

To Communicate Co-Creation or Not? Examining the Effects on Brand and Product Perception

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Abstract

Many scholars assert that co-creation with customers in new product and service development will have positive effects on the brand, innovation speed, innovation adoption and loyalty. Looking more closely at these assertions one comes to the finding that the majority of this research applies to the effect on customers that have been involved in the co-creation or co-creating customers, i.e. customers or users that have taken part in the co-creation process. Only few studies have investigated the effect of the co-creation on (potential) customers, which have not been involved in this co-creation, the so-called non-co-creating customers. This lack of research is remarkable, as co-creating customers generally only form a fraction of the total customer base of companies. This paper reports on two studies in the effects of co-creation in new product/service development on the larger part of the customer base, the non-co-creating customers. The studies focus on the brand and product effects of co-creation disclosure on these (potential) customers that have not been involved for complex luxury goods and for consumer services. Disclosure of the co-creation entails the communication or promotion by the company that the products have been developed through co-creation with other customers. It is found that co-creation disclosure can have positive effects on brand and product perception for services, confirming most extant findings. However, for luxury products this positive effect is not significant.

Key words: Brand attitude, Purchase intention, Word-of-mouth, Customer co-creation, Non-co-creating customers

1. INTRODUCTION

In the traditional conception of a business, value was created inside the firm and outside the market. Both the firm and the customer had their respective roles of production and consumption. In recent years however, companies have started to recognize the importance of communicating and interacting with customers [29]. Driven by new technology, customers are gradually becoming more powerful with unlimited access to information and the ability to connect with anyone at any time. An important outcome of this development is that many customers have begun to aspire to contribute in the process of new value creation [39, 6]. Consequently, the market is moving away from a system of exchange towards a platform of interaction, where customers and firms cooperate to create new consumption experiences that match their ever changing demands [29, 21]. Advantages can come in the form of reduced research and development costs,

superior products and services [13] and even the creation of powerful advertisements [36]. In an age where it gets increasingly more challenging for companies to differentiate from competitors, a customer-oriented approach, such as co-creation, is regarded as a compelling move, both in the eyes of the customer and the firm.

Co-creation has proven to be a viable strategy to cope with these changes. A number of organizations acknowledged the importance of creating interactive platforms to actively engage with customer communities in their innovation activities [11, 31, 25]. Firms invite their customers to participate in multiple stages of the process such as ideation, design, production and even the marketing of their new business offerings [40].

Previous research demonstrated various brand effects of co-creation on customers who have been involved in the co-creation process, which we will call co-creating customers. The co-creating customers show more commitment and trust to the organization [15], exhibit

enhanced loyalty and emotional connection [5], have a stronger tendency towards positive word-of-mouth [28], and demand for products that they co-created [31].

However, only few authors empirically tested for the effects on the perceptions of (potential) customers, who were not involved in the co-creation [36, 10, 32, 37], our so-called non-co-creating customers. This lack of research is remarkable, since co-creating customers usually only form a fraction of the total customer base. These previous studies generally show that non-co-creating customers have a preference for companies that co-create, as compared to those that do not involve their customers in their innovation processes. Only in the case of the co-creation of luxury fashion adverse effects are observed [9]. However, all other studies restrict themselves exclusively to consumer goods and to co-creation effects of the ideation stage of new product development (NPD). This omission leads to the question what effects to expect when communicating the co-creation of other than ordinary consumer goods and of activities beyond mere ideation.

To answer this twofold question, this research executed two studies to look into these effects. They concern respectively the co-creation of luxury goods and new service development (NSD). While the study on the co-creation of luxury goods can be regarded as a replication of previous studies on co-creation effects in the ideation stage, the other study, i.e. the co-creation effects of new services, will also dive more deeply in the effects of other stages of NSD. The results are intended to support marketers of brands, which intend to co-create or have co-created a new product or service, in their decision whether or not to promote that it has been co-created. The two studies were executed separately at the Amsterdam Business School of the University of Amsterdam in the Netherlands. They are integrated in this paper in order to make generalizations on the expected effects of co-creation disclosure.

Before elaborating on the research design, the execution and results of the two studies, a brief review of existing studies will be given in order to provide a context for the effects to be expected. The paper is concluded with a discussion on the implications and limitations of this research.

2. LITERATURE REVIEW

2.1 Brand Perception and Loyalty Behavior

The co-creation concept matches the framework of brand equity creation [35], in which all types of sources, including places, things, people and other brands can be connected to a brand [17]. Informing people about co-creation might affect factors composing the equity of a brand such as brand awareness, brand image, brand attitude and brand credibility. Brand attitude is of great importance to organizations, as it relies on the individual's brand perceptions, which are viewed as a reliable predictor of consumer behavior. Moreover, according to Liu et al. [20], a positive relationship between brand attitude and brand loyalty exists. Since brand loyalty drives customers to repurchase goods from the same brand, it can increase profits [24].

2.2 Effect of Co-Creation on Non-Co-Creating Customers

Extant research demonstrated various brand effects of co-creation on customers who were involved in the innovation process. The co-creating customers show more commitment and trust to the organization [15], exhibit enhanced loyalty and emotional connection [5], have a stronger tendency towards positive word-of-mouth [28], and demand for products that they co-created [31].

As for the effects on ordinary users or customers that have not been involved only a few studies have been executed. Such research does indeed signal changes in the perception of a brand as a result of co-creation [37]. Fuchs and Schreier [10] researched the effect of co-creation awareness on non-co-creating consumers and demonstrated an increase in desire for co-created products that were either 'created' or 'selected' by customers. A more recent study by Schreier et al. [32] revealed that consumers perceive a product as more innovative when knowing that it was user designed. The study by van Dijk et al. [37] proves that information on co-creation to the consumer positively impacts product perceptions and behavioral intentions. Non-co-creating customers have positive purchase intentions towards advertised co-created products [10, 32, 37], show strong willingness to pay, intend to recommend the brand to others [32], and talk about the brand in general [37].

2.3 Product Category Under Investigation

All aforementioned studies show a positive effect of co-creation disclosure or communication of co-creation activities, and tend to generalize these finding to all product categories. They investigate the effects mostly using low-cost and low-complexity goods [37, 32] for which an ordinary user is perceived as capable and sufficiently knowledgeable to co-create, so brand perceptions will undoubtedly improve.

