

Crowdsourcing, more than an innovation partner?

A quantitative study of the effects of crowdsourcing on consumer responses

Abstract

This paper focuses on non-participating consumers' overall attitudes towards brands using crowdsourcing activities, specifically ideation contests, in new product development. As technology has enabled businesses and consumers to interact easier, crowdsourcing has become more popular, but research on responses to crowdsourcing activities is limited. The aim of this study is to fill this research gap. As behavioural intentions and attitudes are highly correspondent, this relationship in the crowdsourcing context is also examined in this study. An experimental study with both a familiar (real) and unfamiliar (fictive) brand is conducted to compare the effects of a brand using an ideation contest vs. a brand not using an ideation contest in new product development. The results imply that a brand using an ideation contest in new product development will be perceived as more customer oriented, innovative and unique. However, the use of an occasional crowdsourcing campaign is assumed to be a too small initiative to affect the overall brand attitude and behavioural intentions to a larger extent. Whether there is a relationship between crowdsourcing activities and non-participating consumers' attitude and behavioural intentions is subject for further research.

Keywords: Crowdsourcing, Ideation contest, Crowdsourcing contest, Brand attitude, Behavioural intentions, Innovation, New product development, FMCG

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Table of Contents

Definitions.....	5
1. Introduction.....	7
1.1. Background	7
1.2 Problem area	8
1.3 Purpose and research question	10
1.4 Delimitations.....	11
1.5 Expected contribution	12
2. Crowdsourcing	13
2.1 Origin and Definition.....	13
2.2 Demarcation of crowdsourcing from other concepts	15
2.2.1 Open innovation	15
2.2.2 User innovation	15
2.2.3 Co-creation.....	16
2.3 Crowdsourcing activities in the context of contests	17
3. Theoretical framework.....	19
3.1 Introduction to attitude theory	19
3.2 Brand attitude in the crowdsourcing context.....	20
3.2.1 Customer orientation	20
3.2.2. Innovative.....	21
3.2.3 Unique	22
3.2.4 Overall attitude	23
3.2.5 Behavioural intentions	24
4. Methodology	25
4.1 Scientific approach.....	25
4.2 Study design.....	25
4.2.1 Execution.....	25
4.2.2 Choice of brand and industry of goods.....	26
4.2.3 Case selection	27
4.2.4 Data Sample	28
4.2.5 Questionnaire design	28
4.2.5 Research Variables.....	29
4.2.6 Quantitative data sampling.....	32
4.3 Data analysis.....	32
4.4 Reliability and Validity	33
4.4.1 Reliability	33
4.4.2 Validity	34
5. Results and analysis	35
5.1 Manipulation check	35
5.2 The possible effect of crowdsourcing on customer orientation, uniqueness, innovativeness, brand attitude and behavioural intentions	35
5.2.2 Customer orientation	36
5.2.3 Innovative.....	36
5.2.4 Unique	37
5.2.5 Brand attitude	37

5.2.6 Behavioural intentions	38
5.2.7 Summary of hypotheses	39
5.3 Control for the possible effect of brand familiarity on the dependent variables ...	39
6. Discussion and conclusion	40
6.1 Conclusion - Overview of findings	40
6.2 Discussion	40
6.2.1 Crowdsourcing can lead to a higher perception of customer orientation, innovativeness and uniqueness.....	40
6.2.2 Crowdsourcing and brand attitude - a relationship?	41
6.2.3 Does brand attitude lead to behavioural intentions in the crowdsourcing context? ..	43
6.3 Implications	43
6.4 Critique and limitations	44
6.5 Future research	46
7. References.....	47
8. Appendix.....	52
8.1 Pictures in the questionnaire.....	52
8.1.1 Bravo Crowdsourcing (Group 1-B)	52
8.1.2 Toppen crowdsourcing (Group 1-T).....	53
8.1.3 Bravo not crowdsourcing (Group 2-B).....	54
8.1.4 Toppen not crowdsourcing (Group 2-T)	55
8.2 Questionnaire	56
8.3 Detailed gender distribution	60
8.4 One-way ANCOVA analysis	61
8.4.1 One-way ANCOVA for customer orientation.....	61
8.4.2 One-way ANCOVA for innovative.....	61
8.4.3 One-way ANCOVA for unique.....	62

Definitions

Behavioural Intentions: The conscious intention to behave. In this study, favourable behavioural intentions refer to consumers' intentions of engaging in behaviours that are valuable for the company (e.g. buy products, talk about the brand, recommend the brand).

Brand attitude: Is the “consumers’ overall evaluations of a brand”.

Brand familiarity: Refers to the prior knowledge, awareness and experience of a brand, regardless of the content.

Collaboration tools: Helps two or more individuals to connect and communicate in order to collaborate.

Collective intelligence: Is the shared intelligence emerging from collaboration, competitions and joint efforts of many individuals.

Crowd: The undefined public consisting of a large mass of individuals.

Crowdsourcing contest: Is the form of crowdsourcing designed as a contest, where the participants compete with their ideas to be titled winner (used interchangeably with crowdsourcing competition).

Crowdsourcing intermediary platforms: A web-based platform, connecting the organisation with the crowd. It also supports the process of realisation of the desired task.

Customer empowerment: Providing consumers with tools and resources to engage them in company activities traditionally performed by the company.

Customer oriented: When a company pervasive have strategies, takes actions and focuses on identifying and satisfying customers' and potential customers' needs, it is customer oriented.

E-WOM: Is the is the passing of information from person to person by using online communication tools.

Fast Moving Consumer Goods (FMCG): The FMCG sector includes consumer goods that sell quickly, at a relatively low cost and tend to be of lower involvement.

Ideation: The process of creating a new idea and implementing it.

Ideation crowdsourcing: A type of crowdsourcing where consumers contribute with ideas for any part of a company's marketing functions.

Information and communications technology (ICT): Is referring to all networking components, systems and applications that allow organisations and people to communicate in the digital world.

Innovation: The process of creating something new or a new idea, product, etc.

Innovative: A company using new or different methods, creative thinking and original approaches, characterised by innovation, is innovative.

Innovator: A person creating something new.

Micro influencers: Individuals with 500-5000 greatly engaged followers on social media, Facebook, their blog, etc.

New product development process: Is a type of innovation process, where a new product is created.

Open call: Is an open communication with the crowd, addressed to anyone interested.

Unique: A company or brand that is different and stands out from others, is unique.

Web 2.0: Is the second stage of internet's development, characterised especially by the user generated content and the software anyone can modify and develop.

WOM: Is the passing of information from person to person by talking.

1. Introduction

1.1. Background

The rapid development of information and communications technology (ICT) has enabled companies to more easily interact and communicate with consumers. Not only customers, but also potential customers can now be reached instantly and direct for collaboration purposes (Whitla, 2009). Online collaboration tools, community platforms and social media are facilitating engagement between companies and consumers (Kozinets et al., 2008; Füller 2010; Boudreau & Lakhani, 2013) in numerous tasks such as marketing campaigns, information collection, product innovation and problem solving (Brabham, 2008). These actions are all examples of crowdsourcing activities. The activity of interacting with consumers through crowdsourcing is challenging, but an opportunity for companies to harness the creativity and knowledge of consumers to improve company activities (Whitla, 2009).

Until 2013, tech brands were the pioneers and the most frequent users of crowdsourcing (Roth et al., 2015). Since then, fast moving consumer goods (FMCG) brands have overtaken the tech brands in the active usage of crowdsourcing. The trend of using crowdsourcing for ideation, where consumers pitch in with ideas for any part of the marketing function, is also evolving, especially for FMCG brands. Between 2015 and 2016 the leading 16 FMCG companies increased their efforts with 95% of ideation crowdsourcing (Roth et al., 2016). Yet, engaging customers in new product or service development, is not a new act (Von Hippel, 2005). The development of ITC has however made the process of obtaining ideas, information and expertise more efficient (Whitla, 2009). Large corporations such as P&G, Unilever and Pepsi tops the lists of companies using crowdsourcing through digital platforms and they are steadily increasing their use, which means that they have managed to find great value of harnessing the creativity of the crowd (Roth et al. 2016).

New product development has been discovered to be positively related to the exploitation of external knowledge (Katila & Ahuja, 2002). Poetz and Scherier (2012) found that user ideas generated from collaborative processes scored overall higher, especially in areas of customer benefit and novelty compared to ideas not generated from collaborative processes. Real-life evidence in the study of Ogawa and Piller (2006), where the Japanese consumer goods manufacturer Muji was investigated, indicated that user generated ideas also are valuable in terms of promotional benefits. The products that were developed from user ideas were

measured to be very popular, compared to products designed in the traditional way (Ogawa & Piller, 2006).

Since Howe (2006a) stated the term “crowdsourcing” in 2006, the popularization of it has accrued rapidly. There is now a vast activity of crowdsourcing through intermediary platforms, such as InnoCentive, Topcoder or Zoppra, where companies can obtain expertise, help with problem-solving or get easier tasks accomplished. The number of successful companies building their entire business model on crowdsourcing is also increasing. Threadless is one of these companies, enabling anyone to design a T-shirt and all interested to vote on which designs will go to production and later be sold in their web shop. Lately, the act of using crowdsourcing through competition has become widespread (Roth et al., 2016). The rules and procedure vary, but commonly the participants submit their ideas, promote them through social media and anyone can vote for the winner. Generation of word-of-mouth marketing, a “buzz” and micro influencer’s promotion are desired outcomes from these kinds of contests. Participants of competition campaigns tend to be more attached to a brand when contributing to it (Füller, 2010). However, the vast of a company’s audience does not engage in the company’s crowdsourcing campaign (Marsden, 2009). The 1-10-90 rule (Marsden, 2009) states that only 1% of the desired audience will directly participate in the crowdsourcing campaign, 10% will be active in the manner of voting and the apparent majority of 90% are non-participants of the campaign.

The majority, the non-participating consumers, will however be exposed to the campaign through the advertisement of the campaign, through the product itself, and through the fact that it has been developed by customers, users or other interested. Previous research of crowdsourcing has shown that the act is valuable for problem solving. Recent research has begun to look at collaborative activities to delve the possible effects of this on non-participants. This awakened the thought of crowdsourcing as a tool to create positive attitudes and shape non-participants’ perception of the brand.

1.2 Problem area

Crowdsourcing is used in different activities in diverse industries and as a problem-solving model it is being increasingly used (Estellés-Arolas et al., 2015). Crowdsourcing is a relatively new concept and the research on crowdsourcing is increasing in an impressive pace

(e.g. 209 publications found in 2012 and 777 publications found in 2014) (Estellés-Arolas et al., 2015). Recent research show that scholars are now more focused on the application of crowdsourcing in some activity or specific area, rather the theoretical basis of crowdsourcing. Crowdsourcing is a burgeoning research field and the time for research of its concrete applications is now (Estellés-Arolas et al., 2015).

While crowdsourcing is becoming more popular and widespread (Estellés-Arolas et al., 2015), its application in marketing activities have not been widely researched (Gatautis & Vitkauskaite, 2014; Stanke & Drogosch, 2015). While some scholars focus on issues with crowdsourcing in marketing activities (Djelassi & Decoopman, 2013; Gatautis & Vitkauskaite, 2014) few mention consumers' responses of crowdsourcing, especially the responses of the non-participating consumers. As a crowdsourcing initiative needs participants, awareness and spread, thus it needs to be managed as any marketing campaign in order to be successful (Sanz-Blas et.al., 2015). As marketing communications help companies establish a dialogue and build relationships with and among consumers (Keller, 2009), one can expect that a crowdsourcing campaign will create consumers' responses.

