



# A meta-analysis of the relationship between customer participation and brand outcomes

Vinicius Antonio Machado Nardi<sup>a,\*</sup>, William Carvalho Jardim<sup>b</sup>, Wagner Júnior Ladeira<sup>c</sup>,  
Fernando Santini<sup>b</sup>

<sup>a</sup> Department of Management, Cruzeiro do Sul University, 13 de maio Street, 1130, Bento Gonçalves, RS 95702-002, Brazil

<sup>b</sup> Department of Management, Unisinos University, Unisinos Av. 950, São Leopoldo, RS 93022-750, Brazil

<sup>c</sup> Department of Management, Unisinos University, Brazil

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## ABSTRACT

Interest in the relationship between customer participation and brand outcomes has increased over the past few decades. However, research in this field has generated diverse and conflicting results. To study this diversity, in this meta-analysis, we converted and analyzed the effect sizes from 135 studies. We focused on common phenomena that have been analyzed in isolation. A model was created and analyzed through meta-analytic structural equation modeling (MASEM). Our results indicate that customers with a high propensity to trust have high levels of participation. Conversely, customer participation can promote brand outcomes, such as brand satisfaction, brand loyalty and brand performance. Our findings indicate that for these customer participation strategies to be more efficient, they should be based on cocreation actions, which generate the perception of value in customers and are aimed at customers in countries with a greater sense of collectivity.

## 1. Introduction

Customer participation is a driver of marketing practice, and there is a high commitment of resources aimed at increasing brand value (France, Merrilees, & Miller, 2015; Vargo & Lusch, 2016). Companies such as DHL, Unilever, Adidas, Skype, Procter & Gamble, Google, Peugeot, Volvo and Microsoft have taken a range of actions, from involvement in virtual communities (Hsieh & Chang, 2004; Nambisan & Baron, 2009) to the combined brand-customer development of new products and services (Kennedy, 2017). Over the last few years, almost all businesses have become involved with brand-customer relationships, especially through social media platforms. According to the Harvard Business Review, in 2018, over 90% of medium and large businesses used social media, with a global investment in social media of approximately \$31 billion (Quesenberry, 2018). Similarly, companies expect to increase that investment by approximately 62% in the next five years, when it is estimated that approximately 49% of the world's total population will use social platforms (Digital Report, 2020).

The effect of customer participation on the brand value and the managerial importance of generating customer participation, especially by social media, has been widely researched but remains unclear. On

the one hand, researchers are still searching for the drivers of customer participation and its effect on brand performance across different communities, industries or product categories (Gong, 2018). Additionally, the stakeholder-oriented perspective of brand management reveals the complexity of the dynamics between companies, brands and multiple actors, shedding light on the significance of customers in this context (Essamri, McKechnie, & Winklhofer, 2019). The topic of participation is increasingly discussed within different scopes, definitions and contexts (Pralhad & Ramaswamy, 2004).

Managers, on the other hand, live with a dilemma: the payoff for customer-participation practices can be slow in a context that demands faster and faster results. The challenge is to create a supportive organizational environment for customer participation and to understand the outcomes of these relationships (i.e., brand satisfaction, future purchasing intention and brand connection). In fact, asking customers for feedback and having a system to deal with these answers effectively is still a challenge (Merlo, Eisingerich, & Aub, 2014)

Customer participation positively influences customer satisfaction and increases the perception of having received higher-quality services (Yim, Chan, & Lam, 2012). However, preliminary research demonstrates that customer participation negatively affects quality evaluations and repurchase intentions (Revilla-Camacho, Vega-Vazquez &

\* Corresponding author.

E-mail addresses: [vinicius.nardi@fsg.edu.br](mailto:vinicius.nardi@fsg.edu.br) (V.A.M. Nardi), [wladeira@unisinos.br](mailto:wladeira@unisinos.br) (W.J. Ladeira).

Cossio-Silva, 2015; Aucouturier, Fujita, & Sumikura, 2015). Finally, a neutral relationship was found between customer participation and company profitability (Zhang & Joglekar, 2016). The heterogeneity of results leads to difficulties in defining the best organizational strategy. This generates uncertainty for organizational decision-making. Currently, there is a gap in the literature with respect to this area of marketing.

This leads to the following research questions from a managerial and a theoretical perspective. What is the impact of antecedents of customer participation on brand outcomes? How can we build customer participation? How can customer participation be stimulated, and what is the impact of customer participation on brand outcomes (brand satisfaction, brand loyalty and brand performance)? Can different approaches (theoretical, methodological and cultural) influence the relationship between customer participation and brand outcomes? Can these different contexts explain the conflicting findings through the estimation of the population-level effect of this relationship?

To answer these questions, this study aims to develop a framework for brand management and customer participation to investigate the interplay between antecedents of customer participation (expected benefits, customer trust and involvement of customers) (Fang, Palmatier, & Evans, 2008; Brodie, Ilic, Juric, & Hollebeek, 2013) and their effect on brand outcomes (brand satisfaction, brand loyalty and brand performance). More specifically, a meta-analysis is proposed to draw definitive, quantitative conclusions about the relationship between customer participation and brand outcomes. In addition, the impact of expected benefits, involvement of customers and customer trust on customer participation is calculated. Synchronically, the impact of consequences of customer participation, such as brand satisfaction, brand loyalty and brand performance, is assessed. Finally, the convergence or divergence of customer participation relationships across different settings is examined. This paper will give a detailed overview of the results in recent years, using theoretical moderators (customer participation versus cocreation versus coproduction), methodological moderators (objective versus subjective measures of brand outcome) and cultural moderators (high versus low levels of individualism).

The paper addresses key gaps in the literature. Our approach has the following specific objectives. First, we conduct a meta-analysis to reconcile inconsistencies found in primary studies. Second, this study introduces a framework that integrates the results from previous research to develop a coherent and comprehensive picture of the interplay between customer participation and brand management. Third, this framework is tested through meta-analytic structural equation modeling (MASEM). This technique allows us to test multiple relationships in a single multivariate model while maintaining the power of meta-analysis to aggregate results from existing research (Bergh et al., 2016). Our fourth objective is to provide insight that advances both theoretical and conceptual knowledge of customer participation/brand management interplay. We describe the direct effects of customer participation on three brand outcomes: satisfaction, loyalty and performance. These factors are recognized as a basis from which to develop a long-term relationship between brands and customers and to ensure the sustainability and growth of this relationship. Finally, this research investigates possible sources of the heterogeneity seen in the preliminary studies. Our results show the source of preliminary divergences based on an analysis of theoretical moderators (type of customer participation), methodological moderators (measurement of brand performance) and cultural moderators (relative to the level of individualism in the original country that can explain the heterogeneity of participation in collectivistic acts with the brand).

