



# The Effect of Labeling Strategies on the Consumer's Purchase Intention

The impact of promoting a product using crowdsourcing labeling versus  
consumer reviews, top sales or public figure endorsement

Ana Rita Roque

Dissertation written under the supervision of  
Professor. Claudia Costa, PhD

Dissertation submitted in partial fulfilment of requirements for the  
MSc in Business Administration at the Universidade Católica Portuguesa, 04.01.2018

## ABSTRACT

As firms fight to mitigate the effects of uncertainty involved in the process of creating a new product, crowdsourcing offers a promising route as it constitutes one of the most efficient decision-making mechanisms, helping marketers to set apart their products from competitors. Innovation scholars identified the benefits of labelling products as crowdsourcing (user-designed) at the point of purchase. Evidence shows that consumers prefer products labeled as user-designed as opposed to company design, as they are associated with more innovation. Yet, little is known about consumer behavioural intentions when other labeling strategies, such as customer reviews, top sales and public figure endorsement, are presented to determine if any of these have a bigger impact, than crowdsourcing, in the consumer purchase intention. Our findings suggest that none of these labeling strategies is more efficient at the point of purchase, showing that the way the product is communicated to the broader market does not influence consumer's behavioural intentions. Second, the results showed that the level of perceived user involvement associated to each strategy is also not enough to affect consumer's behavior.

Enquanto as empresas lutam para mitigar os efeitos da incerteza envolvidos no processo de criação de um novo produto, o *crowdsourcing* tem sido reconhecido como um caminho promissor, na medida que constitui um dos mecanismos de decisão mais eficientes, auxiliando os especialistas em marketing a distinguirem os seus produtos dos da concorrência. Os especialistas em inovação já começaram a estudar o efeito de rotular produtos como resultado de *crowdsourcing* (criado pelo consumidor) no ponto de venda. Foi já provado que os consumidores preferem produtos rotulados como criados pelo consumidor, por oposição aos rotulados como criados pelas empresas, na medida em que lhes atribuem maior inovação. Contudo, pouco se sabe ainda sobre as intenções comportamentais do consumidor quando outras estratégias de rotulagem, tais como comentários de consumidores, top de vendas ou recomendação por figura pública, são comparadas com o *crowdsourcing*, para determinar se alguma terá um maior impacto na intenção de compra do consumidor. Os resultados que alcançámos sugerem que nenhuma destas estratégias de rotulagem é mais eficaz que as outras no ponto de venda, demonstrando que a forma como o produto é comunicado ao mercado não influencia as intenções comportamentais do consumidor. Em segundo lugar os resultados demonstraram que o nível percebido de envolvimento do utilizador associado a cada estratégia também não é suficiente para afectar o comportamento do consumidor.

**Keywords:** Labelling strategies, crowdsourcing, customer review, top sales, public figure endorsement, user-design, purchase intention.

## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>1. INTRODUCTION</b> .....                                      | <b>5</b>  |
| <b>2. LITERATURE REVIEW</b> .....                                 | <b>9</b>  |
| 2.1 DEFINITIONS .....   | 9         |
| 2.1.1 Crowdsourcing.....  | 9         |
| 2.1.2 Consumer Reviews.....                                       | 11        |
| 2.1.3 Top Sales.....  | 13        |
| 2.1.4 Public Figure Endorsement .....                             | 14        |
| <b>3. HYPOTHESES</b> .....  | <b>16</b> |
| 3.1 CROWDSOURCING HYPOTHESIS .....                                | 16        |
| 3.2 CONSUMER REVIEW HYPOTHESIS .....                              | 17        |
| 3.3 TOP SALES HYPOTHESIS .....                                    | 18        |
| 3.4 PUBLIC FIGURE ENDORSEMENT HYPOTHESIS .....                    | 19        |
| <b>4. METHODOLOGY</b> .....                                       | <b>20</b> |
| 4.1 OBJECTIVES AND OVERVIEW.....                                  | 20        |
| 4.2 METHOD .....  | 20        |
| 4.3 SURVEY DESIGN.....  | 20        |
| 4.4 THE MEASURES .....  | 22        |
| <b>5. RESULTS</b> .....   | <b>25</b> |
| 5.1 DESCRIPTION OF THE SAMPLE.....                                | 25        |
| 5.2 PRODUCT INVOLVEMENT .....                                     | 25        |
| 5.3 MAIN ANALYSIS: TESTING THE HYPOTHESES.....                    | 25        |
| 5.3.1 Results for the One Way ANOVAS.....                         | 25        |
| 5.3.2 Results for the Regression Analysis .....                   | 28        |
| 5.4 FURTHER ANALYSIS .....  | 29        |
| 5.4.1 Product Users Involvement.....                              | 29        |
| 5.4.2 New Group: high and low user's involvement assumption ..... | 32        |
| <b>6. DISCUSSION AND CONCLUSION</b> .....                         | <b>34</b> |
| 6.1 ACADEMIC IMPLICATIONS.....                                    | 36        |
| 6.2 MANAGERIAL IMPLICATIONS .....                                 | 38        |
| <b>7. LIMITATIONS AND FUTURE RESEARCH</b> .....                   | <b>39</b> |

|                       |           |
|-----------------------|-----------|
| <b>SOURCES .....</b>  | <b>40</b> |
| <b>APPENDIX .....</b> | <b>47</b> |

## LIST OF FIGURES

|  |           |
|--|-----------|
| Figure 1 The Conceptual Model.....             | 9         |
| <i>Figure 1.1 The Conceptual Model II.....</i> | <i>36</i> |

## LIST OF TABLES

|   |           |
|---|-----------|
| Table 1 Measures .....  | 22        |
| Table 2 Measures for Purchase Intention .....                                   | 23        |
| Table 3 Scenarios on the Purchase Intention.....                                | 26        |
| Table 4 Means Scenarios on the Perceived Innovation.....                        | 27        |
| <i>Table 4.1 Scenarios on the Perceived Innovation.....</i>                     | <i>27</i> |
| Table 5 Means Scenarios on the Perceived Quality .....                          | 27        |
| <i>Table 5.1 Scenarios on the Perceived Quality .....</i>                       | <i>27</i> |
| Table 6 Coefficients: Scenarios on the Product Purchase Intention.....          | 28        |
| Table 7 Coefficients: Scenarios on the Attitude Towards the Firm .....          | 28        |
| Table 8 Coefficients: Scenarios on the Perceived Innovation.....                | 29        |
| Table 9 Coefficients: Scenarios on the Perceived Quality .....                  | 29        |
| Table 10 Scenarios on Users Involvement .....                                   | 30        |
| <i>Table 10.1 Scenarios on Users Involvement .....</i>                          | <i>30</i> |
| Table 11 Users Involvement on Perceived Innovation.....                         | 31        |
| <i>Table 11.1 Users Involvement on Perceived Quality .....</i>                  | <i>31</i> |
| Table 12 Coefficients: Users Involvement on Perceived Innovation.....           | 31        |
| Table 13 Coefficients: Users Involvement on Perceived Quality .....             | 32        |
| Table 14 High and Low Users Involvement on the Purchase Intention.....          | 33        |
| Table 15 High and Low Users Involvement on the Perceived Innovation.....        | 33        |
| <i>Table 15.1 High and Low Users Involvement on the Perceived Quality .....</i> | <i>33</i> |

## **ACKNOWLEDGEMENTS**

First of all, I would like to thank my supervisor Professor Claudia Costa, for her valuable guidance, support, and feedback, throughout the dissertation semester, making it possible to develop this thesis.

Also, I would like to express my special and profound thankfulness to my beloved parents for their support, patience, time and incentive to never give up and for showing me that there is always a positive perspective even when results played tricks on me.

I thank Professor Sergio Moreira for his availability and quick answers in the clarification of some questions related to the use of Qualtrics and SPSS software.

I am sincerely grateful to all of my friends and strangers whose efforts helped spread the survey reaching a sample size that otherwise I would never have reached.

Lastly I want to express my grateful thanks to all the people that responded to the online questionnaire, for the time spent and honest answers. Without them, I would not have any research material to study and to provide some relevant conclusions.

# 1. Introduction

One of the most prominent concerns in the entrepreneurial setting is the uncertainty involved in business decisions (Hebert and Link, 1989). Uncertainty is described as a gap of information regarding the understanding or knowledge of an event (ISO Standard 31000:2009). Generally, managers possess less information than they would like, leading to limited foresight about the future (Surowiecki, 2004). Firms face uncertainty when creating a new product or just improving an existing one (Crawford, Aguinis, Lichtenstein, Davidsson and McKelvey, 2015). The success of a business depends therefore of an efficient decision-making mechanism, in which its efficiency is understood by the way it performs under the conditions of uncertainty (Surowiecki, 2004).

An efficient decision-making mechanism has been recognized in the potentially large and unknown population, i.e., the crowd (Afuah and Tucci, 2012; Howe, 2006; Jeppesen and Frederiksen, 2006; Terwiesch and Ulrich, 2009). The crowd is defined as a “remarkably intelligent and often smarter than the smartest people in them” (Surowiecki, 2004). Technological advances make access to the “wisdom of the crowd”<sup>1</sup>, easier than ever, thanks to the growing importance of the internet. Firms can, due to this empowerment of the internet, built online communities, encourage customer-involvement and gain valuable customer feedback that can ultimately improve the company ability to innovate<sup>2</sup> and anticipate future consumer needs (Prahalad and Ramaswamy, 2002). Companies such as Google, Slashdot and Wikipedia (Surowiecki, 2004); Dell, Lego, Starbucks, or Threadless (Poetz and Schreier, 2012; Stephen, Zubcsek and Goldenberg, 2016), show how successful crowd strategies can be.

The term "crowdsourcing" was used for the first time in 2005 by Jeff Howe and Mark Robison, defined as “representing the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call. This can take the form of peer-production (when the job is

---

<sup>1</sup> “Wisdom of the crowd” it is a concept brought by Surowiecki. (2004), in its book: *The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business*.

<sup>2</sup> Innovation may start from using new knowledge or reusing and combining existing knowledge (Anderson, Potočník and Zhou, 2014).

performed collaboratively), but is also often undertaken by sole individuals. The crucial prerequisite is the use of the open call format and the large network of potential laborers." After this the company, can select the best of the resulting ideas and transform them into new products or just improve the company existing products (Nishikawa, Schreier, Fuchs and Ogawa, 2017). So consequently, crowdsourcing consists in a fundamental key for the innovation process of a company. As companies, are increasingly search for new product ideas outside their own boundaries (Franke, Poetz and Schreier, 2014; Von Hippel, 2005). We live in a world of distributed knowledge; companies should not only rely on their own research and development (Chesbrough, 2003). The innovation concept is therefore the "implementation and execution of creative ideas" (Amabile, 1996; Klein and Sorra, 1996; Shalley, Hitt and Zhou, 2015), making these creative ideas in to new products and offering new services, or adding new value to existing ones (Cassey and Guing, 2007). Consequently, crowdsourcing operates by helping the firms to identify those creative ideas, which will lead them in end to innovate. Crowdsourcing like this is also very useful because it helps the companies to adapt, if necessary, before potentially wasting money (Ebel, Bretschneider and Leimeister, 2016).

Innovation scholars already begun to study the effect of labelling products as a result of crowdsourcing (user-designed<sup>3</sup>) at the point of purchase (POP), as a way to communicate a product. Scholars such as Nishikawa, Schreier and Ogawa (2012), showed that crowdsourcing is an "innovation tool" (to identify promising ideas for new products), and there is a point of differentiation in labelling products, as user-designed. Their research showed that labelling products as user-design had important effects in the bottom line. Muji (a Japanese consumer goods firm, which they studied) increased up to 20% the product's market performance. The authors also showed that customers prefer user-designed, new products at the POP (vs. created by company-internal designers)<sup>4</sup>. In short, crowdsourcing (or, more generally,

---

<sup>3</sup> To simplify: a product that has resulted from crowdsourcing, which is the definition of user-designed provide by von Hippel. (2005) "a user-designed product refers to one that has been created by a user, who resides outside the contractual boundaries of the firm; a user refers to an individual such as a consumer or community member who primarily realizes product benefits by using it".

<sup>4</sup> To simplify: a product or ideas that were generated by the firm's professionals, which is the definition of created by company-internal designers provided by Fuchs, C., Prandelli, E., Schreier, M., & Dahl, D. W. (2013): "define a product created by a company-internal product designer as one where the original design is conceived by a professional employed by the underlying brand".

customer-centric innovation) might not only constitute a promising route to better new products but also help marketers set their products apart from the competition (Nishikawa et al., 2017; Albors, Ramos and Hervas, 2008; Schenk and Guittard, 2011).

Meanwhile research also pointed to the negative effect of labelling products as a result of user-designed in areas such as luxury fashion industry<sup>5</sup> and pharmaceutical industry. In the case of the luxury fashion industry a decrease in demand is showed when products are user labeled (Fuchs, Prandelli, Schreier and Dahl, 2013; Moreau and Herd, 2010). In the case pharmaceutical industry, crowdsourcing cannot be applied, once new medicines result from scientific research processes and not from public suggestions (Nishikawa et al., 2017). Moreover, while fashion brands with their company-internal experts have continuously demonstrated their skills and ability to conceive high quality designs, users might be perceived by consumers to lack the related expertise (Fuchs et al., 2013). In this context user design also backfires because user-designed items provide the wrong signal in the marketplace. Indeed, in certain situations (e.g. luxury items) user-design fails to provide consumers' agentic feelings (e.g., "I am better than others") (Fuchs et al., 2013).

