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顧客參與之整合模型：前置、中介、調節及結果變數

Toward an Integrative Model of Customer Participation: The
Antecedents, Moderators, and Consequences

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準博士推薦函

本校企業管理學系管理科學博士班研究生阮福庭君在本系修業 04 年，已經完成本系博士班規定之修業課程及論文研究之訓練。

1、在修業課程方面：阮福庭君已修滿 36 學分，其中必修科

目：研究方法、最佳化理論、書報討論等科目，成績及格(請查閱博士班歷年成績)。

2、在論文研究方面：阮福庭君在學期間已完成下列論文：

(1) 博士論文：Toward an Integrative Model of Customer Participation: The Antecedents, Moderators, and Consequences

(2) 學術期刊：. 1. A Perspective of Service-dominant Logic on Customer Participation: A Meta-Analysis Approach.

2. The Antecedents of Dynamic Service Innovation Capabilities: The Moderating Roles of Market Dynamism and Market Orientation

3. Online Shopping Behavior in Electronic Commerce: An Integrative Model from Utilitarian and Hedonic Perspectives

本人認為阮福庭君已完成南華大學企業管理學系管理科學博士班之博士養成教育，符合訓練水準，並具備本校博士學位考試之申請資格，特向博士資格審查小組推薦其初稿，名稱：Toward an Integrative Model of Customer Participation: The Antecedents, Moderators, and Consequences，以參加博士論文口試。

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論文題目：顧客參與之整合模型：前置、中介、調節及結果
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論文摘要內容

顧客參與 (CP) 在服務研究領域是特別吸引注意的議題。CP 可以改善客戶和服務提供者的成果。通過他們的參與，客戶在服務過程中發揮著重要作用。然而，不同的研究從不同的角度調查了 CP 問題，以往的研究大多集中在 CP 的影響因素上，其結果和調節因素有相當程度是被忽視的。過去的研究尚未探索具有多個前因、後果和調節因素的客戶參與的綜合框架。本研究提出顧客參與具有三個重要的前因因素，即公司因素（即服務主導取向）、個人因素（即動機、機會和能力 - MOA）和社會因素（即主觀規範）。本研究還提出，顧客參與對品牌績效和客戶公民行為（即推薦、幫助客戶和提供反饋）具有積極影響。此外，這項研究進一步斷言，參與的感知利益和感知能力將積極調節客戶參與與其後果之間的關係。本研究提出了十個假設。

為保證研究結果的信度和效度，本研究分步驟進行：Meta 分析和問卷調查。在研究一中，通過收集 2005 年至 2020 年與顧客參與相關的研究結果進行後設分析研究。結果顯示，服務主導取向、動機、機會、能力、主觀規範對客戶參與有積極影響，進而影響品牌績效和顧客公民行為。

研究二是採用問卷調查法的定量研究。數據來自使用社群網站（SNS）的 425 位客戶。實證結果表明，服務主導取向、動機、機會、能力、主觀規範都對顧客參與有顯著影響，進而影響品牌結果和顧客公民行為。此外，參與的感知收益和感知能力已成為加強顧客參與對其後果影響的兩個調節因子。

由於之前的研究從未將相關的前因整合到客戶參與主題的綜合模型中，故此結果對於院士進一步驗證研究模型非常有幫助，也可能對專業人士設計和實施他們的服務策略非常有用。

關鍵詞：服務主導取向、MOA 框架、主觀規範、顧客參與、品牌績效、客戶公民行為

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ABSTRACT

Customer participation (CP) has received a special interest in service research. It is one of the most important aspects of services which can improve outcomes for customers and service providers. Through their participation, customers play a significant role on the service process. However, different studies have investigated CP issues from different angles. Most of previous studies have focused on the influential factors of CP, its consequential and moderating factors are largely ignored. Previous studies have yet to explore an integrative framework of customer participation with multiple antecedents, consequences, and moderators. This study proposes that customer participation has three important factors of antecedent which are firm factor (i.e., service-dominant orientation), individual factors (i.e., motivation, opportunity, and ability - MOA), and social factor (i.e., subjective norms). This study also proposes that customer participation has a positive effect on brand outcomes and customer citizenship behaviors (i.e., recommendation, helping customers, and providing feedback). Furthermore, this study further asserted that perceived benefit of participation and perceived ability will positively moderate the relationship between customer participation and its

consequences. Ten hypotheses are proposed in this study.

To assure the reliability and validity of the study results, this study was carried out into steps: Meta-analysis and questionnaire surveys. In the study 1, Meta-analysis study was conducted by collecting the results from 2005 to 2020, which related to customer participation. The results of meta- analysis show that service-dominant orientation, motivation, opportunity, ability, subjective norms have a positive effect on customer participation which further influence on brand outcomes and customer citizenship behaviors.

The study two is a quantitative study using a questionnaire survey approach. Data was obtained from 425 customers who are using social network sites (SNS). The empirically results indicate that service-dominant orientation, motivation, opportunity, ability, subjective norms all have a significant influence on customer participation, which further influences on brand outcomes and customer citizenship behaviors. Furthermore, perceived benefits of participation and perceived ability have served as two of the moderators that strengthen the influence of customer participation on its consequences.

Since previous studies never integrated relevant antecedents into an integrative model for the subject of customer participation, the results are very helpful for academicians to further validate the research model and could also be very useful for professionals to design and implement their service strategies.

***Keywords:* Service-dominant orientation, the MOA framework, subjective norms, customer participation, brand outcomes, customer citizenship behaviors**

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CHAPTER ONE

INTRODUCTION

1.1 Research background and motivation

The Web 2.0 technological revolution has transformed the nature of the huge message interactions, and the continuous growth of e-commerce has forced service providers to pay considerable attention to antecedents and consequences of customer behaviors. As a relatively new medium for business, e-commerce websites have changed the way customers seeking and purchasing products. The development of the internet and other technologies has enabled the development of marvelous social commerce as well as online communities throughout the world. Compared to traditional shopping, online shopping offers some unique advantages to customers. For example, various available product information, widespread selection, no temporal and spatial limitations. Moreover; customers as a medium of transaction, have replaced direct interaction and simplify the transaction process. Nowadays, customers are more interested in creating value and making collaboration in the value co-creation process to build up the relationship between customers and organizations (Zhang, Lu, and Kizildag, 2017). More and more firms and domains use social media as their primary customer participation platforms. Among others, the e-commerce sector is a typical example.

As living in the age of information technology, we are offered the opportunities to engage in communication with others through social media. Social commerce combines customer-oriented computer technologies and new commercial features. Customer is the most crucial in an online environment. The process of customer participation in the online environment starts from accessing social network sites (SNS) through devices, searching and collecting the related information, making product evaluations, and giving feedback of the

product to the network. Customers tend to rate and share information about their knowledge on social networks about the brand.

The new service-dominant logic (S-D logic) in marketing currently focuses on customer participation in creating value (Vargo and Lusch 2008), in which “customers participate as co-producer” to cocreate customized offerings (Grönroos, 2011), and customers play an active role in managing the relationships. Moreover, active communication with customers and co-creation activities are deemed to empower them and make them joyful (Fuller, Muhlbacher, Matzler, and Jawecki, 2009). Customer participation (CP) has been found to boost productivity gains and improve service quality and customer satisfaction (Mathis, Kim, Uysal, Sirgy, and Prebensen, 2016), thereby solidifying the engagement (Tu, Neuhofer, and Viglia, 2018) and customer loyalty toward the brand (Grisseemann and Stokburger-Sauer, 2012; Mathis et al., 2016). It has been argued that co-creation helps organizations gain a competitive advantage and increase profitability (Chathoth, Ungson, Harrington, and Chan, 2016).

Although many previous studies have widely examined the antecedents of CP (Yen et al., 2011; Parrado et al., 2013; Gallan et al., 2013; Wang et al., 2013; Dong et al., 2014; Kang et al., 2014), no study has examined the multiple antecedents of CP at the same time (Mustak et al., 2016). To deepen the knowledge, a holistic view of customer participation is very essential for marketers to design appropriate marketing strategies (Wang et al., 2013; Kang et al., 2014, Mustak et al., 2016). This study attempts to fill the research gap by simultaneously examining multiple antecedents of CP by investigating three factors which are firm, individual, and social factors. This study also attempts to establish an integrative framework of CP which consists of antecedents, mediators, moderators, and consequences of CP. Some of the important motivations of this study are shown below:

First, the firm factor which influences CP is the S-D orientation of a firm (Karpen et al., 2012, 2015). S-D orientation refers to “a co-creation capability, resulting from a firm’s individuated, relational, ethical, empowered, developmental, and concerted interaction capabilities” (Karpen, Bove, and Lukas, 2012, p. 21). S-D logic reflects a firm’s understanding of reciprocal resource integration and meaningful interaction with customers (Hau, 2018; Karpen et al., 2015). Service is a value co-creating process (Vargo and Lusch, 2008), therefore, interaction is an important aspect of marketing effort and value-driving experiences (Prahalad and Ramaswamy, 2004). However, creating a smooth interaction sometimes is not easy. Second, the individual factors which influence CP are motivation, opportunity, and ability (MOA). The MOA theory posits that individual behaviors depend on three elements: motivation, opportunity, and ability (Macinnis, Moorman, and Jaworski, 1991). Although, this theory is applied in many contexts such as human resource management, organizational behavior, marketing, but very few studies developed MOA to predict customer participation in the context of social media. This study intends to apply MOA theory to predict customer participation in the co-creation process of social commerce.

Third, the social factors are also important variables to influence CP. Social media may change customer interaction in the service delivery process, it encourages customers to co-create new services in collaboration with firms by engaging through social media. With the continuing development of social media, firms have to stand good chances to invite customers to co-create new services with them (Sarmah, Kamboj, and Kandampully, 2018). The social reference can help an individual to decide if he/she has little experience (Pahnila and Warsta, 2010). Moreover, previous studies stressed that social reference significantly influences co-create intention, which further leads to participation in the service process (Sarmah et al., 2018; Cheung and To, 2017). Since very few studies have considered the influence of social factors on CP. This study

intends to integrate social factors to evaluate their influences on customer participation.

Furthermore, this study identifies brand outcomes and customer citizenship behaviors as the consequential variables of CP. The first consequential variable of customer participation is brand outcomes. The relationship between customer participation and brand value has been widely studied but still not clear. Scholars are still focused on the drivers of CP and its influence on brand outcomes across different product categories, industries, and communities (Gong, 2018). Moreover, customer participation not only influences customer satisfaction (Yim et al., 2012) but also how they perceived the brand (France et al, 2015), which further leads to brand loyalty and brand trust.

Although customer citizenship behaviors (CCB) have been widely discussed in organizational behaviors, it has rarely been discussed in the context of customer participation. CCB refers to the voluntary behavior which is essential to successful production or useful to the whole service organization (Groth, 2005). Several terms can be used to explain customer citizenship behavior, among others: customer voluntary behavior, customer's voluntary performance, and “extra-role” behaviors of the customer. Ford (1995) suggested that customers who display citizenship behavior may show their commitment to the service organization and report potential protective issues to the employees. This study proposes that CCB which consist of recommendation, helping customers, and providing feedback are the consequences of customer participation.

This study further identified two moderators that can enhance the influence of CP on its consequences, which are the perceived benefit of participation and perceived ability. The perceived benefit of participation is considered as the customers' evaluation of the participation rewards (Meuter et al., 2005). When the perceived benefit of participation in the service delivery

process is high, customers tend to be more willing to participate in the service delivery process. Therefore, it is important to find a good match between what is offered from customer participation and what is the customer's preferences (Dong et al., 2014). Previous studies have shown the moderating effect of perceived benefit of participation that enhances the influence of CP on service quality and customer satisfaction, but the moderating effect of perceived benefit for the influence of CP on CCB has never been identified. This study asserted that if the level of perceived benefit is low, the positive effects of CP on CCB are less to be amplified (Kristof, 1996). Higher service quality will result in higher customer preferences. This study argues that when customers perceived that they will receive more benefits when participating in the delivery process through social network sites, the effect of customer participation on brand outcomes and customer citizenship behaviors will be strengthened.