## 2. Conceptual background

The use of customer participation as an active element in the generation of value derives from primary changes in the customer role

assigned by the company; this phenomenon has been studied from the perspective of service-dominant logic (S-DL) (Vargo & Lusch, 2004). In this study, customer participation is taken as the motivated interaction between a company and a customer for coproduction, cocreation or participation in brand communities (Dong & Sivakumar, 2017). Customer participation is no longer thought of as a punctual element but as a continuous process capable of generating positive outcomes. In this sense, organizations have changed the “make for the customer” model by aligning strategies for the “doing with the customers” model (Wind & Rangaswamy, 2000). Preliminary studies show the relevance of these actions, especially in obtaining market inputs that help managers develop new experiences and reduce risk (Ind, 2014).

Theoretical development demonstrates the stakeholder role in the social process that builds brand value. While it is recognized that legal brand ownership is the domain of the company, multiple actors have emotional ownership of corporate brands (Balmer, 2012). The organic view of the brand (Iglesias, Ind, & Alfaro, 2013) highlights the relevance of multiple actors in the cocreation of brand value and the need for companies to adapt their practices and leadership style to manage a process beyond their control. In this way, customer interactions with the brand, which are the main source of brand value cocreation (Iglesias et al., 2013), are strongly linked with building long-term relationships. Customer participation, for example, can mitigate the gap between company brand promises (its vision, culture and image) and stakeholder expectations (Anisimova, 2010).

Understanding the effects of customer participation on brand outcomes is an important topic in this arena. The main elements that directly relate to the central construct of this study are discussed below. Fig. 1 shows the empirical theoretical model analyzed in this paper.

To elaborate the conceptual background, a systematic review was carried out using constructs with similar definitions that operate in similar ways with similar names. Thus, we used a single construct definition to code the existing research. This procedure is very common in meta-analyses (e.g., Palmatier, Dant, Grewal, & Evans, 2006). Table 1 presents the antecedents, consequences and mediator constructs inserted in the theoretical model, conceptual definitions, common alliances/definitions and representative papers used in this study.

### 2.1. Expected benefits and the Involvement of Customers

The involvement of customers can be understood through similarities in individuals' motivation in terms of a specific object. For example, someone experiencing high levels of customer satisfaction has high turnout (Kelley, Donnelly, & Skinner, 1990). Similarly, expected benefits derived through cognitive, social integrative and hedonic advantages (Verhagen, Swen, Feldberg, & Merikivi, 2015) are associated with the ability to enhance confidence and status, build a reputation, and realize self-efficacy (Verhagen et al., 2015). In this way, expected benefits, i.e., the perception of gain (enjoyment, economic, affective or emotional), are an important driver of customer involvement because they can boost enthusiasm for the brand and increase interaction. Thus, higher levels of expected benefits are related to customer involvement (Fang et al., 2008).

Mechanisms to increase expected benefits have been widely used by managers to capture customer attention and increase the perceived value derived from service/product consumption. It is therefore predicted that expected benefits promote positive results for customer involvement (Vargo & Lusch, 2004; Brodie et al., 2013). Therefore, we propose the following hypothesis.

**Hypothesis 1.** Expected benefits positively affect the involvement of customers.

### 2.2. Customer trust, involvement of customers and customer participation

Research has demonstrated a direct relationship between customer

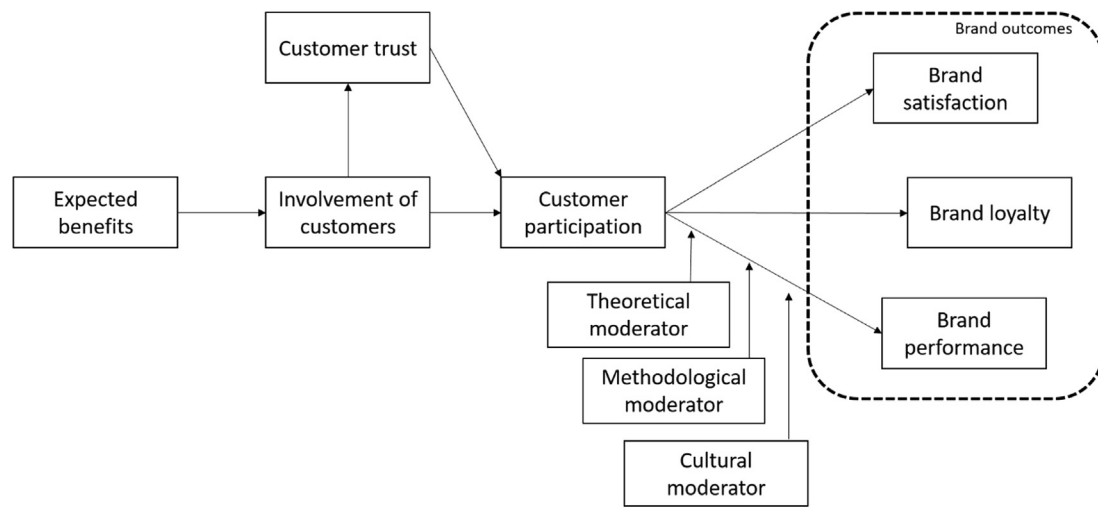


Fig. 1. Theoretical model.

involvement and active customer participation (Brodie et al., 2013; Casalo, Flavian, & Guinaliu, 2007; France et al., 2015). These studies found that greater customer involvement is a consequence of fulfilling customer expectations (Ind, Fuller & Trevail, 2012). When they realize the relevance of the brand, individuals naturally tend to recommend it and actively participate in building its value (Pihl, 2013).