The aim of this thesis is to understand the value of crowdsourcing as a labelling strategy when compared with other related labelling strategies that can be used at the POP, such as consumer reviews and top sales, as suggested by Nishikawa et al. (2017). Still considering the findings of Fuchs et al. (2013) study in labeling products as user designed backfires, it's taking in consideration his suggestion of labeling products as celebrity endorsers, as an influence in the perception of quality by providing agentic feelings to the consumers. This was already demonstrated in the context of the luxury fashion industry, but the interest now is to understand whether such effect also occurs outside the luxury setting. Such understanding maybe of relevance to marketing managers outside the fashion industry (Fuchs et al. 2013).

This research aims to understand if there is a more effective way for a company to promote/communicate new products, when comparing the following labeling strategies:

---

<sup>5</sup> Luxury is derived from the Latin word "luxus" which translates into "excess;" luxury products in general thus refer to products leading to a condition of abundance, something that adds to pleasure or comfort but is not absolutely necessary (Encyclopedia Britannica).

crowdsourcing, consumer reviews, top sales or public figure endorsement. Consumer reviews are important as the Bright Local's 2017 Local Consumer Review revealed that 88 percent of consumers trust online reviews as much as a personal recommendation). Top sale product is likely to be a reflection of ones needs to comply with social norms and group belonging: consumers purchase action depends on what the other consumers are choosing (McFerran, Dahl, Fitzsimons and Morales, 2009). Finally public figure endorsement provides the agentic feelings and an endorsement contract with a celebrity is proven to increases sales (Crutchfield, 2010).

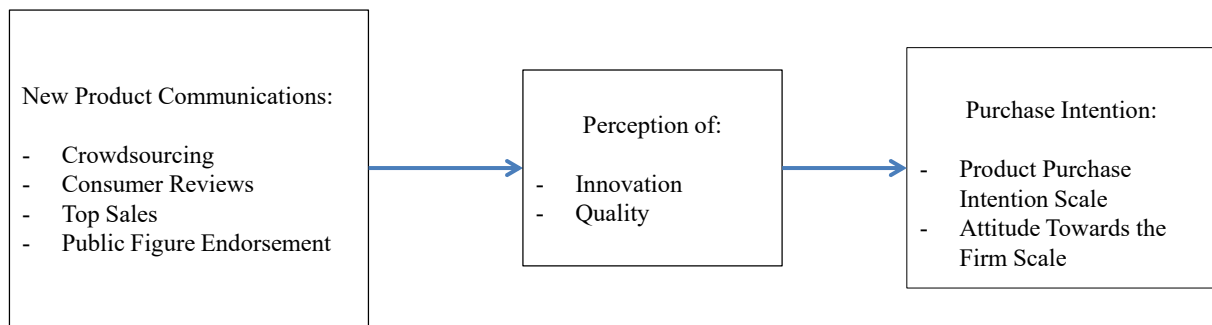
To test our idea, we conducted an experimental study. An online-survey was made to simulate a POP strategy label to understand which one generates more trust in the consumer and why. Taking into account that quality<sup>6</sup> and innovation perceptions are important factors, in this type of decisions. Quality is important in the sense that consumer perceived quality does influence purchase intention and perceived value of a product (González-Benito and Martos-Partal, 2012; Calvo-Porralla and Lévy-Mangin, 2017). Innovation in the sense that realizing customers' needs and wants with new characteristics' through creating new product pattern develops purchase intentions, to purchase the product among consumers (Kleinschmidt and Cooper, 1991). Moreover, product features are the major decision variable used by the marketer to influence the product evaluations and the purchase behaviors of potential customers (Seng and Ping, 2016). To effectively make decisions regarding these variables, marketers seek knowledge about how consumers use product attribute information in the evaluations of products (Chang and Wildt, 1994). When consumers are asked why they have recently purchased products, they mention price and performance (product features) as reasons, which are measures of overall value (Hoyer, 1984). As such, we seek also to understand which of the label strategies is more associated with these quality and innovation concepts perceptions. Our conceptual model is summarized in Figure 1.

The chapters of this thesis are organized as follows: in chapter two the existing literature on crowdsourcing, customer reviews, top sales and public figure endorsement concepts are

---

<sup>6</sup>“Quality is perceived differently by different people. Yet, everyone understands what is meant by “quality.” In a manufactured product, the customer as a user recognizes the quality of fit, finish, appearance, function, and performance. The quality of service may be rated based on the degree of satisfaction by the customer receiving the service. Quality is the degree to which performance meets expectations” (Chandrupatla. 2009).

presented and important features are then identified. While based on the literature, the key relationships are hypothesized. Then in chapter three the experiment, its objective and its method is presented. In chapter four the results of the experiment are highlighted, followed by a discussion and academic and managerial implications in chapter five. Lastly, the conclusions and limitations are stated and areas of possible future research are suggested.



*Figure 1 the conceptual model.*

## 2. Literature Review

### 2.1 Definitions

#### 2.1.1 Crowdsourcing

New products failure is a big concern in any firm. According to Ogawa and Piller (2006) this failure occurs not due to technical issues but because is extremely challenging to produce something that customers will want. To fight this several researchers pointed out crowdsourcing as one efficient solution.

The word crowdsourcing is a compound contraction of crowd and outsourcing. Thus, crowdsourcing means outsourcing to the crowd. Crowdsourcing is a form of outsourcing not directed to other companies but to the crowd (Schenk et al., 2011). The crowd can be defined as a large set of anonymous individuals, due to this anonymity; individuals cannot be individually identified or recognized. Implicit here is the idea that a firm cannot “build its own crowd”. Moreover, the crowd is generally composed of heterogeneous individuals. In particular, a crowd may be composed of scientists and experts in various fields, but also of

novices (Nambissan and Sawhney, 2007). So, crowdsourcing generally involves three categories of actors: the individual's (who form the crowd); the companies directly benefitting from the crowd input; and the intermediation platform, who is building a link between the crowd and the companies (Schenk et al., 2011).

Crowdsourcing, therefore, is a new trend towards integrating consumers/users (the crowd) in the productive processes, by responding to crowdsourcing/open calls (to give feedback), mostly *via* an Internet platform. This, allows firms not only to reach a greater number of individuals but also to create new relationships by persuading new customers to work for the firm or for its users (Kleemann, Rieder and Voss, 2008). After this call the firm selects the best ideas and converts them into new products or just in simple improvements of existing products already offered by the firm (Nishikawa et al., 2017).

The efficiency in crowdsourcing relies in the fact that is an easy, fast and affordable way to mobilize large numbers of people (Garrigos-Simon, Gil-Pechuán, Estelles-Miguel, 2015; Simperl, 2015) in order to get access to expertise which a firm never knew it needed and never had before a way to find it (McNeal, 2013). Moreover, what gives strength to this efficiency is that this crowdsourcing wisdom arises not from an average of solutions but from the aggregation of all them (Brabham, 2008; Surowiecki, 2014). It is from this combination (of all solutions/ideas) that the best one (solution) is born, and it's what makes crowdsourcing thrive.

The main advantages of crowdsourcing are the following: first, by employing users instead of professional designers, in the innovation process, these user-designed ideas have the same features or characteristics as those desired by the segment to which companies are trying to sell to. In this way, they can more easily read the potential customers' needs and wants, leading to higher chances of having successful innovation's (Nishikawa et al., 2017). The second advantage is that by using these user-designed ideas as labelling, customers display higher intentions to purchase products at the POP, because they are made aware that products were created by similar others (the users) (Dahl, Fuchs, and Schreier, 2014), resulting in an increase in brand loyalty (Nishikawa et al., 2017; Sawhney, Verona, and Prandelli, 2005) and consequently in a higher demand for the firm's products (Fuchs et al., 2013). Moreover, it helps marketers differentiate themselves from competitors, by offering them a competitive advantage (Nishikawa et al., 2017). The third advantage consists in the fact that companies

which use user-designed ideas are associated with higher innovation abilities, when compared to firms that internally create their products (Lude, Hauck, Prügl, Linzmajer, 2016). The fourth advantage states that diversity is believed to generate more desirable products (Surowiecki, 2004). This happens because user-designed ideas involve a greater number of people in its process of creation, than number of people which constitutes the professional designers of a company. The fifth and last advantage is that by using user-designed ideas the creations that happen from it were less constrained by a company rules and goals. This is translated in more freedom to be creative and innovate, and therefore in return the products created were more desirable to the consumers (Schreier, Fuchs, and Dahl, 2012).

Inspired by Nishikawa et al., (2017) and Fuchs et al. (2013) investigations in order however to really understand the true value of crowdsourcing labeling as a quality and innovation signal, to promote consumer demand for a product, is important to compare it with other labeling strategies that can also be used at the POP, as mentioned before. These other labeling strategies were identified as consumer reviews, top sales and public figure endorsement.

### 2.1.2 Consumer Reviews

Every company if it has customers, it provides consciously or not a customer experience. The experience can be good, bad or indifferent (Kotler and Armstrong, 1996). No company can completely control the experiences which they give to their customers, because experiences involve perception, emotion and unexpected behaviors on the parts of customers (Richardson, 2010). Despite this lack of control companies can try to plan ways to mitigate this when considering the experiences, they want to create (Richardson, 2010).

Customers are conscious that their feedback matters (Rassega, Troisi, Torre, Cucino, Santoro and Prudente, 2015). Turning their testimonials into a tool rather than a threat is important. To do this, companies must: understand what customers are saying; understand where they are saying it; and (most important) understanding why they are saying it. But, today there is a sea of online feedback and this complicates the identification of the valuable reviews (Hicks, 2012).

Customers are responsive to other customer reviews. Customer reviews works as a social proof, that a business is legitimate and credible and helps to prevent other potential customers to fall for a product or service that will not maximize their needs and wants (Bookbinder, 2017). BrightLocal survey showed that 88 percent of consumers trust online reviews as much as a personal recommendation. This finding suggests that if there is a product or service that is not offering user reviews (or ignoring them as a potential marketing opportunity) is akin to alienating 88 percent of your buying population (DeMers, 2015). Also, there is an increasing expectation gap as business struggle to keep pace with more informed, more connected and more demanding consumer (Perkins and Fenech, 2014), as consequence consumers, now more than ever, are demanding. Thus, if a product has positive or bad review it holds a significant effect on the behavior of the rest of the audience (Sharma and Rehman, 2012; DeMers, 2015). At the same time, customer reviews increase and stimulates conversation; this can result in the elimination of potential uncertainty customers have when purchasing a new product (Charlton, 2015).

When they are looking for product information consumers prefer “independent” sources such Amazon or TripAdvisor, in opposition to other nonneutral sources of information, such advertisements, brochures, company Web sites, and salespeople (Kotler et al., 1996). TripAdvisor is therefore a good example of the influence and power of consumer reviews. TripAdvisor is the biggest travel reviews website in the world (Vanderbilt, 2015). Daily Mail conducted an independent study of TripAdvisor and concluded that user-generated content was “directly related to £2 billion of tourism spending in the UK” (Kitching, 2016). Reviews written by previous visitors to places in the UK have influenced 8.7 million trips by tourist (Kitching, 2016). Also, according to Vanderbilt (2015) study: “hotel owners who reply to comments are 20% more likely to get bookings and hotels can raise prices by 11% to reflect their reputation on the site”. Barrie (2015) concluded as well that “every positive percentage point a place rises up the tables in TripAdvisor, revenue per room at locations increases by 1.4%”.

A survey by Forrester of over 2100 travelers commissioned by TripAdvisor found that 81% of traveler’s suggest reviews are important, while 3% suggest they were not, however, almost half of the respondents said they wouldn’t book or look at a hotel unless it had reviews. Thus, the influence and feedback from costumers is essential for hotels survival and reputation (Vidigal, 2017). TripAdvisor influences and generates increased travel spend. In reality,

hotels with good rankings and reviews can enjoy higher, booking, higher average daily rate and revenue (Lyle, 2015).

To conclude, customer reviews influence the business's digital presence and in turn, sales (Kim and Srivastava, 2007). Reviews not only show consumers that a brand is trustworthy but they also have the potential to improve the business's SEO (Bookbinder, 2017). Overall, customer reviews are a vital piece in the process of convincing prospects that a product or service is better than the competition and that truly offers the value that firms are selling. For buyers, it is a vote of confidence that the purchase decision, which is being made, will be a good one, and if this confidence it's proved to be right, it will make them, later, more willing to purchase again (Bookbinder, 2017). Like this customer reviews have enormous potential to turn a passive shopper into a lifelong, loyal buyer.

### 2.1.3 Top Sales

A top sale consists in a product which is most popular among customers and that consequently is also the one that has being selling in larger quantities (Cambridge Dictionary). A top selling product or service itself yields, sometimes, enough profit to justify the continued existence of a firm or business (Codjia. 2000).