One study on the effect on brand perceptions of co-created luxury fashion brands when communicating co-creation to the public [9], however, found an opposite effect to van Dijk et al. [37] and Fuchs and Schreier [10]: labeling products as user-designed had a negative effect on brand perceptions of non-co-creating customers. Fuchs et al. [9] explain this effect with the lower perceived quality and the failure of these user-designed luxury fashion items to signal high status to other people. Luxury products are symbolic [16], capable of stressing the status and image of a consumer towards others [23]. The importance of the psychological advantages, more than only utilitarian ones, is a major distinction of luxury goods compared to non-luxury goods. Consumers expect luxury brands to provide excellent quality in comparison with non-luxury brands. Luxury products are usually of a complex nature, where ordinary users are perceived as lesser capable to co-create, because they require expertise [32].

2.4 Co-Creation of Services

Services are different from products in a number of ways. The literature differentiates services through four unique

characteristics: inseparability, intangibility, perishability and heterogeneity [27]. According to Alam [1], many service authors believe that these factors influence the innovation processes of service firms. A service innovation can therefore be seen as an advancement that alters one of the characteristics, and is separated from the level of tangibility [12].

Many service companies such as banks, insurance firms, telecommunication providers, airlines and rental services have started to invest in co-creation platforms. The Dutch bank Rabobank is a good example of a company that encourages customers to participate in discussion and co-development of new service ideas. In 2010, the bank set up a project named 'Denk Mee Met Je Bank', in which 100 existing clients were asked to share ideas on improving existing banking services including new savings accounts, mortgage processes and online banking. During a period of three months participants and employees were challenged to collaborate and generate solutions for various local services. It is said that the project turned out to be very successful with the introduction of several innovative improvements, which not only lowered research and development costs, but also built strong community and brand values¹. However, these merits are anecdotal and miss empirical proof. As observed previously, studies on the effects of co-creation on non-co-creating customers is limited to product innovation and new product development.

2.5 Co-Creation in NPD Stages

According to Hoyer et al. [13], co-creation can be used in all four phases of the NPD: ideation, product development, commercialization and post-launch. Research shows that co-creation in the early stages of the NPD can lead to more innovative ideas [43]. Users are even assumed to have a better ability for idea generation than the employees of a company [18]. It is probably because of this feature of co-creation, that the aforementioned research on the effect of co-creation on non-co-creating customers all focus on co-creation in the conception stage and not on later stages where more product-related expertise is required [41].

3. RESEARCH DESIGN

Because of the aforementioned limitations on product categories and innovation stage in the studies that have looked into the effect of co-creation on customers who haven't been involved, we decided to replicate – though not exactly – these studies for more complex luxury products and consumer services.

Two business administration investigators (co-authors) of the Amsterdam Business School separately set up and executed a study in these effects. One of the studies was focused on the effect of co-creation of complex luxury products and the other one on the effects of new services co-creation. Both studies are reported in this paper as an enhancement of previous studies.

The approach was quasi-experimental: Respondents were exposed to fictitious new product/service of the category under examination, which contained information on how it was conceived, developed and finally launched for the market. This information also contained

information on whether it was co-created or not. The sample consisted in both experiments of a control group to which it was not revealed that the product/service was co-created, and one or more groups who were told that other customers have been involved in one or more development stages of the new product/service. The studies focused on looking at the changes in product and brand perception in case that it was revealed that it was co-created. This disclosure was embedded in the product description, which was presented as simple ad or press release to study participants of the experiment. After the product presentation, participants were surveyed on their product/service and brand perceptions. Both studies were conducted online. Use was made of the online survey platform from Qualtrics.

4. STUDY #1: EFFECTS OF COMMUNICATION OF LUXURY PRODUCTS CO-CREATION

The product category that was chosen for this study is the luxury automobile industry. It is not only suitable because of its difference from the fashion category, but also knows a wide co-creation application in practice. Examples are the BMW Co-Creation Lab [30] and "Your Ideas" by Ford [42]. Since this co-creation practice is practically limited to the ideation stage of the new car development, we will also look at only this stage of co-creation.

4.1 Study # 1 Design and Execution

The effect of co-creation disclosure is measured using a survey with an experimental approach. In order to obtain a neutral and objective picture about what luxury brand to select for the survey, a pre-test was conducted (N = 20). The goal of the pre-test was to select a brand that is seen as both luxurious and familiar. Participants were presented four car brands, known in the luxury category. The participants were asked on a 7-point Likert scale to indicate if they considered the brand as luxury and if they were familiar with the brand. The pre-test demonstrated that Mercedes-Benz was considered as most luxurious and familiar, so it was used for the survey.

The survey was placed on the Qualtrics online survey platform. Participants to the survey were recruited through a convenience sample. The chosen language of the survey was English, which means that the survey was accessible to multiple nationalities. The survey was online and active between the 14th and 28th of May 2016. The researcher contacted potential respondents by social media where more than 800 people could be reached. Moreover, emails were sent to other contacts of the researcher. The survey took approximately 5-7 minutes to complete.

In the survey, a between-subjects design was used. The participants were randomly assigned to one of the two groups to prevent selection bias. Respondents of both groups were exposed to the same information, except for the – manipulated – addition of the disclosure of co-creation that was exposed only to one group (see Box 1 for the two different messages used). Before being submitted to the assigned "disclosure message", participants were asked to

indicate whether they had ever co-created with Mercedes-Benz.

After the exposure to the "disclosure message" participants received questions measuring the luxury and brand perception (dependent variables of this study), using Vigneron and Johnson's [38] five dimensions of perceived luxury², and the scale developed by Spears and Singh [35] for brand attitude. The two facets (perceived quality and the signaling of high status) researched by Fuchs et al. [9] do not cover all of the determinants of perceived luxury by the consumer. All items were measured on a 7-point Likert scale, see figure 1 in the Appendix for some examples of the survey questions.

<p>Scenario 1: No co-creation</p> <p>Mercedes Benz is one of the most well-known automobile manufacturers in the world. This established global brand focuses on delivering their promise to provide "the best or nothing". Next year the organization will introduce a new car. For this car, Mercedes Benz developed new features, which will be announced soon.</p>
<p>Scenario 2: Co-creation</p> <p>Mercedes Benz is one of the most well-known automobile manufacturers in the world. This established global brand focuses on delivering their promise to provide "the best or nothing". Next year the organization will introduce a new car. For this car, Mercedes Benz collaborated with consumers to develop new features, which will be announced soon. Through a virtual platform, Mercedes Benz invited people from all over the world to contribute their suggestions and ideas. Moreover, people were asked to evaluate concepts by voting for, and commenting them. Mercedes Benz used these consumers' inputs in developing the new car.</p>

Box 1. Disclosure messages used in study #1

4.2 Results of Study #1

There were originally 332 online responses to the survey. From these, 77 did not complete the survey. Five other cases were discarded because of their indication to have previously been engaged in co-creation by Mercedes-Benz. A total of 250 completed and useful cases was used for further analysis.