Customer involvement is cast in an information-processing role, which generates an increase in participation (Brodie et al., 2013). For example, in the case of new product/service development, managers must be attentive because customer involvement influences participation, causing companies to generate more products and services than their competitors (Song & Adams, 1993). Customer participation is accounted for in terms of involvement that may occur through conversational exchanges (Lundkvist & Yakhlef, 2004).

It is believed that the relationship between involvement and participation is stronger when the customer is in a trust state (Brodie et al., 2013). Customer trust is understood as a psychological state in which an individual decides to believe the behavior of others and ignore possible vulnerabilities (Sirdeshmukh, Singh, & Sabol, 2002). Earlier research has shown that customer involvement leads to more customer participation, resulting in more trust and greater purchasing intentions (Casalo et al., 2007; Dabholkar & Sheng, 2012).

It is known that mechanisms exist that convert customer trust into value and loyalty via relational exchanges. These mechanisms mediate

the effect of management policies and practices, thereby increasing participation (Sirdeshmukh et al., 2002). The dynamic nature of customer involvement has been shown to emerge at different levels of intensity over time, thus reflecting distinct participation states. It is possible that customer trust can mediate this relationship. In line with previous findings on S-DL, customer participation derived from the perception of socially integrative benefits is related to the strengthening of ties (Nambisan & Baron, 2009). It is expected that the creation and maintenance of these ties are affected by mutual confidence in the relationship. Therefore, we propose the following hypothesis.

**Hypothesis 2.** Customer trust mediates the relationship between the involvement of customers and customer participation.

### 2.3. Customer participation and brand outcomes

The customer’s relevance in the creation of brand value is recognized. Through their experience with the brand, customers not only create individual value but also influence how others will perceive the brand (France et al., 2015). In particular, customer participation affects different forms of brand-generated value (Manchanda, Packard, & Pattabhiramaiah, 2015) related to financial and nonfinancial outcomes (Chaudhuri & Holbrook, 2002). In the specific case of our meta-analysis, the literature review indicated three possible outcomes related to

Table 1  
Constructs definitions, alliances and representative studies.

Construct	Definition	Common alliances	Representative papers
<b>Antecedents</b>			
Expected benefits	The customer's perception of the future benefits that will derive from their participation.	Anticipated benefits; Social Interactive Benefits; Cognitive benefits; Hedonic benefits; Emotional benefits	Ashley, Noble, Donthu, and Lemon (2011), Yeh (2016)
Involvement of customers	The brand level of concern and attention for customers	Consumer involvement; Brand involvement; Consumer Engagement; Brand Engagement	Ashley et al. (2011)
<b>Consequents</b>			
Brand satisfaction	The difference found by the consumer in relation to the brand's performance in relation to its preliminary expectations, perceived after its interaction.	Customer satisfaction	Heidenreich, Wittkowski, Handrich, and Falk (2015)
Brand loyalty	The result of psychological processes of loyalty to a brand expressed in behavioral manifestations that keep it preferable to another.	Affective commitment; Customer loyalty; Customer commitment	Atakan et al. (2014)
Brand Performance	The calculation of the results obtained by a brand in a market, compared to its competitors.	Firm performance; Sales performance; Comparative performance; Financial performance	Kohtamaki and Partanen (2016)
<b>Mediator</b>			
Customer trust	The customer's subjective belief that the brand will fulfill its obligations.	Brand trust; Trust in brand community	Chu and Kim (2011)

**Table 2**  
Moderators analyzed in the meta-analysis.

<i>Theoretical moderator</i>	
Description	Coding
The concept used in the original article to analyze the brand vs customer interaction.	0 = Customer participation 1 = Co-creation 2 = Co-production
<i>Methodological moderator</i>	
Description	Coding
The dependent variable used in the original study to measure the brand performance.	0 = Objective 1 = Subjective
<i>Cultural moderator</i>	
Description	Coding
The individualism level of the country analyzed in the original study	0 = Low level of individualism 1 = High level of individualism

brand value: brand satisfaction, brand loyalty and brand performance.

The first outcome is brand satisfaction. Customer satisfaction is the level of satisfaction with a product or service. A customer's participation can have a direct impact on his or her satisfaction and can vary depending on the level of participation in the creation/production (Kellogg, Youngdahl, & Bowen, 1997). Customers that participate in the company process are more likely to report higher levels of role clarity and are more likely to be satisfied than those who do not participate. This can be justified because social exchange can occur through suggestions and helpful comments that benefit both firms and customers and increase the perceived value. In line with previous findings on S-DL, customer participation can increase brand value perception; therefore, it is expected that increasing customer participation can positively affect customer satisfaction. Thus, we propose the following hypothesis.

**Hypothesis 3.** Customer participation positively affects brand satisfaction.

Customer loyalty relates to the brand rather than to a specific product or service. Customers choose brands that are consistent with their perceived self-image, which is an enhancement of their loyalty (Ruane & Wallace, 2015). Interaction with the brand can lead to predictable and positive affective, cognitive and behavioral outcomes for customers (Holland & Baker, 2001). These are decisive factors in changing customers' perceptions of the brand (Bagozzi & Dholakia, 2006), and as a consequence, brand loyalty will increase (Holland & Baker, 2001).

An example of participation may be the use of "likes" on Facebook brand pages. It has been found that participation in terms of the overall number of "likes" and friends' "likes" on Facebook brand pages influences brand loyalty (Phua & Ahn, 2016). In this context, affectual bonds and social communion generated by participation in brand-customer relations might be important in generating brand loyalty (Bagozzi & Dholakia, 2006). Therefore, we propose the following hypothesis.

**Hypothesis 4.** Customer participation positively affects brand loyalty.

Despite being widely studied (Chang, Wang, & Arnett, 2018; Kennedy, 2017), the relationship between customer participation and brand performance is not fully understood. The divergent results from preliminary studies range from very positive effects (Kennedy, 2017) to negative effects, which are recognized as the dark side of customer participation (Meuter, Bitner, Ostrom, & Brown, 2005). Brands are recognized as a firm's resources (Aaker, 1996) and, according to signaling theory (Stiglitz, 1987), they are able to signal organizational strategies regarding the firm's market positioning (Erdem & Swait, 1998). In this way, brands affect customer s' perceptions by boosting customer confidence and reducing decision costs. It is expected that increased customer participation can strengthen positive brand awareness and that

this can boost company performance by providing a source of sustainable competitive advantage (Sharma, Davcik, & Pillai, 2016).