To understand why top sales are influential in the purchase intention of consumers is important to look at social norms and group belonging. Social influence has showed to be important in the consumption process (Bearden and Etzel, 1982; Argo, Dahl and Manchanda, 2005). Most of research has been focus on how an interactive social influence, such as salespeople, impacts the consumer (Childers and Rao, 1992). However social influence situations in purchasing are not limited only to these interactive situations, but to situations that occur without interaction, called noninteractive social situations: "includes events where a social entity is physically present during consumption but is not involved nor attempts to engage the consumer in any way (e.g., other shoppers in a grocery aisle or a fellow audience member at the theater)" (Argo et al., 2005). In this context, a top sales presents a noninteractive social situation.

The consumer attitudes depend on socialization factors (e.g., peers) (Taylor, Lewin and Strutton, 2011). According to Wang, Yu and Wei (2012) online consumer socialization through peer communication effects purchasing decision in two ways: directly (conformity with peers) and indirectly by reinforcing product involvement. People are impacted by the “real, implied, or imagined presence or action of a social presence (e.g., another person or group of people) (Argo et al., 2005). A top sales, refers as mentioned before, to the product or a service, which consumers are buying the most. The social other is purposeful in the social behavior that influences the actions of the consumer (Dahl, 2013). Consumers purchase action depends on what the other consumers are choosing (McFerran et al., 2009). Knowing that most people are buying, for example a specific model of a t-shirt, in order to be part of the group, leads consumers to purchase the t-shirt, even if the consumer may not even need a t-shirt (Kotler et al., 1996).

Another important factor to understand why top sales influence consumers purchase intention is that consumers perceived top sales as a profitable sales volume, meaning these products are associated with long-term customer satisfaction (Schiffman and Kanuk 2004). So when a product is presented as top sales, the message is that this product has quality, because it satisfies the needs and wants of the consumer (Akdeniz, Calantone and Voorhees, 2014). Moreover, the product is perceived as possessing intrinsic quality—related with internal product characteristics - being the perceived product quality a key determinant in building and maintaining customer loyalty (Brakus, Schmitt and Zarantonello, 2009; Pan, Sheng and Xie, 2012). A study conducted by Garrido-Morgado, González-Benito and Martos-Partal (2016) showed that the dimensions of quality perceptions moderated the influence of displays and advertising flyers on sales, and that intrinsic quality perception improved the effect of advertising flyers, which in turn are more closely related to systematic decision processing.

#### 2.1.4 Public Figure Endorsement

Recent research showed that user-design labeling strategy does not benefit all products. In fact, there are negative effects in such labeling (Fuchs et al., 2013). The luxury fashion industry and the pharmaceutical industry seemed to be the most affected ones, with these negative effects (Nishikawa et al., 2017; Fuchs et al., 2013; Moreau and Herd. 2010). Nonetheless fashion brands recognize the promises of user-design. For example, the handbag

brand Coach, invited users to participate in a “Design a Coach Tote” initiative which resulted in 3,000 user-designs, the best of which were manufactured by the brand (Fuchs et al., 2013). The real motivation however for the luxury fashion industry to use crowdsourcing is not only to get better products, but to target the broader mass of consumers, by seducing them to participate in some online voting process, with the aim of increase the consumer’s involvement and ultimately their commitment to buy from the underlying brand (Fuchs, Prandelli and Schreier, 2010; Schau, Muniz and Arnould, 2009).

Meanwhile as it is known the fashion industry has always distanced itself from the mass consumers (Kapferer and Bastien, 2009). This is explained by the fact that being close to the mass consumers does not help but harms luxury fashion brands, due to user-design stands far from the high status signaling (Fuchs et al., 2013). Moreover, user-designed ideas fail in create the feeling of high status/ agentic feelings: “being advantaged, superior and worthy compared to others” (Locke, 2003).

The two useful lessons to be considered with the case of the luxury fashion industry are the following: first, there are still consumers who prefer to buy a product developed by the internal designers of a brand versus user-designed ideas. This occurs for consumers who perceived higher quality only when products are created by the company-internal professionals, i.e., product designers (Dubois, Laurent and Czellar, 2001). Often users are perceived to lack the expertise to create premium products (because it will not have enough quality) (Fuchs et al., 2013). The second lesson lies in the fact that some consumers, want to signal themselves apart from others (the mass consumers) (Fournier, 1998; Rucker and Galinsky, 2008). To achieve this, these consumers, do not want to be in conformity with the crowd, but above it. These consumers want to create social distance by a boost of agentic feelings (Fuchs et al., 2013).

In this context the strategy of using a public figure endorsement is introduced, once while still being able to provide agentic feelings, can in some circumstances be presented as not having resorted to company internal designers, in the cases when the endorser actively participates in the product’s design. This labeling strategy may range from the celebrity only lending their name or image to a product or campaign, not being really involved in the design of the product (Passikoff, 2013), to case which involves the carefully participation of one or some celebrities who are specially invited to participate in the product design (Fuchs et al., 2013).

The involvement of famous celebrities' users is shown to be useful, because celebrities are perceived by others as possessing status and thus owing some social distance from mass consumers, i.e. they possess agentic feelings (Okonkwo, 2007). Therefore, these celebrities' endorsers activate perceptions of design quality in the product that enable those agentic feelings to the consumers that purchase that product (Okonkwo, 2007).

To conclude public figure endorsement has a simple logic: people idolize celebrities, so when famous people are seen in advertisements promoting a new product, audiences are prompted to buy that product, either subliminally or directly (Olenski, 2016). Moreover, one study by Chaudhary and Asthana (2015) found that celebrity endorsers do not necessarily influence consumer brand loyalty; endorsements are instead a powerful and useful tool that magnifies the effect of a campaign. Crutchfield (2010) showed that, a brand that does an endorsement contract with a celebrity or an athlete can see their stock rise up as soon as the news is made public.

### **3. Hypotheses**

Arguments were found in favor of each strategy and as such it is not possible to exactly point the direction of the hypotheses, meaning that apriority we cannot favor one of the following hypotheses.

#### **3.1 Crowdsourcing Hypothesis**

Crowdsourcing when compared with other labeling strategies may increase the purchase intention of the consumer. Several reasons can be considered. First, in the digital landscape and in the globalized competitive arena, companies alone can no longer respond to this complex growing environment of innovation (Chesbrough, 2003; Oldham and Da Silva, 2015), to find successful ways to satisfy the needs and want of its users. Consequently, products labeled as company design or as public figure endorsement may not hold enough innovation to attract consumers. In the case of public endorsement this may happen because sometimes the celebrities' endorsers only lend their name to the product or just appear in a

couple of ads (Passikoff, 2013). As such celebrities are not involved the process of generating ideas for the product, meaning that the product is still created as company design creation.

Secondly, in crowdsourcing a company can select then the best of the ideas given by the users (Schenk et al., 2011; Nishikawa et al., 2017), meaning that the company still holds control about the process of selection, of what are the useful and convenient ideas, in consumer reviews there is no control whatsoever about the information produced, depends on each personal experience and perception of each user of the product (Richardson, 2010; Paljug, 2017).

Finally, while crowdsourcing has in its foundation the creation or the improvement of a product (Cassey et al., 2007; Nishikawa et al., 2017) a top sales it's only rephrasing an existing product with no alterations. As such, the following relationship is hypothesized:

*H1: Labeling a product, as crowdsourcing increases the purchase intention of the consumer, when compared with the strategies of consumer reviews, top-sales and public figure endorsement.*

### 3.2 Consumer Review Hypothesis

Consumer reviews when compared with other labeling strategies may increase the purchase intention of the consumer. Since, they enable a deeper knowledge and feedback about a product uses and features. Consumer reviews arises from experience, after the service or the product has been created (Hicks, 2012), thus focusing on the outcome. While crowdsourcing provides feedback about the creation of a new product or the improvement of an existing one (Cassey et al., 2007) thus focusing on the inputs. Thus, crowdsource alone doesn't provide feedback or results after the product is launched, to show to consumers if product is worthy or not for maximizing their needs and wants (Bookbinder, 2017).

Second, a product presented by customer reviews includes in its creation positive and negative feedback, while a top sales product includes only the most positive side of a product (Kotler et al., 1996), a customer review labeling strategy can be seen as a more complete, than a top sales one.

Third, customer reviews encompass a wider range of consumer opinions (Rassega, et al., 2015), which can include celebrities opinion as well (as they can even leave their comment in an anonymous way if they don't want to expose themselves), while public figure endorsement includes only the recommendation of celebrities. Therefore, the following relationship is hypothesized:

*H2: Labeling a product, as consumer reviews increases the purchase intention of the consumer, when compared with the strategies of crowdsourcing, top-sales and public figure endorsement.*

### 3.3 Top Sales Hypothesis

Top sales when compared with other labeling strategies may increase the purchase intention of the consumer due to: first, a top sales shows exactly what are consumers buying (Argo et al., 2014), successful companies as Mango, H&M and Zara expose in their websites a category called "best sellers", where it's showed their most selling products of each collection. While crowdsourcing is used to create, or improve a product but doesn't show to the consumers (who want to belong to the group) (Kotler et al., 1996), if the product is being after launched consumed by their peers. Also, while companies exhibit their top sale products, in their stores, websites and publicity campaigns, not all companies display their products as crowdsourced ones, as it can backfires (the case of the luxury products) (Nishikawa et al., 2017; Fuchs et al., 2013; Moreau et al., 2010).

Second, top sales are associated with positive information about a product (Cambridge Dictionary), while customer review due to contain negative and positive information about a product (Kotler et al., 1996), the negative information even if is smaller than the positive one, can still shake the purchase intention of the consumer for the product, sometimes unfairly.

Third, consumers purchase intention depends on what the other consumers are choosing (McFerran et al., 2009). As a top sales includes what the majority of consumers are choosing, public figure endorsement includes only what a celebrity or celebrities are choosing (Olenski, 2016). As such, the following relationship is hypothesized:

*H3: Labeling a product, as top sales increase the purchase intention of the consumer, when compared with the strategies of crowdsourcing, customer reviews and public figure endorsement.*

### 3.4 Public Figure Endorsement Hypothesis

Public figure endorsement when compared with other labeling strategies may increase the purchase intention of the consumer due to: not all consumers want a product created by crowdsourcing, because they perceive it as not holding enough expertise, to be able to create a product with quality (Dubois et al., 2001; Fuchs et al., 2013) and also some consumers wish to distance themselves from the mass crowd to reach agentic feeling (Fournier, 1998; Rucker et al., 2009; Fuchs et al., 2013).

Second, due to customer review englobes reviews from anyone and public figure endorsement only includes the careful selection of certain users (the celebrities) (Okonkwo, 2007), consumers may have perceived the feedback from these celebrities as more skilled/selected, due to these celebrities holding status which is worldwide recognized (this is why they are celebrities and not common people).

Third, is proved that an endorsement contract with a celebrity increases sales (Crutchfield, 2010) and also as people idolize celebrities and wish to be as them (Olenski, 2016), so ultimately a celebrity endorsement can lead a product to become a top sale. As such, the following relationship is hypothesized:

*H4: Labeling a product, as public figure endorsement increases the purchase intention of the consumer, when compared with the strategies of crowdsourcing, customer review and top sales.*

## 4. Methodology

### 4.1 Objectives and Overview

To test the above presented hypotheses, an online survey was conducted. The aim was to find evidence of which of the four labeling strategies (crowdsourcing, customer reviews, top sales and public figure endorsement) could lead to a higher purchasing intention, when these strategies are compared among each other.

There were 288 respondents that took part in the study (61,8% female, mean age= 23). This study followed a four-group design experiment (design mode: crowdsourcing, top sales, public figure endorsement and customer reviews).

### 4.2 Method

An online survey was conducted, distributed on Qualtrics. This method was chosen because it was important to have control over the research environment, as some researchers argue this is the best path of creating an experimental research (Charness, Gneezy and Kuhn, 2012). The advantages consist in the fact that this is a simple experiment and the random assignment between groups is easier to be achieved (Charness et al., 2012). Moreover, an online survey provides a non-intimidating environment; therefore, respondents can be more likely to provide open and honest feedback (DeFranzo, 2012). The data gathered was then analyzed using SPSS (Social Package for the Social Sciences) software.

### 4.3 Survey Design

The survey was originally designed in Portuguese (Appendix I) but an English version was also created (Appendix II). To start, the respondents were presented with the survey's goal (a study to evaluate their perception about a new product to be released in the market) next the respondents were informed about which was the new product (a cake). The choice of this product, a cake, was made, because a unisex product was sought, as well as a product whose purchase intention would not be sensible to the age factor, to facilitate the process of data collection. If, for instance, a piece of clothing had been chosen, like a t-shirt, it would require two surveys: one for men and another for women. Even so, bias could also emerge due to the

age factor: if the model of t-shirt to be chosen would please an elder population it probably wouldn't please a younger one and reversely.

In the first question, respondents had to answer about their taste for cakes. Then participants were randomly presented, with the communication strategies (crowdsourcing, customer reviews, top sales and public figure endorsement). All participants read the same introduction: "Imagine that you want to buy a cake for a dinner that you will host at your house." Then, depending on the labeling strategy being surveyed, the way the cake was presented to the consumer was different. In the crowdsourcing scenario, the new cake was presented to the participant as having been created by a national pastry, which used their online platform to collect ideas and feedback about their user's favorite recipes, to create this new product. In the customer review version, the new cake presented to the participant had been created from consumer's comments and criticisms gathered from several pastry blogs and websites, about the most recent cakes they purchased, were their most positive reviews pointed out to this new cake released in the market. In the top sales version, the new cake presented to the participant had been created by a national pastry which used as inspiration for this cake their all times best-selling recipes. Finally, in the public figure endorsement version, the new cake presented to the participant had been created by a national pastry that, for the development of this cake, hired a famous Pastry Chef.