A reliability analysis was done for all variables in order to detect the consistency of the measures [8]. This demonstrated that for three variables, items had to be deleted in order to improve the reliability of the scale: conspicuousness, uniqueness, and hedonism. The other variables showed sufficient internal consistency. Next the data were checked for normality, skewness, and homogeneity of variance; none of these resulted in abnormal findings.

The two groups were compared on the outcomes of the dependent variables by using t-tests. For these tests, we assumed an effect similar to Fuchs et al. [9] with luxury fashion co-creation, implying a negative effect on both luxury and brand perception when the co-creation was revealed to participants. Table 1 in the Appendix depicts the results of these tests. On average, participants perceived more luxury in the brand when co-creation was

disclosed ($M = 4.30$, $SE = 0.07$) than when co-creation was not disclosed ($M = 4.24$, $SE = 0.07$). This difference was not significant: $t(248) = -0.62$, $p > 0.05$. This insignificant difference can also be observed on the brand attitude, $t(248) = -1.5$, $p > 0.05$, and the five dimensions of perceived luxury (see Table 1 in Appendix). These results mean that non-co-creating customers do not perceive less luxury in a brand when co-creation is disclosed. At a first glance, a marginally positive effect can be observed, but still insignificant to be considered positive.

4.3 Discussion of Study #1 Results

The result that the effect on brand perception is not significant could originate from the situation that participants did not receive sufficient information to develop a strong opinion concerning the co-creation activities of the brand. Perhaps the information was insufficient to evaluate whether the co-creators had adequate expertise for successfully co-creating the product. This can be aligned to advertising theory, which indicates that observers of the advertisement search for signals that provide valuable information about the product [19]. However, the information concerning the co-creation of the car existed of only a short explanation. Since there are not many cues here, the participants that were exposed to the co-creation disclosure could have assumed that the car was similar to the previous (luxury) cars of the brand. This could result in less distinction between the groups concerning their (luxury) perception of the brand, since they both took similar products into account.

The, at a first glance observable, but marginally positive difference between the groups can be explained following by following Liljedal [19]. She considers the parties disclosing co-creation by a brand as a brand alliance. This means that the brand and the co-creating consumers, who are thus viewed as brand as well, communicate towards the public. Liljedal [19] states that a familiar brand could improve the evaluations or perceptions of non co-creating customers. She draws on literature from Simonin and Ruth [34] who state that, in a brand alliance, the familiar brand can positively affect the unknown brand (co-creators) through a so-called 'spillover effect'. In this study, this means that the perceived ability of the customers was positively affected. This could explain the positive direction of the effect of co-creation disclosure on the perceived luxury. It could mean that the luxury of Mercedes-Benz is projected on the co-creation activities of the brand as well, leading to a positive difference in the means between the groups.

Another explanation for the positive direction of the effect on perceived luxury concerns the question why the complexity of the product did not produce a negative effect. The study by Schreier et al. [32] demonstrated the negative influence of high complexity on the valence of the effect of co-creation disclosure. They also state that for low-complex goods, the effect of co-creation disclosure is positive. Since the results of this study had a more positive nature, although insignificant, it could be that the participants perceived the actual task for co-creation as less complex. One explanation might be that

the design of a car is easier to understand for the average person than for example the design of a fashion item, like in the study by Fuchs et al. [9]. Another reason might be that the participants perceive co-creation in the ideation phase as less complex than for example co-creation in the product development stage. So, if a more complex phase was communicated, the effect might have been negative. A final explanation for the absence of the negative effect of complexity can be, again, the positive spillover effect [34]. The participants' positive perceived ability of the co-creating consumers might cause the complexity to lose its importance since the consumers are perceived as able to complete the task successfully.

To conclude this study, we did not find any support for Schreier et al.'s [32] assertion that the co-creation of luxury goods will result in a negative product and brand perception for non-co-creating customers. Yet, neither can we conclude that the disclosure of co-creation will have a positive effect. So, more research is needed to determine for which luxury goods it will lead to a positive effect and for which ones it will not. Also, we may want to look into the influence of the stage(s) of the product development process that are deployed for co-creation activities.

5. STUDY #2: EFFECTS OF COMMUNICATION OF CO-CREATION IN NEW SERVICE DEVELOPMENT

Ostrom et al. [26] explain that multidisciplinary work is needed to find success factors related to the creation and maintenance of service brands. Due to the highly subjective, intangible and personal experience of services, perceptions can vary a great deal from one another [26]. An example of such a service can be seen within the highly competitive financial sector. Most customers find it hard to distinguish between services such as credit financing or contracting insurances, making it inherently difficult to differentiate with brands [14]. As such, the service brand has to function as a signal that makes the customer understand the intangible, reduce perceived risks and provide them with a meaningful value proposition [4, 33]. Considering the economic downturns and many scandals in recent years, firms in the financial industry have to make great efforts to (re-)establish a sense of credibility to their brands. A number of Dutch banks such as Rabobank, ING, Triodos Bank and Knab recognized that new service development plays an important role in achieving this. In doing so, co-creation strategies are increasingly being adopted, which stresses the importance of further research on related effects in this sector. Companies that use co-creation in their service development claim to achieve great success, although this success has not been proven yet. So we chose the financial services sector as the focus for this experiment.

Co-creating a new service innovation is a process of idea generation and idea screening (i.e. ideation), concept development, business analysis, service development, market testing and commercialization [2]. Studies explain that most empirical research on co-creation commonly

contain 'black and white' comparisons (no involvement versus involvement) while this is more diverse in practice [10, 32]. During the initial phases, generated ideas are collectively evaluated and selected for further development. In turn, these ideas are processed in the development phases where design and engineering comes into play. All participants are given the freedom to be creative and use their abilities to jointly generate solution items such as service blueprints and virtual prototypes, or even test service delivery processes in mock scenarios [37, 11]. In the final phases, participants take on the role of customers, collaboratively evaluate the service developments, and help with commercialization.

Hoyer et al. [13] explain that co-creation is a function of both the scope and intensity of activities. The scope refers to the tendency of companies to engage with customers on all the different co-creation stages. Four stages are particularly suitable for customer involvement: ideation, service development, commercialization, and post-launch activities. The intensity of co-creation relates to the degree to which a firm is willing to co-create with customers within a specific stage of NSD. As companies start relying more on their customers, the intensity of the involvement grows accordingly [13]. Organizations base their level of customer involvement on factors such as the co-creation strategy, appropriateness of the market, initiator for the co-creation (firm or customer) and the type of innovation. Only when these factors are determined, should a company decide how customers could play a role in the innovation process [41].

