Chapter 1

INTRODUCTION
Occasionally, groups of tourists or security guards are seen riding a two-wheeled, self-balancing, electric vehicle. This, at the time radically innovative, vehicle, named the Segway, was introduced in 2001. It was hyped-up by the media who proclaimed that this strange vehicle would change transportation. Furthermore, one of the primary investors in the Segway, John Doerr, made a bold statement that “it would become more important than the internet”. The Segway, however, failed to meet these expectations. The product found users in niche segments, such as guided tours and law enforcement, but it did not reach the mass market. There are several possible reasons for the failure of the Segway; an important one is that this self-balancing, two-wheeled electric vehicle did not clearly fit into an existing category of transportation modes (Sørensen, 2013).

The Segway combines elements from a walking scooter, (electric) bicycle, and a unicycle. The challenge of clearly categorizing the Segway influenced policy makers, who found it challenging to determine the traffic rules for the Segway. Likewise, consumers had a difficult time categorizing and determining the value of this new method of transportation. It is possible that the Segway was ahead of its time, but after it was introduced it was rejected by the mass market. This is a common problem with innovative products that cannot be clearly categorized into an existing category or that can be categorized in multiple categories. The core theme of this thesis is about the effects of categorization in the case of products or producers that cannot be easily categorized because they are new and/or because they can be categorized in multiple categories.

Categorization is the process of identifying the similarities among alternatives within a category and identifying the dissimilarities among alternatives across categories (Medin and Schaeffer 1978; Rosch and Mervis 1975). To do this, consumers refer to their knowledge of existing product categories (Gregan-Paxton, and John, 1997; Moreau, Lehmann, and Markman, 2001). Through this knowledge, consumers compare products to alternatives in existing categories, which helps them to understand the products and determine their value (Talke et al., 2009; Rindova and Petkova, 2007; Moreau et al., 2001). Categorization can have a particularly strong impact on the market performance of new products. The more innovative a product is, the larger the risk is that consumers will not be able to clearly categorize the product; this might have negative consequences on the market performance of the product.
Indeed, previous research demonstrates that consumers’ evaluations of products that cannot be easily categorized can be negatively affected (e.g., Hsu, 2006; Negro and Leung, 2013; Noseworthy and Trudel, 2011). The Segway is one of the many examples of products that are being valued lower because they cannot be easily categorized.

In order to overcome the potential negative effects of an unclear categorical identity of new products, producers can provide category cues to guide consumers in their categorization efforts. Both visual and textual elements can be seen as category cues and can strongly influence how the market will categorize their products. First, scholars argued that the visual appearance of a product is important to how it is categorized (Bloch, 1995; Creusen and Schoormans, 2005; Eisenman, 2013; Goode, Dahl, and Moreau, 2013; Mugge and Dahl, 2013; Radford and Bloch, 2011; Rindova and Petkova, 2007). Producers can signal the category membership of their products by deliberately applying or not applying typical visual design elements to them. For example, washing machines are often white, clothes for boys are generally not pink, and wine normally comes in a glass bottle and milk in a carton (currently in the Netherlands). Regarding new products, which often combine elements from multiple categories, producers can choose between cues from multiple categories. For example, the Segway combines elements from a walking scooter, (electric) bicycle, and a unicycle. Perhaps the Segway would have been accepted by the mass market if it looked more like a regular bicycle.

Next to visual design elements, producers can use textual cues to communicate the category membership of the product. For example, textual cues can be descriptions of the product or the label of the category. Category labels can provide guidance to consumers in their categorization efforts as they judge the value of a product (Mogilner, Rudnick, and Iyengar, 2008). Labels represent a set of characteristics of a category and they are used by market actors to name and identify products and producers (Navis and Glynn, 2010). Through labels, people can efficiently communicate about categories. It would be time consuming to state “that thing used for transportation, with two wheels, pedals, a steering wheel, and a saddle”, when referring to a bicycle. During the early stages of the emergence of a category the number of category labels that are introduced and used often increases rapidly (Grodal, Gotsopoulos, and Suarez, 2014). This provides challenges for producers in terms of the decision about which category label they
should provide to guide consumers in their categorization efforts during the market introduction of their new products.