There is some previous research on the responses of participants in crowdsourcing activities. Füller et.al., (2013) show that crowdsourcing can turn consumers into engaged, loyal and committed brand ambassadors. However, only 1 % of the desired audience will directly participate in the crowdsourcing campaign (Marsden, 2009), hence the number of people likely to become brand ambassadors are very small. The majority being exposed to the campaign are non-participants (Marsden, 2009). As brand attitude often form the basis for consumer behaviour (Keller, 1993), it is important for companies using crowdsourcing to know how their activities will affect the non-participants' attitudes. FMCG companies are increasing their use of crowdsourcing, especially for new product development, and one common way of engaging in crowdsourcing for FMCG companies is through ideation contests (Roth et al., 2016). Nonetheless, research on the effects of crowdsourcing on important measure as brand attitude is limited.

As crowdsourcing is becoming more popular, especially in the FMCG sector where the marketplace is increasingly characterized by unpredictability, diminishing product differentiation and heightened competitive pressure (Leahy, 2008), we intend to fill the knowledge gap. Moreover, as suggested in the research by Fuchs and Schreier (2011), instead

of examining a company with a business model based on full collaboration with consumers, we will examine a company using a crowdsourcing campaign in the new product development at one point in time. This is because it has become more accessible for companies to employ crowdsourcing campaigns occasionally instead of engaging fully in a crowdsourcing business model. Additionally, this study will give companies implications whether crowdsourcing have more value than just being an innovation partner.

1.3 Purpose and research question

Since crowdsourcing is becoming more popular and is being used in more industries and fields (Estellés-Arolas et al., 2015), the consequences of its application need to be further studied. Considering the limited research of the non-participating consumers' responses towards brands using a crowdsourcing contest in the new product development process, the main purpose of this study is to investigate if a crowdsourcing activity in new product development will affect the non-participants' consumer responses. In order to explore this issue, one main research question has been formulated and it will be answered with an experimental research design. More specifically, the main research question is as follows:

RQ1: *Will a brand using crowdsourcing in new product development generate positive consumer responses by non-participants?*

This will give companies indications whether it is valuable for the them to advertise their crowdsourcing activities to the non-participants or not. We will examine the beliefs of attributes as consumer responses and if they affect the overall brand attitude in the context of crowdsourcing contests. As attitudes may determine consumer behaviour, we will also examine behavioural intentions to fully capture consumer responses. More specifically, in order to answer the main research question, following sub-research questions are formulated:

RQ1a: *Will crowdsourcing used in new product development lead to increased perceptions of favourable attributes by the non-participants?*

RQ1b: *Will crowdsourcing used in new product development lead to a more positive brand attitude of non-participating consumers?*

RQ1c: *Will crowdsourcing used in new product development lead to favourable behavioural intentions of non-participating consumers?*

1.4 Delimitations

Crowdsourcing can generally take one out of four distinctive forms; contest, collaborative community, complementor or labour market (Boudreau & Lakhani, 2013). This study will only focus on crowdsourcing contests, and not investigate how the other forms will affect brand attitude. Nonetheless, a crowdsourcing contest is a straightforward way to engage a crowd (Boudreau & Lakhani, 2013). Second, this study will only focus on the FMCG sector, more specifically the product category of juice, since the trend of using crowdsourcing for ideation in the FMCG sector has increased (Roth et al., 2016). Third, this study will only focus on crowdsourcing within marketing activities, more specifically in new product development, in the form of a crowdsourcing contest. Previous research has investigated crowdsourcing in areas such as new product development (e.g., Djelassi & Decoopman, 2013; Gatautis & Vitakauskaite, 2014) but the research on the non-participating consumers' responses like brand attitude is limited. Furthermore, this study only examines one type of product in the FMCG sector. The results of this study should thus only be considered applicable in the context of crowdsourcing contests for new product development in the specific product category. One should with care generalize the findings beyond this specific context.

Moreover, the effect on brand attitude is predicted to be explained by the variables; customer orientation, innovative and unique. The variables were chosen based on theory and prior research and are predicted to be positive attributes of crowdsourcing brands, hence leading to a positive overall brand attitude. However, it should be taken into account that there might be several other favourable attributes of crowdsourcing brands, which may have been overlooked.

Regarding the experiment, it was made through an online survey distributed only via Facebook and to our close network. As we only looked at Swedish people, the findings may not be applicable on a global level due to cultural differences regarding use and understanding of ICT. Lastly, this study is limited to the responses of the non-participating consumers.

1.5 Expected contribution

Combining the marketing concept brand attitude and crowdsourcing, this study will contribute to research within both fields. Firstly, this study can provide knowledge about how crowdsourcing affect the non-participating consumers' attitude towards the brand using crowdsourcing. As crowdsourcing is becoming more popular and research on its responses is limited, this study will contribute to the field of attitude research. Secondly, this study will give knowledge about the additional value generated by a crowdsourcing campaign, which in turn contribute to the literature of crowdsourcing. Thirdly, this study will give companies guidance in the advertisement of a crowdsourcing campaign, since it may contribute to the understanding of how the non-participating consumers may respond to crowdsourcing. Furthermore, this study can serve as a basis for further research in these areas.

2. Crowdsourcing

2.1 Origin and Definition

The many possibilities of today's business environment, enabled by the internet technologies, differ from before the era of Web 2.0. The popularized term Web 2.0 is built on open-source software that anyone can copy, modify and develop (Howe, 2008). This allow comprehensive online communities and user friendly file-sharing (Hoegg et al., 2006). The present mind-set of openness (O'Reilly, 2005) and sharing enables organizations to successfully engage consumers in an interactive value creating process (O'Reilly, 2005; Hoegg et al., 2006). Engagement of consumers through online collaboration communities, shapes new business models and opportunities for companies. By adjusting towards a more open business model, companies are creating prerequisites for harvesting external ideas, knowledge and creativity (Howe, 2008). Many authors are concurrent that the technologies of Web 2.0 are of great importance in enabling these open business models, interactivity with consumers and for crowdsourcing to operate (Estellés-Arolas & González-Ladrón-de-Guevara, 2012).

The term Crowdsourcing has been under a constant evolution ever since it was founded in by Jeff Howe (2006a) in an article for Wired Magazine. Subsequently, Howe (2006b) stated the following definition in a post on his blog:

Simply defined, Crowdsourcing represents 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 performed collaboratively), but also often undertaken by sole individuals. The crucial prerequisite is the use of the open call format and the large network of potential labourers.

What Howe (2006b) suggest is that crowdsourcing is an activity where an organization outsource an activity or task to the crowd. Since 2006 there has been a substantial research on collaborative activities engaging consumers in the operations of companies, and crowdsourcing is one of them. This has mounted up to the term crowdsourcing being used to describe a wide variety of activities due to the high adaptability (Estellés-Arolas & González-Ladrón-de-Guevara, 2012). However, the variety of activities leads to a variety of definitions, and some authors disagree on what activities should be defined as crowdsourcing. In an

extensive research by Estellés-Arolas and González-Ladrón-de-Guevara (2012) nearly forty different interpretations of crowdsourcing are compared to find a universal definition of the term. The current interpretations were analysed to find the common components and characteristics. This resulted in the following definition:

Crowdsourcing is a type of participative online activity in which an individual, an institution, a non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task. The undertaking of the task, of variable complexity and modularity, and in which the crowd should participate bringing their work, money, knowledge and/or experience, always entails mutual benefit. The user will receive the satisfaction of a given type of need, be it economic, social recognition, self-esteem, or the development of individual skills, while the crowdsourcer will obtain and utilize to their advantage that what the user has brought to the venture, whose form will depend on the type of activity undertaken (Estellés-Arolas & González-Ladrón-de-Guevara, 2012, p. 197).

This extensive definition is easier understood with eight conditions for crowdsourcing and the concerned parties participating in the activity. These conditions are consistent with the origin definition of Howe (2006), yet more specific to create a clear identification of crowdsourcing activities. The view, and definition, of crowdsourcing in this study are grounded on the eight conditions of Estellés-Arolas and González-Ladrón-de-Guevara (2012, p. 197), which are the following:

1. there is a clearly defined crowd
2. there exists a task with a clear goal
3. the recompense received by the crowd is clear
4. the crowdsourcer is clearly identified
5. the compensation to be received by the crowdsourcer is clearly defined
6. it is an online assigned process of participative type
7. it uses an open call of variable extent
8. it uses the internet

2.2 Demarcation of crowdsourcing from other concepts

In the context of collaborative activities, the term crowdsourcing is often used interchangeably with the terms; open innovation, user innovation and co-creation (Aitamurto et al., 2011). The adaptability of crowdsourcing has created a confusion of the clear definition of the term. In order to define a clear scope for this study it is important to make a distinct demarcation of crowdsourcing from other concepts. It is also important for the development of a proper theoretical framework and for accurate interpretations of the results.

2.2.1 Open innovation

Crowdsourcing is a tool to gather collective intelligence (Aitamurto et al., 2011). The term has been widely debated and many consider it to be a subset of open innovation. Open innovation is a concept initially developed by Chesbrough and Crowther (2006), but the activities of open innovation has been in progress for many years (Huizingh, 2011). The core of open innovation is the act of opening up the innovation process, rather than solely depend on internal R&D and resources. In most cases organisations work with other organisations in the innovation process, and not with consumers, in order to improve the process and the commercialization of the outcome (Chesbrough & Crowther, 2006).

There are three main points that distinguish open innovation from crowdsourcing. Firstly, crowdsourcing does not solely focus on the innovation process as open innovation does. Secondly, open innovation is a kind of outsourcing where the two-way interaction between the organisations enables them to share, sell or buy knowledge about innovation and the process. Crowdsourcing is rather a one-way activity where the crowd contribute to the organisation. The last and most distinct difference is that crowdsourcing is an exchange between an organisation and the crowd, while open innovation defines the interaction between firms (Schenk & Guittard, 2009).

2.2.2 User innovation

The accessibility of online communities has enabled the development of crowdsourcing as well as other similar activities, such as user innovation (Schenk & Guittard, 2009). In a user innovation process, the user innovates, and the organization produces the product. It is often the advanced or pioneer users in different areas, by own initiative, that innovate products that they perceive is needed on the market. This is common in the sports equipment industry,

where the expert-users identify their needs and then develop equipment or products they want, instead of relying on the manufacturers to eventually develop it for them (Von Hippel, 2005). Crowdsourcing and user innovation may seem similar due to the common denominator of the individual, outside the company, as the innovator. Yet, there are some important differences. The initiator of crowdsourcing is the company, while user innovation refers to projects driven by the user. Further, as the term indicates, it is only the users of the products that innovates. In crowdsourcing the regulations of who can participate is not as narrow, anyone can participate in the activity. Furthermore, crowdsourcing initiatives are not limited to innovation, it can be other processes as well (Schenk & Guittard, 2009).

2.2.3 Co-creation

The term co-creation is preferred over crowdsourcing among some authors, as it is a broader term and conceals the importance of the interaction between companies and external parties. Co-creation is a way of using open innovation, and is sometimes referred to as “a tool in the open innovation toolkit” (Aitamurto et al., 2011). Crowdsourcing is also seen to partly be an act of open innovation. However, co-creation refers to activities where individuals or organisations may participate and work together, often with innovative processes. Crowdsourcing is rather an activity to harvest the ideas, knowledge or creativity of individuals for a specific task. This indicates that crowdsourcing refers to activities with one-way interaction where companies collect the ideas of individuals from the crowd to a specific task (Füller, 2010; Aitamurto et al., 2011). Important to emphasise is that due to the similar characteristics of co-creation and crowdsourcing, findings in literature of co-creation may be applied in the context of crowdsourcing.