We use a preliminary review of the literature to identify the main consequences of brand performance. Thus, we aggregate common measures in large customer panel operators (e.g., market share, penetration, intention to purchase, positive word of mouth or switching) (Ehrenberg, Uncles, & Goodhardt, 2004) with subjective, long-term aspects (e.g., perceived quality and perceived value of the brand) (Atakan, Bagozzi, & Yoon, 2014).

The creation of mechanisms to increase customer participation with a brand is common (Hsieh & Chang, 2016; Troye & Supphellen, 2012). It is expected that customer participation actions promote positive results for brand performance regardless of the form of its measurement. Therefore, we propose the following hypothesis.

**Hypothesis 5.** Customer participation positively affects brand performance.

#### 2.4. Possible moderators of the relationship between customer participation and brand performance

The relationship between customer participation and brand performance can be influenced by other conditions. The possible moderators can be grouped into three categories: theoretical, methodological and cultural. Table 2 demonstrates how the moderators have been segmented and structured.

The theoretical moderator analyzed the effects of different research approaches employed to assess the marketing practices used to generate customer participation, as many of these circumstances have been noted in the literature (Dong & Sivakumar, 2017). The theoretical construction of customer participation used in our paper is supported by the studies by Dong and Sivakumar (2017). These authors suggested that the concept of customer participation originates from different approaches (cocreation, coproduction and customer participation) used in previous research. These approaches are distinct. However, Dong and Sivakumar (2017) propose the unification of concepts around the term customer participation.

Cocreation is a concept related to the activity that occurs when multiple actors interact and create value through networks related to the use/consumption stage (Lusch & Vargo, 2006; Vallaster & Von Wallpach, 2013). Coproduction is a subordinate concept that can generate cocreation value but occurs in the production phase before consumption (Etgar, 2008). Finally, while customer participation is recognized as an integrative concept (Dong & Sivakumar, 2017), it is used in the literature to refer to the interactions in brand communities (Bagozzi & Dholakia, 2006; Wang, Ma, & Li, 2015). In this way, heterogeneous results were identified in earlier research. We found a strong positive effect of cocreation on brand performance (Hsieh & Chang, 2016; Kennedy, 2017) and a negative effect of cocreation on coproduction relationships (Dong, 2015; Troye & Supphellen, 2012).

Therefore, it is expected that the effects on brand performance will be heterogeneous because they involve interactions that occur in different contexts (production, consumption and communities). This results from the different output and levels of engagement that the customer has with the brand and with other stakeholders. For example, coproduction actions tend to occur in an operational way, and as a rule, they include a one-way interaction between the brand and the customer. On the other hand, customer participation presupposes multiple interactions that involve not only brand interactions but also the advocacy for or criticism of a group of individuals. Finally, in the literature, cocreation is linked with the continuous process that generates value for the brand. Therefore, we propose the following hypothesis.

**Hypothesis 6a.** The effects of customer participation on brand performance are different for the concepts of cocreation, customer participation and coproduction.

The methodological moderator is based on the dependent variable used in the original study to evaluate brand performance. However, brand performance is a broad concept that has been measured with different approaches. Some researchers used objective brand performance metrics that translate direct effects, measurable in the short and medium term, of customer participation in brand performance, such as sales volume, market share and relative price (Chaudhuri & Holbrook, 2002). In contrast, some investigations used subjective measures that are more related to long-term effects, such as perceived quality and value (Troye & Supphellen, 2012) or the perceived value of the brand (Dong, 2015). In both cases, multiple levels of analysis were used; these factors are not considered in our analysis.

Preliminary studies have indicated strong positive effects of customer participation on subjective performance measures (Yim et al., 2012), while the observed relationships between customer participation and objective measures have ranged from weakly positive (Griffith & Lee, 2016; Kohtamaki & Partanen, 2016) to negative (Meuter et al., 2005).

Customer participation is designed to increase results and strengthen the long-term bonds between brand and customer (Vargo & Lusch, 2004). In this sense, it is expected that subjective aspects will be more affected than objective aspects. Therefore, we propose the following hypothesis.

**Hypothesis 6b.** The effects of customer participation on brand performance are different for objective and subjective measures.

Finally, the cultural moderator refers to the degree of individualism in the country evaluated in the original study. This indicator measures the degree to which people are concerned about themselves (de Mooij & Hofstede, 2010). This is taken as a demonstration of the strength of existing ties in a given society (Hofstede, 2011). In individualistic cultures, individuals have more fragile relationships with groups. In collectivist cultures, social relationships are stronger, providing greater support for the individual while demanding greater commitment to the group (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). Preliminary studies examined the effect of customer participation on brand performance in individualistic countries. Some studies found strong negative effects (Atakan et al., 2014; Zhang & Joglekar, 2016), some found neutral effects (Sichtmann, von Selasinsky, & Diamantopoulos, 2011), and some found weak positive effects (Kohtamaki & Partanen, 2016). On the other hand, studies carried out in countries with low levels of individualism showed strong positive effects (Hsieh & Hsieh, 2015). We expect that customers with low levels of individualism would value customer participation actions more highly. This would have marked effects on brand performance. Thus, we propose the following hypothesis.

**Hypothesis 6c.** The effects of customer participation on brand performance are different between customers with low and high levels of individualism.

### 3. Method

Meta-analysis is a technique used in bibliographical research for the study of certain phenomena (Hunter & Schmidt, 2004; Lipsey & Wilson, 2001). To avoid article losses, different search techniques have been employed. A combination of keywords was initially used to search different databases: (“customer participation” or “consumer participation” or “co-production” or “co-creation”) and “brand” and (performance or outcome or “brand loyalty” or “brand satisfaction”). It is important to note that this procedure is commonly used in meta-analysis (e.g., Babić Rosario, Sotgiu, De Valck, & Bijmolt, 2016).

