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Published in:
Journal of Marketing Management

DOI:
[10.1080/0267257X.2017.1325389](https://doi.org/10.1080/0267257X.2017.1325389)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2017

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Gruner, R. L., & Power, D. (2017). What's in a crowd? Exploring crowdsourced versus traditional customer participation in the innovation process. *Journal of Marketing Management*, 33(13-14), 1060-1092.
<https://doi.org/10.1080/0267257X.2017.1325389>

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To cite this article: Richard L. Gruner & Damien Power (2017) What's in a crowd? Exploring crowdsourced versus traditional customer participation in the innovation process, Journal of Marketing Management, 33:13-14, 1060-1092, DOI: [10.1080/0267257X.2017.1325389](https://doi.org/10.1080/0267257X.2017.1325389)

To link to this article: <https://doi.org/10.1080/0267257X.2017.1325389>

Published online: 15 May 2017.

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What's in a crowd? Exploring crowdsourced versus traditional customer participation in the innovation process

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ABSTRACT

This study explores the emerging crowdsourcing phenomenon, that is, the outsourcing of idea generation to the product users ('the crowd'), typically via online platforms to interact with many and diverse customers and glean valuable market insights. The study focuses on this phenomenon and the factors that determine the value of crowdsourced customer participation over more traditional market research methods. The authors present the results of an extensive, in-depth qualitative case-study analysis pertaining to the media industry. The authors find that crowdsourced customer participation is not consistently superior in enabling firms to discover how to serve their customers better. Instead, the results unearth a catalogue of seven interrelated value determinants that show where the boundaries of both crowdsourcing and traditional customer participation in innovation lie. These value determinants fall into three main categories: (1) innovation-specific value determinants, (2) firm-specific value determinants, and (3) managerial value determinants.

ARTICLE HISTORY

Received 21 December 2015
Accepted 31 March 2017

KEYWORDS

Customer participation; crowdsourcing; market research methods; product innovation; qualitative research

Introduction

Firms increasingly benefit from engaging customers in their innovation processes. Brand Muji, for example, reports that products created with customer¹ input result in sales five times higher than those created through internal research and development alone (Nishikawa, Schreier, & Ogawa, 2013). However, many firms struggle in their efforts to leverage customer participation to create more successful innovations (Chang & Taylor, 2016). Some evidence even points towards customer participation's potential to backfire and cause *poor* product performance, 'which calls for a reassessment of the oft-dominant assumption that customer participation *always* leads to new product success' (Chang & Taylor, 2016, p. 49; emphasis added). To solve this problem and improve the innovation process for both products and services, marketers are increasingly turning away from traditional customer participation and towards online methods to innovate in a manner that stimulates market learning and drives transformational change from the outside-in (Day, 2011; De Luca & Atuahene-Gima,

2007). However, managers still have to discover when to use online tools exclusively in facilitating customer-driven change in a world where online techniques increasingly coexist with, rather than substitute, more traditional methods of gathering product ideas (Zhao & Zhu, 2014).

A particularly powerful online customer participation method is crowdsourcing – a behavioural construct that describes the process of outsourcing a participative activity to an online crowd or community of both current and potential product users in an attempt to leverage the collective intelligence of customers and achieve an organisational goal (Poetz & Schreier, 2012). Crowdsourcing stimulates market learning during idea generation and selection and helps firms gather information about product-related problems from the customers' point of view and solve those problems (Piezunka & Dahlander, 2015). In exploring this phenomenon, our study falls within the marketing literature category that focuses on the shift in innovation management from within the firm to an 'outside-in' approach, thus leveraging the collective intelligence of online crowds to develop new products or improve existing products (Day, 2014; Hauser, Tellis, & Griffin, 2006).

Many companies experiment successfully with crowdsourced customer participation (CCP) alongside more traditional customer participation (TCP), such as surveys, focus groups and interviews (Witell, Kristensson, Gustafsson, & Löfgren, 2011), to harness customers' creative potential and innovate (Day & Moorman, 2010; Fuchs, Prandelli, Schreier, & Dahl, 2013). Some firms, such as Threadless.com, rely solely on customers to create and share their product designs (Brabham, 2010). Various non-profit organisations and institutions also turn to online platforms to source ideas, as when the UK-based Natural Environment Research Council crowdsourced the search of a name for one of its new polar research ships (Wilson, Robson, & Botha, 2017). At the same time, many organisations steer clear of CCP, as managers perceive that the 'frictional costs presented by its challenges outweigh its potential benefits' (Antorini & Muñiz, 2013, p. 22). Although CCP typically offers access to a large customer base that can yield promising new product ideas, many long-recognised shortcomings associated with involving customers in the innovation process remain. For example, Bennett and Cooper (1981, p. 54) claimed that a truly innovative product idea 'is often out of the scope of the normal experience of the consumer'. Customers often fail to generate a return on investment from their participation because they have become accustomed to current consumption conditions and thus are limited in their ability to envision product innovations that shape a firm's future (Poetz & Schreier, 2012). Further, in fast-moving digital new product development, customer preferences can shift too quickly for meaningful engagement in CCP. For example, by the time Netflix created a new crowdsourced algorithm for its DVD movie rental business, there was no longer a market for this product (Amatriain & Basilico, 2012). Similarly, research has shown that CCP strategies are highly context-dependent and can harm brand value and even lead to negative effects on the persuasiveness of a product's advertising message (Fuchs et al., 2013; Poetz & Schreier, 2012; Thompson & Malaviya, 2013). These contradictory results raise an important research question:

Under what circumstances is CCP superior (i.e. more useful for managers' decision-making) to TCP in the innovation process?

Scholars have begun to recognise the important role various contingencies play in influencing the success of gathering external knowledge in the innovation process (Chatterji & Fabrizio, 2014) including their effect on crowdsourcing specifically (Djelassi & Decoopman, 2013; Thuan, Antunes, & Johnstone, 2016). Even so, surprisingly little research examines the contingency factors that determine the success of one type of customer participation over the other. While we know a great deal about the management of new products and the benefits of involving stakeholders in customer participation (Prahalad & Ramaswamy, 2004), theory and research explain little about customer participation and the boundary conditions that determine when firms should choose crowdsourcing over more traditional methods to achieve the best possible innovation outcomes.

To address these issues and answer our research question, we follow work that builds theory from qualitative studies within organisations (e.g. Feldman, 2003) and closely examine the customer participation processes of several profit centres in one large international media corporation. This media corporation (which we call 'PogruMedia') reaches millions of customers every day, has more than 10,000 employees and produces an annual turnover of more than US\$2.6 billion. More importantly, its core business is the continuous development of a broad product portfolio often designed in conjunction with customers through both CCP and TCP.

Our in-depth case study reveals a catalogue of seven interrelated value determinants that show where the boundaries of crowdsourcing and traditional customer participation in innovation lie. These value determinants fall into three main categories: (1) innovation-specific value determinants, (2) firm-specific value determinants and (3) managerial value determinants. Our study offers the first empirical exploration of the value determinants of combining CCP with TCP as a product development support mechanism. We thereby respond to calls for more knowledge generation on the methods and 'conditions under which sourcing external knowledge from users will be most beneficial for a firm' (Chatterji & Fabrizio, 2014, p. 1428). In addition, our study helps address firms' growing need to transform data into useful knowledge in the innovation process (Piezunka & Dahlander, 2015), particularly when it comes to decisions about when digital methods of data collection should supersede more traditional ones.

This article is structured as follows. In the next section, we provide an overview of the research background, define our main conceptual constructs and summarise selected literature on customer participation in the production of goods and services. We then describe our methods and data analysis and subsequently provide and discuss our results. The final section states the implications of our findings and proposes directions for future research.

Definitions and research background

Customer participation in innovation

Customer participation in innovation refers to customers' involvement in firms' product development processes (Chang & Taylor, 2016). Customers have long been regarded as a valuable source of product-related knowledge that organisations may lack internally

(Poetz & Schreier, 2012). Customers' participation in product design and development and their involvement in product testing can lead to more successful offerings (Nambisan, 2002). We explore customer participation as it relates to a firm's idea generation and selection process for both new and existing products and focus on capturing external knowledge from customers that relates to both their needs (i.e. what is the problem) and possible suggestions for solutions. Next, we define and describe two ways of capturing external knowledge from customers in the innovation process: CCP and TCP.