5.1 Study # 2 Design and Execution

The aim of this study was to empirically investigate how the intensity of customer involvement (stages where involved) and brand familiarity influence brand attitude and behavioral intentions of non-co-creating customers. We choose to apply this study for the financial services because of developments and implications mentioned earlier. And to see whether brand familiarity has any effect on the results, we choose to investigate this effect of brand familiarity as well.

A multifactor 3x2 Vignette experiment between-subject design and control groups was conducted. The independent variables consist of three levels of customer involvement (none, ideation stage and full, meaning that customers were involved throughout the whole NSD-process) and two service brand levels (well-known familiar and fictitious unfamiliar). The levels of customer involvement differ in the way the service was developed: (1) exclusively by the company, (2) co-created with the customer on an ideation level, (3) or fully co-created with the customer on all levels of the development process.

The developed innovation is a new service presented by the well-known corporate bank 'Bank of America' and the fictitious brand 'Kortos Bank'. See also Box 2. An online experimental Qualtrics survey was used to collect data. Respondents were recruited from Amazon's online panel Mechanical Turk (MTurk). Because these participants were predominately

Americans, we decided to use an American brand (Bank of America) as the familiar brand. Several checks were added to ensure high quality responses [7].

No involvement or co-creation

The new Bank of America is all about you.

Bank of America developed an integrated solution for all your banking needs. One of the improved functions of our brand new website is our insurance services, which is now accessible, easy to understand, tailorable to your personal situation, and with on-demand advice from our experts.

Visit our website now and try it yourself.

Ideation involvement

The new Bank of America is all about you.

Together with our customers we developed an integrated solution for all your online banking needs. Several Bank of America enthusiasts helped us out from the early development stages to generate new ideas for our brand new website. During the collaboration, it became clear that there is need for better insurance services, which are accessible, easy to understand, tailorable to your personal situation, and with on-demand advice from our experts. Bank of America selected these promising ideas to be developed further by our experts and making it available to you.

Visit our website now and try it yourself.

Full involvement

The new Bank of America is all about you.

Together with our customers we developed an integrated solution for all your online banking needs. Several Bank of America enthusiasts helped us out from the early development stages to generate new ideas for our brand new website. During the collaboration it became clear that there is need for better insurance services, which are accessible, easy to understand, tailorable to your personal situation, and with on-demand advice from our experts. After coming up with the ideas, we asked customers to support us with developing these further by testing out new service features, deciding on the design layout, coming up with a suitable name and even the creation of this advertisement.

Visit our website now and try it yourself.

Box 2. Disclosure messages used in study #2

Respondents were informed that the questionnaire aimed to get their opinion about the new service and were randomly assigned an advertisement in which was announced that a financial services brand has developed new insurance services. The advertisement consisted of a promotional text as well as a clarifying visual on the background inspired on an existing advertisement by a Dutch bank. The text briefly described the new innovation, the key features and benefits for customers. The main purpose of this promotional text was to manipulate how the firm decided to develop this new service, which was either by co-creation with other customers or by the company itself.

For the co-created version, two variants were used, one for the ideation stage of involvement and one for a customer involvement in all NSD stages ('full'), i.e. aside

from ideating on possible solutions, the co-creating customers assisted in testing of the various service features, deciding on the final service design, coming up with a suitable name and even participated in the advertisement development. After being exposed to their specific – randomly assigned – respondents were surveyed on their brand perceptions (10 questions) and behavioral intentions, like buying intention and word-of-mouth (8 questions). All question items were measured on 7-point Likert scale.

The survey was placed on the Qualtrics platform (https://eu.qualtrics.com/jfe3/preview/SV_brr0PNxJ7vSKb41). The experiment was conducted within a large and representative sample drawn from Amazon's online panel Mechanical Turk (MTurk). One disadvantage of this choice, however, was that the participants were predominately American citizens. To cope with this disadvantage, we conducted a pilot survey to determine which familiar brand to use for the experiment. Bank of America was selected as the most familiar brand ($M = 6.06$). Additional requirements included that respondents had at least filled in 100 surveys and an acceptance rate of 95 per cent (i.e. 95 per cent of their survey completions were accepted and compensated). To assure high quality responses, attention filters and timing questions were put in place. Respondents were notified that if they did not adhere to the instructions, or failed to answer questions that checked whether they read and understood the instructions, they would not be eligible to complete the survey and receive compensation. The pilot experiment was conducted on the 10th of May 2016 and consisted of a sample of 30 American MTurk respondents. The main experiment was finalized on the 16th of May 2016 after a two-day execution period.

5.2 Results of Study #2

The experiment resulted in 320 completed questionnaire responses. With the exception of three all the respondents filled in the entire questionnaire. For the familiar brand condition, 53 respondents were subjected to the 'no co-creation' involvement condition, 53 to the 'ideation' involvement condition, and 55 to the 'full' involvement condition. Likewise for the unfamiliar brand, 54 to the 'no' involvement condition, 53 to the 'ideation' involvement condition, 53 to the 'full' involvement condition. Both types of familiarity had a total of 160 respondents. Of the 320 respondents 61.2 per cent was male and 38.8 per cent was female. 296 (92.4%) came from the United States, 13 from the Netherlands (4.2%) and the remainder from other European countries 11 (3.4%).

To check for consistency of questions and scales, a reliability check was conducted. This resulted in Cronbach alphas higher than 0.70 for all items that were measured: no items needed to be discarded. Subsequently the dependent variables were checked for their normal distribution, a check that did not result in any abnormal findings. To determine whether the different co-creation manipulations were successful, a two-way factorial analysis of variance (ANOVA) was conducted. The test shows that there was a statistically significant

difference between the groups of customer involvement with respect to the effect on the manipulation variable.

Brand familiarity and the interaction between the two variables however, are proven to be statistically insignificant. Tukey's post hoc test further revealed that respondents who were placed in the 'ideation group' of customer involvement treatment score significantly higher on the manipulation items than the 'no' group. Likewise, the respondents assigned to the 'full' group of customer involvement show a higher score than the 'no' group and 'ideation' group. The brand familiarity manipulation was also proven to be successful with a mean of 5.39 for the familiar Bank of America and 1.78 for the unfamiliar Kortos Bank. In general, the results prove the manipulation to be successful. To test whether the different levels of customer involvement had an impact on brand attitude and behavioral intentions for brand familiarity multivariate analyses of variance (MANOVA) were conducted. The MANOVA demonstrated that there is a statistically significant positive main effect of customer involvement on brand attitude $F(2, 314) = 10.548, p < 0.001, \eta^2 = 0.06$. The test also found a positive main effect of brand familiarity on brand attitude, $F(2, 314) = 13.645, p < 0.001, \eta^2 = 0.04$. This means that regardless of the customer involvement level, respondents considered the familiar bank (Bank of America) better than the unfamiliar bank (Kortos Bank). The interaction between the two variables however, is not statistically significant at $F(2, 314) = 1.340, p(0.26) > 0.05$.