The search was performed using six different electronic databases: Web of Science, Ebsco, Google Scholar, Scopus, Emerald and Science Direct. A snowball technique was then applied to article references in order to identify possible losses. Finally, an individual search was

conducted of the leading journals in the marketing field (e.g., *Journal of the Academy Marketing Science*, *Journal of Advertising*, *Journal of Business Research*, *Journal of Consumer Marketing*, *Journal of Marketing*, *Journal of Marketing Research*, *Journal of Retailing*) and marketing conferences (e.g., Consumer Research Conference, Academy of Marketing Science Conference, European Marketing Academy Conference, and Global Marketing Conference). The initial data collection was conducted in December 2018, resulting in 550 published and unpublished studies. From this database, we excluded seven duplicate files, 171 theoretical or qualitative articles and research that was not relevant to this study (i.e., 234 articles not presenting statistical data or presenting insufficient statistics for the conversion of effect size, such as ARIMA or econometric equations). After the exclusions, the final sample consisted of 135 articles. In appendix A, we present all the studies used in this meta-analysis.

#### 3.1. Coding process and methods of manipulating data

In the coding process, we followed a procedure suggested by Rust and Cooil (1994). The procedure used for the data extraction followed previous research in meta-analyses (Kim & Peterson, 2017; Babić Rosario et al., 2016). The data encoding was performed by two researchers with a background in marketing. The researchers carried out the coding individually. Before beginning this activity, the analytical criteria were extensively discussed among the authors of this study. In addition, for any papers for which there was doubt regarding data extraction, meetings were held with the two evaluators and a third author who served as a judge. The agreement of the codification was 91%.

After the coding process, we performed the data analysis. In this case, we followed suggestions made in previous meta-analytic studies (e.g., Hedges & Olkin, 1985; Babić Rosario et al., 2016). We measured effect sizes using Pearson's correlation coefficient ( $r$ ). For tests that did not provide correlations (e.g., Beta,  $t$ -test,  $f$ -ratios), we converted the results to correlations using formulae suggested by Hunter and Schmidt (2004). Additionally, we corrected the effect sizes by using the reliability of scales and sample sizes, following suggestions by Hedges and Olkin (1985). We applied the random effect sizes as suggested by Hunter and Schmidt (2004).

Next, the theoretical model of antecedents, consequences and mediation were undertaken using meta-analytic structural equation modeling (MASEM). This process combines the techniques of meta-analysis and structural equation modeling (Cheung, 2015; Cheung & Chan, 2005). The MASEM technique is used to perform new meta-analyses and provides effects that control other model variables (Bergh et al., 2016). It is also more robust than the techniques used in the primary studies. This is because MASEM aggregates a correlation matrix derived from different studies that applied diverse methodologies (Cheung, 2015). This procedure is often adopted in meta-analyses (Montazemi & Qahri-Saremi, 2015).

Finally, the moderation analyses were performed using a hierarchical linear meta-analysis (HILMA), which uses a regression-based multivariate format (Geyskens, Krishnan, Steenkamp, & Cunha, 2009) to analyze the variables entered in the model. This technique is also widely used in meta-analytic research (Babić Rosario et al., 2016).

### 4. Results and discussion

The analyzed sample comprised articles published in 69 journals. The growing interest in this theme is evidenced by the increase in related publications during the last five years. These recent publications represent 74.63% of our sample. The range of countries from which data were collected is an important factor in our study. Of the total studies analyzed, a significant number were conducted in the USA (23.91%), Taiwan (10.14%) and China (8.69%).

**Table 3**  
Direct relationships.

Independent variable	Dependent variable	Unstandardized Beta	Error	Critical value	P value	R <sup>2</sup>
<b>Hypothesis 1</b>						
Expected benefits	Involvement of customers	0.365	0.061	6.010	0.000	86%
<b>Hypothesis 2</b>						
Involvement of customers	Customer trust	0.425	0.059	7.197	0.000	82%
Customer trust	Customer participation	0.325	0.062	5.264	0.000	73%
Involvement of customers	Customer participation	0.288	0.062	4.671	0.000	73%
<b>Hypothesis 3</b>						
Customer participation	Brand satisfaction	0.375	0.060	6.201	0.000	86%
<b>Hypothesis 4</b>						
Customer participation	Brand loyalty	0.368	0.061	6.067	0.000	86%
<b>Hypothesis 5</b>						
Customer participation	Brand performance	0.208	0.065	5.339	0.000	99%
<b>Mediating effect - Hypothesis 2: Involvement of customers → customer participation</b>						
Indirect effect		0.426	0.059	7.218	0.000	82%
Direct effect		0.288	0.062	4.671	0.000	73%

#### 4.1. Theoretical model and test of direct relations

The results of the test of direct relationships using MASEM are shown in Table 3. The relationship between expected benefits and the involvement of customers was significant. Expected benefits had a positive relationship with the involvement of customers ( $\beta = 0.365$ ;  $p < .01$ ). This supports hypothesis 1, reinforcing the assumption that higher levels of involvement are related to high expectations of expected benefits (Fang et al., 2008).

A positive and meaningful relationship was predicted to exist between the involvement of customers and customer trust constructs. This prediction was made because customer involvement with the brand can boost customers' perceptions of what to expect from the partnership. This reduces transaction costs and increases confidence in the brand (Dagger & David, 2012). These arguments were confirmed by the positive and significant relationship between the involvement of customers and customer trust ( $\beta = 0.425$ ;  $p < .001$ ) identified in our sample, and this result is in agreement with other research (Jain, Kamboj, Kumar, & Rahman, 2018).

The third relationship evaluated was the propensity for customer trust to positively affect customer participation. Our prediction was aligned with previous investigations that have shown that the central role of trust in the promotion of deeper connections between customers and brands goes beyond simple utility (Hess & Story, 2005). The results from MASEM confirmed these assumptions, as the relationship presented a positive and significant impact ( $\beta = 0.325$ ;  $p < .001$ ). In addition, the theoretical model also predicted a direct relationship between the involvement of customers and customer participation. A significant relationship can be seen in the influence of customer participation ( $\beta = 0.288$ ;  $p < .001$ ).