Then, respondents were asked how strongly they believe users were involved in the product conception process. Only after this question a picture of the cake was displayed, showing a multiple-sliced cake which seeks to join several tastes in only one cake, to ensure greater satisfaction in one single product. The same cake picture was shown to all respondents independently of which version of the second question they were presented. The following questions of the survey tried to capture the perceived innovation ability, the willingness to try the product, the willingness to visit a pastry with this product, the intention of purchase the product and the intention to recommend this product to others. Before leaving, respondents were asked to fill out statistic information about themselves, which included the gender, age, nationality, professional situation, level of education and their average monthly income.

## 4.4 The Measures

The questions in the survey allowed to capture the perceived innovation, perceived quality and users involvement, to influence the consumer's purchase intention towards a product, presented with one of the specific labeling strategies that are being studied (crowdsourcing, customer reviews, top sales and public figure endorsement). For analysis purposes a 7-points Likert scale from 1 to 7 was chosen, to evaluate the intensity of relationship between the variables that were been measured, in the questions made. As this scale enables an easier capture of the feelings and opinions of the respondents, where each number/level poses only one characteristic, makes clear what the respondent is responding to (Bowling, 1997; Burns and Grove, 1997). A Likert-type scale assumes also that the strength/intensity of the experience is linear, i.e. on a continuum from strongly agree to strongly disagree, and makes the assumption that attitudes can be measured (McLeod, 2008).

| <b>Measures</b>             |   |
|-----------------------------|---|
| <b>Construct</b>            | <b>Items</b>  |
| <b>Perceived Innovation</b> | Please state on a scale of 1 to 7, to which degree you consider there is innovation in this cake:<br>1. Not Innovative [1:7],<br>2. Very Little Innovative [1:7],<br>3. Little Innovation [1:7],<br>4. Indifferent [1:7],<br>5. Reasonably Innovative [1:7],<br>6. Innovative [1:7],<br>7. Completely Innovative [1:7]. |
| <b>Perceived Quality</b>    | Please state on a scale of 1 to 7, which do you think is the cake's degree of quality:<br>1. None [1:7],<br>2. Vey Poor [1:7],<br>3. Poor [1:7],<br>4. Indifferent [1:7],<br>5. Reasonable [1:7],<br>6. High [1:7],<br>7. The Highest [1:7].  |
| <b>Users Involvement</b>    | Please state on a scale of 1 to 7, which, do you think, was the degree of users involvement in the creation of this new cake:<br>1. Nonexistent [1:7],<br>2. Vey Weak [1:7],<br>3. Weak [1:7],<br>4. Indifferent [1:7],<br>5. Reasonable [1:7],<br>6. Strong [1:7],<br>7. Total [1:7].                                  |

*Table 1 Measures*

To better analyze and interpret the results, the purchase intention was separated in two different scales, by the aggregation of some variables. This allowed to measure product and firm attitudes (Dahl et al., 2014). When deciding about a purchase, consumers are influenced by the brand/firm (denominated attitude towards the firm) (Forte and Lamont, 1998) and the product (denominated product purchase intention) (Dubois et al., 2001; Fuchs et al., 2013).

To use the data gathered about the product purchase intention (scale), we tested for statistical reliability. As such, a reliability test was performed. Below, in Table 2, it can be observed, that the constructed scale for product purchase intention has Cronbach's alpha coefficient of  $\alpha = 0.927$ . This value of alpha proved internal consistency, meaning that this scale can be considered reliable, therefore is justifiable to interpret scores that have been aggregated together. Also, high item total correlations are presented in Table 2. Moreover, this leads to conclude that if any of these four variables (which constitute the scale: product purchase intention) was removed, the result would be translated into a lower Cronbach's alpha.

| Measures                                       |   |                                   |
|--|---|-----------------------------------|
| Scale  | Scale Items                                     | Corrected Item Total Correlations |
| <b>Product Purchase Intention (Ca = .927):</b> | Willingness to Try the Product                  | 0.80                              |
|  | Intention to Recommend the Product              | 0.82                              |
|  | Willingness to Buy the Product                  | 0.85                              |
|  | Willingness to move to Buy the Product          | 0.86                              |
| <b>Attitude Towards the Firm:</b>              | Intention to Recommend a Firm with this Product | ---                               |

*Table 2 Measures for Purchase Intention*

The scale attitude towards the firm, is composed only by one variable (intention to recommend a firm with this product), as is shown in Table 2. Therefore, reliability cannot be assessed for single item measures. However, it has been recently demonstrated, by several authors, that single-item measures can be a viable alternative to multi-item scales (Drolet and Morrison 2001; Bergkvist and Rossiter 2007; Shamir and Kark, 2004). Concerning internal consistency reliability, several authors showed acceptable reliability values for single-item scales (e.g., see Ginns and Barrie, 2004; Kwon and Trail, 2005).

A single-item measure is considered to be an individual measure or indicator (Bagozzi and Heatherton, 1994). Simplicity, brevity and global measurement are the advantages of using single-item scales (Kwon et al., 2005). Fuchs and Diamantopoulos (2009) paper offered criteria for assessing the potential use of single-item measures. About the criteria, first, in the

nature of the construct, it is relevant whether the focal construct is concrete<sup>7</sup> or abstract (Rossiter, 2002). One example given by the researchers of this concrete constructs is the buying intention (Fuchs et al., 2009), which is ultimately what we are trying to analyze with the creation of this scale. Moreover, when a construct is concrete, the use of single item measures is considered reasonable; due to the measurement error is more prevalent for abstract versus concrete concepts (Rossiter et al., 2002 and Fuchs et al., 2009). Secondly, in the research objectives, the single-item global rating method may be useful if the goal of a study is to gain an understanding for the general nature of construct (Lee et al., 2000). Thirdly, concerning sampling considerations, if a measure is to be administered to a wide range of different populations, the use of single-item measures has certain advantages (Fuchs et al., 2009). An advantage is that it can be given to numerous people (Gorsuch and McPherson, 1989). Single-item measures are flexible. So, taking into account the difficulty of obtaining large sample sizes in surveys, due to the lack of willingness of sacrifice time to do them, leads to the necessity of reducing the length of construct measures (Fuchs et al., 2009). “As a rule of thumb, there should be at least ten times as many respondents as items or, in cases where a large number of items are used, at least five respondents per item” (Nunnally, 1967; Peter, 1979). This rule of thumb was respected in the conducted survey once there are more than five respondents per item. In fact, for the single-item which measures and constitutes the scale “attitude towards the firm”, a total of 288 responses were obtained (Appendix III).

---

<sup>7</sup> Being concrete referred to objects and their characteristics which are perceived as similar by all raters and also they understand that there is only one characteristic being referred to when the attribute is posed, as in a questionnaire, in the context of the to-be rated object) (Rossiter, 2002).

## 5. Results

### 5.1 Description of the Sample

The data of this study was collected, as mentioned above, through a single survey. There was a total of 288 responses to the survey ( $N = 288$ ) (Appendix IV). In terms of gender the respondents were 178 women (61.8%) and 110 men (38.2%), from 15 different countries (Appendix V), where most of respondents were Portuguese. The respondent's age ranged between 16 and 67 years old with an average age of 23.

As previously mentioned the second question of the conducted survey had four different versions (without the respondents been aware of it). Each version corresponded to a different labeling strategy. The results showed that 72 respondents completed the crowdsourcing version, 74 the customer review, 73 the top sales and 69 the public figure endorsement (Appendix VI).

### 5.2 Product involvement

The first question was designed to understand whether respondents were familiar with the product stimuli. The average response was  $M = 5.79$ , where 103 respondents chose scale 6 "I like it" (Appendix VII). This means that most of the respondents liked, a priori, the product used to test the hypotheses.

### 5.3 Main Analysis: testing the hypotheses

#### 5.3.1 Results for the One Way ANOVAS

##### *- Testing for Product Purchase Intention*

In the four hypotheses ( $H1$ ,  $H2$ ,  $H3$  and  $H4$ ) we wanted to understand if one of the labelling strategies (crowdsourcing, customer reviews, top sales and public figure endorsement), could overlap the others in influencing the purchase intention of the consumer. One-way ANOVA was conducted on purchase intention (firm and product) to test the impact, if any, of these labelling strategies, on the purchasing intention.

The One way ANOVA revealed no differences in purchase intentions regarding the four labelling strategies. Regarding purchase intention towards the product ( $F(3,287) = 0.041$ ;  $p > .05$ ) and towards the firm ( $F(3,287) = 0.242$ ;  $p > .05$ ). Results meant there is no enough evidence to reject the null hypotheses and that the respondent's means are all equal. High p-values were obtained and this translated that the data is likely with a true null.

TABLE 3  
Dependent Variable = Purchase Intention Two Scales

| Scale                      | Source    | F    | df  | Sig  |
|----------------------------|-----------|------|-----|------|
| Product Purchase Intention | Scenarios | ,041 | 3   | ,989 |
| Attitude Towards the Firm  | Scenarios | ,242 | 3   | ,867 |
| Total                      |           |      | 287 |      |

*Table 3 Scenarios on the Purchase Intention*

*- Testing for Perceived Innovation and Perceived Quality*

In order to understand whether the different communication strategies had an effect on innovation or quality perceptions, we ran another one way ANOVA, first using as dependent variable innovation and the scenarios as the independent variables. The results indicate no differences in the perception of the level of innovation according to the label associated with the product ( $M_{\text{crowdsourcing on perceived innovation}} = 5.51$ ;  $M_{\text{customer reviews on perceived innovation}} = 5.64$ ;  $M_{\text{top sales on perceived innovation}} = 5.34$ ;  $M_{\text{public figure endorsement on perceived innovation}} = 5.43$ ) ( $F(3,287) = 0.558$ ;  $p > .05$ ).

Another analysis of variance on perceived product quality showed all scenarios were perceived with the same quality ( $M_{\text{crowdsourcing on perceived quality}} = 5.35$ ;  $M_{\text{customer reviews on perceived quality}} = 5.47$ ;  $M_{\text{top sales on perceived quality}} = 5.37$ ;  $M_{\text{public figure endorsement on perceived quality}} = 5.41$ ) ( $F(3,287) = 0.134$ ;  $p > .05$ ). Therefore consumers did not perceived different quality to the product depending on the labeling strategy used.

TABLE 4  
Dependent Variable = Perceived Innovation

| Scenarios                 | Mean | Std. D. | N   |
|---------------------------|------|---------|-----|
| Crowdsourcing             | 5,51 | 1,538   | 72  |
| Customer Reviews          | 5,64 | 1,245   | 74  |
| Top Sales                 | 5,34 | 1,465   | 73  |
| Public Figure Endorsement | 5,43 | 1,43    | 69  |
| Total                     | 5,48 | 1,419   | 288 |

Table 4 Mean Scenarios on Perceived Innovation

TABLE 4.1  
Dependent Variable = Perceived Innovation

| Source    | F    | df  | Sig  |
|-----------|------|-----|------|
| Scenarios | ,558 | 3   | ,643 |
| Total     |      | 287 |      |

Table 4.1 Scenarios on the Perceived Innovation

TABLE 5  
Dependent Variable = Perceived Quality

| Scenarios                 | Mean | Std. D. | N   |
|---------------------------|------|---------|-----|
| Crowdsourcing             | 5,35 | 1,313   | 72  |
| Customer Reviews          | 5,47 | 1,185   | 74  |
| Top Sales                 | 5,37 | 1,275   | 73  |
| Public Figure Endorsement | 5,41 | 1,365   | 69  |
| Total                     | 5,40 | 1,278   | 288 |

Table 5 Mean Scenarios on Perceived Quality

TABLE 5.1  
Dependent Variable = Perceived Quality

| Source    | F    | df  | Sig  |
|-----------|------|-----|------|
| Scenarios | ,134 | 3   | ,940 |
| Total     |      | 287 |      |

Table 5.1 Scenarios on the Perceived Quality

Therefore we reject all four hypotheses.

### 5.3.2 Results for the Regression Analysis

#### *- Testing for Purchase Intention*

We confirmed out the findings with a regression analysis, to ensure that is not possible to reject the null hypotheses, due to this analysis will show if we can predict the value of a variable, based on the value of another variable.

In first regression analysis, we wanted to predict the purchase intention (as the dependent variable) using the scenarios (as the independent variable). As the purchase intention is composed by two scales: first we used the product purchase intention scale in the regression (table); and only afterwards, we used the attitude towards the firm scale (table). The variables presented a p-value higher than 0.05, which indicates that the different scenarios were not statically significant.