By this demarcation, the main characteristics of crowdsourcing that distinguish the activity from other co-creation and open innovation activities can be concluded. Crowdsourcing activities are initiated by an organization, realized through the internet and have a well-defined task that each participant contributes to. These activities cover more than only innovation processes. With this definition, YouTube and Wikipedia are not examples of crowdsourcing as the task is not clearly defined and the initiative is taken by the user (Estellés-Arolas & González-Ladrón-de-Guevara, 2012). When a company on the other hand asks the crowd for a video or content it can be an initiative of crowdsourcing. This type of top-down locus of control is a clear distinction of crowdsourcing from similar activities (Brabham, 2012).

As the term crowdfunding has received more attention compared to crowdsourcing it is important to state how it relates to crowdsourcing. Crowdfunding is sometimes considered as a category of crowdsourcing activities where the crowd contributes with their money to an organisation that makes an open call for it (Geiger et al., 2011; Djelassi & Decoopman, 2013).

2.3 Crowdsourcing activities in the context of contests

Crowdsourcing has been successful in many cases. The derivation of intellect, abilities and talent from a global pool of individuals (Howe, 2008) has led to many problem resolutions, business improvements, innovations and exertions of creativity. The power of the collective intelligence has also proved to be useful in the contexts of marketing, software development, mobile apps and video games (Boudreau & Lakhani, 2013), as well as in genomics, engineering, predictive analytics and scientific contexts (Aitamurto, 2011). NASA has, for example, adopted the process of collective intelligence via crowdsourcing through different crowdsourcing platforms. NASA's crowdsourcing initiative aims to, among other things, find new algorithms and novel ways to use materials found in space (Howe, 2008). A wide variety of intermediary crowdsourcing platforms are now available, which indicates their usefulness. Crucial to mention is the highly developed and user friendly platform designs that makes it simple for the crowd to participate and effective for the initiator to manage (Roth et al., 2016).

There are several approaches to tap the collective intelligence and creativity of the crowd. According to Lakhani and Boudreau (2013), a crowdsourcing contest is a powerful tool to find solutions to technical, analytical or scientific problems, but also for new designs and creativity. There is an idea of that among all contributions there will be one solution that is better than the solutions the company itself would have come up with (Brabham, 2008). The popularity of crowdsourcing contests has increased, and there are many successful examples. Pepsi, Coca-Cola and Google are all brands that have launched contests asking consumers to be creative and to interact with the brand (Roth et al., 2016).

Contests designed to harness the creativity and knowledge of the crowd, are according to the conditions stated in section 2.1, defined as a crowdsourcing activity (Estellés-Arolas & González-Ladrón-de-Guevara, 2012). Usually a company makes an open call, via the internet, to a commonly large crowd to participate in the contest. There is either a monetary reward or, for example, discounts or free consumption of the product in question. The increased use of

crowdsourcing contests may be due to the vast number of accessible and user friendly crowdsourcing platforms. Through these, an organisation can easily stage and pursue the contest in order to accomplish task and solve problems. (Whitla, 2009; Roth et al., 2016). The cases where the crowd has shown to be able to outsmart the experts are proof of the accuracy of Brabham's (2008) statement "crowdsourcing is a legitimate, complex problem-solving model, more than merely a new format for holding contests and awarding prizes." Yet, the form of crowdsourcing as a contest has proven to be easily manoeuvred, accessible and provide satisfying results (Schenk & Guittard, 2009).

There are also a vast number of companies building their business models completely on crowdsourcing. One example is the web-based T-shirt company Threadless that depends on the crowd to design T-shirts in an ongoing contest on their website. Then, other users vote on the designs and the winning designs are produced and sold on the website. However, the intermediary crowdsourcing platforms have opened up for "traditional" companies to use crowdsourcing as a one-time or occasional activity. In this context of practice, a contest is often a convenient way for the company to use crowdsourcing.

3. Theoretical framework

In this section, the relevant theories and previous research are presented, in order to establish the theoretical framework of this study. The theoretical framework will generate hypotheses which will serve as the base for answering the research question. Firstly, an introduction to attitude theory is made. Secondly, attitude theory is examined in the crowdsourcing context. Perceived customer orientation, innovation and uniqueness of a brand using crowdsourcing will be described and how this will affect the overall brand attitude. Finally, how brand attitude can result in behavioural intentions in the crowdsourcing context will be explained.

3.1 Introduction to attitude theory

Within marketing, the concept and process of attitude have been widely researched. Attitudinal surveys are a common way of estimating people's preferential responses to marketing objects such as products, brands and advertisements. Since attitudes can determine behaviour (Keller, 1993), it is important to understand the concept of attitude and how attitudes are formed (Argyriou & Melewar, 2011).

The established definition of brand attitudes is “consumers’ overall evaluations of a brand” (Keller, 1993). Brand attitudes is one of the most important brand associations since they often determine how consumers behave (e.g. brand choice). According to a widely accepted approach, brand attitudes are a function of the associated attributes that are salient to the brand (Keller, 1993; Argyriou & Melewar, 2011). The expectancy-value model, henceforth referred to as the EV-model, is the most commonly used multi-attribute model in marketing (Bettman, 1986; Keller, 1993; Ajzen, 2001; Argyriou & Melewar, 2011). According to this model, brand attitudes are a multiplicative function of the consumers’ salient beliefs about a product or service (i.e. the extent to which consumers think a brand has certain attributes or benefits) and the consumers’ evaluative judgment of the salient beliefs (i.e. how good or bad it is that the brand has those attributes) (Keller, 1993; Ajzen & Fishbein, 2000; Ajzen 2001). Thus, each belief is associated with a certain attribute and the strength of these association will determine a person's overall attitude (Ajzen & Fishbein, 2000). Beliefs about product-related and non-product-related attributes can be related to brand attitude (Keller, 1993). Furthermore, the EV-model implies that forming attitudes is a cognitive process (Ajzen & Fishbein, 2000; Ajzen, 2001).

3.2 Brand attitude in the crowdsourcing context

Based on previous research, we predict that brands using crowdsourcing are likely to be perceived with the favourable attributes; customer orientated, innovative and unique by non-participating consumers. The beliefs of these attributes are accordingly anticipated to positively affect the non-participants' overall attitudes towards a brand using crowdsourcing in new product development.

3.2.1 Customer orientation

The process of developing new products and deciding on which products should be introduced to the market has traditionally been an internal process and the companies have been exclusively responsible for it. However, some companies across many industries are now starting to democratise the processes of new product development and by that empowering customers to participate in the process (Fuchs & Scherier, 2011).

According to Fuchs and Scherier (2011), customer empowerment have two dimensions in new product development; “(1) customer empowerment to create new product designs, (2) customer empowerment to select which product designs to be produced” (Fuchs & Scherier, 2011, p. 18). Co-creation in new product development processes is often seen as a form of customer empowerment. Participation in one, or both parts of the process can, from a marketing perspective, make the consumer feel like they have more control over the brand and its offerings. Hence, these brands can be valued higher, compared to other brands, by consumers (Fuchs & Scherier, 2011; Dijk et al., 2014). As explained in section 2, crowdsourcing share similar characteristics with co-creation. Thus, crowdsourcing can be seen as a tool for empowering consumers (Brabham, 2013). This perspective is henceforth adopted in this study.

Research have shown that not only do the customers who engage in a company's empowering activities provide the company rewards as increased loyalty, but also the non-participants see a value and may respond more favourably towards co-creating brands (Fuchs & Scherier, 2011). Similar findings of non-participation can also be found in economic literature where Frey and Stutzer (2002) show that the possibilities of direct democratic participation has a significantly positive effect on happiness. According to previous research by Fuchs and Scherier (2011) a company fostering customer empowerment will be perceived as more

customer oriented by customers not participating in the activity. When a company is customer oriented, it implies that the company is striving to identify and satisfy customers and potential customers' needs (Deshpandé et al., 1993; Brady & Cronin, 2001). Moreover, Füller (2010) found that customers interacting with the company through co-creation activities would consider the company as more customer oriented.

By crowdsourcing being a tool that can empower customers and co-creation being a highly similar concept, inferences to the crowdsourcing context can be made. Considering aforementioned research and findings, we deduce that a company using crowdsourcing in new product development process will be perceived as more customer oriented. This leads to our first hypothesis:

H1: *A brand using crowdsourcing in new product development will be perceived as more customer oriented by non-participants, than a brand not using crowdsourcing in new product development.*

3.2.2. Innovative

In previous research on crowdsourcing, the act of looking externally for new ideas and opportunities has been described with the aim to generate innovative ideas (Howe, 2008; Brabham, 2008; Gatautis & Vitkauskaitė, 2014; Djelassi & Decoopman, 2013). When developing and changing the innovation process to include, and interact with consumers, companies are also developing their business model towards a more open type. Open business models that rely on activities similar to crowdsourcing are often referred to as innovative business models (Djelassi & Decoopman, 2013; Dijk et al., 2014). As crowdsourcing is enabled by internet and by the new forms of technology, there is also an inherent innovative aspect of it (Howe, 2008). The internet enables organizations to invite consumers to be creative and innovative in order to solve a problem or to get innovative solutions (Estellés-Arolas & Gonzáles-Ladrón-de-Guevara, 2012).

In today's business environment, there is a prevailing philosophy and willingness to share and to open up for external ideas (Estellés-Arolas & Gonzáles-Ladrón-de-Guevara, 2012; Djelassi & Decoopman, 2013). This philosophy is one of the drivers of the success and popularity of crowdsourcing. Consumers are generally curious about participating in interactive co-creation initiatives (Füller, 2010). Furthermore, he also found that consumers interacting with a company in co-creation activities consider it to be more innovative. In the context of new

product development, co-creation share some of its important characteristics with crowdsourcing. Companies that co-create are also using new technology and are inviting consumers in order to improve the products. Dijk et al. (2014) found that co-creation of products also lead to stronger perception of the company being innovative, by the consumers not participating in the process. Due to the similarities of crowdsourcing and co-creation in the context of innovation, it can be predicted that brands using crowdsourcing will be perceived as innovative. Therefore, we hypothesise:

H2: *A brand using crowdsourcing in new product development will be perceived as more innovative by the non-participants, than a brand not using crowdsourcing in product development*

3.2.3 Unique

Findings from previous research by Djelassi and Decoopman (2013) on crowdsourcing in new product development, show that non-participating consumers' perception of brand image is intensified. Crowdsourcing will thus favour a dynamic and accessible brand image due to the originality and collaborative character of the concept (Djelassi & Decoopman, 2013). Co-created products are also perceived as better suited to needs and more unique than non-co-created products (Dijk et al., 2014).

In accordance with previous research, we define uniqueness as the extent to which consumers perceive the brand as different and unique from others (Keller, 1993; 1999; Netemeyer et al., 2004; Liljedal & Dahlén, 2015). Considering the impact of crowdsourcing on brand image and the similarities between co-creation and crowdsourcing, consumers may see a brand using crowdsourcing as superior to other brands, as they may believe that the brand offers advantages that other brands do not. Seeing a brand as superior will lead consumers to view the brand as unique (Keller, 2001).