The main objective of this thesis is to obtain a better understanding of categorization and its effects in cases where consumers or other market actors are undecided about the categorical membership of a product or producer. To obtain a better understanding, this thesis builds on literature in the fields of marketing and organization, which are complementary to each other. Most of the studies in marketing that explore the effects of categorization use consumers as the unit of analysis to investigate how consumers categorize products that are difficult to categorize (e.g. Gregan-Paxton, Hoeffler and Zhao, 2005; Moreau et al., 2001; Noseworthy and Goode, 2011) and the degree to which this affects their evaluation of the product (e.g., Meyers-Levy and Tybout, 1989; Noseworthy and Trudel, 2011; Noseworthy, Di Muro, and Murray, 2014). In most of these studies only a few different products are used. This makes it difficult to account for the competitive context, and to generalize the findings at an industry level.

Studies in organization theory also explore the effects of categorization and tend to use products, producers, or other market actors as the unit of analysis (e.g. Hsu, 2006; Negro and Leung, 2013; Pontikes, 2012; Ruef and Patterson, 2009; Zuckerman, 1999), which makes it possible to measure the effects of categorization at an industry level. However, most of those studies do not directly measure consumer behavior in terms of evaluation and categorization of the product or producer (Bowers, 2014). For example, they use performance indicators such as sales figures, expert ratings, and reviews to measure how the product or producer is categorized and they use third party sources such as databases (e.g. IMDB for movie genres). The problem with these measures is that they are assumed to represent the behavior and perceptions of consumers (Bowers, 2014). This thesis combines and builds on insight from both streams (marketing and organization theory) and builds the foundation for a bridge that could – at least partly – close the gap between these two streams.

1.1 Main theoretical themes

The insight from studies in organization theory and marketing literature on categorization in four themes are structured as discussed in this
The themes are related to the effects of categorization in cases where products or producers are difficult to categorize. The four themes were chosen because they are addressed by scholars in organization theory and marketing literature, and because these themes combine insight into the most recent studies on categorization. The first theme provides insight into the effects of products or producers that combine multiple categories on how those products are categorized and valued. The second theme discusses the lack of consensus that different market actors might have about the categorical membership of a product or producer. The third theme argues that categories are socially constructed and that categories are not fixed elements in a market or industry, but that they evolve and change over time. Finally, the fourth theme deals with how producers communicate the category membership of themselves and their products.

1.1.1 Theme 1: The effects of spanning categories

The first theme of this thesis relates to the effects of spanning categories. Category spanning occurs when a product or producer is concurrently a member of two or more categories that belong to the same classification system (Vergne and Wry, 2014). For example, contrary to ‘pen-scissors’ (i.e. a combination of a pen and a scissors, both are stationary products) a yellow laptop does not span similar hierarchical categories. However, a yellow printer-laptop (i.e. a yellow laptop that can also print) does span similar hierarchical categories. A common notion within studies on organization theory is that products or producers receive less positive evaluations when they span multiple categories (Hsu, 2006; Leung and Sharkey, 2013). Scholars also showed that the effects of spanning categories might be less negative in some situations and more severe in others. For example, the negative effects of category spanning are stronger when the contrast (i.e. the degree to which a category has sharp boundaries) of the categories that are being spanned is high (Kovács and Hannan, 2010).

In addition, some market actors might be less deterred or even attracted to category spanning. For example, venture capitalists prefer startups that belong to multiple categories because they tend to be more flexible and can establish new markets (Pontikes, 2012). Category spanning also has a positive effect on receiving an investment for science startups that incorporate features from a technology category,
but not the other way around (Wry, Lounsbury, and Jennings, 2014). In other words, the effect of category spanning depends on the category that producers ‘start in’ (Wry et al., 2014). Finally, in cases where the categories are emerging and the classification systems are not fully developed, producers who span multiple categories do not seem to be negatively evaluated (Ruef and Patterson, 2009).

Most studies on category spanning in organization theory use the product, the producer, or another market actor as unit of analysis, and they tend to use indirect measures for the evaluation and perception of the unit of analysis. An exception is a recent study by Bowers (2014), who took an initial step towards measuring the direct evaluation of equity analysts to demonstrate the positive effects of a clear category membership and the negative effects of belonging to multiple categories. According to Bowers (2014) the evaluation of market actors for the same producer or product can differ, which is important to consider.

In marketing studies on categorization, it is common practice to examine the effects of categorization by directly measuring the categorization and evaluation of products in the eyes of market actors (mostly consumers). Studies in marketing demonstrate that consumers tend to use a single category to make sense of products that combine elements from multiple categories, which is referred to as the ‘single category belief problem’ (Moreau et al., 2001; Noseworthy, Wang, Islam, 2012; Rajagopal and Burnkrant, 2009). It may not be a desired situation if consumers only use one category to make sense of products that combine elements from multiple categories, because they might not perceive all of the associated benefits. In addition, consumers might understand category spanning products faster if they can use information from multiple categories that they are familiar with (Moreau et al., 2001).