Crowdsourced customer participation

Originally, firms thought of CCP mainly as a way to outsource problems and task a crowd with analysing large amounts of information (Afuah & Tucci, 2012; Piezunka & Dahlander, 2015). Today, CCP has shifted towards a more encompassing meaning that includes manifold online data collection methods intended to discover 'valuable needs- and solution-based information in the idea generation process of the [new] product development process' (Poetz & Schreier, 2012, p. 253). Indeed, crowdsourcing includes many practices and can be difficult to distinguish from online market research or virtually any firm-initiated collaborative online activity. Estellés-Arolas and González-Ladrón-De-Guevara (2012) recognise and tackle this problem by analysing a number of existing definitions of crowdsourcing to distil common elements and establish the basic characteristics underlying crowdsourcing. The authors' definition is:

Crowdsourcing is a type of participative online activity in which ... a 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 ... (p. 197).

We adapt this broad definition of crowdsourcing for our research purposes and context – CCP in the media industry. We conceptualise CCP as a behavioural construct that describes the process of outsourcing a participative activity to an online crowd or community of both current and potential product users in an attempt to leverage the collective intelligence of customers and achieve an organisational goal. This definition of CCP encompasses a range of online, firm-initiated customer-participation activities and captures a firm's attempt to access many customers (a crowd) to understand their points of view and identify their needs and wants (Payne, Storbacka, & Frow, 2008). This definition is also aligned with Brabham (2013), who states that crowdsourcing focuses on 'leveraging the collective intelligence of online communities to serve *specific organisational goals*' (p. xix; emphasis added). In fact, although the benefits of CCP are typically mutual, we focus on the organisational benefits of leveraging customers' collective intelligence in the innovation process (Brabham, 2008; Chan, Yim, & Lam, 2010; Howe, 2006).

For the purposes of our study, the internet is a necessary conduit of CCP, however, not *all* customer participation or market research activities that take place online are CCP. For example, although online brand communities can help facilitate customer participation, they are not synonymous with CCP (Baldus, 2015; Gruner, Homburg, &

Lukas, 2014). The same goes for simple online surveys and focus groups, which are not considered to be CCP unless they meet the outlined definition's criteria.

Traditional customer participation

The internet renders CCP practices much easier and facilitates a continuous uptake in its application (Antorini, Muñiz, & Askildsen, 2012; Piezunka & Dahlander, 2015). Before the inception of the internet, TCP was widely regarded as the dominant, if not only, form of customer participation in firms' innovation processes. However, despite evidence supporting the notion that companies should gather customer insights from crowds in an online environment (Nambisan, 2002; Sawhney, Verona, & Prandelli, 2005), firms often continue to employ TCP. In this study, we define TCP as a typically remunerated, participative offline activity with selected, physically present individuals (or small group of individuals) aimed at sharing their knowledge and/or experience with (and mainly to the benefit of) the firm. TCP links the marketer to the end user in an offline context to potentially gather detailed customer insights (Chesbrough, 2006). This form of customer participation includes face-to-face interviews, focus groups, telephone interviews and ethnographic research.

Unlike CCP, TCP often seeks a more nuanced understanding of a limited number of customers by teasing out their 'emotional longings that can subsequently be elaborated into the organising principles behind a new product' (De Botton, 2009, p. 73). TCP is also better suited than CCP in facilitating the 'transfer of complex, ambiguous and novel information' and provides 'the possibility to capitalise on surprising and unexpected answers' (Salomo, Steinhoff, & Trommsdorff, 2003, p. 446). TCP advocates also argue that, unlike CCP, this form of customer participation facilitates the gathering of rich market insights (Gruner & Homburg, 2000; Von Hippel, 1978) through the recruitment of subjects with particular demographic characteristics (Patino, Pitta, & Quinones, 2012). CCP, on the other hand, is often associated with a struggle to evaluate and make sense of a deluge of crowdsourced data from many often anonymous sources. For example, the Italian design company Alessi dismissed the idea of engaging in CCP to source product ideas because this might lead to information overload (Verganti, 2011).

Research background

A growing body of knowledge highlights the value of using customer input in innovations (Chang & Taylor, 2016; Laursen & Salter, 2006). We conceptualise this value creation process as an account of firms establishing and maintaining relations with customer groups in the innovation process (Day & Moorman, 2010). This value creation process encompasses the articulation of anticipated value creation and value capture dynamics within market-based relationships with customers acting as information providers, and in some cases, even co-developers in the innovation process (Fang, 2008). Customer participation research can be broadly categorised into two research streams. The first stream focuses on the outcomes and strategic value of customer participation from a firm's perspective. This stream mainly seeks to answer the question: why should firms engage in customer participation? In this context, scholars make a business case for soliciting product knowledge from external contributors. In addition to gaining knowledge that may not reside within a firm's boundaries, these works also show that involving customers in innovations can improve customers' perceptions of

product quality (e.g. Cui & Wu, 2016; Piezunka & Dahlander, 2015). Recent experiments show that customers perceive crowdsourced products as more closely aligned with their needs and that ‘marketing the product as “customer-ideated” at the point of purchase versus not mentioning the specific source of design, increases the product’s market performance by up to 20 per cent’ (Nishikawa, Schreier, Fuchs, & Ogawa, 2017). A related body of literature on customer co-production even discusses the value of customers that turn into ‘partial employees’ (Haumann, Güntürkün, Schons, & Wieseke, 2015; Kristensson, Matthing, & Johansson, 2008).

The second stream more closely investigates customer participation from the viewpoint of the involved customer, focusing on the relational value customers derive from their involvement in the product development process. In contrast to the first stream, research in this stream mainly seeks to answer the question: why do customers engage in customer participation? This literature draws heavily on psychological theories to explain the perceptions and behaviours of customers arising from their involvement in innovations. From a customer’s perspective, engagement in participative activities can influence their psychological responses, and ultimately, satisfaction with a developed product (Bendapudi & Leone, 2003). Some scholars even claim that customers increasingly demand a role in production processes and that marketers must respond (Firat & Venkatesh, 1995) perhaps ultimately to allow customers to customise their world through a tailored immersion ‘into the world of objects’ (Firat, Dholakia, & Venkatesh, 1995, p. 50).

In this study, we focus on the first stream. We address the outcomes and strategic value of CCP and TCP from a firm’s perspective. We explore how and when firms can create value in their innovations by tapping customers’ knowledge around product needs and solutions. In exploring this issue, we help address firms’ growing need to transform data into useful knowledge (Piezunka & Dahlander, 2015). We also respond to one of the Marketing Science Institute’s (MSI, 2016–2018) top research priorities regarding our understanding of types of data collection ‘that enable firms to gain insights from multiple approaches [in part driven by] a sense that the old methods aren’t working as well [and a growing need] to bring multiple sources and types of information together to gain insight and to make better decisions (p.12)’.

Table 1 provides an overview of selected literature on CCP (research stream I) and TCP (research stream II) in innovations. Clearly, different forms of customer participation can create value (for a meta-analysis on customer participation, we refer to Chang & Taylor, 2016). However, as Table 1 shows, investigations largely fail to compare CCP with TCP. Some studies intuit opposite effects resulting from customer participation (Fang, 2008), and others compare crowdsourcing with firms’ internal idea generation (Poetz & Schreier, 2012), but empirical explorations of how CCP may fail to provide some of the benefits associated with TCP remain scarce. Instead, scholars mainly focus on the benefits of either CCP or TCP. Further, while some works in this area recognise the importance of contextual factors in determining customer participation success (Chatterji & Fabrizio, 2014), studies of both CCP and TCP in innovations have largely neglected the question of the circumstances that allow one type of customer participation to trump the other, as well as the question of which type of customer participation managers use, and why. Few studies specifically explore the value determinants that influence the success of either CCP or TCP (see Table 1). In other

Table 1. Selected literature on customer participation and main research streams.