Consumers see crowdsourcing as something new and original which creates awareness for the company since people not only talk about the crowdsourcing practice, but also about the company itself (Djelassi & Decoopman, 2013). Research on crowdsourcing in marketing-oriented activities have proved to successfully turn participating customers into brand-ambassadors (Füller et al., 2013) and if these brand-ambassadors see the brand using crowdsourcing as unique, one can expect non-participating customers to be influenced by that as well. Furthermore, recent research by Liljedal and Dahlén (2015) found that when a

company invites consumers to participate in new product development, the non-participating consumers will also perceive the brand as more unique. Therefore, it is fair to expect that a brand interacting with consumers through crowdsourcing will be perceived as unique in the marketplace by non-participants. We hypothesise:

H3: *A brand using crowdsourcing in the new product development will be perceived as more unique by the non-participants, than a brand not using crowdsourcing in product development*

3.2.4 Overall attitude

According to the customer-based brand equity framework by Keller (2009), the power of a brand lies in the minds of the consumers. Keller (1993) define customer-based brand equity as “the differential effect that consumer knowledge about a brand has on their response to marketing for that brand” (Keller, 1993, p. 2). In particular, brand image is one important component of brand knowledge and in forming of the relationship between the businesses and consumers (Low & Lamb Jr, 2000; Keller 1993; 2009). In this framework, brand image is defined as “perceptions about a brand as reflected by the brand association held in consumer memory” (Keller 1993, p. 3). Brand associations are according to Aaker (1991) a brand’s assets and liabilities that include anything linked in memory to a brand. Keller et al. (2011) defines brand associations as “the other informal nodes linked to the brand node in memory and contain the meaning of the brand for consumers” (Keller et al., 2011, p. 72). Brand attitudes are one type of brand association (Keller, 1993) and one of the most commonly cited brand association in the empirical marketing literature (Low & Lamb Jr, 2000).

The EV-model does not make any assumptions about what beliefs will be accessible. In application of the model, accessible beliefs must be elicited anew from theories and ideas and once elicited, these beliefs can help explain why people hold different attitudes toward the object in evaluation. What is important is the strength of the beliefs associated with the object (Ajzen & Fishbein, 2000). With previous reasoning that a brand using crowdsourcing in new product development will have the attributes; customer orientated, innovative and unique, we deduce that these attributes will form beliefs that will contribute to a positive overall attitude towards the brand. This is further strengthened with research by Fuchs and Schreier (2011) as they find that non-participants have more favourable corporate attitudes towards companies who engage in customer empowerment than towards companies who do not. Furthermore, the brand image of participants is more favourable when a company uses crowdsourcing in new

product development (Djelassi & Decoopman, 2013). In addition to this, participants in co-creation activities from more favourable overall brand associations (Dijk et al., 2014). As attitudes are brand associations and contributes to brand image, it is legitimate to hypothesise following:

H4: *Non-participants' overall attitude towards a brand using crowdsourcing in new product development will be more positive, than towards a brand not using crowdsourcing in new product development*

3.2.5 Behavioural intentions

Behavioural intentions are correspondent with attitudes (Ajzen & Fishbein, 1975; 2000; Ajzen, 2001). Thus, to fully capture the aspects of consumer responses, this study will also examine behavioural intentions in the crowdsourcing context.

According to research by Fuchs and Schreier (2011), customer empowerment in new product development leads to non-participants demonstrating more favourable behavioural intentions such as purchase intentions, loyalty and positive word-of-mouth. Also, it has been found that when a brand is being perceived as customer orientated (from customer empowerment in new product development) it will enjoy a positive word-of-mouth advertising from the non-participating consumers (Fuchs & Scherier, 2011). As customer empowerment leads non-participating customer to form more favourable attitudes toward the company empowering its customers, this will also produce a strong basis for behavioural outcomes such as purchase intentions (Fuchs & Schreier, 2011). Keller (1993) recognizes that brand attitude is important in determining how consumers will behave.

As previously described, crowdsourcing can be seen as a form of customer empowerment. Considering this together with aforementioned findings, theory and hypotheses (i.e. the hypothesis about customer orientation, innovative, unique, overall attitude), inference can be made that a brand using crowdsourcing in new product development will enjoy positive behavioural intentions by non-participants. This leads to the last hypothesis:

H5: *Non-participating consumers will demonstrate more favourable behavioural intentions towards a brand using crowdsourcing in new product development, than to a brand not using crowdsourcing in new product development*

4. Methodology

In the following chapter the research methodology will be presented. Firstly, by pointing out the scientific approach, followed by a presentation of the study and a motivation of the selected case. Then, the experiment, the research variables and the process of data collection are presented. Finally, the tools and test of the data analysis and assessment of reliability and validity will be presented.

4.1 Scientific approach

In the theoretical framework of this study, existing theories of attitude, perceived customer orientation, innovativeness, uniqueness and behavioural intentions were applied in the context of crowdsourcing. Hypotheses were derived based on these theories, and finally tested empirically. As the theoretical framework was developed before the data collection and our intention was to test the theory, a deductive scientific approach was appropriate. (Saundres, 2011).

The intention was to measure if the act of crowdsourcing for a company, that traditionally develop their product within the company, could affect non-participating consumers' responses. As this causal link of crowdsourcing's effect on consumers' perceptions, attitude and intentions was intended to be measured, an experimental approach was further appropriate. Experiments are often used to study causal links such as, if a change in an independent variable can generate change in the dependent variables (Malhorta, 2008; Saundres, 2011). The experimental approach is also beneficial as it usually generates high validity and excludes irrelevant factors not included in the scope of the study (Webster & Sell, 2007). In the context of experiments, it is also common to undertake a quantitative approach (Malhotra, 2008). Accordingly, a quantitative experiment of posttest-only control group design was conducted.

4.2 Study design

4.2.1 Execution

The study was conducted with a between subjects, posttest-only, experimental approach. Each respondent was randomly exposed to brief information and the crowdsourcing campaign with pictures of the brand and its new product. The respondents were randomly assigned to either the control group, which was not exposed to the manipulation, or the treatment group, which

was exposed to the manipulation. Group 1, the treatment group, was exposed to a campaign where the product, a juice, was developed by a consumer through a crowdsourcing competition. Group 2, the control group, was exposed to a campaign of a new product that had been developed in the traditional way, within the company. In order to reduce possible biased results due to the respondents' brand familiarity, there were two sub-groups in both groups. This implies that within both the treatment group and the control group respondents were either exposed an actual brand, Bravo, or a feigned brand, Toppen. Hereinafter, the group exposed to manipulation and the brand Bravo is denoted as 1-B. The group exposed to manipulation and Toppen is denoted as 1-T. In the control group, the respondents exposed to Bravo are denoted as 2-B and the group exposed to Toppen is denoted as 2-T.

The survey was created as an online questionnaire using the software Qualtrics. Distribution of the survey occurred online through Facebook. Only one link to the survey was made as Qualtrics randomly assigned one of the four questionnaires to the respondent when clicking the link. The randomization of the different versions enabled us to assign the explanation for divergence in answers to the manipulation and limiting explanation in external factors.

4.2.2 Choice of brand and industry of goods

The study was built on a case of a juice company. Thus, the brand in the study is within the FMCG industry. In order to create a realistic case, the information of the contest was derived from an actual crowdsourcing contest in new product development, "Folkets Bravo". This contest was held by the Swedish juice producer Bravo in 2013 (24HR, 2013). As Bravo is not considered as a controversial brand it was a suitable choice. The campaign, pictures of the juice and brand banners were collected from the company's website. For the fictional brand Toppen, the campaign, pictures and information about the product were created with intent to conform the ones of Bravo. This was in order to limit biased results (*See section 8.1 in appendix*). The control group was exposed to the same product as the treatment group but with the information that the company had developed the product itself.

Consumers ability to innovate and design products varies across industries. If the product is complex and require extensive previous knowledge, it is less likely that consumers will participate and put effort in developing their ideas. On the other hand, if the product is less complex users are more likely to participate (Djelassi & Decoopman, 2013). The reason for

the choice of a product from the FMCG sector is because of the products within this sector are generally less complex compared to other sectors. As a juice is a less complex product, the choice of this product could contribute to a lower participation barrier to the crowdsourcing contest examined in this study. The likelihood of this particular contest to be successful in developing a new product is higher, hence strengthening the choice of campaign and product.

4.2.3 Case selection

The crowdsourcing contest “Folkets Bravo”, which took place in 2013, was examined in this study. Below, the case is described how it meets the eight conditions of crowdsourcing:

No.	Crowdsourcing condition	“Folkets Bravo”
1.	A clearly defined crowd	<i>Anyone interested in participating</i>
2.	A task with a clear goal	<i>Develop a new juice</i>
3.	Recompense received by the crowd is clear	<i>Winner’s juice is produced and he/she receives free consumption</i>
4.	The crowdsourcer is clearly identified	<i>The brand Bravo</i>
5.	The compensation to be received by the crowdsourcer is clearly defined	<i>A new juice to commercialize</i>
6.	An online assigned process of participative type	<i>Conducted online</i>
7.	Uses an open call of variable extent	<i>Communicated to a large audience</i>
8.	Uses the internet	<i>Conducted online</i>

As Bravo’s contest fulfil all conditions to be classified as an act of crowdsourcing, it was a suitable choice. Furthermore, Bravo traditionally develops products within the company, which enabled us to examine non-participants’ responses of an occasional use of crowdsourcing, rather than a business model solely based on crowdsourcing (24HR, 2013).

4.2.4 Data Sample

Crowdsourcing is conducted online, and a convenient way of raising awareness and attracting participants is through social media (Sanz-Blas et al., 2015). As a crowdsourcing campaign needs to be managed as any marketing campaign, Facebook could be a good tool for this. As an example of this, “Folkets Bravo” was promoted mainly on Facebook. Of the Swedish population, 74 % are active users of Facebook (Davidsson & Findahl, 2017). Consequently, the target population is Swedish, active Facebook users. Hence, the target population are consumers with the potential of being exposed to either a crowdsourcing campaign or the final product created through crowdsourcing. The questionnaire was distributed on Facebook and as the study focuses solely on non-participants, a control question regarding partaking in the campaign “Folkets Bravo” enabled elimination of former participants. Therefore, the sample can be considered representative. The study was geographically delimited to Sweden due to the convenience of sampling and limitations of resources and time.

4.2.5 Questionnaire design

The Qualtrics-questionnaire was kept reasonably short with an easily understood instruction and questions, taking approximately 3-4 minutes for the respondent to finish. This was due to the self-administered nature of the online survey to ensure valid answers (Malhotra, 2008) and to increase the response rate. Qualtrics randomly assigned one of the four versions to the respondent. Each version of the questionnaire was designed in the same way and consisted of the following four parts:

1. Introduction and instructions to the survey.
2. Presentation of the scenario, brand and product followed by the basic information questions relating to the research problem. Each dependent variable related to its hypothesis had a group of questions, referred to as scale items. These items were derived from theory and prior research to ensure successful measures of the variables (Schrauf & Navarro, 2005).
3. A manipulation-check question and an instructional validity check question. The manipulation check question ensured that the respondents interpreted the information correctly. The instructional validity check question ensured that the participants understood the implications of crowdsourcing. Valid answers could therefore be distinguished.
4. Classification information questions to obtain demographics of the respondent.

