One of the challenges for the students, is to translate abstract attributes into concrete and specific attributes by means of design elements. The students had a profound exercise in brainstorming skills.

#### *Method and procedure*

Brainstorming sessions with 6 to 10 master students were organized. Different tools were introduced to stimulate the creative process. First, the group had to reformulate the questions: how can we add more visceral, behavioral and reflective experience to the brand (either Saab, BMW, Toyota) by means of product features. A 'divergent thinking exercise' was used to open up the mind of the respondents. The features of the existing brand could be substituted by other features, including other product categories. Features could be combined, restructured, adapted, resized, or eliminated. The product could be given a new destiny, a new advantage, etc. Elements of the world of animals and nature could be used as inspiration. Every feature they found could be re-associated with other possible features. This phase resulted in between 100 and 195 items for each group. Next, these items were assigned to four categories on the basis of two dimensions: which of these items are workable and which of the items are original. We then focused on the ideas for the near future. In the last phase of this exercise the groups made a well organized table of product features that are workable to give the brands (Saab, BMW, Toyota) a more visceral, behavioral or reflective experience. These ideas were categorized in a way that they are usable for the next step in the exercise: four attributes for each experience level, two items for each attribute.

#### *Results*

Table 1. Categorization of the ideas into workable product features for the next step

Visceral	Behavioral	Reflective
The Noise -silence -adapt own sounds	Comfort of loading - Doing other things while loading - Easy Loading on the road	Cost efficiency - Low driving cost - Free city entrance
The Looks -Lounge interior -Technological dynamic	Driving comfort - Orientation of dashboard - Intuitive driving	Information - Accountancy tool - Information on the dashboard
The Touch - Amazing acceleration - Special materials	Pleasure of driving - Choice between driving styles - Alert, pleasure and safe driving	Eco impact - Low CO2 - No noise
The bonding - High tech communication - Community	Driving environment - optimal conversations - extra connectivity	Impact on self image - eco label - communication board

### 3.5 Step five: Creation of the concept descriptions

The overall results of the brainstorming sessions in the previous step were used as an input to create concept descriptions that are currently used in a conjoint analyses, a methodology that proved its usefulness for product design. The four product attributes, each with two possible dimensions, resulted in the presentation of 8 product descriptions for each emotional processing level.

*Method and procedure:*

A quantitative research is now set up with 100 respondents for each experience level.

*Result:*

The conjoint analyses leads to the creation of three basic concept cards, using the best possible features for evoking or a more visceral appealing electric car, or a more behavioral appealing electric car or a more reflective appealing electric car. This step results in a design briefing.

### 3.6 Step six: Further research: main experiment

The next step (Mai 2012- July 2012) will be to research which product description suit best to the different parent brands (Saab, Toyota, BMW) and what effect these design propositions will have on the parent brands.

*Method and procedure*

In order to test the interaction between existing brand personalities and experiential associations on the one hand and the type of emotional design on the other, a quantitative online experiment will be conducted. A between-subjects 3x4 experimental design will be set up as represented in Table 2. Investigating which product manipulations lead to differential effects on brand personalities, experiences, attitudes and adoption intentions for each electrified brand implies the need to know how these brands are perceived initially on the aspects of brand personality, brand experience and adoption intention. Therefore, besides three different design types for each brand, also three control groups will be used to measure the initial (i.e. not electrified) brand personalities and experiences.

## 4 CONCLUSION

The exercise offered the students the opportunity to explore the link between marketing and product development. The first three steps and the step to be taken next in the research project is focused on consumer understanding, the brainstorm session (step 4) and the creation phase (step 6) is more action based. The main experiment ought to bring the two fields together.

Anyhow, the present paper sets the scene to use research in gaining insights into a consumer-centered innovation, selecting the right product innovation for the right brand. Different qualitative and quantitative research methodologies were used as an exercise. It further explores the elaboration of product features which evoke abstract attributes, in this case anticipated product experiences. It

explores the extent to which these different possible electric car product propositions fit existing brand personalities and experiences. The student teams worked in a systematic way. This did not stifle creativity, which is congruent with findings from earlier literature. Moreover they were encouraged to apply new techniques to stimulate them to think beyond the conventional.

The course was based on some principles of 'learning by experience'. During the exercise, students combined theoretical frameworks and well established methodologies with their own experience. The theories became more vivid and actionable throughout this experience. They had the opportunity to exercise with a product that is meaningful and relevant for our society. Moreover they contributed to some more fundamental research.

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