Author(s)	Type of data /study	Purpose of study	Key insights	Value determinants discussed?	Empirical comparison of CCP and TCP?
Research stream I: Crowdsourced customer participation (CCP) Afuah and Tucci (2012)	Quantitative; secondary analysis of existing theories.	To identify the circumstances in which crowdsourcing will either impede or facilitate effective problem-solving in a corporate context.	The model categorises the circumstances in which crowdsourcing will improve the effectiveness of problem solving. Specifically, the method of crowdsourcing transforms distant search into local search problem-solving.	Yes – for example, the pervasiveness and low cost of information technology, or the distance of searches increases crowdsourcing effectiveness.	No – the authors only identify possible opposite effects of CCP and TCP problem-solving techniques.
Boudreau and Lakhani (2013)	Conceptual; an investigation of market crowdsourcing techniques.	To highlight the successful conditions of crowdsourcing and the benefits of utilising the internet to enhance crowdsourcing effects.	Crowdsourcing represents an additional and highly efficient tool to gather data and solve firms' product-related problems.	No.	No.
Estellés-Arolas and González-Ladrón-De-Guevara (2012)	Conceptual; an investigation of crowdsourcing definitions.	To form an exhaustive, broad definition that describes any crowdsourcing activity.	Crowdsourcing was widely defined with reference to eight common characteristics.	No.	No.
Gouillart and Billings (2013)	Qualitative; a case study of a medical technology company.	To identify the steps required for a highly competitive co-creation system to provide a model for future co-creation enterprise.	Enriched engagement with a community of co-creation will generate higher quality company outcomes. This will result in a complete transformation of company operations and an advanced consumer–company relationship.	No.	No.

(Continued)

Table 1. (Continued).

Author(s)	Type of data /study	Purpose of study	Key insights	Value determinants discussed?	Empirical comparison of CCP and TCP?
Palacios, Martinez-Corral, Nisar, and Grijalvo (2016)	Review article.	To explore how organisational forms communicate the value of a particular project to gain legitimacy, and to provide a level of inquiry into the creation of such engagements.	Identified five research streams: problem solving; learning paradigms; open innovation programme; new product development; collaborative initiative. Crowdsourcing research needs to work beyond the micro-level, to include both meso- and macro-level factors for organisations to develop more successful crowdsourcing engagements.	To some extent; crowdsourcing is effective if transaction costs are low and distant searches are needed to problem-solve.	No.
Poetz and Schreier (2012)	Quantitative; a case study on the Bamed/MAM Group idea generation contest in Austria.	To present a comparison of the ideas generated by a firm's professionals with those generated by users in the course of an idea generation contest.	Crowdsourcing generates more novel and beneficial, but not necessarily more feasible ideas than professional innovation activities. Overall, crowdsourcing emerged as a promising method to gather user ideas.	To some extent; knowledge-based entry barriers and the inability to attract the right participants hinders crowdsourcing efforts.	No – however, the authors compare CCP with more traditional, firm-internal idea generations processes.
Prahalad and Ramaswamy (2004)	Conceptual; investigates value co-creation.	To highlight the changing relationships between consumers and firms, specifically the effect of CCP on value creation.	A model of the transformed relationship between consumer–company interaction and value creation can be measured with four mediating factors: dialogue, access, risk-benefits and transparency.	No.	No – however, the authors identify both the revised and traditional consumer–firm relationships.
Zhao and Zhu (2014)	Review article.	Critical examination of the crowdsourcing literature landscape to lead to an increased understanding of crowdsourcing systems.	Identified crowdsourcing as a new frontier for information systems and related research. The authors identify important future research directions including an exploration of the differences between open source software development and outsourcing.	Yes – for example, the ability to motivate participants across contexts and create a task-technology fit with the crowd increases the effectiveness of crowdsourcing.	No – focus lies on crowdsourcing as an information systems phenomenon.

(Continued)

Table 1. (Continued).

Research stream II: Traditional customer participation (TCP)			
Bendapudi and Leone (2003)	Quantitative; two experimental designs.	To examine the effects of bias and choice on customer participation, from a socio-psychological perspective.	No.
Bone, Fombelle, Ray, and Lemon (2015)	Quantitative; longitudinal data from 2542 customers participating in problem-solving activities for a technology firm.	To investigate the effect of problem-solving customer participation in a peer-to-peer problem-solving community among business-to-business service firms.	No.
Chan et al. (2010)	Quantitative; a cross-cultural survey of 349 customer-employee pairings.	To empirically assess the effects of satisfaction (customer and employee), customer participation and performance outcomes on value creation in Hong Kong and the U.S.	No.
Fang (2008)	Quantitative; survey of 143 matched customer-manufacturer pairings within equipment manufacturer companies.	The authors identify two types of customer participation – customers as an information resource (CPI) and as a co-developer (CPC). This study examines the moderating effects of CPI and CPC on innovativeness, speed-to-market and process interdependence in the innovation process.	No – the authors only mention possible opposite effects of CCP and TCP on a firms' product performance.

(Continued)

Table 1. (Continued).

Hull (2004)	Quantitative; analysis of 62 service enterprises.	To investigate the relationship between innovation and organisation.	A triad of mediating factors (organisation, processes, and tools) within an operating system is responsible for the main effects of performance indicators in the innovation process. Higher levels of product innovation will result in a higher impact of this triad on product performance.	No.	No.
Payne et al. (2008)	Conceptual; investigates the nature of value co-creation.	To map the relationship between customer, supplier, and encounter processes in order to develop a framework for customer involvement in co-creation of products.	A strengthened consumer-supplier relationship provides increased product value, a structured market of encounters and interchange, and a central source of highly competitive advantage.	No.	No – although, it is suggested for future research.
Witell et al. (2011)	Mixed method; email surveys and telephone interviews of 244 Swedish firms.	To explore the differences between proactive (capturing customers' spoken and unspoken needs) and more traditional reactive market research techniques in the innovation process.	Differences were found between proactive and reactive market research techniques; proactive customer participation makes a greater contribution to firms' profitability in the innovation process.	No.	No – but the authors distinguish between proactive and reactive TCP.

words, a contingency approach, which assesses potential influencing factors that may determine the value of the two types of customer participation, remains largely missing. This neglect makes replicating customer participation strategies – and transferring successful practices from one product category to the next – challenging.

In summary, research provides evidence of the importance of customer participation aimed at opening firms' boundaries to involve stakeholders in active innovation processes (Laursen & Salter, 2006). Chang and Taylor's (2016, p. 54–55) meta-analysis reveals that 'at the aggregate level, customer participation is significantly positively related to [nearly] all types of new product development performance'. At the core of these research efforts is the argument that customer participation can shape the skilful and fruitful development of firms' products. However, despite long-standing recognition that the means of gathering information from customers are important to the successful development of products – and the recognition of the pivotal role contextual factors such as timing of customer participation can play – studies largely fail to distinguish conceptually between CCP and TCP. It remains unclear, (a) when CCP is superior to TCP in leveraging customer assets and creating value during the product development process, and (b) which type of customer participation managers use, and why. In the following section, we describe the research method we apply to explore these questions.

Method

Research design and theoretical perspective

We adopt a case-study design to examine customer participation in its 'natural setting, employing multiple methods of data collection to gather information from one or a few entities (people, groups, or organisations)' (Benbasat, Goldstein, & Mead, 1987, p. 370). More specifically, we perform a single in-depth case study of multiple sub-units of the same organisation. The aim of this method is not to over-claim any generalisation of the results, but to gain qualitative insights into the studied phenomenon, and thus illustrate how we address the research question (Eisenhardt, 1989; Yin, 1994). Thus, our research design is exploratory and involves the collection of rich data in a real-world organisational environment. Such an approach is appropriate when research examines contemporary events, without the need to control subjects' behaviours and stories (e.g. Yin, 1994).

Indeed, marketing scholars increasingly recognise that managers' behaviours and stories are important to understanding organisational processes (Cayla & Arnould, 2013). To achieve this goal, our project is based on the constructivist paradigm, which is in turn based on the notion that individuals construct their own understanding and knowledge of the world through experiences and reflection on those experiences. While we strive to attain a clear and sincere account of the customer participation phenomenon, we also acknowledge that 'no construction is or can be incontrovertibly right' (Guba & Lincoln, 1994, p. 108). Collected data points are thus not regarded as either true or fixed, but 'rather as narratives surfaced in that moment as part of, and in response to, the research process' (McDonald, Oates, Thyne, Timmis, & Carlile, 2015, p. 1058). In the following section, we provide a more detailed account of the nature of our focal company.