Regarding the consequences of customer participation, three relationships with the following variables were tested: brand satisfaction, brand loyalty and brand performance. First, the relationship between customer participation and brand satisfaction was significant. Customer participation had a positive relationship with brand satisfaction ( $\beta = 0.375$ ;  $p < .01$ ). This supported hypothesis 3, reinforcing the assumption that customers who participate more often tend to be satisfied. The relationship between customer participation and brand loyalty was also positive and significant ( $\beta = 0.368$ ;  $p < .001$ ). This result indicates that increased brand loyalty is likely to be a consequence of customer participation (Holland & Baker, 2001). Thus, hypothesis 4 was confirmed. Finally, the relationship between customer participation and brand performance was confirmed ( $\beta = 0.208$ ;  $p < .001$ ). This result confirmed hypothesis 5.

#### 4.2. Direct effect mediation models

Table 5 presents the possible mediating effects of customer trust in the relationship between the involvement of customers and customer participation. For the mediation to be tested, it is necessary to have a significant relationship between the mediating variable (e.g., customer trust) and the independent variable (e.g., involvement of customers). In addition, the independent variable (e.g., involvement of customers) must have a significant effect on the dependent variable (e.g., customer participation) when the mediating variable (e.g., customer trust) is not included in the equation. It is also necessary to have a significant relationship between the independent (e.g., involvement of customers) and mediating variables (e.g., customer trust). Finally, the mediation effects will exist if the incorporation of the mediating variable into the model eliminates or weakens the relationship between the independent variable (e.g., involvement of customers) and the dependent variable (e.g., customer participation) (Baron & Kenny, 1986) (see Table 3).

According to the results, the conditions necessary for testing the mediation effects were met (Baron & Kenny, 1986). The effect of customer trust on customer participation was significant ( $\beta = 0.426$ ;  $p < .001$ ), as was the direct effect of the involvement of customers on customer participation ( $\beta = 0.288$ ;  $p < .001$ ) and the direct effect of the involvement of customers on customer trust ( $\beta = 0.425$ ;  $p < .001$ ). The results allowed the mediation test to proceed. After incorporating the construct of customer trust into the model, we observed that the relationship between the involvement of customers and customer participation weakened ( $\beta = 0.288$ ;  $p < .001$ ). Therefore, the results indicated a partial mediation effect. It may be suggested that the positive effect of the involvement of customers on customer participation occurs as a result of customer trust in relational exchanges.

#### 4.3. Analysis of moderating effects

The meta-analytic procedures began with a review and coding of the sample. This generated 137 observations ( $n = 34,585$ ), which related customer participation forms with brand performance measurements. We proceeded to test hypothesis 5 through meta-regression. The results indicated a strong positive relationship ( $\beta = 0.208$ ;  $p < .001$ ). Additionally, the observed heterogeneity ( $I^2 = 97.8$ ;  $Q = 10141.99$ ,  $p > .001$ ) indicated the existence of moderating factors in the results. Thus, possible moderators were evaluated according to the hypotheses presented. Table 4 shows the results of the moderation analysis.

Hypothesis 6a posited that different ways of customer participation would induce different results for brand performance, suggesting that because of greater customer involvement, cocreation actions could lead to more positive results. The moderation tests partially confirmed our hypothesis.

**Table 4**  
Test of effect sizes for and moderating effects.

Summary variable and source	Beta	Mean	K	R <sup>2</sup>
<b>Hypothesis 6a</b>				
Theoretical moderator	0.372**			
Co-creation	1	0.329	26	28%
Co-production	-0.150	0.203	18	
Customer participation	0.053	0.365	29	
<b>Hypothesis 6b</b>				
Methodological moderator	0.244**			
Subjective measure	1	0.408	34	25%
Objective measure	0.229*	0.221	48	
<b>Hypothesis 6c</b>				
Cultural moderator	0.304**			
High individualistic	1	0.270	34	10%
Low individualistic	0.127	0.372	37	

**Note.** Mean = Simple mean of effect size (correlation coefficient); K = number of studies; \*p < .05; \*\*p < .01.

The results showed that the effects of customer participation on brand performance did not change across different concepts (cocreation, customer participation and copromotion). This occurred because the correlation means of the three concepts were not significantly different. Therefore, customer participation actions lead to positive results for brand performance. The results suggest that customer involvement in cocreation actions can boost brand returns. Depending on the phase in which they occur, coproduction actions can minimize the sense of belonging and awaken negative feelings in customers, such as a sense of working for the brand without any return.

Next, we analyzed the possible methodological moderation derived from the nature of the measure used in brand performance (as established in hypothesis 6b). The results demonstrated that the subjective measure ( $M_{\text{subjective}} = 0.408$ ) produced stronger effect sizes in the relationship between customer participation and brand performance than the objective measure ( $M_{\text{objective}} = 0.221$ ). These results reinforce the long-term character of customer participation actions. Although all factors had consistently positive results, customers' perceived value is the most affected aspect. The financial return for the company may be perceived over time as a consequence of the increase in positive signaling perceived by customers.

Finally, hypothesis 6c suggested that the customer participation/brand performance relationship would differ based on the level of individualism in the culture. The results confirmed this hypothesis. In this case, we identified that cultures with low levels of individualism showed stronger effects on the relationship between customer participation and brand performance than those with high levels of individualism ( $M_{\text{low}} = 0.372$ ;  $M_{\text{high}} = 0.270$ ,  $p > .05$ ). This result suggests that attention should be focused on brands in countries where customers' sense of collectivity is greater. Thus, efforts and resources can be better managed to achieve higher returns.

## 5. General discussion

During recent decades, an increasing number of papers have contributed to the analysis of the relationship between customer participation and brand outcomes. This research has tended to focus on brand value (Vargo & Lusch, 2004; Ramaswamy & Ozcan, 2016). Our study offers a comprehensive synthesis of the effects of customer participation on brand outcomes. Therefore, this meta-analysis broadens the focus to provide a deeper reflection on the low level of analysis. We summarized the effects of customer participation on brand outcomes (customer satisfaction, brand loyalty and brand performance) that translate to the value of the brand. Through meta-analytic structural equation modeling, we tested a model that identifies the factors that induce customer participation and demonstrates the consequences. This is significant for understanding the importance of customer participation in brand

formation and sustainability. Our meta-analysis supports theoretical models that explain the relationship between customer participation and brand outcomes. In addition, we tested moderating variables that offer new interpretations of customer participation in the construction of the brand image.