The second moderator is perceived ability. It is considered as the customer's perceived knowledge and skills that enable them to perform a participation task effectively (Meuter et al., 2005). A higher level of participation demands that customers need to have knowledge and skills (Yim et al., 2012). The higher the ability, the more confident and competent the customers in fulfilling their tasks (Halbesleben and Buckley, 2003). This study argues that when customers perceived that they have enough ability to participate in their task effectively, the effect of customer participation on brand outcomes and customer citizenship behaviors will be strengthened.

In a summary, this study integrates the factors from S-D orientation, MOA model, and subjective norms as antecedents of CP, this study also identified brand outcomes and customer citizenship behaviors as a consequence of CP. Furthermore, perceived benefit of participation and perceived ability are served as moderator variables that influence the relationship between CP and its consequences. To evaluate the role of CP, this

study further investigates the mediating effect of CP for the influence of antecedents on consequences of CP.

1.2 Research objectives

Based on the above discussion, the objective of this study are as follow:

1. To examine the influence of firm, individual, and social factors on customer participation
2. To examine the influence of customer participation on brand outcomes in terms of brand loyalty and brand trust.
3. To examine the influence of customer participation on customer citizenship behaviors in terms of recommendation, providing feedback, and helping other customers.
4. To evaluate the mediating effect of CP on the influence of antecedents on consequences of CP.
5. To investigate the moderating effect of perceived benefit of participation and perceived ability on the relationship between customer participation and its consequences.

1.3 Contribution of this study

Based on the combination of S-D logic, the MOA theory, TPB, and social exchange theory, this dissertation contributes to the literature in five ways. First, this study has examined the multiple antecedents of CP at the same time. Second, a more consistent framework is developed, as it seems to be more applicable to the current. Third, this study contributes to the existent literature regarding the role of customer participation on brand outcomes and customer citizenship behaviors. Fourth, this study simultaneously examines the influence of firm, individual, and social factors on customer participation, which further influences on the brand outcomes and customer citizenship behaviors. Last but not least, this study sheds some light on two moderating variables: perceived

benefits of participation and perceived ability that moderate the effects of perceived benefit of participation and perceived ability on brand outcomes and customer citizenship behaviors.

1.4 Research project and scope

Based on the above research objectives, this study developed the research project and scope as shown in Table 1-1

Table 1-1: Research project and scope

Items	Scope of The Study
Type of the research	The literature review was adopted to build the research hypotheses and framework. Meta-analysis was adopted to confirm the framework. Questionnaires and construct measurements were used to collect empirical data and to test the hypotheses and draw the conclusions
Key issue	This study focuses on identifying the antecedents, mediators, moderators, and consequences of customer participation.
Dependent variables	Brand outcomes and customer citizenship behaviors.
Independent variables	S-D orientation, motivation, opportunity, ability, subjective norms.
Moderator variable	Perceived benefit of participation, and perceived ability.
Main variable	Customer participation
Underlying theory	S-D logic, Motivation- Opportunity-Ability theory, Theory of Planned Behaviors.
Testing location and sample	Customers who participate in the SNS
Analyzed unit	Individual-level
Time frame	Cross-sectional study

Research instruments	<ol style="list-style-type: none"> 1. Meta-analysis: secondary data, statistical analysis instruments by using CMA software. 2. Survey: theory inference, primary data, and statistical analysis instruments by using SPSS 22.0 and PLS 3.0
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Source: The study

1.5 Research procedures

This study consists of six chapters, and the summary for each is as follows:

Chapter 1 described the research background and motivation, research objectives and scope of the study, procedure, and structure of the dissertation.

Chapter 2 presented the literature review, including the evaluation of the theoretical formation and definition of research variables.

Chapter 3 presents the development of research hypotheses, research design, and methodology. The research model was also presented. The research design including (1) meta-analysis and (2) survey was presented. Specifically, the measurement scales, sample plan, data collection, and data analysis procedure for each study were presented in this chapter.

Chapter 4 presents the results of a qualitative study using meta-analysis. The purpose of this study was to ensure the comprehensive research model and the completion of the survey questionnaire items.

Chapter 5 presents the empirical results of the hypotheses testing questionnaire survey. The descriptive analysis, reliability, and validity of the measurement scales and the hypothesis testing were also presented in this chapter.

Chapter 6 presents the conclusion and suggestion of this study. A summary and conclusion of the research findings were presented. The research contribution and implication and the limitation of this study were also presented.

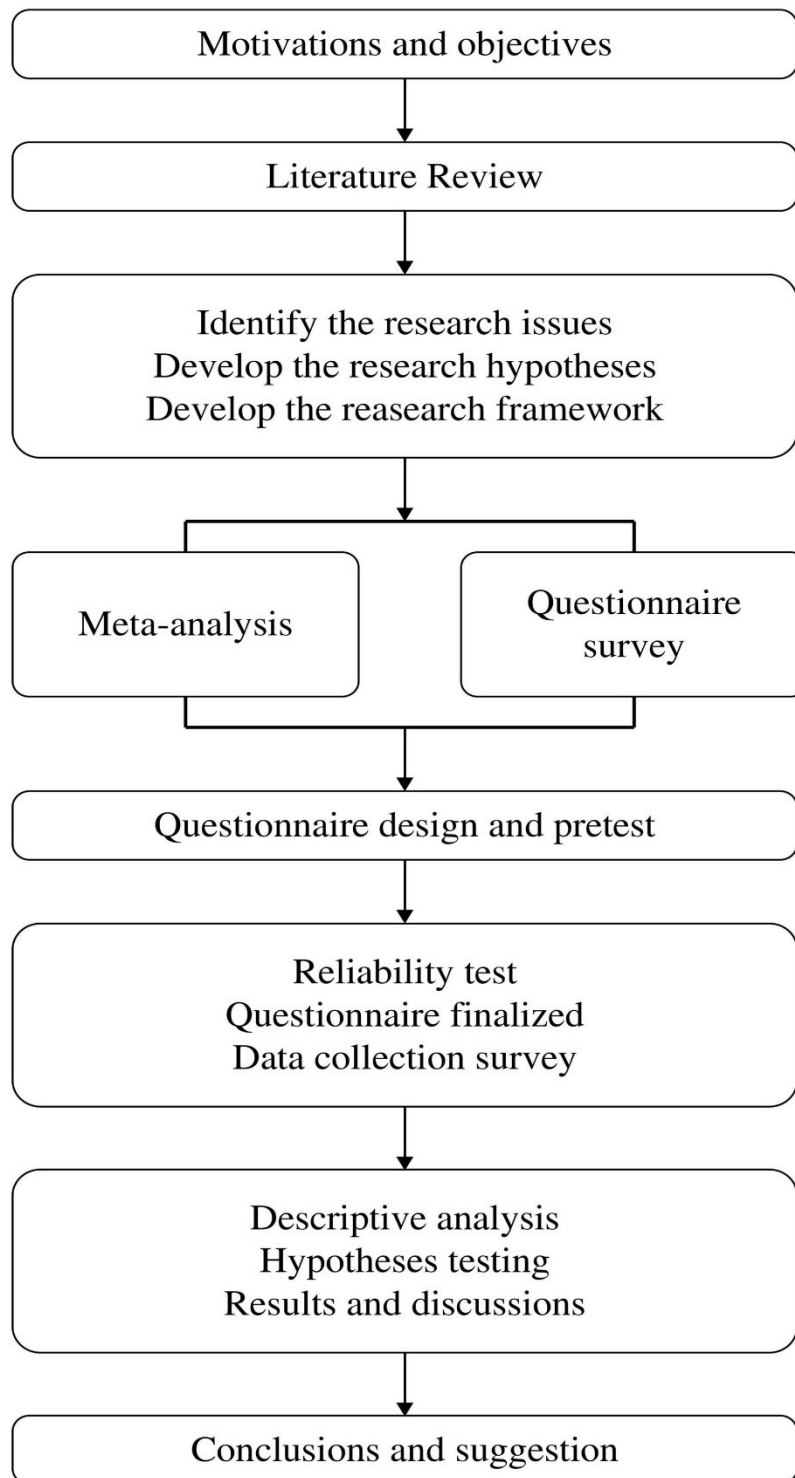


Figure 1-1 The flow chart of this research

CHAPTER TWO

LITERATURE REVIEW

This chapter presents a review of the literature with respect to detailed research constructs definitions. The antecedents, moderators, and consequences of customer participation are also presented.

2.1 Theoretical backgrounds

As a value co-creation between customers and the firms, the market plays an actor depends on and benefits from each other in the process of resource integration activities (Vargo and Lusch, 2008). Karpen et al., (2012) introduced the concept of S-D orientation that enacts S-D logic (Vargo and Lusch, 2008) by enabling firms to co-create value with their network partners. Through interaction with the customer, the role of the firm is to facilitate and enhance these customer experiences (Karpen et al., 2012). Mathis et al., (2016) stressed that participation in the production process of a tangible product can enhance the product value and CP through customer satisfaction with the experience. The firm's motivation should be to support the customer in individual co-creation activities by providing them with the relevant information and necessary resources (Payne et al., 2008).

In this study, service-dominant (S-D) orientation is regarded as one of the most important antecedents of customer participation. S-D orientation was first developed by Karpen, Bove, and Lukas in 2012. It represents a set of strategic capabilities from an S-D logic perspective. Based on S-D logic, strategy is about choosing the best way to facilitate and enhance value co-creation with network partners (e.g., customers, suppliers, etc.) for mutual and long-term benefit (Karpen, Bove, and Lukas, 2012; Karpen et al., 2015). Specifically, S-D orientation refers to “a co-creation capability, resulting from a firm's individuated, relational, ethical, empowered, developmental, and concerted interaction capabilities” (Karpen, Bove, and Lukas, 2012, p. 21). S-D

orientation enables a company to co-create value in service exchanges with customers. Value co-creation can be defined as assisting customers to co-construct and engage in superior experiences (Vargo and Lusch, 2008).

For the influence of individual factors on customer participation. The MOA framework has been applied in various fields such as marketing, operation and supply chain management, knowledge management, etc. (Binney et al., 2003; Kim et al, 2015; Reinholt et al, 2011; Boxall and Purcell, 2016). According to MacInnis and Jaworski (1989), the MOA framework posits that individuals process information based on their motivation, opportunities, and abilities. The MOA is used to capture the complexity of some behaviors in social marketing (O'Reilly and Madill (2007). According to MacInnis, Moorman, and Jaworski (1991), the degree to which individuals process information is determined by three factors: motivation, opportunity, and ability. Rothschild (1999) employed the MOA framework to classify customers into a distinct group depending on their motivation, opportunity, and ability to participate in the target behavior. O'Reilly and Madill (2007) stated that this framework is used as a behavior change approach in social marketing. Bettiga (2018) argued that co-creation participation is facilitated by customer ability and opportunity to enable know-how exchange and motivation to do. This study is used to explain customer participation in social commerce.

Furthermore, the theory of planned behavior (TPB) is an extension of the theory of reasoned action (TRA) (Ajzen, 1991; 1985), which claims that subjective norms influence an individual's behavioral intention. Numerous studies have adopted the TPB model to explore individual behavioral intentions (Casidy et al., 2016; Ching et al., 2017). Song et al. (2012) verified that subjective norms are crucial in forming desires, and desire, in turn, engenders the intentions of travelers. Empirical support for a relationship between subjective norms and desire informing individual intentions has been provided in diverse customer behavioral domains (Song et al., 2012; Lee et al., 2015).

For the influence of CP on its consequences. Based on the social exchange theory, CP includes mutual interactions between customers and brands (Brodie et al., 2013). As individuals examine their behavior and decide their attitude, they start to develop positive behavioral intentions regarding the brand. Brand loyalty indicates that customers tend to have regular purchases of the brand due to their positive attitude toward the same brand (Fullerton et al., 2003). Furthermore, brand trust is another important construct in the long-term relationship in the online environment (Yuan-shuh and Monle, 2012). Jung et al. (2014) stressed that brand trust is one of the important consequences of CP in the online environment.