Company overview

We present the results of an in-depth case study across five sub-units of a large media brand (henceforth referred to as 'PogruMedia') and their respective product development teams, which in total are responsible for a large number of brands and over 30 different products. The five profit centres include one market research unit specialised in gathering and making sense of customer data for other sub-units (including the four remaining sub-units in our sample). PogruMedia is one of the largest privately held global media companies, with a turnover of over US\$ 2.6 billion and more than 10,000 employees. PogruMedia is involved in magazine and newspaper publishing, television, radio broadcasting, online services and commercial printing. The sub-units comprising our sample are companies mainly involved in magazine publishing of general and special interest brands as well as various online offerings such as brand communities and supporting portals.

Importantly, the five chosen sub-units of our case study regularly gather market insights through business-to-consumer customer participation in innovation. They gather two types of customer knowledge: solution-related knowledge needed to develop products, and problem-related knowledge about needs that firms will face in current or future markets. This unit of analysis is also suitable for our investigation because both CCP and TCP are regularly conducted with a wide range of customers in largely non-technical product developments that do not require customers' expert knowledge, affording us wide access to related activities and personnel involved in these processes.

Technological changes and online communications with customers have significantly disrupted the media and publishing industry (Aral, Dellarocas, & Godes, 2013). As a result, since the inception of the internet, publishers have experimented with engaging audiences through crowdsourcing alongside more traditional market research methods. The production of media content also acts as a suitable proxy for the production of goods, as 'both involve generating and vetting ideas that make one product or piece of media content stand out in a field of competitors' (Brabham, 2013, p. 26). These unique circumstances provide an innovative ecosystem for obtaining insights into collaborative arrangements and contributing to existing theory (Kennedy, Goolsby, & Arnould, 2003).

Modes of inquiry and data collection

A unique feature of our case study is a long-term involvement and direct contact with decision makers in an effort to look for holistic explanations (Goulding, 2005). The first author worked for 4 years at PogruMedia and was exposed to customer participation techniques across various product development teams. Initially, the author was an employee at PogruMedia without acting as a researcher. Subsequently, the author engaged in naturalistic observations to build an account of on-going TCP and CCP techniques. The perspective adopted is thus an active, insider mode of inquiry (henceforth referred to as an 'inside-out' mode of inquiry) to provide unique insights into the management of organisational change, market relationships and micro-politics as they relate to the planning and execution of customer participation.

In essence, instead of a detached 'outside-in' mode of inquiry (comparable to an *etic* description of organisational behaviour), we use a process based on immersion in the organisation to make sense of customer participation (comparable to an *emic*

description of organisational behaviour). In line with research that heralds the advantages of a researcher's insider status and the benefits of closeness between self and the research 'other' (Brannick & Coghlan, 2007), this process is crucial in reaching analytical depth and yielding an authentic account of customer participation in innovation. As we recognise that an outside-in approach is more culturally neutral and in many ways less biased, we balance the inside-out perspective with a more traditional outside-in mode of inquiry. We also engaged two research assistants in the collection and analysis of data to add a more independent perspective and acknowledge the importance to combine and find a balance between the two perspectives. For example, if any differences arose in interpretation during the coding of the data, we discussed these until we achieved agreement. The coding was complete only when we reached consensus on each construct. We therefore effectively forced 100% inter-rater reliability between the co-authors and the research assistants, ensuring consistency.

In [Appendix 1](#), we describe the nature of research engagement, the main inquiry-guiding perspective it belongs to, and its advantages and risks. We also describe how we sought to balance the two modes of inquiry. In addition to using interviews, observations and secondary material (Campbell & Fiske, 1959), we achieved triangulation across researchers in terms of convergence and divergence in interpretation. We also collected additional interview data from market research service providers, external to the firm, to assess a variety of perspectives and further balance the modes of inquiry, strengthen the representativeness of concepts, and 'round off the ... theoretical explanation of the phenomenon under study' (Goulding, 2005, p. 300). The naturalistic and participant observation data collection stages took place for two and a half years (most intensely, however, over a 13-month period), during which we conducted 39 interviews. Not all of these interviews were formal, in-depth, recorded and transcribed, because during the naturalistic and participant observation phases these activities were not always appropriate or conducive to obtaining a rich and authentic account of customer participation processes. Within the five sub-units comprising our sample, we interviewed managers at different levels of seniority, including CEOs and their assistants, along with brand/marketing, advertising, and sales managers as well as the team of market researchers making up the sub-unit specifically concerned with supporting the other profit centres with their customer participation methods. Additionally, we conducted six interviews with the mentioned external market research service providers (see [Appendix 1](#)). Formal in-depth interviews lasted between 45 and 90 min and were recorded and transcribed for analysis.

Data collection followed an evolving sampling plan that was not completely specified a priori. Initially, we planned to conduct an ethnographic study only at the mentioned market research profit centre. However, as data were being collected, we realised that a multiple-case design would allow us to draw more compelling and robust conclusions. This approach is in line with established multi-case design guidelines (e.g. Yin, 1994). Further, since qualitative inquiry is an iterative process – which was even more pronounced given the long-term research involvement – the interview questions changed over time and varied by information source. We also added some questions to explore issues that emerged during the data collection. To increase the reliability and comparability of our findings across different information sources and the studied sub-units, we used a case-study protocol (Yin, 2014). In addition to including an overview of

the study project and field procedures, this protocol involved interview questions that were developed with respect to the outlined research questions and gaps and that were consistently considered when interacting with study participants. Examples of guiding interview questions were as follows: *What are the main differences between your crowdsourced and traditional customer participation methods? What are the main methods (e.g. focus groups, mailings) of each type of customer participation? Under what circumstances should firms choose to engage in one form or the other? Do crowdsourcing methods ever entirely replace traditional ones (and if so, when)?* We stopped collecting data when additional data were unlikely to alter our interpretations.

Data analysis

To organise the gathered data, we engaged in frequent discussions with research assistants and used coding to reduce the data. We imported the transcribed interview data into QSR NVivo 10 to manage, explore and search the transcribed texts and identify common themes, resulting in a more transparent account of our data analysis (Bringer, Johnston, & Brackenridge, 2004). This approach also allowed us to code, search and explore transcribed interviews and compare the data with data gathered from informal interactions, as well as observations and secondary material. We filtered the data mainly for insights relating to firms' CCP and TCP processes to help us increase our understanding of the customer participation phenomenon and its value determinants.

We read the transcripts repeatedly and identified concepts from distinct events in the data. We conducted open coding, where the text is scrutinised and broken apart to make sense of the data. NVivo helped us with this process through nodes (i.e. storage areas for references to coded text) that link data to the study's research questions and objectives. Initially, given the lack of value determinants in prior literature, we explored the data with broad concepts such as 'hurdles' and 'facilitators' of customer participation techniques in mind. Over time, our data allowed us to break these concepts down into more specific categories, including innovation-specific and firm-specific value determinants (which we found useful throughout the analysis stage). Next, we broke these down into yet more specific categories, which ultimately resulted in a node structure that corresponded with our value determinants (i.e. nonverbal cues, resources and so forth). These nodes allowed us to explore the extent to which specific value determinants affect the success of both CCP and TCP, and their implications. Thus, with each coding cycle, we were further managing, filtering, ordering and highlighting salient features of the data to generate meaningful value determinants (Saldaña, 2015). We applied these coding procedures to each sub-unit and performed a cross-group analysis by comparing and contrasting our findings (Yin, 2014). We applied the same procedure to our field notes. A consistent picture emerged across all companies.

To allow multi-layered interpretations of customer participation techniques to emerge, we analysed complementary and discrepant data collected through the different modes of inquiry and from researchers (Arnould & Wallendorf, 1994). In addition, we assessed data similarities and variations and engaged in inter-researcher questioning of interpretations to establish the trustworthiness of our results. We also sought member cheques and 'evaluated credibility by asking such questions as, Do the conclusions make sense – to informed

researchers, to the informants, to the audience of this research?’ (Kennedy et al., 2003, p. 71). In the following section, we present and discuss the findings of our cross-group analysis.