A 7-point Likert scale was used for all questions relating to the research problem. This measurement form is easily understood and widely used, which is important for self-completion questionnaires (Malhotra, 2008). The multi-scale-items were used to ensure the quality and reliability of the study. The consistency of the responses of each multi-items set was measured with Cronbach's Alpha in order to increase the reliability of the study through internal consistency (Saunders, 2011). The measurement should preferably exceed 0.700 to ensure the reliability (Söderlund, 2005). *See section 4.3.1 for detailed information of the items*

The questionnaire was carried out in Swedish to ensure a proper comprehension by the respondents. The translation of the survey questions from English to Swedish was conducted using constructs of questions in prior research in both languages to ensure the reliability and validity of the study. Before distributing the questionnaire, it was first screened by Magnus Söderlund, professor at the Stockholm School of Economics, to help establish content validity. Then, a pilot study was conducted on a small sample from the target population. The pilot study was performed on new respondents until there was no need for further changes. During this process, we could eliminate potential problems and refine the questionnaire as well as obtain further assessment of the questions validity and the potential reliability of the collected data. *See the final version in appendix 8.2*

4.2.5 Research Variables

The concepts; customer orientation, innovative, unique, overall brand attitude and behavioural intentions serve as the base for the analysis of this study. In order to make the concepts measurable, an index from its associated scale items generated the research variables. Cronbach's Alpha was examined on the variables of both groups, including subgroups, to ensure the reliability. All variables are further described below and items from prior research are presented.

Customer Orientation (H1)

Perceived customer orientation was measured with four items on a 7-point Likert scale (1=strongly disagree to 7=strongly agree). The questions in the survey measuring customer orientation were adapted from prior research and are stated below. The Cronbach's Alpha for the index in the manipulation group was 0.816 (1-B) and 0.752 (1-T). In the control group, it was 0.860 (2-B) and 0.792 (2-T).

Scale items – Customer orientation	
How well do you agree with the following statements? Company X...	Brady & Cronin (2001) Lehmann et al. (2008)
Has the customer's best interest in mind	
Tries to figure out what customers' needs are	
Cares about its customers	
Tries to get customers to discuss their needs with them	

Innovative (H2)

If consumers perceive the company as innovative was measured with three items on the same 7-point Likert scale previously described. The questions were adapted from prior research. The Cronbach's Alpha for the index was 0.644 (1-B) and 0.751 (1-T) for the manipulation group. For the control group, it was 0.573 (2-B) and 0.754 (2-T). Cronbach's Alpha should preferably exceed the value of 0.700 to ensure the reliability. As Cronbach's Alpha exceeded 0.700 for the index variable in two out of four groups, we accepted the index variable for the analysis.

Scale items - Innovative	
How well do you agree with the following statements? Company X...	Lehmann et al. (2008)
Is a leader in its industry	
Is innovative	
Constantly improves its product offering	

Unique (H3)

Perceived uniqueness was measured with three items on the 7-point Likert scale. The items describing perceived brand uniqueness were derived from prior research. The Cronbach's Alpha for the index in the manipulation group was 0.880 (1-B) and 0.946 (1-T). In the control group, it was 0.889 (2-B) and 0.919 (2-T).

Scale items - Unique	
How well do you agree with the following statements? Company X...	Keller (1993) Liljedal & Dahlén (2015)
Stands out from its competitors	
Stands for something unique	
Is special	

Brand attitude (H4)

Brand attitudes were measured with three items on the 7-point Likert scale. The questions were adapted from previous research. The Cronbach's Alpha for the index in the manipulation group was 0.913 (1-B) and 0.940 (1-T). In the control group, it was 0.963 (2-B) and 0.931 (2-T).

Scale items – Brand attitude	
What is your overall attitude toward company X?	Brown & Stayman (1992) Spears & Singh (2004) Yoo & MacInnis (2005)
Dislike / like	
Negative / Positive	
Not appealing / Appealing	

Behavioural intentions (H5)

Behavioural intentions were measured with six different items on the 7-point Likert scale, which included WOM, E-WOM and other behaviours that could contribute to commerce and/or a favourable “buzz”. The questions were derived in accordance with previous research on behavioural intentions. The Cronbach's Alpha for the index was 0.889 (1-B) and 0.896 (1-T) for the subgroups of group 1. For the subgroups of group 2 it was 0.877 (2-B) and 0.886 (2-T).

Scale items – Behavioral intentions	
How likely is it that you would...	Zeithaml et al. (1996) Brady & Cronin (2001) Thomson et al. (2005)
Use some type of social media to share a positive opinion of company x?	
Talk about the brand x with your friends and/or relatives?	
Buy the juice from company x within a foreseeable future?	
Search for brand x in your store next time you visit?	
Use the internet to learn more about brand x?	

4.2.6 Quantitative data sampling

The sample consisted of active users of the internet. This sample group are familiar and utilizes online-platforms or websites similar to those crowdsourcing is operating through. In order to successfully reach the respondents and simultaneously ensure their familiarity with online-platforms or websites, Facebook was used to distribute the questionnaire. The participants were reached through this social network and received the link to the survey in their news feed, kindly asking the participant to partake in a survey for our bachelor thesis. To assure random assignment of the manipulation, only one link to the survey was used. When the respondent clicked the link, Qualtrics randomly assigned the respondent to one of the four groups. The randomization of the versions enabled us to study the manipulation effects, as explanation attributed to external factors was limited and the divergence in answers could be assigned to the manipulation instead.

To be able to conduct statistical analyses, the sample size is advised to be over 30 respondents of each group (Saunders, 2011). After cleaning the data, the final number of valid answers was 216.

4.3 Data analysis

The data collected by Qualtrics was exported to the statistical analysis software, SPSS. The data was first cleaned by removing incomplete answers. Respondents, who had participated in the crowdsourcing campaign when it was running, were also removed from the data. Furthermore, respondents not succeeding with the manipulation check were deleted. Respondents that did not understand the implications of crowdsourcing, was also excluded to

increase the instructional validity. This resulted in an empirical analysis of a total number of 216 valid responses. The treatment group consisted of total 96 respondents, where 45 was of sub-group 1-B and 51 belonged to group 1-T. The control group had an aggregated amount of 120 respondents, 63 of group 2-B and 57 of group 2-T.

To assure that both groups were similar regarding gender and age distribution, a descriptive analysis was carried out. A cross-tabulation was conducted to secure even distribution regarding gender. To control mean age, an independent t-test was conducted. To test the hypotheses and thus the effects of the manipulation on the dependent variables, the tests conducted were based on comparing mean values of the two main groups. Independent t-tests were accordingly performed for all five variables; customer orientation, innovative, unique, brand attitude and behavioural intentions.

An analysis of covariance (ANCOVA) for each dependent variable was conducted to ensure the quality of the data. The one-way ANCOVA analysis tested that the effects of the manipulation of crowdsourcing remained significant on each dependent variable after including brand familiarity as a covariate.

4.4 Reliability and Validity

In the process of analysing the data of a quantitative study it is essential to assess the reliability and validity of the study. Reliability refers to how veridical the findings of the study are hence demanding data collection and the process of analysis to meet certain requirements. Whenever measures are truly measures of what they are supposed to be is a matter of validity (Saundres, 2011).

4.4.1 Reliability

The overall consistency of a measure is the reliability. If a measure shows the same results under several consistent conditions it is said to have high reliability (Malhotra, 2008). For a study to also be valid, it must be reliable (Saundres, 2011). In terms of reliability it is often recommended to conduct studies at several, or at least two different, points in time (Saundres, 2011). The time limitation and the quantitative approach made a cross sectional study appropriate, which decrease the reliability of the study. Yet, to ensure the quality and reliability of this study multi-item-scales from prior research were adapted for each dependent

variable. Calculations of the Cronbach's Alpha for each subgroups index-variable were conducted to ensure internal consistency and reliability. Adapting the rule of that Cronbach's Alpha should be 0.700 or above is considered to meet the requisites of good reliability (Söderlund, 2005).

4.4.2 Validity

Extraneous effects should be minimized in order to ensure that differences in the means of the dependent variables are ascribed to the manipulation of the independent variable (Malhotra, 2010). Respondents were therefore randomly assigned to either the treatment group or the control group. The two groups, including the subgroups, consisted of respondents with equal age and gender distribution. To leave out other coincidental influences to account for the results, a large sample size ($n > 200$) was used (Blumberg et al., 2014). To further improve the data quality, a one-way ANCOVA analysis tested that the effects of brand familiarity as a covariate. Also, the use of an experimental study generally generates high validity (Bryman & Bell, 2011)

To ensure the content validity the tools of measurement should be appropriate to cover the concepts of the research (Saundres, 2011). Through careful literature review and definition of concept, all elements of the questionnaire were carefully chosen in line with prior theory and research of the specific area of the concept. Only the most seminal and used questions in previous research were included in the questionnaire to measure the dependent variables. This contributes to the appropriateness of the measurements and concept, thus strengthening content validity of the study.

Construct validity refers to the appropriateness of a conclusion of the concept intended to be measured (Saundres, 2011). The questions in our survey relating to each research variable should be a valid measurement of the variables. When compiling the questions of each research variable, only questions adapted from prior seminal research was included. This resulted in multi-items scales of proven measurements in line with theory that have previously been tested for validity.

5. Results and analysis

The findings of the study will be presented in the following section. Firstly, the results of the manipulation-check will be stated, along with the confounding check. Lastly, based on the tests of each dependent variable, the hypotheses will be either supported or rejected.

5.1 Manipulation check

The manipulation and instructional validity check was to a large extent successful. Group 1, the treatment group, had a successful manipulation-check rate of 87,5 %. In this group, 98,2 % also understood what crowdsourcing implies. To ensure the quality of the results, the respondents not successful in the manipulation-check, or not understanding what crowdsourcing is, were excluded from the analysis. This resulted in a total of 216 valid answers.

To secure that there was no significant descriptive differences of age and gender distribution between the control and treatment group, a confounding check was conducted. Both groups, including the subgroups, had similar gender distributions. The proportion of women was between 60-64 % for both groups, including the sub-groups. Hence, the proportion of men and respondents not willing to specify gender, was between 36-40% for both groups, including the sub-groups. The mean age for the treatment group was 25.04, and for the subgroups, 1-B and 1-T the mean ages were 24.99 and 25.06 respectively. In the control group the mean age was 25,44 and for the subgroups, 2-B and 2-T the mean ages were 25.26 and 25.53 respectively. *See appendix section 8.3 for detailed gender distribution*

5.2 The possible effect of crowdsourcing on customer orientation, uniqueness, innovativeness, brand attitude and behavioural intentions

Opening up towards a more interactive business model, has in prior research been found to affect consumers' perception of a company, hence the brand. Theories of brand attitude presented in the theoretical framework have therefore been put in the context of crowdsourcing activities to derive the hypotheses. The possible effects of using crowdsourcing in the new product development process, was thus tested on five dependent variables. The results are presented in the sections below.

5.2.2 Customer orientation

The first hypothesis aims to test if the usage of crowdsourcing in new product development can affect the non-participants' perceived customer orientation of the brand. A brand interacting with its customers has been shown to be highly valued by consumers (Fuchs & Scherier, 2011; Dijk et al., 2014). The effect of crowdsourcing on perceived customer orientation was therefore measured by comparing the means of the index variable for customer orientation for the two groups. In the following table the results from the independent t-test are presented in the table below:

Variable	Group 1 Crowdsourcing M (SD)	Group 2 Not Crowdsourcing M (SD)	Significance
Customer Orientation	5.393 (0.920)	4.250 (1.177)	0.000*
*p<0.05 **p<0.01 ***p<0.001			

The perceived customer orientation (M=5.393) towards a brand using crowdsourcing in the new product development process is significantly higher (p<0.001) than the perceived customer orientation (M=4.250) of a company not using crowdsourcing. Conditions: t(214)=7.797, p=0.000. The result supports that non-participating consumers will perceive a brand using crowdsourcing in new product development as more customer oriented. Thus, it is in line with the theories used to derive the hypothesis.