In order to determine whether there are differences between the involvement groups, a Tukey's post hoc test was conducted. Results from this test indicate that there is a statistically significant difference between the 'full' group and the 'no' group, $p < 0.001$, and between the 'ideation' group and the 'no' group, $p < 0.001$. However, no significant differences have been found between the 'ideation' group and 'full' group $p(0.077) > 0.05$. This demonstrates that the respondents are more positive about a brand when it uses co-creation, regardless of the involvement level, even though the difference between the two levels of co-creation is not significant. We can conclude that co-creation in financial services can have significant positive effects on brand perception, whether the company restricts itself to ideation or fully engages customer in the whole development process.

The differences between the involvement levels and between the two banks are depicted in Figure 3 and the descriptive results in Table 2.

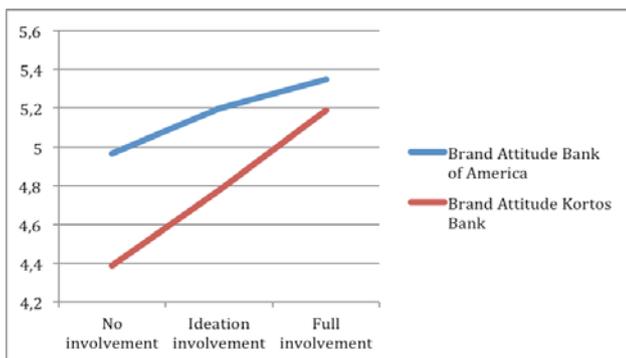


Figure 3. Mean factor scores of brand attitude by familiarity and customer involvement level

Table 2. Mean factor scores of brand attitude by familiarity

	Brand Attitude			
	Bank of America		Kortos Bank	
	Mean	SD	Mean	SD
No involvement	4.968	1.16	4.389	0.69
Ideation involvement	5.198	0.98	4.775	0.79
Full involvement	5.351	1.10	5.190	0.81

As for the effect on behavioral intentions – which consists of two items, purchase intention and word-of-mouth – the MANOVA results show that there is a significant effect of customer involvement on both outcomes. The SPSS output reported $F(2, 314) = 4.748, p < 0.05, \eta^2 = 0.03$ for purchase intentions, and $F(2, 314) = 6.495, p < 0.05, \eta^2 = 0.04$ for word-of-mouth. No statistically significant results were found for brand familiarity at $F(1, 314) = 0.054, p(0.814) > 0.05$, and $F(1, 314) = 1.071, p(0.302) > 0.05$ respectively. Comparably, results at the interaction effects were also insignificant with $F(2, 314) = 1.870, p(0.156) > 0.05$ for purchase intentions and $F(2, 314) = 3.399, p(0.06) > 0.05$ for word-of-mouth. Descriptive results can be found in Tables 3 and 4 and scale plots in Figure 4 and Figure 5.

Table 3. Mean factor scores of purchase intention by familiarity

	Purchase Intention			
	Bank of America		Kortos Bank	
	Mean	SD	Mean	SD
No involvement	4.181	1.60	4.574	1.42
Ideation involvement	4.360	1.59	4.203	1.27
Full involvement	5.031	1.40	4.681	1.38

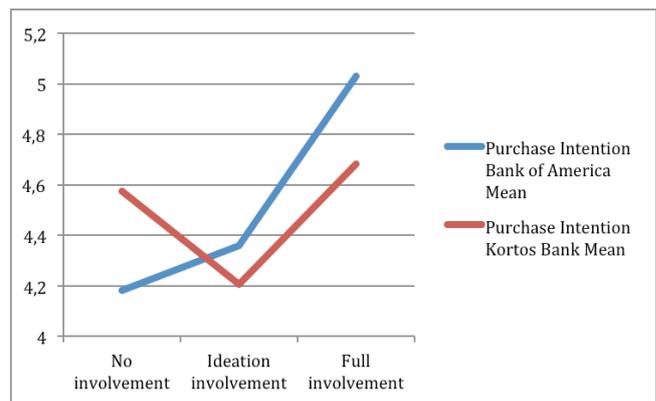


Figure 4. Mean factor scores of purchase intention by familiarity

Table 4. Mean factor scores of word-of-mouth by familiarity

	Word-of-Mouth			
	Bank of America		Kortos Bank	
	Mean	SD	Mean	SD
No involvement	4.201	1.53	4.574	1.15
Ideation involvement	4.575	1.59	4.151	1.03
Full involvement	5.109	1.12	4.723	0.99

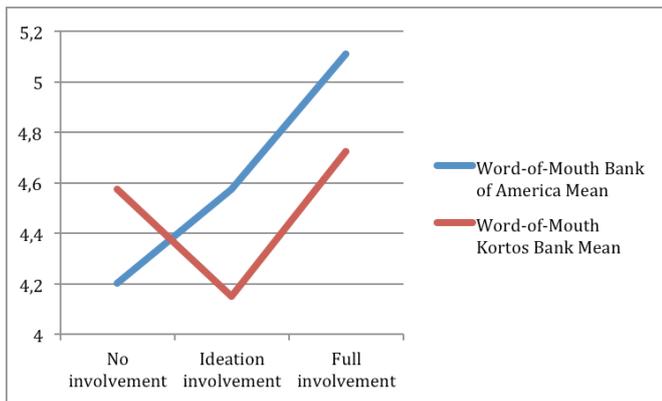


Figure 5. Mean factor scores of word-of-mouth by familiarity

As for the individual customer involvement levels, Tukey's post hoc test reveals that for purchase intentions there is a significant difference between the 'no group' and the 'full group', $p < 0.05$, and the 'ideation' group and the 'full' group, $p < 0.05$. However, this is not the case between the 'no' group and the 'ideation' group at $p (0.878) > 0.05$. Similarly, word-of-mouth output reports significance between the 'no' group and the 'full' group, $p < 0.05$, and the 'no' group and the 'full' group, $p < 0.05$. Again no significant difference was found between the 'no' group and the 'ideation' group at $p (0.991) > 0.05$. This means that both behavioral intentions only change when respondents are exposed to the 'full' customer involvement information. The ideation-version of co-creation seems to be insufficient to make people want to use the service or speak positive of it.

Finally, we checked for moderation effects of brand familiarity between customer involvement and brand attitude and behavioral intentions by using the SPSS PROCESS macro. No moderation effects have been detected, so we can conclude that co-creation revelation affects brand perception and behavior independently.