Findings and discussion

To engage stakeholders in customer participation, market researchers have a broad set of tools that have emerged over time and from various disciplinary origins. We find that the platforms for these tools are an important distinguishing factor and that their relative appropriateness and utility is subject to a number of circumstances. Data show that gathering customer intelligence through technology-empowered CCP, although increasingly heralded in the literature (e.g. Brinker & McLellan, 2014; Nishikawa et al., 2017) is not always appropriate. Our results confirm the notion that – for customer participation in innovation – the ‘rise of digital budgets is [and should] not be merely a migration of spending from traditional to digital media’ (Brinker & McLellan, 2014, p. 84). Instead, customer participation emerges as a process with no dominant way of gathering customer insights. An eclectic fusion of interrelated value determinants surrounding the benefits of CCP and TCP materialises to help us discern how best to generate customer ideas in the innovation process. These value determinants fall into three main firm-based categories: (1) innovation-specific value determinants, (2) firm-specific value determinants and (3) managerial value determinants. Figure 1 provides an overview of CCP and TCP and their respective benefits in the innovation process. High or low scores (represented with a minus and plus sign respectively) for the innovation- and firm-specific value determinants can help decision-makers to assess if CCP or TCP is more desirable for their firm’s purposes and circumstances. For instance, when managers need nonverbal cues or have abundant resources, the high score indicates TCP’s superiority over CCP in the innovation process. Figure 1 also shows two managerial value determinants, which may moderate how much firms benefit from either CCP or TCP; as such, our data suggest that awareness of these factors is crucial in helping managers overcome practices that prevent critically evaluating their judgments, intuitions and preferences about customer participations. Finally, Figure 1 illustrates that the identified value determinants are part of a collective where all factors are inextricably linked; no single factor should determine a firm’s customer participation strategy in the innovation process.

Innovation-specific value determinants

Nonverbal cues

This value determinant refers to managers’ requirement for customers’ nonverbal communication cues (Knapp, Hall, & Horgan, 2012). Our data show that, at present, only TCP can effectively gather nonverbal cues. This finding is important, because our data suggest that nonverbal cues can play a catalytic role in gaining insights from customer participation in the innovation process. The head of market research explains:

For the print titles, we currently ... prefer the traditional way, because we are talking about an object that can be experienced practically.... This is a very important aspect, to not only know what the participants say but also to see how they touch the print, how they flick through pages. Are they convinced by what they are doing there or what they are reading? That’s something you can only see in their gestures and facial expressions.

Figure 1. Overview of value determinants of CCP and TCP and their respective benefits in the innovation process.

This statement illustrates the importance of observing customers' experiences with tangible products and shows how firms seek to supplement verbal accounts with nonverbal cues in an attempt to unveil true product perceptions. These cues are often crucial to elicit subtle, otherwise tacit customer needs. Some informants argue that what is said can be at odds with how customers really feel about a product and its features. The head of the market research team, for instance, further informs us that 'what the subjects are saying and what they are doing in group discussions is often not the same – you see people saying that they like a particular product, but the gestures tell you that they are actually refusing it'.

In addition to noting gestures and facial expressions, market researchers often register and respond to customers' virtually imperceptible and unconscious body movements. Touching, posture, eye movements and vocal behaviour can convey information that is more significant than the words used to describe an innovation – a phenomenon previously studied mainly in the context of service encounters (Gabbott & Hogg, 2000). Indeed, over 50% of the emotional meaning of a message is expressed through the face, posture and gestures, about 40% through vocal tone (Knapp et al., 2012).

In some cases, customers are incapable of articulating reactions to products, especially if these reactions occur below their consciousness (Knapp et al., 2012). During TCP, managers seem highly aware of when this is the case and respond by interpreting customers' facial and body language. CCP, on the other hand, is often less conducive to capturing and 'dealing with the complexity of human emotions and motivations' (Cayla & Arnould, 2013, p.1). A sales manager (responsible for products across two of the five profit centres) confirms this CCP limitation:

We use single participant interviews when we are, for example, trying to assess a particular concept ... and we want to assess deeper, psychological things.... This is only possible in individual interviews, and you find out way more about what is going on underneath.... Once you know how a particular product works psychologically, the next step would be to talk to a group or to work quantitatively.

Some companies have begun to experiment with facial recognition technology to capture respondent reactions to marketing messages in real time, via home webcams. IBM, for example, has created a tool that can capture up to seven emotions every second (*IBM Print Advertising 2013*). But while this technology could become part of future CCP efforts and capture nonverbal cues, our data reveal that on-site participant interviews using TCP convey detail much more effectively than CCP with respect to unveiling cues about customers' underlying product needs.

Commercial sensitivity

This value determinant refers to marketers' need to keep their innovation efforts confidential to maximise incoming and minimise outgoing knowledge spillovers (Alexy, George, & Salter, 2013; Cassiman & Veugelers, 2002). Our data show that the leaking of commercially sensitive information during the innovation process is usually of concern only when the firm engages in CCP.

While managers must often limit the degree to which information can leave the firm, we learn that the managers in our sample are particularly concerned about commercial sensitivity in the development of radically new products, and less apprehensive with respect to market research that aims to improve existing products. The open nature of CCP can pose a threat of distributing confidential information into the public domain and exposing knowledge to other firms. In collecting secondary data such as summaries of TCP results, we are often reminded to keep these strictly confidential, even when data are clearly out of date and no longer of apparent use to competitors. Overall, however, this issue of confidentiality appears to be more relevant for CCP. Participants note the difficulty associated with keeping new product ideas from spreading into the public domain.

This concern is overwhelmingly related to the possibility that competitors could gain insights into research and development. A brand manager clarifies this:

[D]ue to the low entry barriers to the market, we have a big problem of trying to not just give everything away to the competition when we are in an innovation process. And the question [with CCP] is always how public it is. Well, as long as you are in your own panel, it's not that much of a problem, [but] you can never know if there are people in your panel who should not know about what you are doing.

In part, this finding results from the chosen companies' competitive environment and saturated market. New products as well as product modifications are constantly launched both online and off, and as a Pogramedia CEO notes, 'the only way to increase market share is by stealing some piece of the action from competitors'. In response to probing, most managers agree that, in general, CCP is preferable for less confidential (typically existing) product developments and TCP for more confidential (typically radically new) product developments.

In the rare cases that CCP is used for the development of confidential new products, it is done only in the early invention phase of product development. A sales manager points

out that ‘customers’ and firms’ [sharing of] information very early on in the development of a product is much less risky than when we already have a fully developed product concept’. In fact, many interviewees refer to the need for safeguards when conducting CCP. The partial and selective sharing of information with customers emerges as another important strategy to keep product development information confidential. Specifically, to reduce the danger of knowledge expropriation in CCP, managers often separate projects into distinct and mutually complementary components, which make the act of recombination difficult for competitors (see also Ahuja, Lampert, & Novelli, 2013).

Our data also reveal that, to help increase the confidentiality of CCP, other strategies are occasionally used. These strategies include getting potentially crowdsourced co-creating customers to sign a nondisclosure agreement before they receive more detailed information about a problem to solve. Also, a managing director at an external market research service provider tells us how some of his clients insist on a technology that prevents participating individuals from taking screenshots. Overall, this finding is contrary to arguments in the innovation literature promoting the importance of total transparency (e.g. Ogawa & Piller, 2006).

Firm-specific value determinants

Resources

This value determinant refers to firms’ availability of time and financial resources. Although managers’ limitations put bounds on the usefulness of both CCP and traditional market research (Williamson, 2002), our data show that TCP requires more financial and time resources than CCP.

The most frequently noted disadvantage of TCP is its resource-intensive nature. As an example of the resources TCP can require, employees were directly observing shoppers at the point of sale to see whether they would peruse and purchase a new product prototype. A study participant alludes to the huge costs of similar TCP efforts by describing steps in commonly conducted group discussions:

For group discussions, you need to recruit the people, which takes some time, you need research agencies that have spare capacity, for copy tests (which normally require around 200–300 responses) you need even more time for recruiting, and usually we do these tests with two interviews, so the time for data collection alone is more than 3 weeks. Every page of a new or existing magazine is usually colour-coded for the editors to learn more about what the readers wanted both in terms of content and layout. The same is done for competitors, usually me-too products. The lessons learned here are often as valuable as those from our own products.