Furthermore, CCB is an extension of organizational citizenship behaviors. It proposes that customers can contribute to the co-creation process through a variety of citizenship behaviors (Groth, 2005). Moreover, CCB has been investigated in the service marketing literature under different names: the organizational citizenship behavior of clients (Lengnick-Hall et al., 2000) and customer extra-role behaviors (Adhearne et al., 2005). CCB is predicted by CP in the service process (Groth, 2005). Moreover, LePine et al. (2002) stressed that CP is manifested to a greater extent in extra-role behaviors than in task performance.

With regard to the effect of moderator variables, this study identified two moderator variables: perceived benefit of participation, and perceived ability. According to the person-job fit theory (Kritof-Brown et al, 2005), there are two components that influence the compatibility between an individual and their work role: (1) the individual's ability matches the job requirement and (2) the individual perceives that the rewards they desire correspond to those offered by the firm (Kritof-Brown et al, 2005). Furthermore, Dong et al. (2014) stated that good customer-task fit arises when customers are willing to participate in tasks; that is, they have the appropriate ability, perceive the rewards to be acceptable, and deem the role to be suitable.

2.2 Research construct definitions

2.2.1 Service-Dominant logic

According to Karpen, Bove, and Lukas (2012), S-D orientation consists of six strategic themes such as value-in-context, relation focus, values focus, co-production focus, operant resource focus, and process flow focus. It reflects an understanding of meaningful interaction and reciprocal resource integration with customers (Karpen et al., 2015). Service is a value co-creating process (Vargo and Lusch, 2008), therefore, interaction is an important aspect of resource integration effort and value-driving experiences (Prahalad and Ramaswamy, 2004). Interaction requires that all co-creative processes be enabled and supported by interaction capabilities (Karpen, Bove, and Lukas, 2012; Ramaswamy, 2009).

In the conceptualizing service as a value co-creation process, interaction reflects resources integration efforts and subsequent value-driving experiences (Karpen et al., 2015). Furthermore, the strategic themes of S-D orientation, which help us understand the type of interaction capabilities in facilitating and enhancing value co-creation with customers, led to the identification of the following interaction capabilities (Karpen et al., 2012):

- (1) Individuated interaction capability: As a firm's ability to understand the resources integration process, contexts, and desired outcomes of customers and their network partners.
- (2) Relational interaction capability: As a firm's ability to enhance the connection of social and emotional links with customers and their network partners.
- (3) Ethical interaction capability: As a firm's ability to act in a fair and nonopportunity way toward its customer and their network partners.
- (4) Empowered interaction capability: As a firm's ability to enable its customers and their network partners to shape the nature and content of the exchange.

(5) Developmental interaction capability: As a firm's ability to assist customers and their value network partners' knowledge and competence development.

(6) Concerted interaction capability: As firm's ability to facilitate coordinated and integrated service process with customers and their network partners.

2.2.2 The Motivation-Opportunity-Ability framework

First of all, motivation is considered a vital force in directing behavior towards desirable results (Boudreau et al., 2003). Motivation incorporates readiness, willingness, interest, and desire to engage in participation (MacInnis et al., 1991), which is for action in terms of the effort that individuals or organizations are willing to exercise if they can see the benefits. The benefits offered need to favor customers in order to induce or motivate them to participate (Dann, 2010).

Opportunity is the extent to which a situation is favorable to the lack of the constraints for goal achievement or the goal attainment (Jaworski and MacInnis, 1989; Macinnis, Moorman, and Jaworski, 1991). Opportunity is the extent to which the attention toward a topic is affected by distraction or limited time (Bettiga, Lamberti, and Noci, 2018). It reflects the extent to which a situation is conducive to achieving the desired outcome.

Ability refers to the customers' proficiency in participating in the activities, which are under their control (Batra and Ray, 1986). When customers acquire the natural capacity and the physical capital necessary for social production and action, they can become more and more ubiquitous (Benkler, 2004). Ability is considered as the extent to which customers have knowledge and skill or necessary resource to achieve the desired goal (Hoyer and MacInnis, 2007). In this study, the ability is defined as the customer's skill to perform and participate in social network sites.

2.2.3 Social factors

In this study, social factors are also designed to influence customer participation. According to the Theory of Reason Action (Fishbein and Ajzen, 1975), behavior is preceded by intention, which is determined by an individual's attitude toward the behavior and the individual's social norms. Social psychology suggested that social interaction can have a significant impact on an individual's behavior. Social norms are an individual's perception that most people who are important to him/her think he/she should or should not perform the behavior in question (Fishbein and Ajzen, 1975). Moreover, social norms are informal or formal rules of a group that leads to the behaviors and values of the group (Aronson, Akert, and Wilson, 2010).

According to the Theory of Planned Behavior (TPB), there is one type of social determinant of intentions and behaviors which is subjective norms (Ajzen, 1991). Subjective norms reflect the impact of expectations from other people, which are largely based on the need for approval (Bagozzi and Dholakia, 2006). This mode of social influence may also be termed compliance (Kelman, 1974). This is only one type of social influence that is relevant for consumer participation (Bagozzi and Dholakia, 2006) since the operation of subjective norms in many situations may be problematic because it describes norms in terms of the context to which people perceive that others want them to perform the behavior, yet for behaviors that do not influence other people or behaviors that are not so directly associated with outcomes, such pressures may be latent and may not be perceived (Terry and Hogg, 1996).

From the perspective of social psychology, individuals' behaviors are influenced by external social factors, including normative social influence and informational social influence. According to the definition of subjective norms in the TPB, under pressure to meet the requirement of normative social influence, individuals engaged in various types of specific behaviors. Therefore,

subjective norms in TBP and normative social influence in social psychology share a similar meaning.

2.2.4 Customer participation

The definitions of customer participation employ many forms and degrees, from firm production to joint production to customer production (Meuter and Bitner, 1998). Researchers identified different roles that customers could assume in the service process, for example, partial employee (Johnston and Mash, 1989), co-producer (Kelley et al., 1990), decision-maker (Bitner et al., 1997), and quality evaluator (Ennew and Binks, 1999). Customer participation was considered to comprise various behaviors, such as preparation, relationship building, information exchange, quality assurance, and assessment behaviors (Kellogg et al., 1997; Youngdahl et al., 2003). Several authors suggested that customer participation actually extends beyond the service process, involves customers' inclination to learn and experiment, and engages in active dialogue, collaboration, and co-development with sellers (Wikström, 1996; Prahalad and Ramaswamy, 2004). The concept of participation was gradually extended to apply to both product and service offerings (Wikström, 1996; Vargo and Lusch, 2004), and to cover a broader scope of activities, such as customer interactions with providers or other actors (Tether and Tajar, 2008), as well as participation in product development (Wikström, 1996) or innovation (von Hippel, 2001; Magnusson et al., 2003). Because our purpose is to understand the value creation process when customers participate and interact with employees in services, we do not consider firm and customer production (e.g., self-service technologies). This study defined CP as a behavioral construct that measures the extent to which customers provide or share information, make suggestions, and become involved in decision making during the service co-creation and delivery process (Auh et al., 2007; Bettencourt, 1997; Bolton and Saxena-Iyer, 2009; Hsieh, Yen, and Chin 2004).

2.2.5 Brand outcomes

In this study, brand outcomes were measured by two dimensions, including brand loyalty and brand trust. Loyalty has been defined as “a repeat purchasing frequency or relative volume of same brand purchasing (Oliver, 1999). Jones and Taylor (2007) described attitudinal loyalty as “a consumer’s identification with a particular service provider and preference of a product or service over alternatives”. A loyal customer would like to purchase the same brand and thus become loyal to a particular service provider (Jones and Taylor, 2007).

The concept of trust has been discussed in various disciplines, especially in the literature of marketing. Trust is the degree of “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trust, irrespective of the ability to monitor or control that other party” (Mayer, Davis, and Schoorman, 1995). Brand trust is defined as “the willingness of the average consumer to rely on the ability of the brand to perform its stated function” (Chaudhuri and Holbrook, 2002). Brand trust is determined by the consumer’s expectation and how it is fulfilled by the brand (Navaneethakrishnan and Sathish, 2020).

2.2.6 Customer citizenship behaviors

Customer citizenship behaviors have been increasingly discussed in management and marketing literature (Aherne, Bhattacharya, and Gruen 2005; Ida, 2017; Ben-Shaul and Reichel, 2018; Zhu et al., 2016). In management literature, customer citizenship behavior is formally defined as “the voluntary individual behavior which is not explicitly or directly recognized by means of the formal reward system and generally strengthens the effective efficiency of the organization” (Organ, 1988). Similarly, customer citizenship behavior is defined as “the voluntary behavior which is not essential to successful production or to the introduction of services but totally useful to the whole

service organization” (Groth, 2005). Several terms can be used to explain customer citizenship behavior among which the following are considerable: customer voluntary behavior, customer's voluntary performance, and “extra-role” behaviors of the customer. Groth (2005) has identified three aspects of customer citizenship behavior: 1) introducing feedbacks to the organization which means the presentation of applicant's information to the organizations with an aim to help them improve their service providing process; 2) helping other customers parallel to the philanthropy aspect in organizational citizenship behavior; 3) giving commercial recommendations to friends or family members

Bowen (1986) argued that customers seldom get involved in the process of production. However, in in-service organizations, both customers and employees are regarded as human resources. Customers take part in service delivery activities; it is, therefore, possible that customers replace employees in service-based organizations (Halbesleben and Buckley, 2004). Previous studies suggest that service-based organizations should, in some cases, consider customers at least as organizational members or even as employees (Kelley, Donnelly, and Skinner 1990). Based on these descriptions, it can be claimed that service customers may display citizenship behavior the same way as employees themselves do. Thus, we can apply the findings of citizenship behavior studies to the customers.

In addition, Ford (1995) suggested that customers who display citizenship behavior may show their commitment to the service organization and report potential protective issues to the employees. Keh and Teo (2001) claimed that the customer's resistance against the failure of a service is another aspect of customer citizenship behavior. They stated the case as a customer's tendency to accompany the services they encounter while these services are not executed as expected. Such an attitude results in permanent customization and does not publish negative word-of-mouth marketing (advertisements).

2.2.7 Perceived benefit of participation

Perceived benefit of participation refers to the customers' evaluation of the participation rewards (Meuter et al., 2005). Benefits may include extrinsic and intrinsic rewards (Dong, et al., 2014). Extrinsic rewards are monetary discounts and convenience (Meuter et al., 2005) while intrinsic rewards are enjoyment and a sense of accomplishment (Lusch, Brown, and Brunswick 1992). When the benefits of participating in the service delivery process are high, customers tend to be more willing to join in the service delivery process.

2.2.8 Perceived ability

Perceived ability refers to the customers' perceived knowledge and skills that enable them to participate effectively in service delivery (Meuter et al., 2005). Typically, a level of customer participation needs greater knowledge and skills from a customer (Yim, Chan, and Lam 2012). A high CP design also enables customers with a high ability to leverage their expertise to co-create value (Dong et al., 2014). According to Auh et al. (2007), a high level of customers' ability is likely to increase their participation in service delivery because first, as customers gain more knowledge and skills, they are better at assessing where they might make a contribution and they are better in evaluating various attributes of different service offerings. Second, customers with better knowledge and skills typically perceive lower decision-making risk. Third, they likely have a greater need for control in the service delivery process.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

This study is carried out in two stages. The first is a meta-analysis study that integrates the results of previous studies related to our research hypotheses. The meta-analysis has resulted in hypothesis developments. The second stage is a questionnaire survey. The research design and methodology adopted in two stages, including questionnaire design, sampling design, data collection methods, and data analyses techniques are included in this chapter.

3.1 Study 1: Meta-analysis

3.1.1 Research framework

This meta-analysis study aims to test some of the hypotheses from the proposed research framework based on the study results of previous studies. Meta-analysis is important because some primary studies may lack sufficient power (e.g., sample size) to achieve statistically significant results and nearly all studies are in lack the power for a precise estimate of effect size (Lipsey and Wilson, 2001). By combining into a single estimate of the findings of multiple independent studies that bear on the same relationship, while correcting for the distorting effects of artifacts that may produce the illusion of conflicting findings, meta-analysis arrives at more accurate conclusions than those presented in any one of the primary studies (Hunter and Schmidt, 2004).