H1	<i>A brand using crowdsourcing in new product development will be perceived as more customer oriented by non-participants than a brand not using crowdsourcing in new product development.</i>	SUPPORTED
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5.2.3 Innovative

The new technologies that enables the act of crowdsourcing gives the activity a native character of innovativeness (Estellés-Arolas & Gonzáles-Ladrón-de-Guevara, 2012). Thus, the second hypothesis states that a brand using crowdsourcing in the new product development process will be perceived as more innovative. The results from the independent t-test are presented in the table below:

Variable	Group 1 Crowdsourcing M (SD)	Group 2 Not Crowdsourcing M (SD)	Significance
Innovative	4.701 (1.160)	4.097 (1.340)	0.001**
*p<0.05 **p<0.01 ***p<0.001			

The independent t-test conducted revealed that non-participants will perceive a brand using crowdsourcing in new product development as more innovative ($M=4.701$) compared to a brand not using crowdsourcing ($M=4.097$). Conditions $t(214)=2.349$, $p=0.001$. This shows a significant ($p<0.01$) positive difference, which is in line with the hypothesis.

H2	<i>A brand using crowdsourcing in new product development will be perceived as more innovative by the non-participants, than a brand not using crowdsourcing in product development</i>	SUPPORTED
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5.2.4 Unique

The third hypothesis intend to conclude if a company's crowdsourcing activities impact non-participants' perceived uniqueness of the brand. If a brand is perceived superior to other, it is perceived as unique (Keller, 2001). The quite uncommon, although increasing activity of crowdsourcing and the special characteristics of it motivates this hypothesis. Results of the difference in mean values from the independent t-test is presented in the table below:

Variable	Group 1 Crowdsourcing M (SD)	Group 2 Not Crowdsourcing M (SD)	Significance
Unique	4.267 (1.416)	3.355 (1.375)	0.000*
* $p<0.05$ ** $p<0.01$ *** $p<0.001$			

The perceived uniqueness of a company using crowdsourcing ($M=4.267$) in the new product development process is significantly higher ($p<0.001$) than the perceived uniqueness of a company that is not using crowdsourcing ($M=3.356$). Conditions $t(214)=4.779$, $p=0.000$. These results support the third hypothesis and are therefore in line with the theories deriving the hypothesis.

H3	<i>A brand using crowdsourcing in the new product development will be perceived as more unique by the non-participants, than a brand not using crowdsourcing in product development</i>	SUPPORTED
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5.2.5 Brand attitude

The beliefs associated with attributes of a brand determine a person's overall attitude (Ajzen & Fishbein 2000; Ajzen, 2001), which is highly relevant to strategic decisions and marketing for a company (Aaker, 1991; Keller, 1993). The act of using crowdsourcing in new product development is assumed to form beliefs of the following attributes; customer orientated, innovative and unique. These attributes are considered favourable as previous research has proven benefits deriving from these attributes, thus they are predicted to contributing to a

positive overall brand attitude. It is therefore hypothesized that non-participants will form a positive brand attitude towards a company using crowdsourcing in new product development. The results from the independent t-test on overall brand attitude are presented below:

Variable	Group 1 Crowdsourcing M (SD)	Group 2 Not Crowdsourcing M (SD)	Significance
Brand attitude	4.770 (1.332)	4.653 (1.453)	0.539
*p<0.05 **p<0.01 ***p<0.001			

The results of the independent t-test show that there is no significant difference ($p>0.05$) in brand attitude towards a brand using crowdsourcing in new product development ($M=4.770$) compared to a brand that is not using crowdsourcing ($M=4.653$). Conditions $t(214)=0.616$, $p=0.539$. Therefore, this hypothesis is rejected.

H4	<i>Non-participants' overall attitude towards a brand using crowdsourcing in new product development will be more positive, than towards a brand not using crowdsourcing in new product development</i>	NOT SUPPORTED
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5.2.6 Behavioural intentions

The act of crowdsourcing in new product development is hypothesized to form a positive brand attitude, which is an important determination of how consumers behave (Keller, 1993). Thus, the fifth hypothesis suggest that using crowdsourcing in new product development will yield more positive behavioural intentions of non-participating consumers. The results from the independent t-test on behavioural intentions are presented below:

Variable	Group 1 Crowdsourcing M (SD)	Group 2 Not Crowdsourcing M (SD)	Significance
Behavioral intentions	3.172 (1.322)	3.153 (1.375)	0.916
*p<0.05 **p<0.01 ***p<0.001			

The conducted independent t-test reveals that there is no significant ($p>0.05$) difference in the measure for behavioural intentions, conditions $t(214)=0.105$, $p=0.916$. Therefore, this hypothesis is rejected.

H5	<i>Non-participating consumers will demonstrate more favourable behavioural intentions towards a brand using crowdsourcing in new product development, than to a brand not using crowdsourcing in new product development</i>	NOT SUPPORTED
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5.2.7 Summary of hypotheses

No.	Hypothesis	SUPPORT
H1	<i>A brand using crowdsourcing in new product development will be perceived as more customer oriented by non-participants than a brand not using crowdsourcing in new product development.</i>	SUPPORTED
H2	<i>A brand using crowdsourcing in new product development will be perceived as more innovative by the non-participants, than a brand not using crowdsourcing in product development</i>	SUPPORTED
H3	<i>A brand using crowdsourcing in the new product development will be perceived as more unique by the non-participants, than a brand not using crowdsourcing in product development</i>	SUPPORTED
H4	<i>Non-participants' overall attitude towards a brand using crowdsourcing in new product development will be more positive, than towards a brand not using crowdsourcing in new product development</i>	NOT SUPPORTED
H4	<i>Non-participating consumers will demonstrate more favourable behavioural intentions towards a brand using crowdsourcing in new product development, than to a brand not using crowdsourcing in new product development</i>	NOT SUPPORTED

5.3 Control for the possible effect of brand familiarity on the dependent variables

Both the treatment and control group consisted of two subgroups exposed to two different brands, one familiar and one unfamiliar brand. Thus, the factor of familiarity could show if there was an effect on the results due to prior interactions with the familiar brand. The one-way ANCOVA analysis for each dependent variable revealed that the significant results of the effect of crowdsourcing, remained significant after controlling of the possible effects of brand familiarity ($p < 0.001$). The one-way ANCOVA results showed statistically significant difference of crowdsourcing on customer orientation, $F(1,213)=60.742$, $p=0.000$, innovative, $F(1,213)=18.756$, $p=0.000$ and unique $F(1,213)=22.455$, $p=0.000$ when controlling for brand familiarity. As the results for overall brand attitude and behavioural intentions were not statistically significant, no ANCOVA analysis was made on these variables. *See appendix section 8.4*

6. Discussion and conclusion

The following section will firstly present an overview of findings and answer the main research question. Further, the sub-research questions will be answered and discussed. The hypotheses and theory will be connected to the research questions. Lastly, suggestions of implications, critique and limitations and proposal for future research will be presented.

6.1 Conclusion - Overview of findings

The aim of this study was to examine if the usage of crowdsourcing for a company could generate positive consumer responses by the non-participants of the activity. The motive was to explore the implications for a brand communicating its act of crowdsourcing. Through the sub-research questions; (1a) will crowdsourcing used in new product development lead to increased levels of perceived customer orientation, uniqueness and/or innovativeness, (1b) will crowdsourcing used in new product development lead to a more positive brand attitude, (1c) will crowdsourcing used in new product development lead to stronger behavioural intentions, the main research question can be answered. The results of the study indicate that crowdsourcing positively affect the perception of a brand being customer orientated, unique and innovative. On the contrary, findings did not show a favourable effect on brand attitude, nor on behavioural intentions. The conclusion in regard of these results is consequently; *yes, crowdsourcing used in new product development can to some extent generate positive consumer responses by non-participants in terms of increased levels of perceived customer orientation, uniqueness and innovativeness.*

6.2 Discussion

6.2.1 Crowdsourcing can lead to a higher perception of customer orientation, innovativeness and uniqueness

Crowdsourcing used in new product development leads to increased levels of perceived customer orientation, uniqueness and innovativeness by the non-participants.

The study found that the use of crowdsourcing in new product development can affect non-participants' brand perceptions. The perceptions of a brand being customer orientated, innovative and unique increased when crowdsourcing was used in the product development process. Accordingly, this research shows that crowdsourcing is not only a productivity tool that can be used to harness the knowledge, creativity and abilities of the crowd.

Crowdsourcing also form perceptions of the brand using it. The distinct characteristics of crowdsourcing, such as its collaborative nature, inherent innovative aspects as it is built on new technologies and the still rather limited use of it, bring forth consumers' perceptions. The non-participants' perception of the attributes was in this study formed solely from processing the information given in the questionnaire (i.e. that the product had been developed through a crowdsourcing contest). The assessing of the attributes of the brand can be ascribed to the specific characteristics of crowdsourcing. As the perception of the attributes is linked to the information, rather than the respondent's evaluation, the perception of the attributes is more easily formed.

Crowdsourcing's similarities with other interactive activities of companies and consumers, such as customer empowerment, co-creation and open innovation, lead to the initial concern; if findings of such research were applicable in the crowdsourcing context as well. This study focus solely on non-participants, yet findings of research on participants of interactive activities also motivated the hypotheses. The findings of Fuchs and Scherier (2011) showing that companies practicing customer empowerment are perceived as more customer orientated by non-participants, compared to other companies in the marketplace. Concerning the perception of innovativeness, Füller (2010) found that the consumers interacting with a company in co-creation initiatives consider it to be more innovative compared to a company not co-creating. Furthermore, in the context of co-creation, Dijk et al. (2014) found that co-created products are perceived more unique compared to products developed exclusively within the company. Findings of this study reveals that these attributes are also perceived by non-participants, in the context of crowdsourcing. Thus, findings are in line with previous findings of complementary situations. Moreover, our study focused on the use of crowdsourcing in only one isolated product development process, while other company activities continue within the organisation. The characteristics of crowdsourcing can thus be understood to be very distinctive in order to be capable of affecting brand perceptions.

6.2.2 Crowdsourcing and brand attitude - a relationship?

Crowdsourcing used in new product development did, according to our study, not lead to higher overall brand attitude for the non-participating consumers.

The study showed a slightly higher overall attitude for a brand using a crowdsourcing contest in new product development, compared to a brand not using a crowdsourcing competition.

However, this difference was surprisingly not statistically significant. The finding was therefore not consistent with past research of similar activities (Fuchs & Schreier, 2011; Djelassi & Decoopman, 2013; Dijk et al., 2014). Firstly, research by Dijk et al. (2014) and Djelassi & Decoopman (2013) was carried out on consumers participating in the activity which proved to create favourable brand associations (Dijk et al., 2014) and brand image (Djelassi & Decoopman, 2013). According to Keller (1993) attitudes are one important brand associations and a part of the brand image. One explanation for the inconsistency of the results could be that the consumers as participants in previous research were important for creating favourable associations and brand image. Hence, the passive role of non-participating consumers in our study made the previous findings not applicable and therefore overall attitude was only affected to a small extent.