This account clearly reflects the two resource dimensions typically required for TCP: time and money. For simple group discussions, managers often engage market research agencies for participant recruitment and logistics, because inviting participants to ‘neutral’ ground at research agencies biases participants much less than participating on branded, corporate soil. But despite this outsourcing of TCP, employee time is required to coordinate, be present and observe market research participants ‘through the glass’. Our analysis of agencies’ market research proposals also reveals that in-house observations of products in-use, in addition to interviews, are often made but rarely executed even though scholars describe these methods as a more forward-looking and less reactive form of gathering

customer insights (e.g. Witell et al., 2011). Upon our probing, we discover that such observations are rarely executed – despite their potential to capture latent needs that lie outside the prepared interview guide or questionnaire – because of a perceived drawback of a combination of small sample sizes and high costs involved in this form of TCP.

Importantly, some of the deep customer insights generated through TCP would be inconsequential without the organisation's willingness to invest both time and money to leverage gathered information. Managers continuously refer to the potential benefit deriving from resource-intensive customer interactions. For instance, a CEO notes that only prolonged interactions with customers revealed their propensity to perceive increases in the value of a product from an increasing availability of related products and what she refers to as 'branded worlds'. She explains,

We now create entire branded worlds for our customers. Many customers don't just buy a product anymore, they want to live and experience our brands in their everyday lives. For us this means increasingly creating product extensions, merchandise and so on that increases our readers' brand experience.... Interactions with customers show that many people want more than just a product from us.

Similar brand experiences may lead to the mentioned phenomenon of people customising their experiences through a tailored immersion in the world of (often co-produced) products (Firat et al., 1995).

Task specificity

This value determinant refers to firms' ability (and need) to elicit responses to predetermined, precisely formulated questions, or to set tasks for research purposes that are definite and quantifiable. Task specificity requires not only many customers to participate, but also quantification of insights. We find specific, quantifiable tasks and questions more suitable for CCP than for TCP in the innovation process.

CCP enables the involvement of many people across physical locations. CCP is also typically faster and generates larger amounts of data than TCP (Sawhney et al., 2005). However, our data show that this advantage is subject to managers' ability to translate their open questions and tasks into specific, closed questions with a set range of possible answers that do not require subjects to fully express their opinions and thoughts. An informal talk with a CEO reveals that his editor-in-chief had once experimented with a new layout of a magazine cover (opting for a headshot of two models rather than the usual one). However, this decision temporarily decreased sales significantly and is an example of a scenario that could have been avoided had managers chosen to conduct CCP and engaged a crowd with the specific task of picking their favourite from a choice of two (or more) magazine covers. A sales manager also notes that CCP 'is more beneficial than offline methods if you need to know exact things like *when* readers use the media you are interested in'.

Further, when tasks and problems can be standardised and TCP is adopted, translation errors often occur. A managing director at an external research unit explains that even in traditional computer-assisted telephone interviews, 'errors occur in the translation from the consumer to the operator, which don't occur online'. Our informants largely agree that CCP does not provide deep insights, as the following quotation illustrates:

What is very difficult, what you don't get from ... online is a solid opinion on what other topics might be interesting. The participants can probably tell you that a page is too dark or that they don't like a topic, but to offer more than that is taxing.

Yet, TCP and CCP can be used in combination to complement one another in the innovation process. The head of market research describes an instance where CCP is used only after concrete, specific quantifiable questions have been formulated with the help of TCP. In explaining this approach, he says,

For one project we did ... qualitative research in group discussions, asking what the requirements would be for this product to be accepted, what the participants liked and disliked, what we still have to work on regarding this concept, and then we quantified it. Particular steps of this concept, such as layout alternatives, were then given to an online group to choose from.

The market research team is presently considering using this process to screen ideas, much as Japanese firms screen large numbers of employee suggestions as part of continuous product improvement programmes (Piller & Walcher, 2006). That CCP can also be used for concept developments in this manner is remarkable and illustrates the dynamic and potentially productive nature of this form of customer participation. In particular, when TCP complements CCP to go beyond surface rationalisations and dig deeper into what drives and motivates customers.

Adaptive capacity

This value determinant encompasses firms' capacity to quickly and continuously (1) analyse and interpret data and (2) adapt to gathered information by disseminating and responding to customer-generated market insights (Kohli & Jaworski, 1990). Adaptive capacity describes managers' flexibility in understanding context and recognising and seizing opportunities that emerge from customer-generated information. We find that a firm's adaptive capacity is particularly valuable for CCP; this form of customer participation emerges as inherently more flexible, offering managers the opportunity to adapt and respond to continuously emerging data in a digital environment. This capacity is especially needed when CCP is used to create online products to complement offline magazine content. A marketer explains, 'in addition to inviting the crowd to provide us with information of what they want from us like in the form of a suggestion box, you can understand pretty quickly from introducing a new content service [...] what's performing well for a particular audience and then adapt your content'.

Our data thus suggest that innovation success in the media industry depends on firms' agility and ability to adapt to constantly changing customer preferences. Broadly, this finding is aligned with research efforts that view the innovation process as a complex adaptive system (McCarthy, Tsinopoulos, Allen, & Rose-Anderssen, 2006). Product strategies that include a five-year forecast for income, profit and cash flow often fail to survive the first contact with the customer. Paradoxically, our data show that while most managers are aware of the importance of adapting to changing circumstances (as illustrated above), iterative learning and continuously improving their products, few managers have any formal strategy for doing so.

Our findings also show that CCP has the potential to go beyond the collection of vast amounts of data in response to specific questions (such as in the example of the magazine cover choice provided above) if organisations adopt a more adaptive data management strategy and collect data without a preconceived set of research questions. This view challenges the idea that media companies benefit from highly structured deliberate data management strategies. These strategies can improve the efficiency of the innovation process, but typically reduce its creativity and ability to adapt to changing circumstances (Ahuja et al., 2013).

Further, we find evidence that – to successfully respond and adapt to customer knowledge – PogruMedia must continuously and skilfully visualise findings. The majority of informants agree that to extract the most meaningful information, data need to be presented visually, mainly by means of graphics and charts. This finding aligns with recent research illustrating the importance of simplifying gathered data to deal with the potential for miscommunication and complications that are part of most organisations' operations (Siegel & Etzkorn, 2013). Some managers refer to the value of infographics to communicate information in this way. However, visualisations are effective only if they reveal the patterns in the underlying data. An external data analyst notes:

Visualisations help the human mind to see patterns, only once you see them, more specific questions can be asked in a more targeted manner. Without discovering these patterns first, it won't even occur to you to ask the right question. Only then can you go back and test this statistically and compute a few numbers.

Somewhat surprisingly, this issue is less evident for TCP. For TCP, the potentially long-term discovery is more important to our informants as managers are more intuitively making sense of gathered information. Conversely, part of CCP's ability in offering managers the opportunity to adapt and respond to continuously emerging data is a result of CCP data being more consistently and skilfully visualised than TCP.

Managerial value determinants

Managerial value determinants refer to factors inherently tied to managers' identities, personalities, former experiences with and beliefs about the value of customer participation techniques. Two main managerial value determinants emerge that help advance our understanding of the circumstances when CCP is superior to TCP in the innovation process, and why.

Intuitive judgment

Market learning through customer participation is a complex process, often influenced more by managers' intuitive judgment than by specific guiding principles. Intuitive judgment in market learning allows media managers to collect and analyse customer information quickly and efficiently, in a manner that is often distinct from the orderly logic-based scientific investigation used by areas such as the company's marketing planning, budgeting and human resource practices.

Intuitive judgment often leads to customer participation techniques that are largely used in an ad hoc manner. Managers employ a mixture of knowledge snippets from previous market research, current findings and intuitive knowledge to organise data into

a cohesive narrative. Paradoxically, the less information managers gather, the more confident they seem that they have drawn the right lessons from their interactions with customers. Regardless of whether data are collected through CCP or TCP, we find that many managers live by the adage that consistency rather than completeness of the information matters most. In the interest of speeding up market learning, information that conflicts with a preferred picture or 'story' is often underemphasised or ignored. A manager from an external market research provider confirms,

If you want to hear something specific, well, of course, then you will hear it. Even online stuff [CCP] does not protect us from that. It just gives you the illusion of more objectivity. In fact, I trust traditional methods more; they allow me to develop a natural feeling for what our customers want.