TABLE 6  
Coefficients

| Dependent Variable = Product Purchase Intention |      |      |      |
|---|------|------|------|
| Source  | Beta | t    | Sig  |
| Scenarios                                       | ,001 | ,013 | ,990 |

*Table 6 Coefficients: Scenarios on the Product Purchase Intention*

TABLE 7  
Coefficients

| Dependent Variable = Attitude Towards the Firm |       |       |      |
|--|-------|-------|------|
| Source   | Beta  | t     | Sig  |
| Scenarios                                      | -,020 | -,337 | ,737 |

*Table 7 Coefficients: Scenarios on the Attitude Towards the Firm*

#### *- The effect of labeling strategies on Perceived Innovation and Perceived Quality*

Regressing our scenarios on innovation and then quality (as the dependent variables), showed, as expected, no significance confirming that labeling strategies are not influencing perceived innovation ability ( $\beta = -.042$ ,  $p > .05$ ) and perceived quality ( $\beta = .006$ ,  $p > .05$ ), which indicates that the different scenarios do not influence the level of perceived innovation or quality in the product.

TABLE 8  
Coefficients

| Dependent Variable = Perceived Innovation |       |       |      |
|---|-------|-------|------|
| Source                                    | Beta  | t     | Sig  |
| Scenarios                                 | -,042 | -,714 | ,476 |

Table 8 Coefficients: Scenarios on the Perceived Innovation

TABLE 9  
Coefficients

| Dependent Variable = Perceived Quality |      |      |      |
|--|------|------|------|
| Source                                 | Beta | t    | Sig  |
| Scenarios                              | ,006 | ,104 | ,918 |

Table 9 Coefficients: Scenarios on the Perceived Quality

## 5.4 Further Analysis

### 5.4.1 Product Users Involvement

Focusing now on the variable of perceived user's involvement, we wanted to understand if respondents perceived differences in the user's involvement, among the different scenarios displayed, as the above main analysis couldn't provide significant differences between the scenarios.

#### - Testing for differences in perceived user's involvement among the scenarios

Resorting to one way ANOVA, in this case of measurement we used as dependent variable consumers perceiving that a certain labeling provides a strongest user involvement than others. Results show a significant difference of perception of respondents about the degree of user's involvement. Respondents showed that public figure endorsement was perceived with the least user's involvement ( $M_{\text{public figure endorsement perceived users involvement}} = 4.51$ ), crowdsourcing was second highest ( $M_{\text{crowdsourcing perceived users involvement}} = 5.19$ ), and top sales was perceived with the highest users involvement ( $M_{\text{top sales perceived users involvement}} = 5.29$ ). ( $F(3,287) = 4.554$ ;  $p = .004$ ). Moreover, the *post hoc test*, revealed that this significance existed only between crowdsourcing and public figure endorsement ( $p\text{-value} = .016$ ), and top sales and public figure endorsement ( $p\text{-value} = .004$ ).

Being top sales the only strategy, among the four strategies studied, born from the post-selling results, it therefore translates the preferences of the consumers for the products that are being most bought, once consumers perceive them as satisfying the most their needs and wants (Akdeniz et al., 2014). At the same time the consumers purchase action depends on what the other consumers are choosing (McFerran et al., 2009). Bearing this in mind, maybe is not surprising that this was the scenario which was attributed the most user involvement.

TABLE 10  
Dependent Variable = Users Involvement

| Source    | F     | df  | Sig  |
|-----------|-------|-----|------|
| Scenarios | 4,554 | 3   | ,004 |
| Total     |       | 287 |      |

Table 10 Scenarios on Users Involvement

TABLE 10.1  
Dependent Variable = Users Involvement

| Scenarios   |                       | Sig   |
|---|-----------------------|-------|
| Crowdsourcing<br>(Mean = 5,19; Std. D. = 1,146)             | Customer Reviews      | ,854  |
|   | Top Sales             | ,977  |
|   | Public Figure Endors. | ,016* |
| Customer Reviews<br>(Mean = 5,01; Std. D. = 1,419)          | Crowdsourcing         | ,854  |
|   | Top Sales             | ,617  |
|   | Public Figure Endors. | ,122  |
| Top Sales<br>(Mean = 5,29; Std. D. = 1,230)                 | Crowdsourcing         | ,977  |
|   | Customer Reviews      | ,617  |
|   | Public Figure Endors. | ,004* |
| Public Figure Endorsement<br>(Mean = 4,51; Std. D. = 1,633) | Crowdsourcing         | ,016* |
|   | Customer Reviews      | ,122  |
|   | Top Sales             | ,004* |

Table 10.1 Scenarios on Users Involvement

\*The mean difference is significance at 0.05 level

#### - Testing for Perceived Innovation and Perceived Quality

Next we run again an ANOVA to see if perceived innovation and perceived quality (as dependent variables) can be related with the user involvement (as independent variable). The analysis of variance (ANOVA) revealed a significant interaction effect of user's involvement on perceived innovation ( $F(6,287) = 5.941; p < .001$ ) and on perceived quality ( $F(6,287) = 4.118; p < .001$ ). This makes sense, once consumers are also users and so they feel

connected to the user-designers and to companies which use user-designed ideas (Dahl et al., 2014).

TABLE 11  
Dependent Variable = Perceived Innovation

| Source            | F     | df  | Sig  |
|-------------------|-------|-----|------|
| Users Involvement | 5,941 | 6   | ,000 |
| Total             |       | 287 |      |

*Table 11 Users Involvement on Perceived Innovation*

TABLE 11.1  
Dependent Variable = Perceived Quality

| Source            | F     | df  | Sig  |
|-------------------|-------|-----|------|
| Users Involvement | 4,118 | 6   | ,001 |
| Total             |       | 287 |      |

*Table 11.1 Users Involvement on Perceived Quality*

The results of the regression analysis in this case provided evidence that the relationship between perceived user involvement and perceived innovation  $\beta = .266$ ,  $p < .05$  and perceived quality  $\beta = .188$ ,  $p < .05$  both have significance ( $p < .05$ ). Reporting, perceived innovation and perceived quality, this suggests that the perceptions of higher user involvement influences how consumers rate the level of quality and innovation in the product. Higher innovation is associated once the user-designed ideas involve more people in the process of creation (Dahl et al., 2014).

TABLE 12  
Coefficients

| Dependent Variable = Perceived Innovation |      |       |      |
|---|------|-------|------|
| Source                                    | Beta | t     | Sig  |
| Users Involvement                         | ,266 | 3,921 | ,000 |
| R <sup>2</sup> (R-squared)                |      |       | ,051 |

*Table 12 Coefficients: Users Involvement on Perceived Innovation*

TABLE 13  
Coefficients

| Dependent Variable = Perceived Quality |      |       |      |
|--|------|-------|------|
| Source                                 | Beta | t     | Sig  |
| Users Involvement                      | ,188 | 3,244 | ,001 |
| R <sup>2</sup> (R-squared)             | ,035 |       |      |

*Table 13 Coefficients: Users Involvement on Perceived Quality*

It is then possible to conclude from the results, that the user's involvement in the product, leads to higher perceptions of innovation and quality. The relevant question for us is whether such perception of user's involvement is reflected in the scenarios. For that purpose below we used the scenarios of top sales and public figure endorsement, once these were the ones that showed the highest and lowest levels of user involvement to try again to explain the purchase intention and the perceptions of innovation and quality, previously addressed on the main analysis.

#### 5.4.2 New Group: high and low user's involvement assumption

##### *- Testing Product Purchase Intention*

Based on respondents' reported user involvement, we defined new variables with two levels: *high user's involvement* (top sales scenario) and *low user's involvement* (public figure endorsement scenario). Then we performed a one way ANOVA, to understand if there were differences in purchase intention that could be attributed to the inferred levels of user involvement in the product development. As dependent variable we had the two scales (product purchase intention and attitude towards the firm), and as independent variable the new variables (*high and low users involvement*).

The One way ANOVA revealed that the variables have no statistical significance ( $F(1,141) = 0.102; p > .05$ ) ( $F(1,141) = 0.519; p > .05$ ). So this new created group cannot help to explain the purchase intention of the respondents.

TABLE 14  
Dependent Variable = Purchase Intention Two Scales

| Scale                      | Source                         | F    | df  | Sig  |
|----------------------------|--------------------------------|------|-----|------|
| Product Purchase Intention | High and Low Users Involvement | ,102 | 1   | ,750 |
| Attitude Towards the Firm  | High and Low Users Involvement | ,519 | 1   | ,473 |
| Total                      |                                |      | 141 |      |

*Table 14 High and Low Users Involvement on the Purchase Intention*

*- Testing for Perceived Innovation and Perceived Quality*

Next, we wanted to test if these new variables (*high* and *low user involvement*) could at least explain the perceived innovation and quality by the respondents. An One-way ANOVA revealed that the new variables doesn't have a significant interaction effect on perceived innovation ( $F(1,141) = 0.144, p=.705$ ) and in perceived quality ( $F(1,141) = .026; p=.871$ ). Hence, we find no evidence that *high* and *low user involvement* directly moderates the relationship between perceived innovation and perceived quality.

TABLE 15  
Dependent Variable = Perceived Innovation

| Source                         | F    | df  | Sig  |
|--------------------------------|------|-----|------|
| High and Low Users Involvement | ,144 | 1   | ,750 |
| Total                          |      | 141 |      |

*Table 15 High and Low Users Involvement on Perceived Innovation*

TABLE 15.1  
Dependent Variable = Perceived Quality

| Source                         | F    | df  | Sig  |
|--------------------------------|------|-----|------|
| High and Low Users Involvement | ,026 | 1   | ,871 |
| Total                          |      | 141 |      |

*Table 15 High and Low Users Involvement on Perceived Quality*

## 6. Discussion and Conclusion

The aim of this thesis was to investigate the effect of new product labeling strategies, which can be used at the POP, to determine which could be the most effective strategy, to drive behavioural intentions such as purchase intention. The new product labeling strategies investigated were crowdsourcing, customer reviews, top sales and public figure endorsement. Comparing the four strategies, in the cases of top sales and customer reviews the products are created by company-internal designers, by opposition to crowdsourcing. In the case of public figure endorsement the public figure may or may not be involved in the product's design process. As communication strategies, crowdsourcing, customer reviews and top sales are able to convey a sense of user's involvement.

The purchase intention was explored with the creation of two different scales, to better measure the different sources which we believe consumers are influenced when facing purchasing decisions, the brand/firm (Forte and Lamont, 1998) and the product (Dubois et al., 2001; Fuchs et al., 2013).

We started by testing the four labeling strategies to determine if one of these labeling strategies would overlap the others, to influence the consumer's purchase intention, which was the main analysis. Results, however, proved that, among those studied, there wasn't a labeling strategy more or less effective than the others. The consumers seemed not to attribute the expected relevance to the different labeling strategies, as the hypotheses have implied. Therefore, we had to reject all the hypotheses (*H1*, *H2*, *H3* and *H4*).

Afterwards, we investigated if these labeling strategies could impact the consumer perceived innovation and perceived quality. Once again this analysis presented no relevance. Significance was instead found on the relation between user's involvement and the perceived innovation and quality. Therefore, in this line of reasoning of user's involvement, the relevant question was whether such perception of user's involvement was reflected in the scenarios. So the perception of user's involvement was used to try to find and explain differences between the scenarios, as the main analysis couldn't provide significant differences. The results showed that respondents perceived relevant differences in user's involvement between the top sales scenario and the public figure endorsement scenario, where respondents attributed a higher user's involvement to the top sales scenario and a lower user's involvement to the

public figure endorsement scenario. Then we used this higher and lower user's involvement perception from the scenarios, to try, again, to explain the purchase intention. However, again, no significance was found. Next we used the higher and lower user's involvement perception from the scenarios, to understand if we could attribute higher innovation and quality when the perceived user's involvement of the scenarios was higher, and less innovation and quality when the perceived user involvement of the scenarios was lower. However, again, no evidence was found that the higher and lower user's involvement, perceived from the scenarios, could explain the user's perceived innovation and perceived quality.

Nevertheless our results found that, when the perceived user involvement is considered on its own, meaning that the scenarios were not considered in the analysis, the perception of user's involvement influences how consumers rate the level of quality and innovation in the product. This translates to a perception of a higher user's involvement by the consumers, leads to a perception of higher product innovation and quality. This is consistent with other authors who found that higher innovation abilities are attributed to firms that co-create with consumers (Schreier et al., 2012; Lude et al., 2016).

In general our results showed that the way the product is communicated (the four labeling strategies: crowdsourcing, customer reviews, top sales and public figure endorsement) does not influence the consumer's behavioural attitudes or their perceptions of innovation and quality. Furthermore, and this came as a surprise, the level of user's involvement, in each of the four studied communication strategies, is not enough to affect consumer behavior.