The aim of study 1 is to identify the evidence of the relationship among the above themes. Based on literature review and meta-analysis techniques. The research framework is shown in Figure 3-1.

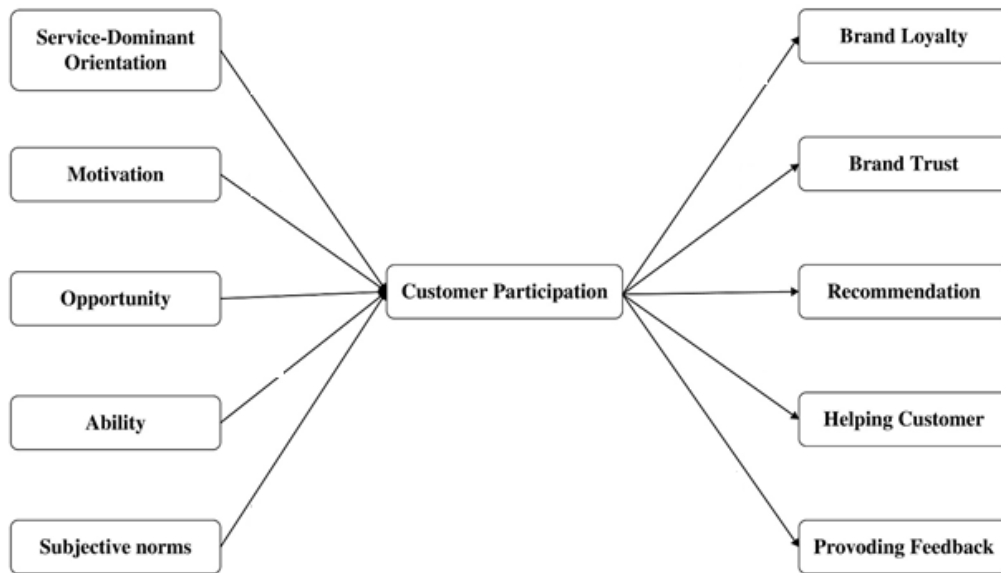


Figure 3-1 The conceptual framework of meta-analysis

3.1.2 Meta-analysis procedure

This meta-analysis study aims to test some of the hypotheses from the proposed research framework based on an integration of the study results from previous studies. Meta-analysis is important because some primary studies may lack sufficient power (e.g., sample size) to achieve statistically significant results and nearly all studies are in lack the power for a precise estimate of effect size (Lipsey and Wilson, 2001).

Based on the literature review and the conceptual model in this study, meta-analysis was used to integrative the result from previous studies and confirm the relationship between the research constructs. This study chose the correlation coefficient (r) as the primary effect size metric because it is a scale-free measure and often adopted in social science researches. This method provided a systemic and comprehensive framework that combines, integrates, and examines the relationships between the research constructs from previous studies. In this study, meta-analysis was used to evaluate the relationship between each construct about customer participation.

3.1.3 Searching and data collecting

This meta-analysis searched the empirical studies from the different scientific databases. The data was collected electronically in management, psychology, social science, business, marketing, health, and organizational behavior. First of all, this research looked for the coefficient correlations of the relevant studies, including S-D Orientation, motivation, opportunity, ability, subjective norms, customer participation, brand loyalty, brand trust, recommendation, helping customers, providing feedback by using ProQuest, JSTOR, SAGE, Emerald, ScienceDirect, Wiley InterScience, Dissertation Abstract, and Google Scholar. This research used them with multiple keywords to identify relevant journals, thesis, and dissertations.

Several criteria were used to select the studies for the meta-analysis (Zhao, Seibert, and Lumpkin, 2010). First, the study must include the measurement of the research constructs in this study. Research variables that show no consistent relationship to any customer participation were excluded. Second, the sample used in the study must be appropriate for the dependent variable examined. The study must include a Pearson correlation coefficient (or its equivalent, e.g., an F value or t value).

3.1.4 Data analysis techniques for meta-analysis

All identified studies obtained the following information: total sample size, the number of items used to measure each construct, correlation for each hypothesis, and reliability for each variable (Peterson & Brown, 2005). All selected studies were examined in terms of the following relevant variables: authors, year, sample size, research variables, effect size, and the journal.

This study chose the correlation coefficient (r) as the primary effect size metric because it is a scale-free measure and often adopted in social science researches. Following Peterson and Brown (2005), a meta-analysis should include the maximum number of effect sizes and the process can make the results more generalizable (Hunter and Schmidt, 2004). This study also

collected those studies that only provided standard regression coefficients (β) and estimate correlation from the β following the formula $r=0.98\beta +0.5\lambda$, where $\lambda=1$ when β is non-negative, and $\lambda=0$ when β is negative (Peterson and Brown, 2005).

After integrating the correlation coefficient (r) of each study, a confidence interval is presented for each effect size, and its significance when the interval range does not include zero. A significant level of 0.05 is used in this study. The statistic of the confidence interval is an indication of the robustness of the results. The criterion of 95% confidence interval was adopted to prove whether the hypothesis is accepted.

Moreover, Lipsey and Wilson (2001) explained another Q-statistic which is an analysis of homogeneity of the effect size distribution. It is distributed as a Chi-square with the degree of freedom = $n-1$, where n = number of studies. This test has assumed that all of the effect sizes are estimating the same population mean is a reasonable assumption. The criterion for Q-statistic is that Q-value should be higher than Chi-square. It means the null hypothesis of homogeneity is accepted. Then, the variability across effect size does not exceed what would be expected based on sampling. If the null hypothesis of homogeneity is rejected, differences in effect size may be attributed to factors other than sampling, therefore, the heterogeneity between the variance exists.

In this study, the effect size was calculated and categorized as small ($r<0.1$), medium ($0.1 <r<0.4$), and large ($r>0.4$) by using Comprehensive Meta-analysis (CMA) software. Furthermore, this study also reported that a 95% confidence interval (CI). A 95% CI around a point estimate not include zero suggests that the point estimate would be greater or lesser than zero in 95% of the cases of the estimation procedures were repeated many times.

The Q statistic was compared with the Chi-square value in order to assess the homogeneity of the effect size (Lipsey and Wilson, 2001). The criterion for Q statistic that value should be higher than Chi-square value, and the p-value should be less than 0.05. When the null hypothesis of homogeneity is rejected, it means that the difference in effect size is attributed to the factors and not to sampling error (Masto and Rossi, 2008). The equation to calculate the Q statistic is as followed:

$$Q = \sum W_i(ES_i - \overline{ES}_j)^2$$

Where: ES_i is the individual effect size

\overline{ES}_j is the weight mean effect size for each group

W_i is the weight for each effect size

3.2 Study 2: Questionnaire survey approach

3.2.1 Research framework for survey

This study identified firm factor (S-D orientation), individual factors (motivation, opportunity, and ability), and social factors (subjective norms) as antecedents of customer participation. While brand outcomes (brand loyalty, brand trust) and customer citizenship behaviors (recommendation, helping customers, and providing feedback) are identified as consequences of customer participation. Furthermore, perceived benefits of participation and perceived ability to participate are served as two moderating variables that moderate the influence of customer participation on brand outcomes and customer citizenship behaviors.

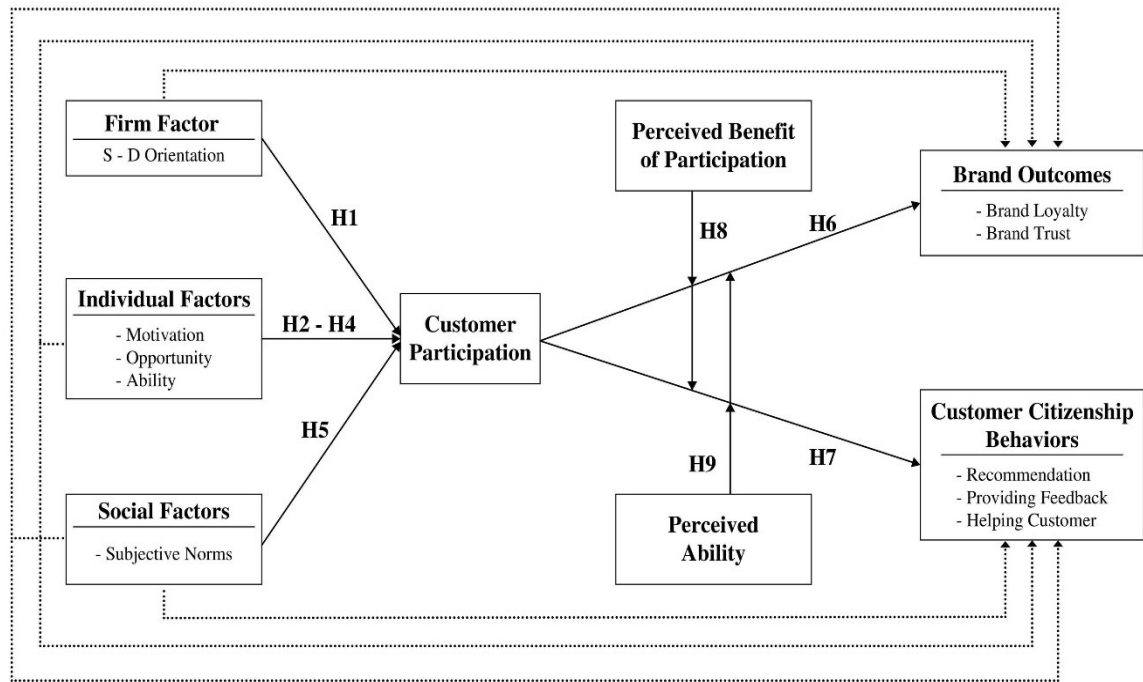


Figure 3-2 The conceptual framework of this study

3.2.2 Hypothesis development

3.2.2.1 The effect of S-D orientation on customer participation

Previous studies have identified S-D orientation as one of the most important firm factors for CP. As the nature of the business operations, the traditional roles of economic actors are changing and becoming blurred (Prahalad and Ramaswamy, 2004). Customers progressively take on employee roles and perform activities in value creation processes. Those customers who are more informed, connected, and activated have more demanded to participate in service provision processes, while firms encourage and enable customers to do so even in traditional manufacturing industries (Bendapudi and Leone, 2003; Firat and Venkatesh, 1995). Firms strive to provide better service outcomes and seek to compete based on service principles, independent of their industry or “pure” service business nature (Berry et al., 2006). Therefore, the element of marketing represents joint processes of providing benefits and service flows

rather than finished units of output (Vargo and Lusch, 2004). It is argued that firms could benefit from implementing a strategic orientation consistent with the principles of the S-D logic because it leads organizational strategy-making activities and service-like interactions with the market, (both externally and internally). Moreover, it also provides a way of responding not only to the opportunities but also to the challenges of the current business environment.

According to S-D logic (Vargo and Lusch, 2004), service is a customer-oriented and relational process, customer is always a co-creator of value so firms increasingly encourage and engage customers and other value creation partners in co-production activities (Vargo and Lusch, 2008). They empower customers and strive to maximize the involvement of value creation partners in the customization of service outcomes (Lusch et al., 2007) by opening up their service production processes during the series of the ideation, innovation, production, and/or distribution phase of the core of the market offering. It implies that customers play a vital role in valuing co-creation (Ordanini and Parasuraman, 2011). S-D orientation is a portfolio of co-creation capabilities including individuated, relational, ethical, empowered, developmental, and concerted interaction capability which enables the company to co-create value with its customers (Karpen, Bove, and Lukas, 2012). S-D orientation companies emphasize value co-creation processes through personal interactions and resources integrations (Karpen et al., 2015). These interactions and resources integrations are continuous and interdependent processes for the mutual benefit of all involved actors. This study proposes that S-D orientation has a positive effect on customer participation. Karpen et al. (2015) found that S-D orientation positively influences customers' trust, commitment, and perceived value. Therefore, this study hypothesizes:

H1: S-D orientation has a positive effect on customer participation.