However, we find that this 'natural feeling' can also lead to mistakes. If this feeling is combined with selective perception of TCP-gathered data, managers will often try to reduce complex assessments – including that of product success probabilities – to simpler judgments aimed at supporting their biased views. This finding is closely related to a rich body of literature on motivational and cognitive biases influencing managers' decision-making processes (e.g. Van Knippenberg, Dahlander, Haas, & George, 2015). In the context of customer participations, the confirmation bias proves particularly relevant. The confirmation bias describes the tendency to filter and interpret new information in a manner that makes it compatible with what managers already believe, often resulting in overconfidence in their decisions (Russo & Schoemaker, 1992). In fact, the abovementioned product manager admits that market research can be abused and used the way a drunk uses a lamppost – for support rather than illumination. We find evidence that while CCP cannot eliminate such biased decision-making in the innovation process, it can at least reduce this bias, as the conflict created when CCP research does not align with a manager's intuition leads to deeper thought in the decision-making process (Quinn & Patterson, 2013). Most informants discuss how crowdsourcing helps them to scrutinise collected data more critically and to challenge their assumptions.

Generally, we find intuitive judgments to be useful when the stakes are low, and the costs of an occasional misjudgement are acceptable. For instance, when small disagreements arise among customers attending focus groups (a form of TCP), decision-makers regularly have to quickly (and often intuitively) make a call as to which viewpoint they give more weight.

Prior experience can also bias data collection choices and interpretation. As one consultant puts it:

Sometimes you are biased by your own knowledge; you have x-number of years of experience. You know *how*, or rather you believe you know *how* the market goes, you know what the consumer wants, and you say this is how it's going to go. This obviously influences how you collect data, and even more how you interpret it. So objectivity then goes out of the window.

Thus, experience can act as a disadvantage in making sense of customer insights. No clear picture emerges as to whether managers of one company tend to make intuitive judgments more than other managers. We note, though, that the market research team is more aware of the potential pitfalls of intuitive thought when making non-routine

decisions, and its members reveal that they frequently challenge their judgments through more deliberate analyses of gathered innovation insights.

Managerial discretion

Discretionary choices of individual managers (particularly of influential CEOs and chief editors) emerge as another crucial value determinant in deciding when CCP, TCP or a combination thereof should be employed, and how. The following comment by a senior manager illustrates a critical perception of CCP:

Consumers' favourable rating of a product online does not always translate into a purchase. What matters is the market. And I can get a much better feeling for the market if I can see my target group [through TCP]. Anonymous online research [CCP] is useful in generating some numbers and probabilities, but will always fall short in providing a real feeling for readers. It is often superficial, and online anonymity can compromise how honest and authentic customer interactions with a firm really are.

Similarly, other informants point out that learning from customers in their own natural environments is more effective than learning in artificial online settings. Many respondents report that even when the environment is artificial, customers must 'feel at home'. To achieve this comfort, they offer participants complementary cake, coffee and even alcoholic drinks to relax them and obtain more truthful responses. A former senior manager and consultant also points out that 'once people had a drink or two they changed, they became less vigilant and more creative ... that's when we learned most'. These responses are the result of practices that are suffused with emotions, providing executives with new ways of innovating.

Managerial differences in perception of CCP and TCP, and subsequent discretionary choices, are most pertinent regarding the use and benefits of online brand communities as CCP platforms in innovating products and services. Online brand communities, which are online forums for employees and customers to engage in dialogues about products and customer trends (Gruner et al., 2014), have been studied extensively and heralded as fertile ground for innovation (Füller, Matzler, & Hoppe, 2008; Prahalad & Ramaswamy, 2004). The media industry has been a forerunner in their development as a customer participation platform owing to the industry's long-standing development of these forums where offering content – both online and off – is central to the business model. Even so, we find mixed evidence for online brand communities' usefulness in gathering knowledge from customers.

On the one hand, many managers recognise that members of these communities can help identify trends and generate and screen product ideas. In some cases, online brand communities also facilitate the formation of teams of customers participating in crowdsourcing, because they allow customers to find others with complementary skills anywhere in the world. A conversation with a study participant further reveals the potential of online communities in providing a source of product ideas that can be tapped at any point in time.

[T]his notion of a community is definitely there. [Some of our lifestyle brands] for example have a very lively online community... We also have small panels for the individual current magazines, which editors tap into on demand And this is not only a chance for market

researchers, but gives the editorial staff a chance to check their own work [and do] their own market research on an on-going basis.

Many informants echo this sentiment and are thrilled about the potential of this type of CCP to move beyond a mere cross-sectional snapshot of customer needs and wants. For some decision-makers, the potential value of these communities seems unlimited with small communities for individual brands holding the potential to transform the work of both editors and market researchers. A sales manager, for instance, points out that online brand communities 'definitely rule' if editors learn to engage their readers in regular dialogues instead of observing them 'once in a blue moon and separated by a glass wall'. Online brand communities have the potential to overcome some of CCP's shortcomings and enable managers to continuously and dynamically gather, analyse and respond to customer data.

We also discover that this type of CCP is much more integrated within each product development team. Market researchers and editors are equally quick to point out that online brand communities can change the role external market research plays.

[M]arket research for the existing magazines will in the future be more integrated in the particular editorial office. A clever editor is ... able to build her own little forum, where she gets feedback every day, and knows the people ... so the task of market research is more to moderate such processes and to ensure that they are conducted professionally. It is about enabling the editors to see [what] is important now, or to see that other things are always an issue, and that this [forum] also generates information that you can then take into other market research to recognise new structures or changes.

On the other hand, however, many managers are uncertain of online brand communities' value in the innovation process. A number of managers mention a danger inherent in these communities: users identify too much with the brand at hand. Consequently, members are biased and in some cases think they know better than the editors, whereas in fact, they represent only a minority opinion. Problematically, at present, most managers choose to not invest valuable firm resources in generating a critical number of active online brand community members that goes beyond a minority of brand enthusiasts.

Theoretical and managerial contributions

Our results have significant theoretical implications. We contribute uniquely to the body of literature that seeks to creatively leverage customer insights for innovation (Day, 2014; Jaworski & Kohli, 1993). We explore two behavioural constructs – CCP and TCP – which capture distinct ways of outsourcing a participative activity to current and potential product users in an attempt to leverage their collective intelligence in a firm's innovation process. In brief, while CCP encompasses a range of online activities and captures a firm's attempt to access many customers (a crowd), TCP is a typically remunerated, participative offline activity with selected and physically present customers (or small groups thereof).

CCP is widely heralded as key in improving innovation performance by tapping customers' product-related knowledge. After all, CCP allows managers to gauge what should be developed from a large pool of ideas (e.g. Dell IdeaStorm) and can even assist managers in refining products in the launch stage (e.g. Microsoft Windows beta-testing communities) (Chang & Taylor, 2016). However, contrary to the prevalent view that crowdsourcing is often superior to more traditional methods of gathering customer

knowledge, our data suggest that CCP fails to consistently outperform TCP in generating market insights. This finding supports earlier research findings that 'indicate that a more deliberate approach should be taken to selecting market research techniques' (Witell et al., 2011, p. 142). We also empirically confirm and shed light on the notion that CCP 'is not universally good or bad, but rather a tool whose strength (exploiting large numbers of diverse problem solvers) is a benefit in some contexts but not in others' (Pisano, 2015, p. 53). More broadly, in the context of customer participation in innovation, our data confirm that the rise of digital budgets among firms should not merely 'consist of a migration of spending from traditional to digital media' (Brinker & McLellan, 2014, p. 84).

In addition, our results provide unequivocal evidence that while organisations should be concerned about the quantity and quality of user input, to make the most of external information sources, firms should understand different sense-making processes in place. Therefore, our results not only challenge the prevailing assumption that 'the solution to meeting user needs is to build ever more extensive knowledge about the specific context and purposes of various [product] users' (Stewart & Williams, 2005, p.4) but also suggest a theoretical explanation of why customer participation can fail to stimulate market learning (Cayla & Arnould, 2013; Day, 2011).