Similar to studies in organization theory, studies in marketing demonstrate that category spanning does not necessarily have a negative effect on all cases. For example, consumers can use two categories to make sense of a product when the number of cues per category is limited (Moreau et al., 2001), or when both categories are communicated at the same time (Gregan-Paxton et al., 2005). In addition, Noseworthy et al., (2012) demonstrated that the competitive context, in terms of the products that are being compared by consumers, influences how consumers classify category spanning product. Their study is the first in the field of marketing to investigate the effects of categorization
and demonstrate the importance of the competitive context. Interestingly, among studies on organization theory it is common to account for the competitive context, since those studies use the product or producer as the unit of analyses.

Spanning categories does not always have negative effects on performance. This partly depends on the categories that are spanned, how they are spanned, and the signals that producers send to reveal the category membership of themselves or their products. It also depends on the competitive position of the producer and the competitive context in which it operates. Two of the four core chapters of this thesis cover this theme. First, Chapter 2 describes a specific hybrid product that combines product and service elements into product-service systems (PSS). An increasing number of producers develop and offer bundles of product and service elements. However, many producers struggle with developing and marketing effective PSS’ that enhance performance (Baveja, Gilbert, and Ledingham, 2004; Neely, 2008; Stanley and Wojcik, 2005; Ulaga and Reinartz, 2011). PSS’ combine a product and a service category, which may be confusing for consumers and negatively affect their evaluation (Hsu, 2006; Leung and Sharkey, 2013; Noseworthy and Trudel, 2011). In Chapter 2, a framework is proposed that can be used to identify and develop effective PSS’.

A second study that deals with category spanning – as reported in Chapter 3 – examines producers’ decisions about the design of a product that combines functionalities from multiple categories. The decision to combine functionalities from multiple categories into called hybrid product can arise due to a market opportunity (such as the current trend of combining product and service elements into PSS’). Combining functionalities of multiple categories provides producers the freedom – and the challenge – to choose from multiple category specific design characteristics. The strategic design decisions that producers make will determine whether the hybrid product will look more or less like one particular category, like all categories, or like neither category. In addition, the extent to which the competitive position of the producer and how the competitive context in which it operates affects their strategic design decisions when developing hybrid products are discussed.
1.1.2 Theme 2: Category consensus

The second theme of this thesis is about the similarity in category perceptions between and among different market actors, also referred to as category consensus. In organizational literature, category consensus is conceptualized as the degree to which market actors have a similar perception about the categorical membership of a product or producer (Zuckerman, 2004). Categories have high consensus when the sets of characteristics largely overlap in the perceptions of the market actors (Hannan, Pólos, and Carroll, 2007). Hsu (2006) demonstrated that greater consensus among market actors led to higher box office movie sales. In addition, she found that category consensus had a positive moderating effect on the negative effect of category spanning. In other words, products or producers that span multiple categories face less or even no negative effects if market actors agree on the categorical membership of a product or producer.

In marketing literature, the concept of category consensus has not received significant attention. However, marketing scholars demonstrate that consumers can differ in their perception or attitude towards products or producers, which can also affect the manner in which they categorize the same product or producer. For example, marketing scholars found that consumers differ in their tendency to buy new products more often and earlier than others (Goldsmith, Freiden, and Eastman, 1995; Goldsmith, Hauteville, and Flynn, 1998; Midgley and Dowling, 1978). In addition, consumers also differ in their knowledge of categories (Bettman and Sujan, 1987). Therefore, as consumers have different degrees of knowledge of a category, differ in their degree of innovativeness and given that categories are sense-making devices (Murphy, 2002; Ross, 1996); different consumers might use different categories to make sense of the same product. Moreover, this might occur often when product categories are emerging. During the early stages of category emergence, the boundaries are less clear and multiple category labels are used (Grodal et al., 2014); this increases the risk of a lack of consensus among – for example – consumers.