Taking in consideration all of the above analysis and results, below we present the resulting conceptual model:

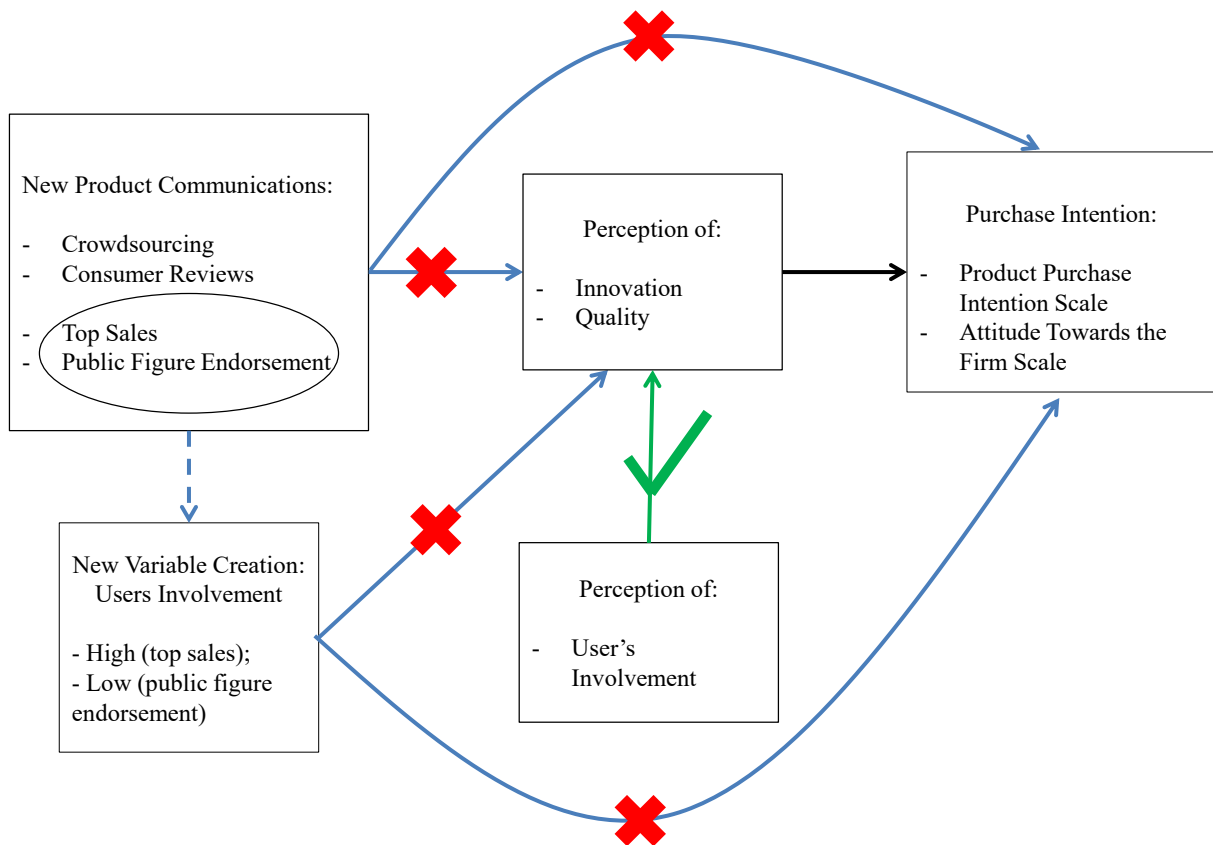


Figure 1.1 the conceptual model II

## 6.1 Academic Implications

Previous studies have shown that consumers prefer products labeled as user-designed as opposed to company design, as they are associated with more innovation (Schreier et al., 2012). However, almost no efforts have been made to investigate consumer behavioural intentions when other labeling strategies, such as customer reviews, top sales (Nishikawa et al., 2017) and public figure endorsement, are presented to determine if any of these have a bigger impact, than crowdsourcing, in the consumer purchase intention. Our findings bear new insights to the literature on strategies for communicating new products (the labeling strategies). In the context of this study, references to labeling strategies should be understood in a broader scope than the label which is affixed to the packaging of the product and should instead be understood as a communication strategy.

This study found that the way the product is communicated to the broader market, through the use of the four labeling strategies studied (crowdsourcing, customer reviews, top sales and public figure endorsement), is not relevant enough to influence consumer's behavioural

intentions, such as the purchase intention. Previous investigation suggests some considerations that may help understand this finding. A survey conducted by the Israel Consumer Council and the Association for Public Health Services, reported that only 17% of consumers care to read the label, with 40% of consumers not reading it at all. The same survey also found that 10% don't understand what is written, and other 10% don't believe in the data printed there. Moreover, at the point of purchase consumers don't want to spend much time comparing labels (Schuldt, 2014). Also, consumer confusion, as consumers are provided with ever increasing amounts of decision-relevant information in their purchasing environments, can also play a role (Mitchell and Papavassiliou, 1999).

Finally our results found, as above mentioned, that the perception of user's involvement influences how consumers rate the level of quality and innovation in the product. A perception of a higher user's involvement by the consumers, leads to a perception of higher product innovation and quality. Concerning the issue of innovation, these results corroborate previous studies by Dahl et al. (2014), which found that, in the case of user-design, a higher perception of innovation is associated with the involvement of more people in the process of creation. This innovation perception, brought by the user's involvement, seems to lead to positive outcomes with respect to purchase intentions (Fuchs et al., 2011). In fact, Schreier et al. (2012) showed that perceived innovation ability explains important outcome variables, including intention to recommend the firm to others, purchase intentions, and willingness to pay. This is explained by a number of arguments, the more people involved leads to more ideas, a diversity argument (more diverse people involved leads to more diverse ideas), a user argument (actual users leads to more applicable ideas), and a constraints argument (people who are less constrained leads to more freedom in ideas) (Schreier et al., 2012). In the case of perceived quality, the quality of the product is related to the user's involvement with the product, as Tsiotsou (2005) showed in a study about sport shoes, consumers who perceive the quality of this product as low are less involved and satisfied with them whereas they report less intention for buying it in the future. However, consumers perceiving the quality of their sport shoes to be of high quality report higher involvement and satisfaction with them and higher intentions to buy them again. It is important to state that Tsiotsou (2005) proved that product quality explains user involvement, while our study proved that user's involvement explains perceived quality.

## 6.2 Managerial Implications

Research is not consensual about whether managers should, or not, communicate user participation in the product design. In a managerial perspective the findings of this study suggests that, when communicating new products, companies should focus the following issues. First with the exception of luxury items companies and pharmaceutical companies, if consumers had an active role in the design of the new product it is beneficial for companies to state that fact, as well as to convey a sense of user's involvement with the product. Studies showed that consumers reward brands that listen to them (Edgecliffe-Johnson, 2017). Secondly, communicating this user's involvement leads to higher perceptions of innovation and quality. This is important because as other studies proved, this innovation perception, brought by the user's involvement, leads to positives outcomes with respect to purchase intentions (Fuchs et al. 2010; Schreier et al., 2012; Dahl et al., 2014). Consumers who are empowered to contribute to the innovation process will demonstrate higher willingness to pay and purchase intentions for the underlying products (Fuchs et al. 2010). In the case of quality perception the same situation is verified as perceived quality does influence not only the purchase intention but the perceived value of a product (González-Benito et al., 2012; Calvo-Porralla et al., 2017).

Finally our results showed that the way the product is communicated (using the four labeling strategies: crowdsourcing, costumer reviews, top sales and public figure endorsement) it is not enough to influence the purchase intention, nor the perceptions of innovation and quality. Thus, marketing managers should otherwise emphasize the product's attributes (such as innovation and quality) in their communications and promotional activities in order to retain their consumers, attract new ones, and increase their purchase intention (Tsiotsou, 2005).

## 7. Limitations and Future Research

The limitations of this study are encouraged to be further investigated. To start, this study was conducted with just one product category: a cake. As mentioned before, despite the product was carefully chosen, it may present a challenge in terms of generalization, once, for instance, this product is not included in the luxury category. It would be interesting to conduct a similar study using a luxury product, to determine if, in this case, public figure endorsement, which was perceived with the lowest user involvement, could be the one associated then with the highest quality, once this could be the scenario which would further distance itself from user's involvement, providing the highest "agentic feelings", thus having a better chance to impulse the purchasing intention of this kind of consumers.

This study sample had in its majority a young population (with the average age being 23 years old), and as a study conducted by Cadent Consulting Group proved, 51% of the younger population have no real preference between labels, while by contrast elder generations have a stronger care, as were raised with fewer choices and different advertising channels. Furthermore, once the older generation is alive for a longer span, they had more time to develop empathy, trust and a more faithful relation with the brands they use.

As the survey presented an appealing picture of a cake, there may have been a bias in the responses, in which respondents made their choices based on the appealing cake image and not on the information presented on how the product was created (the labeling strategy used), causing the so-called *ceiling effect* in the data collection process.

## Sources

- Akdeniz, M. B., Calantone, R. J. and Voorhees, C. M. (2014). *Signaling quality: an examination of the effects of marketing- and nonmarketing-controlled signals on perceptions of automotive brand quality*. *Journal of Product Innovation Management*, 31, pp. 728–743.
- Afuah, A. and Tucci. C.L. (2012). *Crowdsourcing As A Solution To Distant Search*. *Academy of Management Review*, 37(3), pp. 355-375.
- Albors, J., Ramos, J., and Hervás, J. (2008). *New learning network paradigms: Communities of objectives, crowdsourcing, wikis and open source*. *International Journal of Information Management*, 28(3), pp. 194-202.
- Amabile, T. M. (1996). *Creativity in context*.
- Anderson, N, Potonik, K. and Zhou, J. (2014). *Innovation and Creativity in Organizations: A State-of-the-Science Review and Prospective Commentary*. *Journal of Management*, 40(5), pp. 1297-1333.
- Argo, J.J., Dahl, D.W. and Manchanda, R. (2005). *The Influence of a Mere Social Presence in a Retail Context* [online] *Journal of Consumer Research*, 32, pp. 207-212.
- Bagozzi, R. P. and Heatherton, T.F. (1994). *A General Approach to Representing Multifaceted Personality Constructs: Application to State Self-Esteem*. *Structural Equation Modeling*, 1 (1), pp. 35–67.
- Barrie, J. (2015). *TripAdvisor reviews are now so powerful they impact the tourist industry of entire countries*. *Business Insider*.
- Bearden, W.O. and Etzel, M.J. (1982). *Reference Group Influence on Product and Brand Purchase Intentions*. *Journal of Consumer Research*, 9, pp. 183-194.
- Bergkvist, L.I. and Rossiter, J. (2007). *The predictive validity of multiple-item versus single-item measures of the same constructs*. *Journal of Marketing Research*, 44 (2), pp. 175-184.
- Brabham. D. (2008). *Moving the crowd at iStockphoto: The composition of the crowd and motivations for participation in a crowdsourcing application*. *Journal of Research into New Media Technologies*, 14(1), pp. 75–90.
- Brakus, J. J., Schmitt, B. H. and Zarantonello, L. (2009). *Brand experience: what is it? How is it measured? Does it affect loyalty?* *Journal of Marketing*, 73, pp 52–68.
- BrightLocal: *Local Consumer Review Survey* (2017).
- Bookbinder. S. (2017). *Why Customer Reviews Really Matter in Improving Your Sales*.
- Bowling, A. (1997). *Research Methods in Health*.
- Burns, N., and Grove, S. K. (1997). *The Practice of Nursing Research Conduct, Critique, & Utilization*.
- Cadent Consulting Group: *Sea Change for Private Label* (2017).

Calvo-Porralla, C. and Lévy-Mangin, J.P. (2017). *Store brands' purchase intention: Examining the role of perceived quality*. European Research on Management and Business Economics, 23(2), pp 90-95.

Cambridge Dictionary [online]

Available at: <https://dictionary.cambridge.org/dictionary/english/top-selling> [Accessed at 05 Nov. 2017].

Cassey, L. and Chew-Guing, L. (2007). *Encouraging innovation in Malaysia: Appropriate sources of finance*. CACCI Journal, 1.

Chandrupatla, T.R. (2009). *Quality and Reliability in Engineering*. Cambridge University Press.

Chang, T.Z. and Wildt, A.R. (1994). *Price, product information, and purchase intention: An empirical study*. Journal of the Academy of Marketing Science, 22(1), pp. 16-27.

Charlton, G. (2015). *Ecommerce consumer reviews: why you need them and how to use them*. Econsultancy.

Charness, G., Gneezy, U. and Kuhn, M.A. (2012). *Experimental methods: Between-subject and within-subject design*. Journal of Economic Behavior & Organization, 81, pp. 1–8.

Chaudhary, U. and Asthana, A. (2015). *Impact of celebrity endorsements on consumer brand loyalty: Does it really matter*. International Journal of Scientific and Research Publications, 5(12).

Chesbrough, H. W. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Harvard Business Press.

Childers, T.L. and Rao, A.R. (1992). *The influence of Familial and Peer-Based Reference Groups on Consumer Decisions*. Journal of Consumer Research, 19, pp. 198-211.

Codjia, M. (2000). *Difference Between the Sales & Sales Volume*.

Crawford, G.C., Aguinis, H., Lichtenstein, B., Davidsson, P. and McKelvey, B. (2015). *Power law distributions in entrepreneurship: Implications for theory and research*. Journal of Business Venturing, 30(5), pp. 696-713.

Crutchfield, D. (2010). *Celebrity Endorsements Still Push Product: Why, in the Era of Social Media, the Rewards Continue to Outweigh the Risks*. AdAge.

Dahl, D.W. (2013). *Social Influence and Consumer Behavior*. Journal of Consumer Research, 40(2).

Dahl, D.W., Fuchs, C. and Schreier, M. (2014) *Why and When Consumers Prefer Products of User-Driven Firms: A Social Identification Account*. Management Sciences, 61(8), pp. 1978 – 1988.

Dahlander, L. and Piezunka, H. (2017). *Why Some Crowdsourcing Efforts Work and Others Don't*. Harvard Business Review.

DeFranzo, S.E. (2012). *The 4 Main Reasons to Conduct Surveys*. Snap Surveys.