Brand practitioners around the world use customer participation strategies without fully comprehending the real impact of these practices on brand outcomes. This meta-analysis synthesized the results of a large stream of literature that discusses how models of client participation work in practice in different environments. This study provides important insight and a roadmap for future research contributions to the literature. We summarized preliminary findings and highlighted the pathway to generate brand value.

We developed and tested a framework to demonstrate the antecedents of customer participation in the brand domain. To date, there have been few investigations of this topic (France et al., 2015). From our findings, we can see that there is a significant relationship between expected benefits and the involvement of customers. This initial finding indicates that the increase in customer participation depends directly on expected benefits: if there are few expected benefits, customer participation will not occur. This relationship indicates that expected benefits by customers are essential for customer participation (Fang et al., 2008; Manchanda et al., 2015).

In addition, we demonstrated that customer trust partially mediates the relationship between the involvement of customers and customer participation. The incorporation of customer trust into the model as a mediator weakens the relationship between the involvement of customers and customer participation. The mediation analysis provided deeper insight into the relationship between the involvement of customers and the central construct (customer participation). Customer trust was shown to be an important agent in this relationship because it involves different customer perceptions associated with privacy, reputation, security, perception of risk, among other factors (Casalo et al., 2007; Dabholkar & Sheng, 2012). In essence, customers are simply not conducive to relationship exchanges without customer trust.

The findings also provide insight into customer participation and the brand outcomes that lead to optimal customer responses regarding attitudes and possible intentions for future purchases. Customer participation directly influences brand outcomes, such as brand satisfaction, brand loyalty and brand performance. The effects found in the three relationships that involve brand outcomes clearly indicate that there is a positive effect of customer participation on positioning the brand with customers. To optimize brand outcomes, the formulation of a marketing strategy should prioritize the increase in relational exchanges with customers (Chaudhuri & Holbrook, 2002; Phua & Ahn, 2016). Thus, higher levels of customer participation will generate greater brand outcomes.

Our study generated more precise conclusions about the effect of customer participation on brand outcomes than previously published studies. This is because the meta-analysis enabled us to explain the effects of heterogeneity based on published studies. The aim of this study was to analyze the extent of heterogeneity to overcome the shortcomings of measures used in the primary papers regarding the relationship between customer participation and brand performance. Thus, we aimed to identify the degree to which conclusions might be generalized to situations outside those investigated in the primary studies. This meta-analysis contributes to the field of marketing with a set of empirical generalizations resulting from coefficients of the relationships and calculated fail-safe numbers.

The heterogeneity observed among the moderators showed that cocreation actions, classified as participation, generate more than coproduction actions. One explanation for these findings is that the creation experiences that generate customer participation are part of an active and personalized dialogue that takes place in the use/consumption stage (Pralhad & Ramaswamy, 2004; Lusch & Vargo, 2006). Cocreation is aimed at addressing customer-specific idiosyncratic needs

(Kristensson, Matthing, & Johansson, 2008). Coproduction occurs in the production process, which precedes the usage stage (Etgar, 2008). Thus, cocreation can generate stronger relationships between customer participation and brand performance because it is dependent on the unique experiences of each person using the brand.

Another important aspect that was seen to generate heterogeneity in the sample was the measurement of brand performance. Subjective measures demonstrated larger effect sizes between customer participation and brand performance than objective measures. This indicates that the value generated by customer participation tends to be perceived over time. These findings corroborate previous results that identify customer participation as an agent that improves seller-customer relationships in the long term by developing offerings that facilitate the customer's value creation (Chan & Ngai, 2010).

Finally, it was found that the relationship between customer participation and brand performance was greater in countries where the sense of collectivity was greater. In countries with high levels of collectivism, collaboration is internalized by the person, becoming part of one's personality and influencing transactions with the social and physical environment (Soares, Farhangmehr, & Shoham, 2007). In addition, customer participation is conceived in many academic studies as a level of relationship that occurs in the collective environment (Bagozzi & Dholakia, 2006; Kennedy, 2017; Essamri et al., 2019). This is probably the reason that customer participation with orienting devices at the collective level can generate higher levels of brand performance.

### 5.1. Academic and managerial implications

These findings support some academic considerations about the effects of customer participation, many of which have previously been examined only in individual categories or single studies. Our framework can help researchers and managers identify some of the critical aspects of customer involvement and develop better models through empirical research. It provides the possibility of identifying the variables that are tested to varying degrees in the primary models. This meta-analysis combined the aggregated effects of various constructs and showed the strength of the relationship between these inputs (expected benefits, involvement of customers and customer trust) and outputs (brand outcomes). Based on these data, the meta-analysis provides a broad and generalized approach to various models in marketing.

The concept of customer participation in primary studies was analyzed in different scenarios (online communities, social media, online check-in systems, online games, service deliveries, brand communities, social media brands, etc.) with brands from different sectors (food, beverages, transportation, health, accommodation, technology, etc.). Unlike previous studies, this meta-analysis provided an integrated model of the client participation phenomenon, which increased the heterogeneity of the results and provided more precise effect sizes regarding the overall effect of customer participation on brand outcomes.

The results of this meta-analysis suggest that academic research is necessary to investigate the moderating mechanisms that affect the variation in the relationship between customer participation and brand performance. The effect size of this relationship proved to be sensitive to some factors: cultural factors (such as levels of collectivism), the characterization of customer participation, and brand performance typology. When collecting data for customer participation studies, academic researchers must be aware of these variations. This is particularly true if the data include information about cultural factors (distance power and uncertainty avoidance), customer participation (type of environment and type of involvement) and typology of brand performance (short-term versus long-term orientation performance). Research involving these factors is necessary to understand the underlying reason why customer are willing to participate in improving products and services.

This research shows managers that adopting the customer participation approach may be fruitful in enhancing the understanding of the factors that stimulate brand outcomes. In addition, managers should be aware that customers with a high propensity to trust have high participation levels. In this sense, we can say that the most confident customers are those who show higher levels of participation and promote higher levels of brand satisfaction, brand loyalty and brand performance.