Although studies in organization theory have demonstrated different effects of categorization on different types of market actors (e.g. Pontikes, 2012; Kim and Jensen, 2011), these studies did not consider that different types of market actors might categorize the same object differently. In addition, studies in marketing have not focused on the effects of a lack of consensus between different types of market
actors. However, Rosa et al. (1999) argued that producers and consumers – being different types of market actors – have different frames of references (e.g. a production versus a consumption frame) and different knowledge structures, and they operate in different contexts. Consequently, these different types of market actors could also have different categorical perceptions. Hsu (2006) has taken a step in the direction of studying the effects of consensus by considering the possibility that different market actors categorize the same object differently. However, she only considered category consensus among the same type of market actors and not between different types of market actors (for example producers versus consumers). Although both ‘types’ of consensus – within and between types of market actors – might have an effect on market performance, the latter has not received attention in organization theory or marketing literature.

In summary, this theme argues that there can be a lack of consensus about the categorical membership of the same product, as perceived by different market actors. This can occur within one type of market actor (e.g. consumers) and among different types of market actors (e.g. consumers versus producers). As the latter has not received much attention, one study (reported in Chapter 5) was devoted to examining the effect of a lack of consensus between producers and consumers about the categorical membership of the same product. We argue that this difference in classification between producers and consumers – the classification gap – about the same products has a negative effect on the performance of those products.

1.1.3 Theme 3: Dynamic character of categories

A third theme of this thesis deals with the dynamic character of categories. Categories are not fixed elements in a market or industry; they are socially constructed and they evolve and change over time (Rosa et al., 1999). Scholars in the field of organization theory have extensively studied how categories emerge (Grodal et al., 2014; Navis and Glynn, 2010; Santos and Eisenhardt, 2009) and how this affects the market performance of producers and their products (Alexy and George, 2013; Kennedy, 2008; Khaire and Wadhwani, 2010). This topic has received much less attention among marketing scholars. One exception in marketing literature is the study by Rosa et al. (1999) – which is widely cited by organization theory scholars – who demonstrate that
categories emerge through interaction between producers and consumers.

The emergence of a new category is often triggered by the introduction of radically innovative products (Garcia and Calantone, 2002; Rindova and Petkova, 2007; Veryzer, 1998). In general, emerging categories tend to follow a few stages in their process of becoming mature (Abernathy and Utterback, 1978; Grodal et al., 2014). In the early stages of the emergence of new categories, there is low or even no agreement on the core attributes of the categories (Grodal et al., 2014). The following three types of category attributes play a role during the emergence of new categories. First, within emerging categories there is no dominant design, in terms of technological features (Srinivasan, Lilien, and Rangaswant, 2006; Utterback and Suarez, 1993). When there is no dominant design the core technological functionalities of the products within a category substantially differ across the products in that category (Utterback and Suarez, 1993).

Second, during the first stages of the emergence of a category many new category labels are introduced by different market actors who try to make sense of the new products (Grodal et al., 2014). It is mainly producers that introduce new category labels, because they often come into contact with new products much sooner than consumers (Grodal et al., 2014). However, the category label that turns out to be ‘the one’ often emerges from interaction between actors from both sides of the market (i.e. production and consumption) (Grodal et al., 2014; Rosa et al., 1999).

Third, the alternatives in an emerging category tend to look dissimilar in terms of visual appearance (Eisenman, 2013). New products and their new technological features and functionalities also need an ‘embodiment’. Since the features and functionalities greatly differ during the early stages of the emergence of a category, the embodiment can also differ to a large extent. Once the category is further emerging, typical visual design elements also emerge (Eisenman, 2013). Although the emergence of a category is influenced by the interaction between actors from the production and consumption sides of the market, producers’ decisions that are related to all three of the discussed category attributes (technological features, category labels, visual appearance) affect how consumers categorize and evaluate the producers and their products. In addition, these decisions can strongly influence the emergence of a category.

Organization theory scholars argue that the effects of categorization differ depending on the emergence of the category (Ruef
and Patterson, 2009; Negro, Hannan, and Rao, 2010; Kovács, and Hannan, 2010). For example, when categories and classification systems are not yet mature, producers who span multiple categories are not negatively evaluated (Ruef and Patterson, 2009). The opposite is true for cases in which producers span categories with high contrast (Kovács, and Hannan, 2010). In addition, introducing a new product in an emerging category might be beneficial, since consumers expect new products due to the innovative character of that product category (Wood and Moreau, 2006).

Two core chapters of this thesis focus on the effects of the degree to which a category is emerging on the decisions of producers and on the performance of the products within those categories. Chapter 3 discusses whether or not producers make different design decisions depending on the degree of emergence of a category, when they combine elements from multiple categories into a hybrid product. It is argued that producers are less likely to use any category specific design characteristics from these categories for the hybrid product.