Subsequently, research by Fuchs and Schreier (2011) was made mainly on the company Threadless (see section 1.1) that is a company that has built its entire business model on crowdsourcing. Instead, this study examined a company using a crowdsourcing campaign in new product development once. The explanation for inconsistency with previous research could be attributed to an occasional use of crowdsourcing being too vague to affect the non-participants' attitudes. Furthermore, if a non-participating consumer already held an attitude towards the brand in evaluation, it can be resistant to change by relatively objective means (Ajzen, 2001). Thus, this crowdsourcing campaign might have been a too small manipulation to be able to change attitude.

Interestingly, the beliefs of the attributes for the brand using crowdsourcing proved to be statistically significant in our study. Yet, the effect on overall brand attitude was not statistically significant, the beliefs of the attributes were evident but not strong, accessible or important enough as they did not contribute to overall brand attitude. However, as the study found the perceptions of customer orientation, innovative and unique to be statistically significant for crowdsourcing brands, crowdsourcing proves to generate some form of consumer response. Therefore, a deeper study of crowdsourcing where non-participating consumers create beliefs of further attributes and benefits of the brand using crowdsourcing, may establish the relationship between crowdsourcing and brand attitude.

6.2.3 Does brand attitude lead to behavioural intentions in the crowdsourcing context?

Crowdsourcing in new product development did not lead to non-participating consumers forming favourable behavioural intentions.

Previous research (Keller, 1993; Fishbein & Ajzen, 1975; 2000; Ajzen, 2001) suggests that attitudes can determine consumer behaviour. However, our study did not receive statistically significant results concerning higher overall brand attitude. Therefore, our findings regarding behavioural intentions are not surprising. As previously discussed, one explanation for this may be that the manipulation was too small to cause consumer response in terms of higher attitude hence leading to behavioural intentions.

What is surprising though, is that our findings are consistent with Fuchs and Schreier (2011) regarding customer orientation, however, in our study, this does not lead to higher overall brand attitude nor favourable behavioural intentions, as Fuchs and Schreier (2011) finds. One explanation for this could be, as previously discussed, that beliefs about attributes are easier attained as they are descriptive features (Keller, 1993). An effect in attitude, however, might need a greater manipulation to give results as attitudes are more cognitive (Ajzen, 2001) than descriptive. Why formation of favourable attitudes was found in the research by Fuchs and Schreier (2011) and not in our study could be due to the differences in the experimental setup. They, longitudinal, examined full crowdsourcing business models, whereas we, cross-sectional, examined a one-time crowdsourcing activity.

Unfortunately, neither did the single items measuring different behavioural intentions prove statistically significant. This can be attributed to the manipulation being too modest. Even though behavioural intentions could not be captured in this study, one could still expect behavioural intentions to exist in the crowdsourcing context based on theory and previous research.

6.3 Implications

The findings of this research can give guidance for managers in the field of marketing as well as innovation. Decisions of whether to realise a crowdsourcing contest can benefit from understanding the effects on the greater part of the crowd, the non-participants. Brand perceptions of the non-participants was in this study found to be stimulated by the mere

implementation of a crowdsourcing contest in a single product development process. As crowdsourcing increased the perceptions of a brand being; customer oriented, innovative and unique, managers should thoroughly consider if these perceptions are in line with the desired perceptions of the brand. This can also give guidance of to what extent the crowdsourcing activity should be advertised. Furthermore, the overall brand attitude and behavioural intentions was not significant positively affected. Solely depending on crowdsourcing in marketing communication might only amount small benefits, and therefore it can be seen as an addition to other marketing activities. Greater value might come from the participants, that forms bands with the company they are interacting with, or from the actual innovation coming from the process of crowdsourcing. Nonetheless, the relatively low costs of using crowdsourcing in the innovation process can motivate the value of positive brand perceptions of non-participants to be fair.

As the study found that all statistically significant results hold when controlling for brand familiarity as a covariate, it indicates that the use of crowdsourcing can be valuable for both new brands entering the market, as well as established brands. This can provide managers of both sorts of brand, with indications of that they can differentiate the brand by the use of crowdsourcing. As crowdsourcing also is a rather new activity in the fields of communication and marketing, the use of it can serve as a mechanism of competitive advantage. Crowdsourcing's distinct characteristics enabled stimulation of the beliefs that a brand has the attributes; customer orientation, innovativeness and uniqueness. Accordingly, crowdsourcing can be a part of a company's positioning strategy.

6.4 Critique and limitations

The study was conducted in an as authentic setting as possible, by using a real example of a crowdsourcing campaign. To avoid biases of a familiar brand, the study was also carried out with a fictive brand. However, due to time and resource constraints the study face some limitations which are important to consider. Nonetheless, these limitations could constitute a point of departure for future research.

Firstly, the sample size was rather small relatively to the target population and limited to the Swedish consumers. Furthermore, the survey was distributed via Facebook and it did not spread wider than to our network. This might lead to a sampling bias as some people in the

intended population were more likely to be included in the sample than others. This diminishes generalizability thus the reliability. Nonetheless, whether the respondent was exposed to the treatment or not was completely randomised. Subsequently, the use of both a real brand and crowdsourcing campaign, and a fictive brand strengthen the results of the study. However, the construction of the fictive brand and its campaign might not be as authentic as the real brand and campaign. Even though the fictive campaign was made as similar as possible to the real campaign by Bravo, the minor differences could affect the result.

The attributes; customer oriented, innovative and unique, which were predicted to contribute to a more positive overall brand attitude, were all based on theory and prior research. These attributes proved to be true for a brand using a crowdsourcing contest in new product development. However, there might be other attributes relating to crowdsourcing that may have been overlooked and not tested due to the scope of the study and time limitations. Furthermore, in contradiction to what was hypothesized, the attributes examined in the study might not be important enough to contribute to a more favourable brand attitude towards a brand using crowdsourcing. Even though a pilot test was carried out in order to check the clarity of questions and instructions, a pre-test of the attributes could have had given us an indication whether these attributes were important and accessible for brand attitude and other important attributes might have been found. However, time limitations and the research design made a posttest-only experimental most appropriate.

The survey and the cross-sectional research design is also limiting the study since we examined consumer responses through an artificial crowdsourcing contest at only one point in time. Furthermore, the consumers were aware of partaking in a study. This can possibly distort the findings of the study hence we did not examine a crowdsourcing activity in its natural setting, even though a real crowdsourcing contest was used. With more resources, we would have done a longitudinal study of the non-participants in the natural setting of a crowdsourcing contest to be able to capture more aspects and subtler effects of brand attitude and behavioural intentions.

Regarding the choice of the familiar brand Bravo, it could have influenced the overall brand attitude although we do not consider it as a controversial brand. However, the established brand familiarity could imply that consumers already hold attitudes towards the brand, which

may affect the results of overall brand attitude. Thus, the insignificance of overall attitude may partly be explained by already held brand attitudes toward the brand, but also due to the overall characteristics of the manipulation.

Lastly, regarding the validity and reliability. Behavioural intentions should have been more thoroughly tested as every intention was only tested with one item. Using more items could have capture more subtler differences in behavioural intentions hence possibly making the results statistically significant. Finally, the Cronbach Alpha value for group 1-B and 2-B for the index variable “innovative” was not significant in spite of the items measuring it are according to theory appropriate. Both groups with a Cronbach’s Alpha lower than 0.700 was exposed to the familiar brand, Bravo. Brand familiarity could thus be an explanation to the inconsistency of the items’ results. Further tests and research of the measurement of “innovative” might find more or better representational items of this dimension.

6.5 Future research

As have been proved in this study, crowdsourcing activities in new product development generates consumer responses to some extent. This strengthen further research in the exciting area of crowdsourcing. Firstly, future research should further examine how attitudes might be affected by the exchange of participants and non-participants.

Subsequently, as this study only examined one type of crowdsourcing activity, crowdsourcing competition, future research should examine more types of activities. This would make comparisons of different activities possible in order to be able to distinguish which generate most consumer responses. Later, this could guide companies in the usage of crowdsourcing activities in new product development. Furthermore, future research should measure more and other possible attributes and benefits that consumers might form beliefs about as there might be other attributes connected to crowdsourcing than the ones captured in this study. This could help companies to a further understanding of what benefits there might be of using crowdsourcing.

Finally, future research should examine crowdsourcing activities receiving negative feedback and how that might affect both participating and non-participating consumers. Also, future research should investigate these research areas with a larger sample and with more cultural differences as crowdsourcing occurs online and is easily spread beyond country borders.

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8. Appendix

8.1 Pictures in the questionnaire

One of the pictures in section 8.1.1 to 8.1.4 was shown to the each respondent

8.1.1 Bravo Crowdsourcing (Group 1-B)

The image shows a screenshot of the Bravo website and a Facebook post. The website header features the 'BRAVO' logo and the tagline 'En smak för alla'. The main content area is titled 'Tävla i Folkets Bravo' and celebrates Bravo's 40th anniversary with a '40 år' badge. It describes a juice competition where participants blend their own juice, with the winner's juice being sold in stores. Below the text, several juice cartons are displayed, including 'ADE', 'BÄR & BÄR', 'JOHANNA', 'HITCHERS', 'VIGGO', 'AOI', and 'KO'. A green circular button says 'Se alla bidrag'. A link 'Läs tävlingsreglerna' is at the bottom.

The Facebook post is from Andreas Disman, dated March 28, 2013, about the 'Folkets Bravo' juice competition. He asks his friends to vote for his juice, 'LYCKA', which is a blend of Stjärnfrukt and Acerola with Physalis. The post includes a photo of a 'LYCKA STJÄRNFALL' juice carton and a glass of the juice. Below the photo, there are three circular icons labeled 'SYRLIGHET', 'SÖTMA', and 'BESKA'. A small photo of Andreas Disman is also shown with the text 'Den här juicen är gjord av ANDREAS DISMAN'. At the bottom, there is a star rating of 5 and a 'Betyg' section with five stars. Social media sharing buttons for Facebook, Google+, and Twitter are also present.

LYCKA

Här är Andreas juice! En smakrik blandning av Stjärnfrukt och Acerola med Physalis. Andreas juice deltar i tävlingen Folkets Bravo, där den vinnande juicen kommer att säljas i butik. Ge Andreas ditt stöd med ett like och bra betyg. Vill du också tävla?

Den här juicen är gjord av ANDREAS DISMAN

Stjärnor **5**

Betyg ★★★★★

Delat på Facebook, Google+, and Twitter.

LYCKA

Här är Andreas juice! En smakrik blandning av Stjärnfrukt och Acerola med Physalis. Andreas juice deltar i tävlingen Folkets Bravo, där den vinnande juicen kommer att säljas i butik. Ge Andreas ditt stöd med ett like och bra betyg. Vill du också tävla?

WWW.FOLKETSBRAVO.NU

Gustav Tillman och 3 andra

8.1.2 Toppen crowdsourcing (Group 1-T)

Tävla i Folkets Toppen!

Toppen firar 40 år! Detta uppmärksammar vi genom att utse Folkets Toppen i spännande och rolig tävling där du själv blandar din egen Toppen. Första pris är just att din juice blir verklighet och kommer att säljas i butik.

Tävlingen är avslutad och vinnaren presenterades 30/6 på hemsidan och på Facebook.