3.2.2.2 The effect of MOA framework on customer participation

The three elements MOA framework are crucial factors in decision making but they mainly affect the direction of customer participation. Motivation is influenced by personal beliefs and organizational structures and then in turn affects customer participation (Birg, Backers, and Mittag, 2011). Previous studies show that motivation to participate can help to make a closer relationship between customer and provider (Lewer and Van den Breg, 2007), which further enhances the customer's embeddedness per each transaction (Weng et al. 2020). Smonk et al. (2011) proved that there is a link between user's motivation and the SNS they used. Motivation can predict customer behaviors, for example, commenting, chatting, and sending a message (Wang et al., 2005). Motivation has proven to explain online consumer-to-consumer how-how transfer that takes place among the customer of a firm's offering (Bettiga, et al., 2018).

The opportunity represents the circumstance that allows for or facilitates people to perform people's behavior. Opportunity refers to the favorable condition and availability of time that enable participation. According to Bettiga et al. (2018), the advantage of virtual participation (in SNS) is the possibility of interacting with the other customer in the community and engaging in the activity without time limitations and regardless of the places. Leung and Bai (2013) argued that several situational factors such as time available, attention paid, number of distractions, and the number of times a travel destination is presented all influenced the opportunity to participate in SNS.

Ability refers to the extent to which travel has the necessary resources such as knowledge, intelligence, and money to make an outcome happen in the area of e-commerce (Monnemaizon and Batat, 2011). In many cases, the ability is measured by self-efficacy which refers to the perceived capability of ones' self to execute a behavior (Siemsen and Balasubramanian, 2008). Leung and Bai (2013) argued that ability refers to the customer skills or proficiencies in

processing information in the SNS. In the context of co-creation, customers with a higher level of ability are more proficient in the activity and are able to process information more efficiently than a customer with a lower level of ability.

Based on the above discussion, this study hypothesizes that

H2: Motivation has a positive effect on customer participation.

H3: Opportunity has a positive effect on customer participation.

H4: Ability has a positive effect on customer participation.

3.2.2.3 The effect of subjective norms on customer participation

According to the theory of reasoned action and the theory of planned behavior, a person's behavior intention is determined by social normative beliefs (Ajzen and Fishbein, 1970). Subjective norms are identified as the social pressure that influences the individual behavior intention (Ajzen, 1991). The subjective norms might help individual decision-making when an individual has little experience (Pahnila and Warsta, 2010). According to Hsu and Lin (2008), the subjective norm is referred the degree to which a user perceived that others approved of their participation in social media. TRA presented that the individual behavior would be performed when he or she perceived the positive benefits from the action (Compeau and Higgins, 1995).

According to Cheung and Lee (2010), subjective norms are particularly important for consumers to perform a certain behavior. Taylor and Todd (1995) also found that subjective norms have a significant effect on the intention of pre-adopters and post-adopters. Empirical studies have found that subjective norms positively affect consumers' behavioral intention. Bagozzi and Dholakia (2006) found that subjective norms positively influence customers' desire to join the brand community. Many studies have confirmed the effects of social norms to use Internet-related services: online shopping, online games usage, and blogs adoption. Thus It is argued that when the impact of expectations from

other people is high, customer participation in the service delivery process tends to be high. Thus, this study hypothesizes:

H5: Subjective norm has a positive effect on customer participation.

3.2.2.4 The effect of customer participation and brand outcomes

“Brand plays an important role in the development of companies that today consider their brands to be one of their most valuable assets, to the point where brands have become a real economic issue” (Michel, 2009, p.7)

Various studies confirmed the significant relationship between customer participation and brand loyalty in social media (Kamboj and Rahman, 2016; Kang et al, 2014; Kamnoj et al, 2018; Kamboj and Joshi, 2020). As an active customer in SNS, individual’s commitments, participation, and emotion attached to the brand will increase through customer interaction with communities; which are concerned with the issues associated with the brand (Kamboj and Joshi, 2020). According to Brodie et al. (2013), a customer with higher participation tends to perceive strong brand loyalty. Han and Ryu (2009) showed that customer participation has a positive influence on brand loyalty.

Brand trust is considered as a customer's secure confidence that the brands will respond expectedly by customers through their participation (Ha and Perks, 2005). In order to reduce and avoid the risks from the services or products, Customers prefer seeking a trustworthy brand (Delgado-Ballester and Munuera-Aleman, 2005); therefore, brand trust is built up by customer experiences over time. With positive participation, customers become more confident with the brand because it meets their expectations, which will result in generating brand trust (Flavian and Guinaliu, 2006).

In the SNS, the more customer communicates and interact with others or the higher the band will lead exhibiting to brand novelty (Hatch and Schultz, 2010). In the other words, customer participation in SNS stimulates brand engagement, brand experience, brand satisfaction, and finally brand loyalty and brand trust. The co-creation activities can increase brand trust and brand loyalty

among the customers, creating more communication with the brand (Kennedy and Guzman, 2016), which further leads to enhance customer loyalty and trust with innovation in the service industry (Kumar and Megha, 2018).

Based on the discussion above, this study hypothesizes that:

H6a: Customer participation has a positive influence on brand loyalty

H6b: Customer participation has a positive influence on brand trust

3.2.2.5 The effects of customer participation on customer citizenship behaviors

The factors which influence customer citizenship behaviors have been examined by previous empirical studies. An intrinsic process motivation perspective suggests that individuals are motivated to work or engage in behavior for the pleasure of it. Customers may cooperate and take part in co-production because they enjoy the processes rather than for other task performance or outcome reasons. Therefore, customer satisfaction and participation are positively correlated (Bendapudi and Leone, 2003). This study thus proposes that customer participation enhances brand outcomes (i.e. brand loyalty and brand trust) and customer citizenship behaviors (i.e., recommendation, helping others, and providing feedback). Bettencourt (1997) found out that customer commitment, satisfaction, and perceived support for customers have a positive relationship with customer citizenship behavior. Gruen et al., (2007) showed a positive relationship between affective commitment and customer citizenship behavior. Aherene et al. (2005) suggested a positive link between customer identification of the organization and customer citizenship behaviors. Groth (2005) figured out that customer's socialization is in relation to his/her satisfaction with customer citizenship behaviors. It is argued that the higher the customer participation in the service delivery process, the higher will be their citizenship behaviors. Therefore, this study hypothesizes:

H7a: Customer participation has a positive effect on recommendation.

H7b: Customer participation has a positive effect on helping customers

H7c: Customer participation has a positive effect on providing feedback.

3.2.2.6 The moderating role of the perceived benefits of participation

Service firms often create inspiration and encouragement to drive CP. In many situations, firms do not provide rewards, but customers still appreciate and value participation (Frei, 2006). It is essential to find a good correlation between what is offered and what a customer prefers to receive from CP (Yim et al., 2012). According to the person-job fit theory (Kristof, 1996; Edward, 1991), a customer who considers that the rewards of CP meet their expectations will perceive a good “needs-supply fit”, which will lead to positive results such as better performance, and higher satisfaction (Kristof-Brown et al., 2005).

Dong et al. (2014) found that the perceived benefit of participation positively moderated the effect of CP on service quality and customer satisfaction. This study argues that when customers perceive that they will receive more benefits when participating in the service delivery process, the effect of CP on brand outcomes (including brand loyalty and brand trust), and customer citizenship behaviors (including on recommendations, helping customers, and providing feedback) will be strengthened. Therefore, this study hypothesizes:

H8a: The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and brand loyalty

H8b: The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and brand trust

H8c: The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and recommendation.

H8d: The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and helping customers

H8e: The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and providing feedback.

3.2.2.7 The moderating role of perceived ability

According to Vargo and Lusch (2004), many service firms still do not try to improve their relationships with their customers or support them in becoming better co-producers. In the process of CP, customers must become co-producers of the service with responsibility for the service process as well as their own satisfaction (Bendapudi and Leone, 2003)

When customers believe that they have sufficient capabilities to participate at a high level, the positive effect of participation on the service outcome is strengthened because of a greater demand-ability fit. Dong et al. (2014) found that perceived ability moderated the effect of CP on service outcomes and customer satisfaction. This study argues that when customers perceive that they have sufficient knowledge and skills to participate effectively, the effect of CP on brand outcomes (including brand loyalty and brand trust), and customer citizenship behaviors in terms of recommendations, helping customers and providing feedback) will be strengthened. Therefore, this study hypothesizes the following:

H9a: The perceived ability has a positive moderating effect on the relationship between customer participation and brand loyalty

H9b: The perceived ability has a positive moderating effect on the relationship between customer participation and brand trust

H9c: The perceived ability has a positive moderating effect on the relationship between customer participation and recommendation.

H9d: The perceived ability has a positive moderating effect on the relationship between customer participation and helping customers

H9e: The perceived ability has a positive moderating effect on the relationship between customer participation and providing feedback.

3.2.3 Construct measurement

This study identified firm factor (S-D orientation), individual factors (motivation, opportunity, and ability), and social factors (subjective norms) as antecedents of customer participation. While brand outcomes (brand loyalty, brand trust) and customer citizenship behaviors (recommendation, helping customers, and providing feedback) are identified as consequences of customer participation. Furthermore, perceived benefits of participation and perceived ability to participate are served as two moderating variables that moderate the influence of customer participation on brand outcomes and customer citizenship behaviors.

Survey questionnaire items were designed based on the review of the literature and the purpose of this study. Research items for the following constructs were developed:

3.2.2.1 S-D orientation

This study identified S-D orientation as antecedents of customer participation. Following Karpen et al. (2015), S-D orientation consists of six factors, namely relational interaction, ethical interaction, concerted interaction, individuated interaction, empowered interaction, and developmental interaction, and each factor has four items. The measurement items designed by Karpen et al. (2015) were adopted. All measurement item was designed in seven-point Likert scales from 1= strongly disagree to 7 = strongly agree. The questionnaire items are as following:

Relational interaction

ARI1 This SNS makes me feel at ease during our dealings

ARI2 This SNS tries to establish rapport with me

ARI3 This SNS encourages two-way communication with me

ARI4 This SNS shows genuine interest in engaging me.

Ethical interaction

AEI1 This SNS does not try to take advantage of me

AEI2 This SNS does not pressure me in any way

AEI3 This SNS does not mislead in any way

AE4 This SNS does not try to manipulate me

Individual interaction

AII1 This SNS makes an effort to understand my needs

AII2 This SNS is sensitive to my situation

AII3 This SNS makes an effort to find out what kind of offering is most helpful to me

AII4 This SNS seeks to identify my expectation

Empowered interaction

AEM1 This SNS invites me to provide ideas or suggestions

AEM2 This SNS encourages me to shape the service I receive

AEM3 This SNS provides me with control over my experiences

AEM4 This SNS let me interact with them in my preferred way

Concerted interaction

ACI1 This SNS works together seamlessly in service to

ACI2 This SNS acts as one unit when dealing with me

ACI3 This SNS provides the message to me that are consistent with other customers

ACI4 This SNS ensure they have smooth procedures for interacting with me

Developmental interaction

ADI1 This SNS shares useful information with me

ADI2 This SNS helps me become more knowledge

ADI3 This social media provides me with the advice I need to use our offering successfully

ADI4 This social media offers expertise that I can learn from

3.2.2.2 The MOA framework

This study identified the MOA framework as antecedents of customer participation. The MOA framework including three factors: motivation, opportunity, and ability. Motivation measurement items designed by Barreda, Nusair, Bilgihan, and Okumus (2013), opportunity and ability measurement items designed by Leung and Bai (2013) were adopted in this study. All measurement items were using a seven-point Likert scale from 1= strongly disagree to 7 = strongly agree. The questionnaire items are as follow:

Motivation

BM1 I will chance to learn about how to use this SNS

BM2 I have changes to learn about useful SNS

BM3 Using SNS is certainly a good way to get information that I want

BM4 I can talk with people who share my interests in this SNS

BM5 Through SNS, I received timely and exclusive information

BM6 Using SNS will allow me to synchronize updating my contact information (email, phone numbers)

BM7 The advertising via SNS customized to my profile is useful

Opportunity

BO1 I have enough time to spend on this SNS

BO2 Organization policy encourages my using this SNS

BO3 I am frustrated by the downtime this SNS

BO4 Internet connection helps me use this SNS

Ability

BA1 For me, it is easy to use

BA2 I have facilitated to use of this SNS

BA3 I have time to use this SNS

BA4 I am very skill in shopping by using social media, in using social media websites