Chapter 4 examines the effect of providing category labels on consumers’ willingness to pay and their newness perceptions. Providing category labels – for example, when advertising new products – can guide consumers in categorizing and evaluating new products (Yamauchi and Markman, 2000). When a category is emerging, multiple category labels might be in use for the same product category (Grodal et al., 2014). This provides producers with the challenging task of choosing the ‘right’ category label when they advertise their product. The effect of providing category labels that represent categories that differ in their degree of matureness on consumers’ newness perceptions and willingness to pay is studied. It is expected that consumers’ newness perceptions of radically innovative products would increase when labels refer them to an emerging category, compared to a mature category. In addition, as consumers tend to value newness (Bloch, 1995; Hirschman, 1980; Moreau and Dahl, 2005), it is expected that their willingness to pay for radically innovative products would increase when labels refer them to an emerging category, compared to a mature category.

1.1.4 Theme 4: Communicating category membership

The final theme of this thesis deals with how producers communicate the category membership of themselves and their products. Scholars in
organization theory studied how producers communicate their category membership by making claims about their organizational identity. According to Whetten and Mackey (2002), an “organizational identity is appropriately conceived of as a set of categorical identity claims (who or what we claim to be, categorically) in reference to a specified set of institutionally standardized social categories” (p. 397). For example, producers can claim categorical identity by mentioning category labels in press releases (Pontikes, 2012). Organizational identities are formed by the claims that are made by internal actors towards each other and towards external actors (Gioia et al., 2010; Ravasi and Schultz, 2006; Scott and Lane, 2000). By sending out those claims producers try to create a consistent and targeted representation of themselves (Elbsch and Kramer, 1996; Lamertz, Heugens, and Calmet, 2005). In addition, producers may establish category membership through claims of similarity or dissimilarity compared to competitors (Porac and Thomas, 1990; Porac, Thomas, and Baden-Fuller, 1989).

Next to communicating category membership at an organization level, producers also communicate the category membership of their products. Studies in marketing and organization theory have discussed several types – both visual and textual – of cues that can affect categorization and evaluation (Bloch, 1995; Eisenman, 2013; Creusen and Schoormans, 2005; Goode, Dahl, and Moreau, 2013; Mugge and Dahl, 2013; Radford and Bloch, 2011; Rindova and Petkova, 2007). Since producers make decisions about which (technological) features and functionalities to combine in their new products, they also need to make decisions about the visual appearance of the products and the textual elements that they provide when they advertise or communicate the products. Category cues – both visual and textual – are especially useful when it is not directly obvious how the product can be categorized, which is often the case with a new product. In those cases, category cues can help consumers make sense of the product.

Producers can signal their own category membership and that of their products by deliberately providing – or deliberately not providing – visual and textual category cues. Category cues provide guidance to consumers in their categorization efforts by helping them decide which alternatives the product should be compared to in order to understand and judge the value of the product (Mogilner et al., 2008). However, it is not always straightforward which category cues a producer should use, or what the determinants are of producers’ decisions regarding their choice to use certain category cues. Therefore, two core chapters in this
thesis aim to gain more insight regarding the communication of a product’s categorical membership. Chapter 3 examines the determinants of producers’ decisions regarding the use of certain typical design characteristics, such as color, shape, texture, and symbols. In this chapter the concept of category markers is introduced to refer to those typical design characteristics with a primary function of conveying a product’s categorical identity. This chapter focuses on the influence of the competitive position (in terms of the producer’s market share of a product in a particular category) and competitive context (in terms of the degree of emergence of the category) of producers on their decisions to use category markers when designing new hybrid products.

Chapter 4 aims to gain a better understanding of the effects of providing category labels. Category labels can provide guidance to consumers in their categorization efforts by helping them to decide which alternatives the product should be compared to in order to understand and judge the value of the product (Mogilner et al., 2008). Specifically, the effects of providing category labels that differ in their degree of matureness on consumers’ newness perceptions and willingness to pay for a radically innovative product are studied. This chapter argues that consumers’ willingness to pay for a radically innovative product increases when a category label is provided from an emerging category, due to perceived newness. However, it between the degree of matureness between the provided label and the degree to which the product is innovative is important.

1.2 Empirical context: Innovative products

This PhD project was part of CRISP (Creative Industry Scientific Programme), which focused on generating knowledge about how to design and develop effective product service systems (PSS), which are – often innovative – combinations of product and service elements. As PSS’ combine elements from multiple categories (i.e. a product and a service category), this thesis focuses on categorization in general, and not solely on PSS’. Specific, it focuses on the effects of categorization in the case of innovative products.