DeMers, J. (2015). *How Important Are Customer Reviews For Online Marketing?* Forbes.

Drolet, A.L. and Morrison, D.G. (2001). *Do We Really Need Multiple-Item Measures in Service Research?* Journal of Service Research, 3(3), pp. 196-204.

- Dubois, B., Laurent, G. and Czellar, S. (2001). *Consumer Rapport to Luxury: Analyzing Complex and Ambivalent Attitudes*. American Journal of Industrial and Business Management, 5(9).
- Ebel, P.A., Bretschneider, U. and Leimeister, J.M. (2016). *Can the Crowd Do the Job? Exploring the Effects of Integrating Customers into a Company's Business Model Innovation*. International Journal of Innovation Management, 20(7).
- Edgecliffe-Johnson, A. (2017). *Inside Business: Consumers don't care about most brands*. Financial Times.
- Encyclopedia Britannica [online] Available at: <https://www.britannica.com/> [Accessed at 07 Oct. 2017].
- Forrester Research: TripAdvisor Sustains The Momentum Of Experience By Enticing Reviewers To Post Travel Experiences (2016).
- Forte, M. and Lamont, B. (1998). *The bottom-line effect of greening (implications of ecological awareness)*. The Academy of Management Executive, 2(1), pp. 89-91.
- Fournier, S. (1998). *Consumers and Their Brands: Developing Relationship Theory in Consumer Research*. The Journal of Consumer Research, 24(4), pp. 343-373.
- Franke, N., Poetz, M.K. and Schreier, M. (2014). *Integrating Problem Solvers from Analogous Markets in New Product Ideation*. Management Science, 60(4), pp. 1063 – 1081.
- Fuchs, C. and Diamantopoulos, A. (2009). *Using single-item measures for construct measurement in management research*. European Journal of Marketing, 44 (11/12), pp.1763-1786.
- Fuchs, C., Prandelli, E. and Schreier, M. (2010). *The Psychological Effects of Empowerment Strategies on Consumers' Product Demand*. Journal of Marketing, 74, 65–79.
- Fuchs, C., Prandelli, E., Schreier, M., and Dahl, D. W. (2013). *All that is users might not be gold: How labeling products as user designed backfires in the context of luxury fashion brands*. Journal of Marketing, 77(5), 75-91.
- Garrido-Morgado, A., González-Benito, O. and Martos-Partal, M. (2016). *Influence of Customer Quality Perception on the Effectiveness of Commercial Stimuli for Electronic Products*. Frontiers Psychol.
- Garrigos-Simon, F.J, Gil-Pechuán, I. and Estelles-Miguel, S. (2015). *Advances in Crowdsourcing*.
- Ginns, P. and Barrie, S. (2004). *Reliability of Single-Item Ratings of Quality in Higher Education: A Replication*. 95 (3), pp. 1023-1030.
- González-Benito, O. and Martos-Partal, M. (2012). *Role of retailer positioning and product category on the relationship between store brand consumption and store loyalty*. Journal of Retailing, 88(1), pp. 236-249.
- Gorsuch, R.L. and McPherson, S.E. (1989). *Intrinsic/Extrinsic Measurement: I/E-Revised and Single-Item Scales*. Journal for the Scientific Study of Religion, 28(3), pp. 348-354.
- Hébert, R.F. and Link, A.N. (1989). *The Entrepreneur: Mainstream Views and Radical Critiques*. Review of Industrial Organization, 4(2), pp. 135-137.
- Hicks, A. (2012). *What Angie's List Knows About Customer Reviews*. Harvard Business Review.

- Howe, J. (2006). *The Rise of Crowdsourcing*. Wired magazine, 14 (6), pp. 1-4.
- Hoyer, W.D. (1984). *An Examination of Consumer Decision Making for a Common Repeat Purchase Product*. Journal of Consumer Research, 11(3), pp. 822–829.
- International Standards Organization (ISO), (2009). *ISO Standard 31000:2009 – Risk Management – Principles and Guidelines*.
- Israel Consumer Council: About 50% of Consumers Don't Read the Labels on Food Packages (2008).
- Jeppesen, L.B. and Frederiksen, L. (2006). *Why Do Users Contribute to Firm-Hosted User Communities? The Case of Computer-Controlled Music Instruments*. Organization Science, 17(1), pp. 45–63.
- Kapferer, J.N. and Bastien, V. (2009). *The specific city of luxury management: Turning marketing upside down*. Journal of Brand Management 16(5), pp. 311–322.
- Kim, Y. and Srivastava, J. (2007). *Impact of social influence in e-commerce decision making*. Proceedings of the ninth international conference on Electronic commerce, pp. 293-301.
- Kitching, C. (2016). *The TripAdvisor effect*. Daily Mail.
- Kleemann, F., Rieder, K. and Voss, G. (2008). *Un(der)paid Innovators: The Commercial Utilization of Consumer Work through Crowdsourcing*. Science, Technology & Innovation Studies, 4(1), pp. 5-26.
- Klein, K.J. and Sorra, J. (1996). *The Challenge of Implementation*. Academy of Management, 21(4), pp. 1055-1080.
- Kleinschmidt, E.J. and Cooper, R.G. (1991). *The impact of product innovativeness on performance*. Journal of Product Innovation Management, 8, pp. 240-251.
- Kotler, P. and Armstrong, G. (1996). *Principles of Marketing*.
- Kwon, H. and Trail, G. (2005). *The Feasibility of Single-Item Measures in Sport Loyalty Research*. Sport Management Review, 8 (1), pp. 69-88.
- Lee, H., Delene, L.M., Bunda, M.A. and Kim, C. (2000): *Methods of measuring health-care service quality*. Journal of Business Research, 48, pp. 233–246.
- Locke, K.D. (2003). *Status and Solidarity in Social Comparison: Agentic and Communal Values and Vertical and Horizontal Directions*. Journal of Personality and Social Psychology, 84(3), pp. 619–631.
- Lude, M., Hauck, J., Prügl, R., Linzmajer, M. (2016). *When Co-Creation does not benefit companies' perceived innovation ability*. Innovation and Product Development Management Conference Proceedings.
- Lyle, T. (2015). *Why Do TripAdvisor Reviews Matter for Hoteliers?*
- McFerran, B., Dahl, D.W., Fitzsimons, G.J. and Morales, A.C. (2009). *I'll Have What She's Having: Effects of social influence and Body Type on the Food Choices of Others*. Journal of Consumer Research, 36, pp. 915-929.
- McLeod, S. A. (2008). *Likert scale*. Simply Psychology.

- McNeal, M. (2013). *How GE Crowdsources Insights from Data Scientists*. America Marketing Association.
- Mitchell, V.W. and Papavassiliou, V. (1999). *Marketing Causes and Implications of Consumer Confusion*. *Journal of Product and Brand Management*, 8, pp. 319-339.
- Moreau, C.P. and Herd, K.B. (2010). *To Each His Own? How Comparisons to Others Influence Consumer Self-Design*. *Journal of Consumer Research*, 36(5), pp. 806-819.
- Nambissan, S., Sawhney, M. (2007), *The Global Brain: Your Roadmap for Innovating Faster and Smarter in a Networked World*.
- Nishikawa, H., Schreier, M. and Ogawa, S. (2012) *User-generated versus designer-generated products: A performance assessment at Muji*. *International Journal of Research in Marketing*, 30(2), 160–167.
- Nishikawa, H., Schreier, M., Fuchs, C. and Ogawa, S. (2017). *The value of marketing crowdsourced new products as such: Evidence from two randomized field experiments*. *Journal of Marketing Research*, 54(4), pp. 525-539.
- Nunnally, J.C. (1967). *Psychometric theory*.
- Ogawa, S. and Piller, F.T. (2006). *Reducing the risks of new product development*. *MIT Sloan management review*, 47(2), pp. 65-71.
- Okonkwo, U. (2007). *Luxury Fashion Branding: Trends, Tactics, Techniques*.
- Oldham, G.R. and Da Silva, N. (2015). *The impact of digital technology on the generation and implementation of creative ideas in the workplace*. *Computers in Human Behavior*, 42(C), pp. 5-11.
- Olenksi, S. (2016). *How Brands Should Use Celebrities For Endorsements*. *Forbes*.
- Paljug, K. (2017). *How to Take Control of Your Business's Online Reviews*. *Business News Daily Contributor*.
- Pan, Y., Sheng, S. and Xie, F. T. (2012). *Antecedents of customer loyalty: an empirical synthesis and reexamination*. *Journal of Retailing and Consumer Services*, 19, pp 150–158.
- Passikoff, R. (2013). *The New Brand Relationship by Robert Passikoff of Brand Keys*. *Forbes*.
- Perkins, B. and Fenech, C. (2014). *The Deloitte Consumer Review: The growing power of consumers* Deloitte Consumer Review 8<sup>th</sup> Edition.
- Peter, J.P. (1979). *Reliability: A Review of Psychometric Basics and Recent Marketing Practices*. *Journal of Marketing Research*, 16, pp. 6-17.
- Poetz, M. K and Schreier, M. (2012). *The Value of Crowdsourcing: Can Users Really Compete with Professionals in Generating New Product Ideas?* *The Journal of Product Innovation Management*, 29(2), pp. 245-256.
- Prahalad, C. K., and Ramaswamy. (2002). *The co-creation connection*. *Strategy and Business*, pp. 50-61.
- Rassega, V., Troisi, O., Torre, C., Cucino, V., Santoro, A. and Prudente, N. (2015) *Social Networks and the Buying Behavior of the Consumer*. *Journal of Global Economics*, 3(4).

- Richardson, A. (2010). *Understanding Customer Experience*. Harvard Business Review.
- Rossiter, J. R. (2002). The C-OAR-SE procedure for scale development in marketing. *International Journal of Research in Marketing*, 19, pp. 305 – 335.
- Rucker, D. D. and Galinsky, A. D. (2008). *Desire to acquire: Powerlessness and compensatory consumption*. *Journal of Consumer Research*, 35(2), pp. 257-267.
- 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*, 19(4), pp. 4-17.
- Schau, H.J., Muniz, A.M., and Arnould, E.J. (2009). *How Brand Community Practices Create Value*. *Journal of Marketing*, 73, pp. 30–51.
- Schenk, E. and Guittard, C. (2011). *Towards a characterization of crowdsourcing practices*. *Journal of Innovation Economics & Management*, 1(7).
- Schiffman, L.G., and Kanuk, L.L., (2004). *Consumer Behavior*.
- 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* 76(5), pp. 18-32.
- Schuldt, J. (2014). *Health buzzwords on food labels are misleading consumers, study finds*. Los Angeles Times.
- Seng, L.C. and Ping, N.S. (2016). *The Influence of Product Innovation Toward Consumer Purchase Intention*. *International Journal of Economics, Commerce and Management*, 4(4), pp. 773-782.
- Shalley, C. E., Hitt, M.A. and Zhou, J. (2015). *The Oxford Handbook of Creativity, Innovation, and Entrepreneurship*.
- Shamir, B. and Kark, R. (2004). *A single-item graphic scale for the measurement of organizational identification*. *Journal of Occupational and Organizational Psychology*, 77(1), pp. 115-123.
- Sharma, S. and Asad, R. (2012). *Assessing the Impact of Web2.0 on Consumer Purchase Decisions: Indian Perspective*. *International Journal of Marketing and Technology*, 2, pp. 125-139.
- Simperl, E. (2015). *How to Use Crowdsourcing Effectively: Guidelines and Examples*. *Journal of the Association of European Research Libraries*, 25(1), pp.18–39.
- Stephen, A.T, Zubcsek, P. P. and Goldenberg. J. (2016). *Lower Connectivity Is Better: The Effects Of Network Structure On Redundancy Of Ideas And Customer Innovativeness In Interdependent Ideation Tasks*. *Journal of Marketing Research*, 53(2), pp. 263-279.
- Surowiecki, J. (2004). *The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations*.
- Taylor, D.G., Lewin, J.E. and Strutton, D. (2011) *Friends, Fans, and Followers: Do Ads Work on Social Networks? How Gender and Age Shape Receptivity*. *Journal of Advertising Research*, 51, pp. 258-276.
- Terwiesch, C. and Ulrich, K.T. (2009). *Innovation tournaments: Creating and selecting exceptional opportunities*. Harvard Business Press.

Tsiotsou, R. (2006). *The role of perceived product quality and overall satisfaction on purchase intentions*. International Journal of Consumer Studies, 30(2), pp. 207–217.

Vanderbilt, T. (2015). *Inside the Mad, Mad World of TripAdvisor*. Outside Online.

Vidigal, J. (2017). *The growing influence of TripAdvisor*.

Von Hippel, E. (2005). *Democratizing Innovation*. Journal für Betriebswirtschaft, 55.1, pp- 63-78.

Wang, X. and Yu, C. and Wei, Y. (2012) *Social media peer communication and impacts on purchase intentions: A consumer socialization framework*. Journal of Interactive Marketing 26, pp. 198-208.

# Appendix

## Appendix I

### Thesis Survey – Portuguese Version

---

Agradeço pela sua participação neste estudo.

O objetivo do presente estudo é avaliar a sua percepção acerca de um novo produto a ser lançado no mercado.

A recolha destes dados é para o desenvolvimento de uma tese de mestrado na Católica Lisbon School of Business & Economics.