3.2.2.3 Subjective norms

This study identified subjective norms as antecedents of customer participation. A preliminary version of subjective norms measurement items designed by Pahnla and Warsta (2010) and Zhao, Yin & Song (2016) was preferred. All measurement items were used seven-point Likert scales from 1= strongly disagree to 7 = strongly agree. The potential questionnaire items as follow:

CSU1 People in my organization have recommended me to do participate in this SNS

CSU2 My peers have recommended me to participate in this SNS

CSU3 My immediate friends have recommended me to participate

CSU4 Most people who are important to me would want me to socialize online

CSU5 People who influence my behavior encourage me to participate in social media

CSU6 I feel morally obligated to refute crisis-related rumors on social media during the crisis

CSU7 I feel personally obligated to refute crisis-related rumors on social media during a social crisis, such as not spreading misinformation

CSU8 My friends, my family, and people who are important to me think I should refute crisis-related rumors through social media during a social crisis

3.2.2.4 Customer participation

The measurement items for CP designed by Chan, Yim, and Lam (2010) were adopted. All measurement items are used a seven-point Likert scale from 1=strongly disagree to 7=strongly agree. The questionnaire items are as follow:

DCP1 I spent a lot of time sharing information about my needs and opinions with the staff during the process

DCP2 I put a lot of effort into expressing my personal needs during the process

DCP3 I always provide suggestions for improving the service outcome

DCP4 I have a high level of participation in the process

DCP5 I am very much involved in deciding how the services should be provided

3.2.2.5 Brand outcomes

This study identified the brand outcomes, including brand loyalty and brand trust, as consequences of customer participation. Brand loyalty measurement items designed by Laroche et al. (2013) were adopted; while brand trust measurement items designed by Chauhuri and Holbrook (2002) were adopted. All measurement items were used a seven-point Likert scale from 1=strongly disagree to 7 = strongly agree. The questionnaire items are as follow:

Brand loyalty

EBL1 I consider myself to be loyal to the brand

EBL2 I am committed to purchasing from the brand

EBL3 I am willing to pay more on my brand

Brand trust

EBT1 The brand gives me everything that I expected out of the product

EBT2 I rely on my brand

EBT3 The brand never disappointing me

3.2.2.6 Customer citizenship behaviors

This study identified three factors of customer citizenship behaviors: recommendation, helping customers, and providing feedback as consequences

of customer participation. Customer citizenship behaviors measurement items designed by Groth (2015) were adopted. All measurement item was using seven-point Likert scales from 1= strongly disagree to 7 = strongly agree. The potential questionnaire items as follow:

Recommendation

REM1 I refer fellow coworkers to this SNS

REM2 I recommend this SNS to my family

REM3 I recommend this SNS to my peers

REM4 I recommend this social media to people interested in SNS

Helping customers

HC1 I assist other customers if they need help

HC2 I help others with their services if they seem to have problems

HC3 I teach other customers to use the service correctly

HC4 I advise other customers

Providing feedback

PF1 I fill out a customer satisfaction survey

PF2 I provide helpful feedback to customer service

PF3 I provide information when surveyed by this social network

PF4 I inform social media about the great service received by an individual employee

3.2.2.7 Perceived benefits of participation

For perceived benefits of participation, measurement items designed by Dong et al. (2014) were referred. All measurement items are used a seven-point Likert scale from 1=strongly disagree to 7=strongly agree. The questionnaire items are as follow:

PB1 I get what I really want when I participate in this SNS

PB2 I get my best service in a timely manner when I participate in this SNS

PB3 I make it a good product and service when I participate in this SNS

PB4 When I participate in this SNS, it provided me with the feeling of enjoyment

3.2.2.8 Perceived ability

For perceived ability, measurement items designed by Dong et al. (2014) were referred. All measurement items are used a seven-point Likert scale from 1=strongly disagree to 7=strongly agree. The questionnaire items are as follow:

PA1 I am fully capable of choosing this SNS myself

PA2 I am confident in my ability to choose this SNS

PA3 Choosing a good SNS is well within the scope of my abilities

3.2.4 Questionnaire design

Based on the above construct measure, the questionnaire was developed and data was collected through the internet platform. The questionnaire includes nine sections (1) firm factor; (2) individual factors; (3) social factors; (4) customer participation; (5) brand outcomes; (6) customer citizenship behaviors; (7) perceived benefits of participation; (8) perceived ability; (9) personal demographic information. The questionnaire was filled out by customers who participate in SNS.

3.2.5 Sampling plan

The questionnaires items including cover letter items were sent to the respondent, who participate in SNS. The respondents were informed about the anonymity and confidentiality of any information that they submitted and the results are for academic study. The respondents spent approximately 30 minutes completing the questionnaire. A pilot test was conducted with 150 respondents who participate in SNS to confirm the clarity of the questionnaire.

Following Burn and Bush (1975), there are three important factors should be noted when choosing the sample size: the confidence interval, relative standard error, and proportion. When the population size is unknown, the formula to calculate the sample size is as follows:

$$n = Z^2 \frac{p * q}{e^2}$$

In which:

- n: sample size
- p: the estimated percentage of population size
- q = 1 - p
- e: margin of error (5%)
- Z: the number of standard deviations a given proportion corresponding with the sampling confidence level (if the sampling confidence level is 95%, the z score is 1,96...)

In this study, the p and q defined as 50%/50%, e is 0.05. In order to reach the sampling confidence level, the required sampling size is

$$n = Z^2 \frac{p * q}{e^2} = 1.96^2 \frac{0.5 * 0.5}{0.05^2} = 385$$

Furthermore, following Hair et al. (2017) guideline, the minimum sample size should be (1) larger than 10 times of the largest numbers of formative indicators used to measure one construct; (2) 10 times of the largest number of structural path directed at a construct in the research model. Therefore, this study obtained at least 385 valid respondents from the survey.

3.2.6 Data analysis procedures

In order to test the hypotheses, SPSS 22.0, and Smart PLS 3.0 were employed to analyze the collected data. The following data analysis methods were adopted:

3.2.6.1 Descriptive statistic analysis

Descriptive statistics were used to explain the characteristics of the collection of data in quantitative terms. Descriptive statistics including frequency, means, and standard deviation of each research variable and cross-tabulation of the demographic variables was adopted.

3.2.6.2 Reliability and validity measures

To verify the dimensionality and reliability of the research constructs in this study, several purification processes, including factor analysis, correlation analysis, and internal consistency analysis (Cronbach's alpha) was conducted. The purpose of factor analysis is to identify the dimensionality of each research construct, to select questionnaire items with high factor loadings, and to compare these selected items with items suggested theoretically. Item-to-total correlation and coefficient alpha were also assessed to identify the internal consistency and reliability of the constructs. Latent roots (Eigenvalues), scree test, and other criteria were used to determine the number of dimensions to be extracted from the principal component factor analysis. According to Hair et al. (2011), following criteria including factor loading >0.6 ; Eigenvalue >1 , accumulated explained variance >0.6 , Item-to-total correlation >0.5 , and coefficient alpha (α) > 0.7 were adopted in this study.

Furthermore, to assess the possibility of common method variance (or percept-percept correlations which may be biased by collecting two measures from the same source using the same method at the same time), the following validity check was conducted. First, a Harmon one-factor test was adopted that loads all the variables into a principal component factor analysis (Podsakoff & Organ, 1986). Second, discriminated validity was performed by comparing the square root of the AVE (average variance extracted) with the Pearson correlations among the constructs. All AVE estimates were greater than the corresponding inter-construct square correlation estimates (Fornell & Larcker, 1981; Hair, et al., 2017).

3.2.6.3 Hypotheses testing techniques

The Partial Least Squares (PLS) path modeling algorithm was adopted in this study for both the measurement model and the structural model. PLS is less restrictive in regard to its normal distribution assumption, sample size restriction, and multicollinearity situation (Ribbink et al., 2004; Anderson and Swaminathan, 2011) than other options. According to Hair et al. (2011), PLS is particularly more appropriate in the following conditions:

- (1) When the goal of the study is predicting key-driven components or constructs;
- (2) When the structural model is very complex (including many constructs and many indicators);
- (3) When the sample size is relatively low;
- (4) When the collected data are to some extent non-normal;
- (5) When the latent variable score will be used in the subsequent analysis.

Hair et al., (2012) further argued that the primary criterion for the PLS model assessment is the coefficient of determination (R^2), which represents the amount of explained variance of each endogenous latent variable. The second important global criterion is the goodness-of-fit (i.e., the GoF index), which is the geometric mean of the average communality and the models' average R^2 value. According to Schroer and Herterl (2009) and Teh and Chin (1988), an R^2 value of more than 0.67 is considered to be substantial; 0.33 is described as moderate, while 0.19 is described as weak. According to Vinzi et al. (2010), the goodness of fit index (GoF) greater than 0.36 is considered to be large; 0.25 is described as medium, while 0.10 is described as small.

In addition, following Hair, et al. (2011), the average variance extracted (AVE) is another criterion used to assess the convergent validity, which should be greater than 0.5 to assure that the latent variables can explain more than half of the variance of the indicators on average (Henseler et al., 2012). The composite reliability (CR) should be greater than 0.6 to confirm that the

variance shared by the respective indicators is robust (Considine et al, 2005)). Using the above criteria, the reliability and validity of the measurement model can be verified. When the measurement model and structural model are justified to be reliable, then the coefficients of the path parameters were used to test the hypotheses as developed in this study. The PLS procedure was implemented using the SmartPLS software package.



CHAPTER 4

META-ANALYSIS RESULTS AND DISCUSSIONS

This chapter presents hypotheses developments and the results from meta-analysis, respectively. The hypotheses were tested by analyzing the data collected from the meta-analysis.

4.1 Research hypotheses

The aim of this meta-analysis study is to test some of the hypotheses from the proposed research framework based on the study results of previous studies. Meta-analysis is important because some primary studies may lack sufficient power (e.g., sample size) to achieve statistically significant results and nearly all studies are in lack the power for a precise estimate of effect size (Lipsey and Wilson, 2001). By combining into a single estimate of the findings of multiple independent studies that bear on the same relationship, while correcting for the distorting effects of artifacts that may produce the illusion of conflicting findings, meta-analysis arrives at more accurate conclusions than those presented in any one of the primary studies (Hunter and Schmidt, 2004).

The aim of study 1 is to identify the evidence of the relationship among research constructs based on the integrative data from the literature review. The scope of relationships is as follow:

Hypothesis MH1: S-D orientation has a positive influence on customer participation.

Hypothesis MH2: Motivation has a positive influence on customer participation.

Hypothesis MH3: Opportunity has a positive influence on customer participation.

Hypothesis MH4: Ability has a positive influence on customer participation.

Hypothesis MH5: Subjective norms has a positive influence on customer participation.

Hypothesis MH6: Customer participation has a positive influence on brand loyalty.

Hypothesis MH7: Customer participation has a positive influence on brand trust.

Hypothesis MH8: Customer participation has a positive influence on recommendation.

Hypothesis MH9: Customer participation has a positive influence on helping customers.

Hypothesis MH10: Customer participation has a positive influence on providing feedback.

4.1.1 Selection of studies

Table 4-1 shows the studies included in the meta-analysis. This meta-analysis evaluated all previous studies for measuring the relationships between research constructs.