[Läs tävlingsreglerna](#)

Se alla bidrag här!

Den här juicen är gjord av
ANDREAS DISMAN

SYRLIGHET SÖTMA BESKA

TOPPEN
APPELJUICE
blåbär och hallon

Drickfärdig juice med frisk smak, pressad ur krispiga äpplen
1 liter

Andreas Disman
den 28 mars 2013

Hej alla mina vänner (och vänners vänner)

Vänligen gå in och rösta på mitt bidrag till TOPPEN:s juicetävling. Juicen är en härlig blandning av äpple, blåbär och hallon. Låter inte det smaskigt? 😊

Tack på förhand!

TOPPEN

Här är Andreas juice! En smakrik blandning av äpple, blåbär och hallon. Andreas juice deltar i tävlingen Folkets Toppen, där den vinnande juicen kommer att säljas i butik. Ge andreas ditt stöd med en like och bra betyg. Vill du också tävla?

WWW.FOLKETSTOPPEN.NU

Gustav Tillman och 3 andra

8.1.3 Bravo not crowdsourcing (Group 2-B)

[OM BRAVO](#)[PRODUKTER](#)[BRAVOKLUBBEN!](#)



LETAR DU EFTER VANLIGA FRÅGOR ELLER KONTAKTUPPGIFTER?



100% FRUKT

När du dricker Bravo juice kan du vara säker på att du bara får i dig 100% frukt – inget annat. Inget tillsatt socker och inga tillsatser. Sockret som finns kommer naturligt från frukten. Bara drycker som innehåller 100% frukt får säljas under namnet juice. Detta gäller också juice som framställs av koncentrat. Då tillsätts samma mängd vatten som avlägsnats vid koncentreringsen.



LYCKA

STJÄRNFRUKT
OCH ACEROLA
MED PHYSALIS

SYRLIGHET SÖTMA BESKA





8.1.4 Toppen not crowdsourcing (Group 2-T)



TOPPEN - 100 % FRUKT

I flera år har TOPPEN producerat sina juicer med endast naturliga råvaror. Bra för dig och bra för naturen.

TOPPEN

SYRLIGHET SÖTMA BESKA

TOPPEN
APPELJUICE
slår till och håller

Drickfärdig juice med frisk smak, pressad ur krispiga äpplen
1 liter

The advertisement features a top banner with a blurred background of red apples and a semi-transparent text box containing the brand name and a slogan. Below this, the left side shows a 1-liter carton of Toppen Apple Juice next to a glass of the juice. The carton is decorated with various fruits and includes a '100% FRUKT' seal. To the right of the carton are three circular icons representing 'SYRLIGHET' (Sourness), 'SÖTMA' (Sweetness), and 'BESKA' (Bitterness). The right side of the advertisement is a large image of three glasses filled with different colored juices (orange, green, and red) with blue and white striped straws. The glasses are garnished with fresh fruit: an orange slice, kiwi slices, and strawberries.

8.2 Questionnaire

Juicen i bilden ovan är framtagen genom online Crowdsourcing.

Crowdsourcing betyder att en organisation sänder ut en **öppen förfrågan** om att utföra en **uppgift** som tidigare utförts inom organisationen, till en **odefinierad grupp människor**. Crowdsourcing förekommer oftast online.

Varumärket Bravo anordnade en tävling där (frivilliga) konsumenter bjöds in till att delta i **framtagningen av en ny produkt**. Deltagarna skapade sin egen juice och sedan fick vem som helst sätta betyg på juicen. Vinnaren utsågs sedan av en jury som bedömde helhetsintrycket - smak, namn, färgval och förpackning, antalet Facebook-likes och betyg från andra besökare på tävlingssidan. Första pris i tävlingen var en årsförbrukning av juice och att juicen började produceras samt säljas i butik.

Det vinnande bidraget "LYCKA" produceras nu och finns tillgänglig att köpa i livsmedelsbutiker runt om i Sverige.

Hur väl stämmer följande påståenden överens med din uppfattning om varumärket BRAVO?

BRAVO...

	Stämmer inte alls					Instämmer helt	
	1	2	3	4	5	6	7
...har kundens bästa intresse i åtanke	☐	☐	☐	☐	☐	☐	☐
...anstränger sig för att förstå kundens preferenser	☐	☐	☐	☐	☐	☐	☐
...bryr sig om sina kunder	☐	☐	☐	☐	☐	☐	☐
...bjuder in sina kunder till att diskutera sina preferenser med dem	☐	☐	☐	☐	☐	☐	☐

BRAVO...

	Stämmer inte alls					Instämmer helt	
	1	2	3	4	5	6	7
...är ett nytänkande företag	☐	☐	☐	☐	☐	☐	☐
...är en ledande aktör i branschen för juice	☐	☐	☐	☐	☐	☐	☐
...försöker ständigt förbättra sitt produktutbud	☐	☐	☐	☐	☐	☐	☐

BRAVO...

	Stämmer inte alls					Instämmer helt	
	1	2	3	4	5	6	7
...utmärker sig jämfört med sina konkurrenter	☐	☐	☐	☐	☐	☐	☐
...står för något unikt	☐	☐	☐	☐	☐	☐	☐
...är ett speciellt varumärke	☐	☐	☐	☐	☐	☐	☐

Hur sannolikt är det att du skulle...

	Inte sannolikt				Sannolikt		
	1	2	3	4	5	6	7
...rekommendera Bravo till dina vänner och/eller din familj?	☐	☐	☐	☐	☐	☐	☐
...använda någon typ av social media för att dela ett positivt omdöme om Bravo?	☐	☐	☐	☐	☐	☐	☐
...prata om Bravo med dina vänner och/eller din familj?	☐	☐	☐	☐	☐	☐	☐
...köpa en produkt från Bravo inom en snar framtid?	☐	☐	☐	☐	☐	☐	☐
...leta efter en produkt från Bravo nästa gång du besöker en livsmedelsbutik?	☐	☐	☐	☐	☐	☐	☐
...vilja veta mer om Bravo?	☐	☐	☐	☐	☐	☐	☐

Vad är din övergripande attityd gentemot **varumärket BRAVO**?

	1	2	3	4	5	6	7	
Gillar inte	☐	☐	☐	☐	☐	☐	☐	Gillar
Dålig	☐	☐	☐	☐	☐	☐	☐	Bra
Inte tilltalande	☐	☐	☐	☐	☐	☐	☐	Tilltalande

Är du sedan tidigare bekant med varumärket BRAVO?

Ja

Nej

Hur är **juicen** i bilden framtagen?

Av Bravo själva

Av en konsument genom online Crowdsourcing

Vad är Crowdsourcing?

En öppen förfrågan till en odefinierad grupp om att utföra en uppgift

En förfrågan till utvecklingsteamet inom företaget att utföra en uppgift

Har du någon gång aktivt deltagit genom att designa och/eller rösta i en Crowdsourcing kampanj liknande den av BRAVO?

Ja

Nej

Vet ej

Deltog du aktivt med att ta fram en juice när BRAVO genomförde denna Crowdsourcing-kampanj i verkligheten?

Ja

Nej

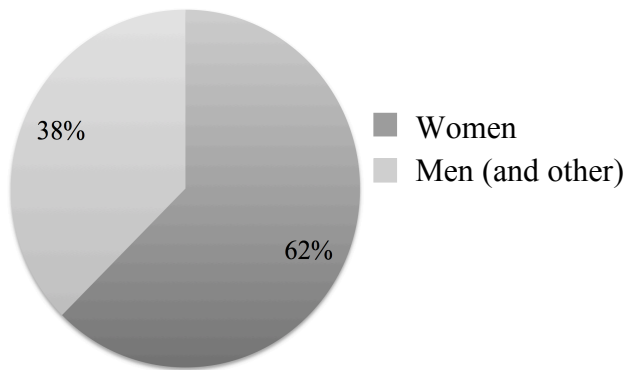
Deltog du aktivt genom att rösta på en juice när BRAVO genomförde denna Crowdsourcing-kampanj i verkligheten?

Ja

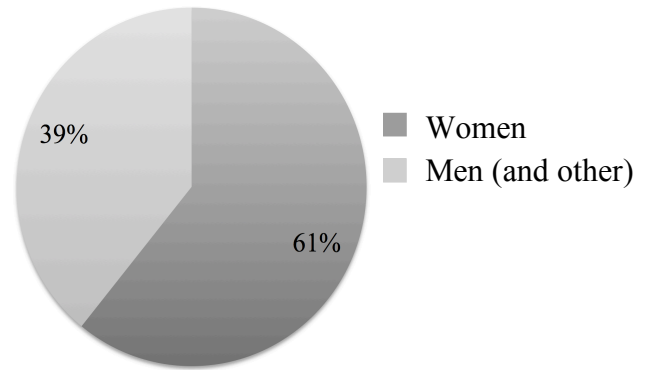
Nej

8.3 Detailed gender distribution

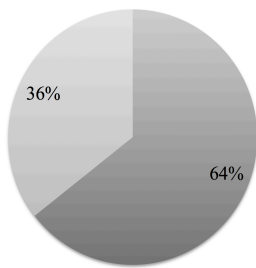
Group 1



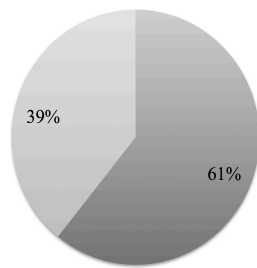
Group 2



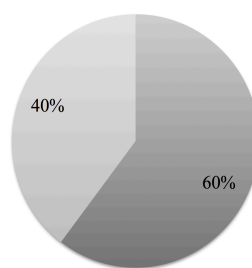
Group 1-B



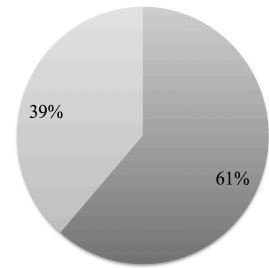
Group 1-T



Group 2-B



Group 2-T



8.4 One-way ANCOVA analysis

8.4.1 One-way ANCOVA for customer orientation

Tests of Between-Subjects Effects

Dependent Variable: Index Customer Orientation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	69.908 ^a	2	34.954	30.371	.000
Intercept	2475.233	1	2475.233	2150.707	.000
Familiarity	.203	1	.203	.176	.675
CS	69.908	1	69.908	60.742	.000
Error	245.140	213	1.151		
Total	5205.188	216			
Corrected Total	315.048	215			

a. R Squared = .222 (Adjusted R Squared = .215)

8.4.2 One-way ANCOVA for innovative

Tests of Between-Subjects Effects

Dependent Variable: Index Innovative

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	90.828 ^a	2	45.414	35.804	.000
Intercept	1579.469	1	1579.469	1245.254	.000
Familiarity	71.360	1	71.360	56.261	.000
CS	23.790	1	23.790	18.756	.000
Error	270.167	213	1.268		
Total	4477.889	216			
Corrected Total	360.995	215			

a. R Squared = .252 (Adjusted R Squared = .245)

8.4.3 One-way ANCOVA for unique

Tests of Between-Subjects Effects

Dependent Variable: Index Unique

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	44.706 ^a	2	22.353	11.471	.000
Intercept	1600.285	1	1600.285	821.258	.000
Familiarity	.365	1	.365	.187	.666
CS	43.754	1	43.754	22.455	.000
Error	415.047	213	1.949		
Total	3514.778	216			
Corrected Total	459.753	215			

a. R Squared = .097 (Adjusted R Squared = .089)