Products that are innovative and new to the market are, by definition, different from existing products, but the degree of newness can differ. In addition, the extent to which a new product can be easily categorized can differ. For example, a new product could be easily
categorized but still be perceived as a new alternative in an existing category. This type of products refers to incremental innovation. On the other hand, radically innovative products are the starting point for new product categories because they cannot be categorized into existing ones (Garcia and Calantone, 2002; Rindova and Petkova, 2007; Veryzer, 1998). The effects of categorization seem to be particularly interesting in the case of innovative products.

In the four core studies described in this thesis incrementally and radically innovative products were examined. Two of the four studies (partly) focus on PSS’ that are new to the market (Chapters 2 and 3). One of those studies provides and empirically tests, a framework to clearly identify innovative PSS’ (Chapter 2), and the second study examines how producers decide on the categorical identity of the innovative PSS – among other innovative hybrids – that they develop (Chapter 3). The third core study examines, by conducting three experiments, the effects of using category labels on consumers’ evaluations of incrementally and radically innovative products (Chapter 4). In the final core study (Chapter 5) we measure the degree to which producers and consumers categorize music festivals differently, and measure the effect of this ‘classification gap’ on product performance. Most festivals are recurring yearly events that tend to offer a new lineup each year, which increases the risk of a classification gap.

1.3 Methodology

In this thesis three methods of data collection were used, including surveys, structured interviews, and experimental auctions. In two of the four studies surveys were used. As described in Chapter 2, in which a framework for clearly identifying a PSS is provided, a survey was used to empirically test ideas among 84 product and service developers. Chapter 5 measures – using surveys – how producers and consumers categorize the same festival in terms of musical genres. In total, the genre classification of 70 festivals was measured. In addition, 1554 potential visitors of music festivals in the Netherlands were surveyed about their awareness of the festivals, and whether or not they considered visiting or had visited the festivals.

In the study described in Chapter 3 structured interviews were conducted with 71 product and service designers. They were queried about their decisions to use category markers in a range of possible
contextual scenarios in which they were asked to combine elements from two categories. During new product development, designers often decide – or at least strongly influence – what the product will look like in terms of shapes, color, or graphic elements; thus, they consciously or unconsciously also make decisions about the use of category markers. The different scenarios varied in terms of a) the degree of emergence of the categories that they were asked to combine, b) whether or not they had a large market share in the categories, and c) the type of products that they were asked to combine.

The third method of data collection consisted of online experimental auctions. Online experimental auctions were conducted in two of the four studies (see Chapters 2 and 4). The online research platform, which we developed ourselves, combines a sealed bid nth price auction with a short survey tool. The platform works as follows; respondents place one sealed bid that others cannot see and subsequently they answer a few questions. The respondents are randomly assigned to one of a number of advertisements. This allow us to measure differences in willingness to pay depending on the advertisement. The winners of the auction actually pays for and receives the product. The winners of the auction are the highest bidders, but they pay an amount that is equal to a bid that is lower than their own bid. The amount that the winners pay is approximately 20% below the normal retail price. The reason for this is to make the auction more comparable with real purchase situations for bidders. Since respondents know that the auctions are real and that they will pay less than their own bid if they win the auction, they have an incentive to truthfully bid their maximum willingness to pay.

A consumer panel of 1800 ‘active’ respondents was recruited (i.e. respondents who participated in at least one auction every 30 days). When conducting an experiment, respondents are invited by email and they place their bids in a field below the advertisement. After confirming their bids they are asked to complete the survey questions. After closing the auction, the respondents will receive an email with the outcome of the auction. In the email to the winner, his or her own bid amount and the amount that he or she has to pay is mentioned, and the payment details are provided. The respondents who do not win the auction will receive an email in which their own bid amount and the amount that the winner has to pay are mentioned.

This self-developed auction platform provides an efficient and valid way to conduct experiments that measure the effect of
communicating a product in a particular way on consumers’ willingness to pay. This not only proved to be an efficient method of gathering reliable data for these studies; this tool was also useful for students, other researchers, and producers. I will continue using this tool – although under a new name (www.alleeup.com) – for my own academic research and to assist startups with: a) testing what consumers are willing to pay for their new products, b) finding out who is willing to pay the most, and c) determining how to effectively communicate their new products.