Tendo em conta que não existem respostas certas ou erradas, pede-se a vossa máxima sinceridade, pois toda a informação recolhida é estritamente confidencial e será apenas usada como objeto de estudo.

Antecipadamente grata pela vossa colaboração.

Rita Roque

---

Por favor indique numa escala de 1 a 7, o seu gosto por bolos:

- Detesto (1)
  - Não gosto (2)
  - Não aprecio (3)
  - Indiferente (4)
  - Aprecio (5)
  - Gosto (6)
  - Adoro (7)
-

---

<sup>8</sup>Imagine que quer comprar um bolo para um jantar que vai dar em sua casa.

Na sua procura pelo bolo ideal tomou conhecimento de uma pastelaria nacional que lançou um novo bolo no mercado. Para o desenvolvimento deste novo bolo, a pastelaria criou uma plataforma online, onde foi pedido aos seus utilizadores para escreverem sobre as suas receitas preferidas. O resultado foi um bolo novo a partir das ideias e sugestões vindas desta plataforma online.

O bolo está actualmente disponível em todas as pastelarias da rede.

---

Imagine que quer comprar um bolo para um jantar que vai dar em sua casa.

Na sua procura do bolo ideal leu vários comentários e críticas de outros consumidores, em vários blogs e sites de pastelarias, acerca dos bolos que compraram recentemente.

Os comentários mais positivos apontaram-lhe para um bolo novo no mercado, que está actualmente disponível numa rede de pastelarias próximas de si.

---

Imagine que quer comprar um bolo para um jantar que vai dar em sua casa.

Na sua procura pelo bolo ideal tomou conhecimento de uma pastelaria nacional que lançou um novo bolo no mercado. Para o desenvolvimento deste novo bolo a pastelaria inspirou-se nas suas receitas mais vendidas de sempre de entre todas as suas produções, e conjugou-as neste único bolo.

O bolo está actualmente disponível em todas as pastelarias da rede.

---

Imagine que quer comprar um bolo para um jantar que vai dar em sua casa.

Na sua procura pelo bolo ideal tomou conhecimento de uma pastelaria nacional que lançou um novo bolo no mercado. Para o desenvolvimento deste novo bolo a pastelaria contratou um famoso Chefe Pasteleiro.

O bolo está actualmente disponível em todas as pastelarias da rede.

---

---

<sup>8</sup> Depending on the labeling strategy being surveyed the cake introduction text presented to the respondents was different. Each respondent was randomly presented with just one labeling strategy. The introduction texts for the four different labeling strategies above presented on this page, are in the following order: crowdsourcing, customer reviews, top sales and public figure endorsement.

---

Numa escala de 1 a 7, qual acha que foi o grau de envolvimento dos utilizadores na criação deste novo bolo?

- Inexistente (1)
  - Muito fraco (2)
  - Fraco (3)
  - Indiferente (4)
  - Razoável (5)
  - Forte (6)
  - Total (7)
- 

Em seguida vai-lhe ser apresentada a imagem do bolo criado.



Trata-se de um bolo multi-fatiado, que procura juntar vários gostos num só bolo, para garantir maior grau de satisfação num único produto.

Responda por favor às seguintes perguntas.

---

Numa escala de 1 a 7, qual o grau de qualidade que atribui a este bolo:

- Nenhuma (1)
  - Muito pouca (2)
  - Pouca (3)
  - Indiferente (4)
  - Razoável (5)
  - Elevada (6)
  - Máxima (7)
- 

Numa escala de 1 a 7, até que ponto considera este bolo inovador:

- Nada inovador (1)
  - Muito pouco inovador (2)
  - Pouco inovador (3)
  - Indiferente (4)
  - Razoavelmente inovador (5)
  - Inovador (6)
  - Completamente inovador (7)
-

---

Numa escala de 1 a 7, o quão disposto estaria a provar o bolo:

- Nada disposto (1)
  - Muito pouco disposto (2)
  - Pouco disposto (3)
  - Indiferente (4)
  - Razoavelmente disposto (5)
  - Disposto (6)
  - Completamente disposto (7)
- 

Numa escala de 1 a 7, até que ponto recomendaria este bolo a um amigo ou familiar:

- Não recomendaria (1)
  - Recomendaria muito pouco (2)
  - Recomendaria pouco (3)
  - Indiferente (4)
  - Recomendaria ligeiramente (5)
  - Recomendaria (6)
  - Recomendaria completamente (7)
-

---

Numa escala de 1 a 7, o quão estaria disposto a visitar uma pastelaria com este bolo:

- Nada disposto (1)
  - Muito pouco disposto (2)
  - Pouco disposto (3)
  - Indiferente (4)
  - Razoavelmente disposto (5)
  - Disposto (6)
  - Completamente disposto (7)
- 

Numa escala de 1 a 7, o quão estaria disposto a recomendar uma pastelaria com este bolo:

- Não recomendaria (1)
  - Recomendaria muito pouco (2)
  - Recomendaria pouco (3)
  - Indiferente (4)
  - Recomendaria ligeiramente (5)
  - Recomendaria (6)
  - Recomendaria completamente (7)
-

---

Numa escala de 1 a 7, o quão estaria disposto a comprar este bolo (todas as fatias) :

- Nada disposto (1)
  - Muito pouco disposto (2)
  - Pouco disposto (3)
  - Indiferente (4)
  - Razoavelmente disposto (5)
  - Disposto (6)
  - Completamente disposto (7)
- 

Género:

- Masculino
  - Feminino
- 

Por favor indique a sua idade:

---

Nacionalidade:

---

---

Qual a sua situação profissional:

- Estudante (1)
- Trabalhador Estudante (2)
- Empregado (3)
- Desempregado (4)
- Reformado (5)

---

Nível de Escolaridade (último nível concluído):

- Ensino Básico (1)
- Ensino Secundário (2)
- Licenciado (3)
- Mestre (4)
- Doutorado (5)

---

Qual é o seu rendimento médio mensal:

- Até 500€ (1)
  - 500€ - 1000€ (2)
  - 1000€ - 2000€ (3)
  - Superior a 2000€ (4)
-

## Appendix II

### Thesis Survey – English Version

---

I appreciate your participation in this study.

The objective of the present study is to evaluate your perception about a new product to be released in the market.

The data collection is to be used for the development of a master thesis at Católica Lisbon School of Business & Economics.

Please take in consideration that there are no right or wrong answers, so honesty is requested. All the collected information is strictly confidential and it will only be used as a study object.

Grateful for your participation  
Rita Roque

---

Please state your taste for cakes on a scale of 1 to 7:

- I hate it (1)
  - I do not like it (2)
  - I don't appreciate it (3)
  - Indifferent (4)
  - I appreciate it (5)
  - I like it (6)
  - I love it (7)
-

---

<sup>9</sup> Imagine that you want to buy a cake for a dinner that you will host at your house.

In the search for the perfect cake you just found out that a national pastry just released a new cake in the market. In order to develop this new cake the pastry created an online platform where the users were asked to write about their favorite recipes.

The result from the ideas and suggestions gathered by this online platform was the creation of a new cake.

The cake is currently available at all the franchise pastries.

---

Imagine that you want to buy a cake for a dinner that you will host at your house.

In the search for the perfect cake, you just read several comments and criticism, from other consumers, in several pastry blogs and websites, about the most recent cakes they purchased. The most positive reviews from the other consumers ended up by pointing out to a new cake that was just released in the market.

The cake is currently available at a nearby pastries franchise.

---

Imagine that you want to buy a cake for a dinner that you will host at your house.

In the search for the perfect cake you just learned about a national pastry that released a new cake in the market. In order to develop this new cake the pastry used their all times best-selling recipes and combined them in a new cake.

The cake is currently available at a nearby pastries franchise.

---

Imagine that you want to buy a cake for a dinner that you will host at your house.

In the search for the perfect cake you just learned about a national pastry that released a new cake in the market. In order to develop this new cake the pastry hired a famous Pastry Chef.

The cake is currently available at a nearby pastries franchise.

---

---

<sup>9</sup> Depending on the labeling strategy being surveyed the cake introduction text presented to the respondents was different. Each respondent was randomly presented with just one labeling strategy. The introduction texts for the four different labeling strategies above presented on this page, are in the following order: crowdsourcing, customer reviews, top sales and public figure endorsement.

---

Please state on a scale of 1 to 7, which, do you think, was the degree of users involvement in the creation of this new cake?

- Nonexistent (1)
- Very weak (2)
- Weak (3)
- Indifferent (4)
- Reasonable (5)
- Strong (6)
- Total (7)

---

Next the image of the created cake will be presented to you.



It is a multiple-sliced cake, which seeks to join several tastes in only one cake, to ensure greater satisfaction in one single product.

Please answer the following questions.

---

Please state on a scale of 1 to 7, which do you think is the cake's degree of quality:

- None (1)
  - Very poor (2)
  - Poor (3)
  - Indifferent (4)
  - Reasonable (5)
  - High (6)
  - The highest (7)
- 

Please state on a scale of 1 to 7, to which degree you consider there is innovation in this cake:

- Not innovative (1)
  - Very little innovation (2)
  - Little innovation (3)
  - Indifferent (4)
  - Reasonably innovative (5)
  - Innovative (6)
  - Completely innovative (7)
-

---

Please state on a scale of 1 to 7, your willingness to taste this cake:

- No willingness (1)
- Very low willingness (2)
- Low willingness (3)
- Indifferent (4)
- Reasonable willingness (5)
- Willing (6)
- Totaly willing (7)

---

Please state on a scale of 1 to 7, to which point would you recommend this cake to a friend or relative:

- I would not recommend it (1)
  - Very hard to recommend (2)
  - I would hardly recommend it (3)
  - Indifferent (4)
  - I would slightly recommend it (5)
  - I would recommend it (6)
  - I would strongly recommend it (7)
-

---

Please state on a scale of 1 to 7, to which point would you be willing to visit a pastry with this cake:

- No willingness (1)
- Very low willingness (2)
- Low willingness (3)
- Indifferent (4)
- Reasonable willingness (5)
- Willing (6)
- Totaly willing (7)

---

Please state on a scale of 1 to 7, to which point would you recommend a pastry with this cake:

- I would not recommend (1)
  - Very hard to recommend (2)
  - I would hardly recommend it (3)
  - Indifferent (4)
  - I would slightly recommend it (5)
  - I would recommend it (6)
  - I would strongly recommend it (7)
-

---

Please state on a scale of 1 to 7, your willingness to purchase this cake (all the slices):

- No willingness (1)
  - Very low willingness (2)
  - Low willingness (3)
  - Indiferent (4)
  - Rasonable willingness (5)
  - Willing (6)
  - Totaly willing (7)
- 

Gender:

- Masculine
  - Feminine
- 

Please state your age:

---

Nacionality:

---

---

Which is your professional situation:

- Student (1)
  - Working student (2)
  - Employee (3)
  - Unemployed (4)
  - Retired (5)
- 

Level of Education (last level completed):

- Basic Education (1)
  - High School (2)
  - Bachelor (3)
  - Master (4)
  - PhD (5)
- 

What is your average monthly income:

- Until 500€ (1)
  - 500€ - 1000€ (2)
  - 1000€ - 2000€ (3)
  - Above 2000€ (4)
-

### Appendix III: Attitude towards the firm Scale

| Attitude Towards the Firm |      |     |                |
|---------------------------|------|-----|----------------|
| Gender                    | Mean | N   | Std. Deviation |
| Masculine                 | 4.91 | 110 | 1.594          |
| Feminine                  | 5.30 | 178 | 1.487          |
| Total                     | 5.15 | 288 | 1.538          |

### Appendix IV: Sample description by Gender

| Gender    | N   | Percentage |
|-----------|-----|------------|
| Masculine | 110 | 38.2%      |
| Feminine  | 178 | 61.8%      |
| Total     | 288 | 100%       |

### Appendix V: Sample description by Country

| Country     | N   |
|-------------|-----|
| Portugal    | 260 |
| Germany     | 8   |
| Romania     | 3   |
| France      | 1   |
| Egypt       | 1   |
| Brazil      | 3   |
| Russia      | 1   |
| Poland      | 1   |
| Turkey      | 2   |
| El Salvador | 2   |
| Italy       | 1   |
| Holand      | 1   |
| China       | 1   |
| India       | 1   |
| Angola      | 1   |
| Australia   | 1   |
| Total = 16  | 288 |

## Appendix VI: Sample description by Scenario

| Scenario                  | N   |
|---------------------------|-----|
| Crowdsourcing             | 72  |
| Customer Reviews          | 74  |
| Top Sales                 | 73  |
| Public Figure Endorsement | 69  |
| Total                     | 288 |

## Appendix VII: Product User Taste

| Frequencies |                |     |
|-------------|----------------|-----|
| Mean        | Std. Deviation | N   |
| 5,79        | 1,153          | 288 |

| Please indicate, from a scale 1 to 7, your taste for cakes: |           |
|---|-----------|
|   | Frequency |
| 1. I hate it  | 3         |
| 2. I don't like it  | 3         |
| 3. I don't appreciate it                                    | 7         |
| 4. Indifferent  | 12        |
| 5. I appreciated it   | 74        |
| 6. I like it  | 103       |
| 7. I love it  | 86        |
| Total   | 288       |