5.3 Discussion of Study #2 results

In line with similar research by Fuchs and Schreier [10], Schreier et al. [32] and van Dijk et al. [37], the findings of this study suggest that the awareness that a service business offering has been co-created has an overall positive effect on brand perceptions. This implies that co-creation changes the way a service brand is perceived and the value it provides to customers. It became clear that brand attitude increased for both the limited 'ideation' condition as well as the 'full' involvement condition when compared to the traditional innovation strategy. Unlike Schreier et al. [32] and van Dijk et al. [37] who simply measured for two levels (i.e. no involvement and involvement), and Fuchs and Schreier [10] who investigated for intensity dimensions within the ideation and selection phase, this research thus proved similar effects for other stages of the innovation process as well. An interesting finding is that no significant contrast was found between the two levels of co-creation, implying that a brand always will benefit in brand perception, whether it involves

customers in ideation only or in the whole NSD process as a whole.

The behavioral intentions towards the service were both positively affected by co-creation awareness, although the level of involvement did matter: purchase intentions and word-of-mouth will only be affected significantly in case of 'full' involvement. One explanation is that the advertisement insufficiently convinced the customers for the 'ideation' case. According to Money, Gilly and Graham [22], under uncertainty customers tend to search for more information about a service before making decisions. Taking the traditional lack of interest and nature of insurance services into account [3], customers would probably think twice before actively promoting or buying from a brand. Although insurances are widely available, they remain high-involvement services with some sort of threshold that customers have to overcome before taking action. The result therefore may relate back to the ambiguity associated with intangible services and the banking sector. Altogether, it can be argued that while innovating on 'ideation' level has a positive impact on attitude, it may not be enough to persuade customers to actually purchase and advocate the new services of the tested corporate banks.

Finally, no evidence was found for moderation effects of brand familiarity between customer involvement and brand attitude and behavioral intentions. This implies that, aside from the overall value of co-creation as an innovation strategy, involving customers could also be used as a method to improve the perceptions for well known as well as unfamiliar brands. This result is in line with familiarity results by van Dijk et al. [37]. A possible explanation could be that customers have a hard time distinguishing familiar brands in the banking industry. Although the familiar bank (i.e. Bank of America) may have build up a certain level of attitude, it can also be that many customers still do not have a clear image of what the bank stands for exactly. In fact, Balmer et al. [3] argue that the large majority of customers have a hard time differentiating between brands of major banks and insurance companies. The insurance business is characterized by complicated service products, pushy sales people and minimal understanding of branding [3]. From this perspective, it can be argued that both unfamiliar and familiar brands equally benefit from co-creation relationships, as it is an entirely new approach to branding and positioning. However, further research may be needed to determine whether the same findings will apply for other service sectors.

6. CONCLUSIONS

Brand knowledge and brand associations affect brand equity [17], so it is essential for brands to find out what the consequences are of using and communicating co-creation to the public. Understanding the effect of co-creation information of luxury goods on consumer's perceived luxury and brand attitudes, can be of great value to companies in this market. The same applies to service organizations. Firms might have to either hide or promote co-creation in their communication strategies. This insight is essential for marketers since

these customers form the majority of the market [10]. In two experiments we've tested the effect of the disclosure of co-creation on the brand perception of non-co-creating customers for these two businesses, i.e. the luxury product industry and the services industry. Along we've also tested the effects of several variants, like the stage (or level) of co-creation level and the brand familiarity. Other effects that were measured were product perception – in the case of luxury products – and behavioral intentions – in the case of service innovation – such as word-of-mouth and buying intention.

As for the luxury industry, the findings of the experiment show that no significant effect can be detected for co-creation disclosure on the perceived luxury and brand attitude of non co-creating consumers. This is not in line with earlier research in the luxury industry [9], but is neither consistent with studies in other product categories [10, 37, 32]. This could mean that the effect of co-creation disclosure will differ between categories within the luxury industry. We cannot generalize our findings for the whole luxury industry. For the luxury automobile industry specifically, this indicates that firms probably will not harm the brand when using and communicating the use of co-creation in the ideation phase. However, further research is necessary to determine which luxury categories are affected by co-creation disclosure and which ones are not.

As for the services industry, the results show strong evidence in favor of incorporating co-creation in marketing and branding strategies such as advertisements similar to the one in this study. Spreading awareness on NSD customer involvement successfully increased the brand perception of the two corporate banks, whether familiar or not. In addition to existing research on product brands active in the fast moving consumer goods sector, this investigation therefore shows that perceptions can also change towards services and their respective brands. The study also showed that the intense involvement of customers, i.e. throughout the whole NSD process, will yield better results in improved behavioral intentions – word-of-mouth and purchasing intention – than when involving customers in only ideation stages. Although no difference was found between 'ideation' and 'full' involvement for brand attitude, it is recommended to repeatedly promote 'full' co-creation in order to improve actual customer behavior over time.

Literature states that empowering customers in value creation has become of high importance due to the shifting demand for more transparent and sincere company behavior. Considering that the economic crisis of 2008 was predominately caused by the financial industry, this demand may be especially relevant for the banking, insurance and investment sectors. Therefore, in communicating co-creation to the larger public, it is recommended to underline the different characteristics belonging customer involvement in which the interaction between the customer and company is clearly described. Overall, it constitutes as a promising branding approach that managers can use to establish a competitive advantage in the market.

In general we observe none to positive influences of the revelation of a firm's co-creation efforts on the perceptions that non-co-creating customers have of a brand or product/service. So, firms will not meet any harm, but are encouraged to engage their customers in co-creation and actively promote this action.