A recommendation resulting from these findings is that practitioners implementing customer participation practices should gear practices towards customers with a high propensity to trust. In this sense, the mechanisms of customer involvement may generate different levels of intensity in business-customer interaction. To increase levels of customer involvement, interaction technologies that generate innovation for customers are recommended. In managerial terms, large companies such as Adidas, Google, Skype, Procter & Gamble, Peugeot, Volvo and Microsoft have already operationalized interactions with their customers. This has led to reduced outcomes. It is interesting that the interaction of these brands with customers has been driven by technological tools such as the internet and social networks. These tools present interaction resources at a low cost with great convenience for customers (Nambisan & Baron, 2009).

Customer participation outcomes are a key factor in the relationship of brands with customers through social media. The growth in the representativeness of investments in social media (which currently reaches 13.3% of the marketing budget compared to 3.5% in 2009) increases the relevance of these findings. Managing this relationship is especially important considering that people spend an average of 6 h and 43 min (approximately 40% of the average awake human time) using the Internet (Digital, 2020).

Our findings shed light on the complexity of brand value built in a dynamic interplay between brands and customers. Brands need to develop a structured strategy across all steps in our framework to explicitly demonstrate the benefits of participation for customers, a factor that will increase their involvement in brand life. Our findings can also help managers to see the relevance of strategies that facilitate interaction. This will increase their customer base and improve the return on investment in their relationship marketing efforts. Customer participation is an instrument that will generate positive outcomes for brands.

On a practical level, our findings support the notion that strategies promoting customer participation can play an important role in a firm's performance. For marketing managers, our findings offer both good and bad news. The good news is that managers can now be confident that customer participation will generate higher levels of brand performance. Companies that want to enhance their market knowledge should invest in creating interactive means with customers that can generate learning between customers and companies. This can be through the exchange of ideas in groups, the exposure of common problems and the search for solutions to problems. The bad news is that effectiveness varies, and managers must examine the characteristics of customer participation, typology of brand performance and levels of collectivism. We suggest that for these strategies to be more efficient, they should be based on cocreation actions, which generate the perception of value in customers and are aimed at customers in countries where there is a strong sense of collectivity.

### 5.2. Limitations and future research

Overall, we believe that this paper brings new theoretical and empirical insight to the existing literature. Table 5 provides a summary of indications for future research and possible questions prompted by our main findings.

However, some limitations should be noted. First, our results were limited to the pool of journals that satisfied the selection criteria. Our aim was to understand customer participation in the field of marketing. The scope of the study did not include other areas, such as psychology



**Table 5**  
Future research agenda.

Our Results	Possible academic research questions	Future researches
Expected benefit influences the involvement of customers that leads to higher levels of customer participation.	Would the involvement of customer enhance customer participation only in cases where the customer has high expected benefits?	The proposal is to analyze the effects of the expected benefit on the different mechanisms used to involve consumers. It is assumed that the forms of customer participation can be conditioned to the levels of expected benefit.
Partial mediation effect of Consumer Trust in the relation between Involvement of Customers and Customer Participation	Future research should examine whether it is the involvement of customers a moderator between Consumer Trust and Customer Participation?	A deeper investigation of the impact of Consumer Trust in Customer Participation seems necessary. Since Customer Involvement is an impacting construct for Customer Participation, it could be relevant as a moderator, considering the level of Consumer Trust that exists previously to the consumer.
The relationship between Customer participation and Brand Performance is lower in co-production than in co-creation.	A doubt derived from this result Is the co-production generating a sense of non-monetary return to the consumers?	The study of the effects of co-production paves the way to additional investigations in the area. As long as the co-creation actions generates stronger effects on brand performance, co-production actions should involve more lasting contacts extending the steps of using the product. Thus, consumers involved in co-production experiences could have a greater sense of non-monetary return.
The relationship between customer participation and brand performance is stronger in subjective measures than objective measures.	What is the impact of subjective and objective measures on brand performance in different types of customer participation scenarios?	The purpose is to analyze the subjective and objective measures in brand performance in different types of customer participation scenarios, such as: online communities, social media, Internet service delivery, online product recommendation, among others.
Consumers in cultures with low individualism have high effects sizes in the relationship between customer participation and brand performance.	Could other cultural dimensions influence brand performance in a strategy that involves customer participation?	Future research should examine the effect of other cultural dimensions (uncertainty avoidance, power distance and masculinity-femininity) on customer participation actions that generate brand performance.

and information systems. A second limitation is associated with the high heterogeneity of the studies. Although mitigated by moderators, the significant between-study variance was not eliminated. This suggests that other conditions, such as the type of product or the social context experienced during the primary data collection, can explain some of the heterogeneity. This result highlights the need for research to investigate boundary conditions that better explain the model relations. Third, although we made an effort to include all important papers regarding customer participation, it is possible that we may have failed to include some relevant articles in our meta-analysis. A fourth limitation concerns the relationships analyzed here. Although there are other variables that would help us to understand customer participation, the number of relevant studies is too small to perform meta-analytic structural equation modeling. A further limitation relates to the quantity of qualitative studies (31%), which cannot be used in effect size calculations. Another limitation of this paper concerns the understanding of methodological moderators. The effect size interpretation may have different results based on the difference in stakeholders, such as studies at the customer level or at the organizational level, resulting in a difference in the impact of customer participation on brand outcomes. Finally, there are clear limitations related to the set of studies analyzed. For example, unpublished studies have not been taken into account. This may have led to a bias. There is a need to study contextual factors regarding customer participation and studies measuring the influence of other possible moderators. These studies could provide greater consistency in terms of global effects.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jbusres.2020.06.017>.

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- Vinícius Antonio Machado Nardi.** Associate Professor of Marketing at the Cruzeiro do Sul University and research assistant at Brazilian Agricultural Research Corporation (Embrapa). He has published in international journals in the following areas: food safety, marketing, consumer behavior, visual attention, experimental research, decision making (conscious and unconscious), and persuasion.
- William Carvalho Jardim.** Master student at Unisinos University. He has published in international journals in the following areas: marketing, consumer behavior and visual attention, experimental research.
- Wagner Ladeira.** Associate Professor of Marketing at the Unisinos University. He has more than one hundred articles published in peer-reviewed journals and congresses with emphasis on marketing, unconscious choices, and temporal distance.
- Fernando Santini.** Associate Professor of Marketing at the Unisinos University. He has more than one hundred articles published in peer-reviewed journals and congresses with emphasis on marketing, meta-analysis, consumer behavior and brand relations