Table 4-1 Studies Used in Meta-Analysis

Studies Alphabetically by Source and Codes for Hypotheses Tests^{a,b}	
Al-Ghaith, (2015), 14 (SN-CP)	Huang, (2016), 3 (SN-CP)
Anaza and Zhao, (2013), 35 (CP-R;CP-H;CP-P)	Hussein and Hassan, (2017), 41(M-CP)
Anaza, (2014), 44 (CP-R; CP-H; CP-P)	Ida, (2017), 26 (CP-R)
Anh and Thuy, (2017), 46 (SD-CP)	Iwasaki and Fry. (2016).45 (SD-CP)
Assegaff and Kurniabudi (2016), 12 (M-CP)	Joshi and Rahman, (2017), 47 (SN-CP)
Auh et al., (2007), 33 (SD-CP)	Kadic-Malajlic et al.,(2017), 24 (SD-CP)
Bagozzi and Dholakia (2006), 21 (SN-CP)	Kamboj and Rahman, (2016), 23 (CP-BL)
Ben-Shaul and Reichel, (2015), 32 (CP-R)	Kamboj et al.,(2018), 19 (CP-BL; CP-BT)
Bettiga et al., (2018), 16 (M-CP; A-CP)	Kang et al., (2014), 18 (CP-BT)
Buonincontri et al., (2017), 48 (SD-CP)	Karpen et al., (2015), 33 (SD-CP)
Casaló et al., (2007), 41 (CP-BL;CP-BT)	Kim and Seock, (2019), 34 (SN-CP)
Celebi, (2015),4 (M-CP)	Kristianto (2017), 29 (O-CP)

Cha et al., (2016), 5 (CP-BL)	Kujur and Singh, (2017), 2 (M-CP)
Chen and Tung, (2014), 18 (SN-CP)	Kulviwat et al., (2009) (SN-CP)
Chen et al., (2013), 11 (O-CP)	Li et al., (2020), 28 (CP-BL; CP-BT)
Chiu et al., (2015), 32 (CP-H; CP-R;CP-P)	Lin et al., (2016), 9 (A-CP)
Chua and Chua, (2017), 4 (M-CP; A-CP)	Llopis and Foss, (2016), 8 (M-CP)
Cossío-Silva et al., (2016), 24 (SD-CP)	Ma and Chan, (2014), 4 (M-CP)
Curth et al., (2014), 35 (CP-H; CP-R;CP-P)	Marikiti et al., (2017), 1 (SN-CP)
Di Pietro et al., (2012), 29 (O-CP)	Mishra and Vaithianathan, (2015). 15 (SD-CP)
Duong et al., (2020), 23 (SD-CP)	Pee and Lee (2015), 19 (M-CP)
Erkmen and Hancer, (2019), 17 (CP-BT)	Petre et al., (2017), 38 (O-CP; A-CP)
Ferrer et al., (2020), 10 (M-CP)	Radaelli et al., (2014), 6 (O-CP)
Greaves et al., (2013), 27 (SN-CP)	Schmid and Adams, (2008), 43 (M-CP; O-CP)
Grisseemann and Stokburger-Sauer (2012). 48 (SD-CP)	Seliaman, (2013), 49 (A-CP; SN-CP)
Groth, (2005), 31 (CP-H; CP-R; CP-P)	Shang et al., (2006), 22 (CP-BL)
Gruen et al., (2007), 36 (M-CP; A-CP)	Sohail and Al-Jabri, (2017), 20 (O-CP; A-CP)
Han (2015), 48 (SN-CP)	Talih Akkaya et al., (2017), 39 (A-CP)
Han and Hwang, (2016), 18 (SN-CP)	Wang et al., (2015), 42 (M-CP)
Han and Kim, (2010), 18 (SN-CP)	Wang, (2015), 40 (M-CP; SN-CP)
Han and Yoon, (2015), 18 (SN-CP)	Xie et al., (2014), 18 (CP-BT)
Han et al., (2010), 48 (SN-CP)	Yadav and Pathak, (2016), 25 (SN-CP)
Ho et al., (2011), 7 (SN-CP)	Zhang et al., (2015), 13 (CP-BL)
Hsu et al., (2017), 34 (SN-CP)	Zhu et al., (2016), 34, (CP-H; CP-R; CP-P)

^aCodes in parentheses: SD = SD orientation; M = motivation; O = Opportunity; A = Ability; SN = Subjective norms; CP = Customer Participation; BL = Brand loyalty; BT = Brand Trust; R= Recommendation; H = Helping customers; P = Providing feedback

^bJournals are footnoted in order: (1) Acta Commercii; (2) Asia Pacific Management Review; (3) Computers & Education; (4) Computers in Human Behavior; (5) Cornell Hospitality Quarterly; (6) Creative and Innovation Management; (7) Cyberpsychology, Behavior, and Social Networking; (8) European Management Journal; (9) Health Informatics Journal; (10) Higher Education; (11) Human Factors and Ergonomics in Manufacturing & Service Industries; (12) Indonesian Journal of Electrical Engineering and Computer Science; (13) Information Technology & People; (14) International Journal of Advanced Computer Science and Applications; (15) International Journal of Bank Marketing; (16) International journal of Consumer Studies; (17) International Journal of Contemporary Hospitality Management; (18) International Journal of Hospitality Management; (19) International Journal of Information Management; (20) International Journal of Marketing, Communication and New Media; (21) International Journal of Research in Marketing; (22) Internet Research; (23) Journal of Brand Management; (24) Journal of Business Research; (25) Journal of Cleaner Production; (26) Journal of Competitiveness; (27) Journal of Environmental Psychology; (28) Journal of Hospitality and Tourism Management; (29) Journal of Hospitality and Tourism Technology; (30) Journal of Information Technology Education; (31) Journal of Management; (32) Journal of Physical Education and Sport; (33) Journal of Retailing; (34) Journal of Retailing

and Consumer Services; (35) Journal of Services Marketing; (36) Journal of the Academy of Marketing Science; (37) Journal of Travel Research; (38) Managerial Challenges of the Contemporary Society; (39) Marmara University Journal of Economic & Administrative Sciences; (40) Mobile Media & Communication; (41) Online Information Review; (42) Personality and Individual Differences; (43) Project Management Journal; (44) Psychology & Marketing; (45) Psychology of Sport and Exercise; (46) Service Business; (47) Sustainable Production and consumption; (48) Tourism Management; (49) World Congress on Computer and Information Technology (WCCIT).

The following 10 research hypotheses were identified in this meta-analysis (1): S-D logic has a positive influence on customer participation; (2) Motivation has a positive influence on customer participation, (3) Opportunity has a positive influence on customer participation; (4) Ability has a positive influence on customer participation; (5) Subjective norms has a positive influence on customer participation; (6) Customer participation has a positive influence on brand loyalty; (7) Customer participation has a positive influence on brand trust; (8) Customer participation has a positive influence on recommendation; (9) Customer participation has a positive influence helping other customers; (10) Customer participation has a positive influence customer participation.

4.1.2 The selected paper for meta-analysis

This meta-analysis evaluated each study published to measure the influential factors of customer participation. The following journals were included to select papers in this study. The list of the journals is shown below:

1. Acta Commercii
2. Asia Pacific Management Review
3. Computers & Education
4. Computers in Human Behavior
5. Cornell Hospitality Quarterly
6. Creative and Innovation Management
7. Cyberpsychology, Behavior, and Social Networking

8. European Management Journal
9. Health Informatics Journal
10. Higher Education
11. Human Factors and Ergonomics in Manufacturing & Service Industries
12. Indonesian Journal of Electrical Engineering and Computer Science
13. Information Technology & People
14. International Journal of Advanced Computer Science and Applications
15. International Journal of Bank Marketing
16. International journal of Consumer Studies
17. International Journal of Contemporary Hospitality Management
18. International Journal of Hospitality Management
19. International Journal of Information Management
20. International Journal of Marketing, Communication and New Media
21. International Journal of Research in Marketing,
22. Internet Research
23. Journal of Brand Management
24. Journal of Business Research
25. Journal of Cleaner Production
26. Journal of Competitiveness
27. Journal of Environmental Psychology
28. Journal of Hospitality and Tourism Management
29. Journal of Hospitality and Tourism Technology.
30. Journal of Information Technology Education
31. Journal of Management
32. Journal of Physical Education and Sport
33. Journal of Retailing
34. Journal of Retailing and Consumer Services
35. Journal of Services Marketing.
36. Journal of the Academy of Marketing Science

37. Journal of Travel Research
38. Managerial Challenges of the Contemporary Society. Proceedings
39. Marmara University Journal of Economic & Administrative Sciences
40. Mobile Media & Communication
41. Online Information Review
42. Personality and Individual Differences
43. Project Management Journal
44. Psychology & Marketing
45. Psychology of Sport and Exercise
46. Service Business
47. Sustainable Production and consumption
48. Tourism Management
49. World Congress on Computer and Information Technology (WCCIT)

4.1.3 Study result for meta-analysis

Table 4-2 shows the meta-analysis results for the influence of antecedents on customer participation. According to preview the influence of S-D orientation on customer participation, the results in table 4-2 show that variables of S-D orientation have a positive influence on CP ($r = 0.54$). Based on the criteria as stated Lipsey and Wilson (2001), the relationship has a high effect size. These results are also supported by a 95% confidence interval with non-zero values. Therefore, hypothesis 1 is supported in the meta-analysis. Furthermore, the Q-values are higher than the Chi-Square value, which means that these effects are significantly heterogeneous.

According to preview the influence of individual factors on customer participation, the results in table 4-2 show that motivation, opportunity, and ability have a positive influence on CP ($r = 0.28$; $r = 0.29$; $r = 0.33$, respectively). Based on the criteria as stated Lisey and Wilson (2001), the relationships have medium effect sizes. This study is supported by a 95% confidence interval with non-zero values. Therefore, hypotheses H2, H3, and H4 are supported in the

meta-analysis. Furthermore, the Q-value is higher than the Chi-Square value, which means that the effect is significantly heterogeneous.

According to preview the influence of social factors on customer participation, the results in table 4-2 show that subjective norms have a positive influence on CP ($r= 0.32$). Based on the criteria as stated Lisey and Wilson (2001), the relationships have a medium effect size. The results are also supported by a 95% confident interval with non-zero values. Therefore, hypothesis H5 is supported in the meta-analysis. Furthermore, the Q-value is higher than the Chi-Square value, which means that the effect is significantly heterogeneous.

Table 4-2 Meta-Analysis Results for Influence of Antecedents on CP

Variables		k	Total	Effect size & 95% confidence interval			Heterogeneity		
IV	DV	Studies	n	r	LCI	UCI	p-value	Chi-square	Q-value
SD	CP	16	3699	0.54	0.52	0.56	0.00	37.69	860.95
M	CP	11	3500	0.28	0.25	0.31	0.00	29.58	48.03
O	CP	5	2719	0.29	0.25	0.32	0.00	18.46	42.57
A	CP	9	3317	0.33	0.30	0.36	0.00	26.12	100.70
S	CP	15	4442	0.32	0.30	0.34	0.00	36.12	53.12

SD = S-D orientation; M = motivation; O = Opportunity; A = Ability; S = Subjective norms; CP = Customer Participation.

For the relationship between customer participation and its consequences. According to preview the influence of customer participation on brand outcomes, the results in table 4-3 show that customer participation has a positive influence on brand loyalty ($r= 0.27$) and brand trust ($r= 0.31$). Based on the criteria as stated Lisey and Wilson (2001), the relationships have a medium effect size. The results are also supported by a 95% confident interval with non-zero values. Therefore, hypotheses H7a and H7b are supported in the meta-

analysis. Furthermore, the Q-value is higher than the Chi-Square value, which means that the effect is significantly heterogeneous.

According to preview the influence of customer participation on customer citizenship behaviors, the results in table 4-3 show that customer participation has a positive influence on recommendation ($r=0.48$), helping customers ($r=0.39$), and providing feedback ($r=0.43$). Based on the criteria as stated Lisey and Wilson (2001), the influence of CP on recommendation and providing feedback have high effect size, and the relationship between CP and helping other customer has a medium effect size. The results are also supported by a 95% confident interval with a non-zero value. Therefore, hypotheses H8, H8b, and H8c are supported in the meta-analysis. Furthermore, the Q-values are higher than the Chi-Square values, which means that these effects are significantly heterogeneous.

Table 4-3 Meta-Analysis Results for Influence of CP on its Consequences

Variables		k	Total	Effect size & 95% confidence Interval			Heterogeneity		
IV	DV	Studies	n	r	LCI	UCI	p-value	Chi-square	Q-value
CP	BL	10	2273	0.27	0.24	0.31	0.00	27.87	113.53
CP	BT	9	1778	0.31	0.28	0.35	0.00	26.12	148.10
CP	R	7	1622	0.48	0.44	0.51	0.00	22.45	172.16
CP	H	10	1980	0.39	0.35	0.42	0.00	27.87	77.38
CP	p	10	1980	0.43	0.40	0.45	0.00	27.87	126.00

CP = Customer Participation; BL = Brand loyalty; BT = Brand Trust; R= Recommendation; H = Helping customers; P = Providing feedback.