7. REFERENCES

- [1] Alam, I. (2006), "Removing the fuzziness from the fuzzy front-end of service innovations through customer interactions", *Industrial Marketing Management*, Vol. 35, No., pp. 468-480.
- [2] Alam, I. and Perry, C. (2002), "A customer-oriented new service development process", *Journal of Services Marketing*, Vol. 16, No. 6, pp. 515-534.
- [3] Balmer, J. M., McDonald, M. H., De Chernatony, L. and Harris, F. (2001), "Corporatemarketing and service brands-moving beyond the fast-moving consumer goods model.", *European Journal of Marketing*, Vol. 35, No. 3/4, pp. 335-352.
- [4] Berry, L. L. (2000), "Cultivating service brand equity", *Journal of the Academy of Marketing Science*, Vol. 28, No. 1, pp. 128-137.
- [5] Brodie, R. J., Ilic, A., Juric, B. and Hollebeek, L. (2013), "Consumer engagement in a virtual brand community: An exploratory analysis", *Journal of Business Research*, Vol. 66, No. 1, pp. 105-114.
- [6] Brunswicker, S. and Ehrenmann, F. (2013), "Managing Open Innovation in SMEs: A Good Practice Example of a German Software Firm", *International Journal of Industrial Engineering and Management*, Vol. 4, No. 1, pp. 33-41.
- [7] Crump, M. J., McDonnell, J. V. and Gureckis, T. M. (2013), "Evaluating amazon's mechanical turk as a tool for experimental behavioral research", *PLoS One*, Vol. 8, No. 3, pp. e57410.
- [8] Field, A. (2009), *Discovering statistics using SPSS (Vol. 3)*, Sage Publications, London, UK.
- [9] Fuchs, C., Prandelli, E., Schreier, M. and Dahl, D. W. (2013), "What Is Users Might Not Be Gold: How Labeling Products as User Designed Backfires in the Context of Luxury Fashion Brands", *Journal of Marketing*, Vol. 77, No. 5, pp. 75-91.
- [10] Fuchs, C. and Schreier, M. (2011), "Customer Empowerment in New Product Development*", *Journal of Product Innovation Management*, Vol. 28, No. 1, pp. 17-32.
- [11] Füller, J., Faullant, R. and Matzler, K. (2010), "Triggers for virtual customer integration in the development of medical equipment -- From a manufacturer and a user's perspective", *Industrial Marketing Management*, Vol. 39, No. 8, pp. 1376-1383.
- [12] Gallouj, F. and Weinstein, O. (1997), "Innovation in services", *Research Policy*, Vol. 26, No. 4, pp. 537-556.
- [13] Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M. and Singh, S. S. (2010), "Consumer Cocreation in New Product Development", *Journal of Service Research*, Vol. 13, No. 3, pp. 283-296.
- [14] Hyun Baek, T. and Whitehill King, K. (2011), "Exploring the consequences of brand credibility in services", *Journal of Services Marketing*, Vol. 25, No. 4, pp. 260-272.
- [15] Ind, N., Iglesias, O. and Schultz, M. (2013), "Building Brands Together: EMERGENCE AND OUTCOMES OF CO-CREATION", *California Management Review*, Vol. 55, No. 3, pp. 5-26.
- [16] Kastanakis, M. N. and Balabanis, G. (2012), "Between the mass and the class: Antecedents of the "bandwagon" luxury consumption behavior", *Journal of Business Research*, Vol. 65, No. 10, pp. 1399-1407.
- [17] Keller, K. L. (2003), "Brand synthesis: The multidimensionality of brand knowledge", *Journal of Consumer Research*, Vol. 29, No. 4, pp. 595-600.
- [18] Kristensson, P., Gustafsson, A. and Archer, T. (2004), "Harnessing the Creative Potential among Users", *Journal of Product Innovation Management*, Vol. 21, No. 1, pp. 4-14.
- [19] Liljedal, K. T. (2016), "The Effects of Advertising Consumer Co-Created New Products. A Brand-Alliance Framework Model Can Predict Perceptions about Co-Created Brands and Their Creators", *Journal of Advertising Research*, Vol. 56, No. 1, pp. 53-63.
- [20] Liu, F., Li, J., Mizerski, D. and Soh, H. (2012), "Self-congruity, brand attitude, and brand loyalty: a study on luxury brands", *European Journal of Marketing*, Vol. 46, No. 7/8, pp. 922-937.

- [21] Mahr, D., Lievens, A. and Blazevic, V. (2014), "The Value of Customer Co-created Knowledge during the Innovation Process", *Journal of Product Innovation Management*, Vol. 31, No. 3, pp. 599-615.
- [22] Money, R. B., Gilly, M. C. and Graham, J. L. (1998), "Explorations of national culture and word-of-mouth referral behavior in the purchase of industrial services in the United States and Japan", *Journal of Marketing*, Vol. 62, No., pp. 76-87.
- [23] Nueno, J. and Quelch, J. (1998), "The mass marketing of luxury", *Business Horizons*, Vol. 41, No. 6, pp. 61-70.
- [24] Oliver, R. L. (1999), "Whence Consumer Loyalty?", *Journal of Marketing*, Vol. 63, No. Special Issue 1999, pp. 33-44.
- [25] Orcik, A., Tekic, Z. and Anisic, Z. (2013), "Customer Co-Creation throughout the Product Life Cycle", *International Journal of Industrial Engineering and Management*, Vol. 4, No. 1, pp. 43-49.
- [26] Ostrom, A. L., Bitner, M. J., Brown, S. W., Burkhard, K. A., Goul, M., Smith-Daniels, V., Demirkan, H. and Rabinovich, E. (2010), "Moving Forward and Making a Difference: Research Priorities for the Science of Service", *Journal of Service Research*, Vol. 13, No. 1, pp. 4-36.
- [27] Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1988), "Servqual: A Multiple-Item Scale For Measuring Consumer Perc", *Journal of Retailing*, Vol. 64, No. 1, pp. 12.
- [28] Piller, F. T., Ihl, C. and Vossen, A. (2010), "A typology of customer co-creation in the innovation process", available at: <http://dx.doi.org/10.2139/ssrn.1732127>.
- [29] Prahalad, C. K. and Ramaswamy, V. (2004), "Co-creation experiences: The next practice in value creation", *Journal of Interactive Marketing*, Vol. 18, No. 3, pp. 5-14.
- [30] Russo-Spena, T. and Mele, C. (2012), "Five Co-s in innovating: a practice-based view", *Journal of Service Management*, Vol. 23, No. 4, pp. 527-553.
- [31] Sawhney, M., Verona, G. and Prandelli, E. (2005), "Collaborating to create: The Internet as a platform for customer engagement in product innovation", *Journal of Interactive Marketing*, Vol. 19, No. 4, pp. 4-17.
- [32] Schreier, M., Fuchs, C. and Dahl, D. W. (2012), "The Innovation Effect of User Design: Exploring Consumers' Innovation Perceptions of Firms Selling Products Designed by Users", *Journal of Marketing*, Vol. 76, No. 5, pp. 18-32.
- [33] Simoes, C. and Dibb, S. (2001), "Rethinking the brand concept: New brand orientation", *Corporate Communications: An International Journal*, Vol. 6, No. 4, pp. 217-224.
- [34] Simonin, B. and Ruth, J. (1998), "Is a Company Known by the Company It Keeps? Assessing the Spillover Effects of Brand Alliances on Consumer Brand Attitudes", *Journal of Marketing Research*, Vol. 35, No. 1, pp. 39-56.
- [35] Spears, N. and Singh, N. (2004), "Measuring Attitude toward the Brand and Purchase Intentions", *Journal of Current Issues & Research in Advertising*, Vol. 26, No. 2, pp. 53-66.
- [36] Thompson, D. V. and Malaviya, P. (2013), "Consumer-Generated Ads: Does Awareness of Advertising Co-Creation Help or Hurt Persuasion?", *Journal of Marketing*, Vol. 77, No. 3, pp. 33-47.
- [37] Van Dijk, J., Antonides, G. and Schillewaert, N. (2014), "Effects of co-creation claim on consumer brand perceptions and behavioural intentions", *International Journal of Consumer Studies*, Vol. 38, No. 1, pp. 110-118.
- [38] Vigneron, F. and Johnson, L. (2004), "Measuring perceptions of brand luxury", *Brand Management*, Vol. 11, No. 6, pp. 484-506.
- [39] Von Hippel, E., Ogawa, S. and De Jong, J. P. (2011), "The age of the consumer-innovator", *MIT Sloan Management Review*, Vol. 53, No. 1, pp. 27-35.
- [40] Weber, M. E. A. (2011), *Customer Co-Creation in Innovations. A protocol for innovating with end-users*, Eindhoven University of Technology, Eindhoven.
- [41] Weber, M. E. A. (2012), "Paving the Way to Customer Co-Creation in Innovations", in the proceedings of the 5th International Conference on Mass Customization and Personalization in Central Europe (MCP-CE 2012), Novi Sad, Serbia, 2012, pp. 271-276.
- [42] Williams, K. C., Spiro, R. L. and Fine, L. M. (1990), "The Customer-Salesperson Dyad: An Interaction/Communication Model and Review", *Journal of Personal Selling & Sales Management*, Vol. 10, No. 3, pp. 29-43.
- [43] Witell, L., Kristensson, P., Gustafsson, A. and Löfgren, M. (2011), "Idea generation: customer co-creation versus traditional market research techniques", *Journal of Service Management*, Vol. 22, No. 2, pp. 140-159.