Further, studies on the value of customer input in innovation processes typically focus on previously explored resource (Kotabe & Swan, 1995), relationship (Sivadas & Dwyer, 2000), or organisational (Robertson & Gatignon, 1998) characteristics. We provide a novel and more encompassing theoretical framework by inductively exploring a wide range of inextricably linked value determinants that affect CCP and TCP in creating market insights. We discover, for instance, that a firm's adaptive capacity is a significant additional determinant of whether a customer participation strategy can flourish.

Our data also suggest that customer participation is often conducted in an ad hoc and biased manner. On the one hand, this finding confirms previous research results on often hidden flaws in managerial decision-making such as managers' confirmation bias leading to overconfidence in their decisions (e.g. Russo & Schoemaker, 1992). On the other hand, these findings contrast with research results that describe customer participation efforts as typically well-planned and mutually beneficial collaborations that result in deeply engaged communities such as those of the LEGO group's adult user community (e.g. Antorini et al., 2012). We therefore provide an impetus for more research on customer participation techniques in innovation, and an exploration of when and how these techniques can lead to true market insights and previously unknown creativity and innovation (Rosenthal & Capper, 2006).

Our study also makes practical contributions. As CCP and TCP differ markedly in execution, managers should be mindful of when to choose one method over the other or to combine the two. The critical challenge for managers lies not merely in assessing whether customer participation techniques should be adopted (Chang & Taylor, 2016) or in applying the latest technological platform for customer participation purposes (Kohler, Fueller, Matzler, & Stieger, 2011), but in deciding when to use which method (s). Our findings help managers in this endeavour and can significantly improve their learning techniques and ability to create superior customer value. Managers should further be mindful of their own limitations and biases, and work to overcome these, particularly when the stakes are high.

In the belief that the quality of our study depends on its relevance to practice, we previously presented [Figure 1](#) as a practical checklist to guide managers in assimilating customer information into their innovations. High or low scores on each of the five dimensions can help managers decide whether CCP or TCP is more desirable for their firm's purposes and circumstances. While the outlined factors do not directly determine how much firms benefit from either CCP or TCP, awareness of these factors is crucial in helping managers overcome practices that prevent them from critically evaluating their judgments, intuitions and preferences about customer participations. Finally, these value determinants are part of a collective where all factors are inextricably linked. No single factor should determine a firm's customer participation strategy in the innovation process.

Limitations and future research

This study has several limitations that future research should address. For example, the chosen research context likely influenced our findings. Indeed, industry differences influence customer participation practices including their adoption rates (Etgar, 2008), and while we collected a large amount of data across five profit centres, all of this information pertains to one company and one industry. This sample restriction allowed us to control for extraneous sources of variation, but future research should explore the extent to which our findings are generalisable and applicable to different organisations and industries. Although the production of media content provides an innovative ecosystem to discover insights into collaborative arrangements and contribute to existing theory (Kennedy et al., 2003), some value determinants, such as commercial sensitivities, may be more prevalent in the context of continuous development processes typical of the media companies than in other industries. In the media industry, competitors constantly monitor one another and fiercely fight for audiences and advertisers (Dimmick, 2014). Some value determinants will also likely be more important than others, depending on the company and industry that are being studied.

Moreover, while our data reveal a number of circumstances that determine when firms should choose CCP over TCP in the innovation process (and how the two are employed and combined), the identified value determinants are by no means exhaustive. For this reason, future studies could further explore value determinants and their boundary conditions in the context of customer participations.

We also acknowledge limitations in our ability to align findings with previous studies on crowdsourcing; this arises because crowdsourcing continues to take on different forms, and 'depending upon the perspective and definition used, certain initiatives classified by some authors as crowdsourcing are not classified as such by others' (Estellés-Arolas & González-Ladrón-De-Guevara, 2012, p. 189).

Another fruitful avenue of study involves compounding effects: how do the manifold components of customer participation techniques interrelate? Although knowledge recombination is a core function of a firm (Ahuja et al., 2013), limited research examines the strategies that enable firms to recombine their knowledge into new syntheses. Indeed, the more time we spent collecting data, the more clearly we saw that the success of market research depends on myriad ways of learning and multiple

sources of inspiration. For instance, the billionaire owner of Pogramedia sometimes travels by public transport to collect first-hand data about the way people interact with various products on their daily commute. Much research remains to be done regarding the way managers collect and collate various pieces of data to refine the innovation process.

Note

1. We use the connotation of 'customer' to denote both a consumer and a business customer.

Acknowledgments

The authors acknowledge the support of the participants in this research. The authors thank Robin Canniford, Paul Harrigan, Geoffrey Soutar, Elizabeth Anderson, Jan B. Heide, Mirco Sydow, Roberto Minunno, and Christian Homburg for their help.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Appendix 1. Research engagement and dominant mode of inquiry

Research engagement	Researcher	Dominant MOI	Description, benefits, and risks of respective MOI
Naturalistic observations (over a 13 month period)	Principal researcher	Inside-Out	<i>Description.</i> This MOI is characterised by the researcher's immersion in the organisational setting under study. The principal researcher came to know PogruMedia's reality through a high degree of involvement in its everyday events and activities around customer participations.
Participant observations (over a 13 month period)	Principal researcher	Inside-Out	<i>Advantages.</i> The Inside-Out approach allowed the researcher to become experientially and existentially rooted at PogruMedia. This MOI led to an understanding about the nature of PogruMedia: How it worked, how to recognise what was important and related to the studied phenomenon, who best to talk to, what the critical language was, and so forth. Patterns in the data emerged simultaneously with successive experience. On a more basic level, the inquiry from the inside was critical in gaining access to many different key organisational members and secondary material related to customer participations. <i>Risks.</i> The findings could be distorted and influenced by the values and purposes of the principal researcher who had to maintain the distance and objectivity necessary for valid research (see also the fallacy of subjectivism). Indeed, an objective knowledge-generation is likely compromised in this MOI. Many of the taken-for-granted processes of an organisation's culture or day-to-day operations are less likely to be questioned or probed (without the principal researcher even being aware of this). Juggling the demands of two roles – organisational and researcher – can be challenging.
Several interviews with key members of the five sub-units (39 in total)	Principal researcher; research assistant A	Inside-Out and Outside-In	<i>Description.</i> This mixed, or balanced, MOI is characterised by both the researchers' immersion, and detachment in the organisational setting under study. For this type of research engagement, different involved researchers adopted different MOI subject to who collected which type of data, and from what organisation.

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Research engagement	Researcher	Dominant MOI	Description, benefits, and risks of respective MOI
Collection of secondary material (e.g. market research protocols, presentations)	All researchers (including research assistants A and B)	Inside-Out and Outside-In	<p><i>Advantages.</i> The mixed Inside-Out and Outside-In approach allowed for consistencies in interpretations between researchers to emerge, which led to multi-layered interpretations and ultimately more confidence in the patterns that consistently emerged from the data. This led to a more robust construction of propositions. The mixed MOI directly acknowledges that the two modes of inquiry are rarely orthogonal, but benefit from being combined and blended.</p> <p><i>Risks.</i> The different researchers discovered inconsistencies, that is, disagreements on different outcomes of their research and what the data show; to overcome these it was necessary to make an effort to become reflexive and aware of the strengths and limits of different pre-understandings (depending on the MOI) and, in so doing, reconcile any differences in interpretation.</p>
In-depth interviews with external market research service providers (6 in total)	Principal researcher; research assistant A	Outside-In	<p><i>Description.</i> This MOI is characterised by the researchers' detachment from the organisational setting under study. For this type of research engagement, the researchers were experientially committed to academia (not PogruMedia) and only briefly and superficially involved in the subject organisations.</p> <p><i>Advantages:</i> The outside researchers were, in many instances, less prone to assume and probe more because they were ignorant of the many taken-for-granted tacit understandings of different external organisational members. The Outside-In approach allowed the researchers to further balance the substantive emotional investment of the principal researcher at PogruMedia. A more distant and objective scientific inquiry is possible under this MOI where premature conceptualisation and theorising are minimised.</p> <p><i>Risks.</i> The findings are less detailed than those obtained from the principal organisation under study. Although not necessary for the purposes of this study, it was difficult to acquire in-depth knowledge of what these organisations are 'really like'.</p>

MOI = Mode of inquiry. For a more detailed review of the two modes of inquiry see Brannick and Coghlan (2007).