Promocija kokreacije ili ne? Istraživanje efekata na percepciju brenda i proizvoda

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Apstrakt

Mnogi stručnjaci tvrde da kokreacija sa potrošačima pri razvoju novih proizvoda ili usluga ima pozitivne uticaje na brend, brzinu inovacija, prihvatanje inovacija i lojalnost. Analizom ovih tvrdnji može se doći do zaključka da se većina istraživanja u ovoj oblasti odnosi na uticaje na potrošače koji su uključeni u proces kokreacije. Samo nekoliko studija istražuje uticaje kokreacije na (potencijalne) potrošače, koji nisu bili uključeni u proces kokreacije, koje nazivamo potrošačima koji ne kokreiraju. To je izuzetan nedostatak u istraživanju, uzimajući u obzir da potrošači koji učestvuju u kokreaciji čine samo jedan deo od ukupne baze potrošača neke kompanije. U ovom radu su predstavljena dva istraživanja uticaja kokreacije pri razvoju novih proizvoda ili usluga na veću grupu baze potrošača, koju predstavljaju oni potrošači koji nisu bili uključeni u proces kokreacije. Istraživanja su fokusirana na uticaje brenda i proizvoda za koje je ukazano da su nastali kokreacijom na one potrošače koji u tom procesu nisu učestvovali, u tržišnim segmentima luksuzne robe i korisničkih usluga. Podrazumeva se da kompanija putem informisanja ili promocije ukaže da su proizvodi nastali uz kokreaciju sa drugim potrošačima. Utvrđeno je da ukazivanje na kokreaciju u segmentu korisničkih usluga može imati pozitivne uticaje na percepciju brenda i proizvoda, što potvrđuje zaključke prethodnih istraživanja. Sa druge strane, pozitivan uticaj u segmentu luksuznih proizvoda nije značajan.

Ključne reči: Odnos prema brendu, namera kupovine, od usta do usta, kokreacija potrošača, potrošači koji ne kokreiraju

Appendix



Please indicate how you would describe Mercedes-Benz by checking the appropriate circles.

In your opinion, Mercedes-Benz is...

Very noticeable	<input type="radio"/>	Fairly Noticeable
Popular to public	<input type="radio"/>	Elitist
Affordable	<input type="radio"/>	Extremely expensive
Upper class	<input type="radio"/>	Upper-middle class



Please indicate how you would describe Mercedes-Benz by checking the appropriate circles.

In your opinion, Mercedes-Benz is...

<i>(not mass-produced)</i> Crafted	<input type="radio"/>	Manufactured <i>(mass-produced)</i>
Superior	<input type="radio"/>	Better
Best quality	<input type="radio"/>	Good quality
Very sophisticated	<input type="radio"/>	Fairly sophisticated



Figure 1: Example pages of the survey of Study #1 on the Qualtrics online platform

UNIVERSITY OF AMSTERDAM

Faculty of Social and Behavioural Sciences

ASN is a large corporate bank offering a variety of financial services.

This is an advertisement about the introduction of their new online insurance service. Please take a moment to observe the advertisement and carefully read the text about their innovation as the following questions should be answered based on the content.

Note: it is possible to return to the advertisement for re-examination by using the back button



Easy arrangement of insurances that match your personal situation

The new ASN website is all about you.
Together with our customers we developed an integrated solution for all your online banking needs. Several ASN enthusiasts helped us out in the early development stages to generate new ideas for our brand new website. During the collaboration it became clear that there is need for better insurance services, which are accessible, easy to understand, tailorable to your personal situation, and with on-demand advice from our experts. ASN selected these promising ideas to be developed further by our experts and making it available for you.
Visit our website now and try it yourself.

ASN BANK

>>

Figure 2: Introduction page of the survey of Study #2 on the Qualtrics online platform

Table 1: Results of Study #1

	Control Group		Experimental Group		t	df	p-value
	Mean	SD	Mean	SD			
Perceived Luxury	4.2388	0.78140	4.2980	0.72837	-0.620	247.275	0.536
Conspicuousness	5.0926	1.03935	5.0403	0.84754	0.436	239.752	0.663
Uniqueness	3.6587	1.10752	3.6815	1.18996	-0.156	246.108	0.876
Quality	4.1270	1.01328	4.1552	1.00739	-0.221	247.974	0.825
Hedonism	3.8810	1.27189	4.1048	1.10298	-1.488	244.147	0.138
Extended Self	4.4345	1.01695	4.5081	1.00301	-0.576	247.999	0.565
Brand Attitude	4.9762	1.19214	5.1871	1.02259	-1.502	243.475	0.134
*Significant for $p < 0.05$							

¹ <http://www.marketingonline.nl/blog/3-vragen-antwoorden-over-de-online-co-creatie-community-van-rabobank>

² Vigneron and Johnson (2004) developed a theoretical framework for the luxury that consumers perceive in a brand. The dimensions that form the perceived luxury of a brand are of a personal and non-personal nature. The non-personal perceptions that perceived luxury is composed of are formed by conspicuousness, uniqueness and quality. The personal perceptions of perceived luxury are formed by hedonic and the extended self.