4.1.4 Conclusion

This study intends to contribute to the literature from the following aspects. First, this study examines multiple level antecedents of customer

participation at the same time which has yet to be done by previous studies. Those antecedents consist of S-D orientation, motivation, opportunity, ability, subjective norms. Second, this study identifies brand outcomes (brand loyalty and brand trust) and customer citizenship behaviors intern of recommendation, helping other customers, and providing feedback.

For the influence of S-D Orientation on customer participation, Anh and Thuy (2017) argued that frontline interaction can enhance customer participation (including information seeking, information sharing, and responsive behavior). Cossío-Silva, Revilla-Camacho, Vega-Vázquez, and Palacios-Florencio (2016) stated that customer co-creation will result in behaviors. Lin, Chen and Filieri (2017) stated that tourists' perceived economic and social-cultural benefits will result in value- co-creation. Karpen et al. (2012) further confirm that S-D orientation (including individuated, relational, ethical, empowered, developmental, and concerted interaction capability) will be related to co-creation capability with then facilitate networking behavior. Karpen et al., (2015) argued that S-D orientation has a significant impact on customer satisfaction and WOM.

For the influence of MOA on customer participation. Yang et al (2017) stated that customer participation has reduced the boundaries separating from the service provider, which is influenced by diverse issues such as knowledge sharing, reputation, enjoyment, and other motivation. For the influence of subjective norms on customer participation, Cheung and Lee (2010) stated that customers are influenced by others (relatives, friends, and peers) in SNS. Hung et al.(2016) argued that subjective norms impact individuals' decision-making in the context of participation. Fang and Zhang (2019) stated that subjective norms also associated with customer continued usage of SNS.

For the influence of customer participation on brand outcomes. Chen et al. (2013) found that customer participation in an online community affected the contribution of knowledge to the community. Yuan-shuh and Monle (2012)

suggested that customer participation has a significant influence on brand trust toward an online community. Jung (2014) stated that customer attitude toward the online community influence brand loyalty and brand trust.

For the influence of customer participation on CCB. Customer participation is linked to CCB (Anaza and Zhao, 2013, Al Halbusi et al., 2020; Van Tonder and de Beer, 2018). Ida (2017) stated in the service sectors, customer participation has a significant influence on citizenship behavior in terms of helping other customers, advocacy, tolerance, and feedback. Anaza and Zhao (2013) analyzed the influence of e-store facilitating conditions and familiarization on customer citizenship behavior in an online shopping context. Zhu et al. (2016) stated that customer citizenship behaviors toward products and service providers are influenced by customer psychological reactions.

Although plenty of studies have been conducted to understand CP, none of the previous studies integrated those variables into a more comprehensive framework like this study. It is expected that the results of this study can be provided as an important reference for academicians to conduct further empirical validations on the research of customer participation, the results can be very useful for professionals to identify their strategies of customer participation management to enhance the profitability of the firms.

CHAPTER 5

EMPIRICAL RESULTS

This chapter presents the empirical results. The hypotheses were tested by analyzing the data collected from the questionnaire survey.

5.1 Descriptive analysis

The survey of this study is conducted between December 2020 and February 2021. The questionnaires were sent to Vietnamese respondents who participate in social media, including Facebook, Youtube, Zalo, Tiktok, Skype, Line, etc. The characteristics of respondents are gathered and show in table 5-1. Online and offline questionnaires were distributed. For 425 valid respondents, 230 were male (54.1%) and most of the respondents were aged less than 30 years old (88.9%). Most of the respondents had an educational background of a bachelor's degree (83.8%).

Table 5-1 Demographics and Descriptive Information of Respondents

Demographic		Frequency (n=425)	Percentage (%)
Gender	Male	230	54.1
	Female	195	45.9
Ages	Less than 30	378	88.9
	31-35	26	6.1
	36-40	8	1.9
	41-45	6	1.4
	Higher than 46	7	1.6
Education	High school or lower	48	11.3
	Bachelor degree	356	83.8
	Master degree	13	3.1
	Doctoral degree	8	1.9

Monthly income	Less than 500 USD	295	69.4
	501-750 USD	72	16.9
	751-1000 USD	41	9.6
	Higher than 1000 USD	17	4.1
Occupation	Educational sector	43	10.1
	Business sector	40	9.4
	Industrial sector	36	8.5
	Service sector	48	11.3
	Students	246	57.9
	Others	12	2.8
Hours of using internet per week	Less than 10 hours	30	7.1
	11-20 hours	181	42.6
	21-30 hours	128	30.1
	Higher than 30 hours	86	20.2

5.2 Characteristic research constructs

Table 5-2 shows descriptive statistics of mean value and standard deviations with respect to each of the research variables for 425 respondents. The results of means and standard deviation are shown in table 5-2. Based on the results, all respondents tend to report higher levels (the value of mean all above 4.4 in a seven-point scale) for most items of the constructs of this research framework.

Table 5-2 Descriptive Analysis for Questionnaire Items

Research Items	Mean	Std. Dev
Research Constructs: S-D Orientation		
Relational Interaction		
ARI1 This social media makes me feel at ease during our dealings	5.48	1.297
ARI2 This social media tries to establish rapport with me	5.32	1.312
ARI3 This social media encourages two-way communication with me	5.25	1.302
ARI4 This social media shows genuine interest in engaging me.	5.38	1.276
Ethical Interaction		
AEI1 This social media does not try to take advantage of me	5.54	1.297
AEI2 This social media does not pressure me in any way	5.53	1.335
AEI3 This social media does not mislead in any way	5.60	1.247
AEI4 This social media does not try to manipulate me	5.36	1.408
Individual Interaction		
AII1 This social media makes an effort to understand my needs	5.60	1.144
AII2 This social media is sensitive to my situation	5.51	1.234
AII3 This social media makes an effort to find out what kind of offering is most helpful to me	5.60	1.193
AII4 This social media seeks to identify my expectation	5.62	1.177
Empowered Interaction		
AEM1 This social media invites me to provide ideas or suggestions	5.06	1.449
AEM2 This social media encourages me to shape the service I receive	5.05	1.412
AEM3 This social media provides me with control	5.12	1.410

over my experiences		
AEM4 This social media let me interact with them in my preferred way	4.92	1.472
Concerted Interaction		
ACI1 This social media works together seamlessly in service to	5.29	1.337
ACI2 This social media acts as one unit when dealing with me	5.55	1.176
ACI3 This social media provides the message to me that are consistent with other customers	5.49	1.245
ACI4 This social media ensure they have smooth procedures for interacting with me	5.57	1.179
Developmental Interaction		
ADI1 This social media shares useful information with me	5.01	1.527
ADI2 This social media helps me become more knowledge	5.01	1.553
ADI3 This social media provides me with the advice I need to use our offering successfully	4.53	1.736
ADI4 This social media offers expertise that I can learn from	4.49	1.779
Research Constructs: Individual factors		
Motivation		
BM1 I will chance to learn about how to use this social media	5.20	1.359
BM2 I have changes to learn about useful social media	5.11	1.349
BM3 Using social media is certainly a good way to get information that I want	5.04	1.356
BM4 I can talk with people who share my interests on this social media	5.20	1.356
BM5 Through social media, I received timely and exclusive information	5.09	1.461
BM6 Using social media will allow me to synchronize updating my contact information (gmail,	5.11	1.383

phone numbers)		
BM7 The advertising via social media customized to my profile is useful	5.03	1.440
Opportunity		
BO1 I have enough time to spend on this social media	5.33	1.273
BO2 Organization policy encourages my using this social media	5.56	1.217
BO3 I am frustrated by the downtime this social media	5.42	1.222
BO4 Internet connection helps me use this social media	5.46	1.173
Ability		
BA1 For me, it is easy to use this social media	5.50	1.187
BA2 I have facilitated to use of this social media	4.63	1.690
BA3 I have time to use this social media	4.50	1.764
BA4 I am very skill in shopping by using social media, in using social media websites	4.89	1.604
Research Constructs: Social Factors		
Subjective Norms		
CSU1 People in my organization have recommended me to do participate in this social media	5.42	1.271
CSU2 My peers have recommended me to participate in this social media	5.40	1.292
CSU3 My immediate friends have recommended me to participate	5.30	1.358
CSU4 Most people who are important to me would want me to socialize online	5.15	1.402
CSU5 People who influence my behavior encourage me to participate in social media	4.72	1.519
CSU6 I feel morally obligated to refute crisis-related rumors on social media during the crisis	5.16	1.339
CSU7 I feel personally obligated to refute crisis-related rumors on social media during the social crisis, such as not spreading misinformation	5.09	1.425

CSU8 My friends, my family, and people who are important to me think I should refute crisis-related rumors through social media during a social crisis	5.36	1.267
Research Construct: Customer Participation		
DCP1 I spent a lot of time sharing information about my needs and opinions with the staff during the process	4.82	1.642
DCP2 I put a lot of effort into expressing my personal needs during the process	5.04	1.395
DCP3 I always provide suggestions for improving the service outcome	5.06	1.421
DCP4 I have a high level of participation in the process	4.98	1.468
DCP5 I am very much involved in deciding how the services should be provided	5.08	1.430
Research Constructs: Brand Outcomes		
Brand Loyalty		
EBL1 I consider myself to be loyal to this social media	4.65	1.554
EBL2 I am committed to purchasing from this social media	4.86	1.503
EBL3 I am willing to pay more on my social media	4.77	1.594
Brand Trust		
EBT1 The social media gives me everything that I expected out of the product	5.33	1.471
EBT2 I rely on my social media	5.10	1.558
EBT3 The social media never disappointing me	5.55	1.410
Research constructs: Customer Citizenship Behaviors		
Recommendation		
REM1 I refer fellow coworkers to this social media	5.36	1.227
REM2 I recommend this social media to my family	5.22	1.278
REM3 I recommend this social media to my peers	5.23	1.349
REM4 I recommend this social media to people interested in	5.44	1.198

Helping Customers		
HC1 I assist other customers if they need help	5.38	1.279
HC2 I help others with their services if they seem to have problems	5.31	1.267
HC3 I teach other customers to use the service correctly	5.38	1.294
HC4 I give advice to other customers	5.35	1.305
Providing Feedback		
PF1 I fill out a customer satisfaction survey	5.14	1.415
PF2 I provide helpful feedback to customer service	5.06	1.481
PF3 I provide information when surveyed by this social network	4.93	1.580
PF4 I inform social media about the great service received by an individual employee	5.05	1.504
Research Constructs: Perceived Benefit of Participation		
PB1 I get what I really want when I participate in this social media	5.20	1.427
PB2 I get my best service in a timely manner when I participate in this social media	5.21	1.340
PB3 I make it a good product and service when I participate in this social media	5.00	1.429
PB4 When I participate in this social media, it provided me with the feeling of enjoyment	4.98	1.426
Research Constructs: Perceived Ability		
PA1 I am fully capable of choosing this social media myself	5.48	1.305
PA2 I am confident in my ability to choose this social media	5.28	1.362
PA3 Choosing a good social media is well within the scope of my abilities	5.49	1.326

5.3 Factor analysis and reliability test

After verifying the descriptive characteristics, this study conducted a test of the reliability of the variables. This paper used Factor loading analysis and reliability test by using SPSS software. Based on Hair et al. (2012), the resulting values must satisfy the following criteria: factor loading > 0.6 , Eigen value > 1 , cumulative explained variance $> 50\%$, Item to total correlation > 0.5 , Cronbach's alpha > 0.6 (Hair et al., 1998). If any variable did not meet the criteria mentioned above, it was deleted from further analysis. Tables 5-3 to 5-9 show the results of the confirmative factor analysis. It shows that no variables were deleted from the data analysis. The results of the confirmative factor analysis and reliability test for each dimension are shown from Table 5-3 to Table 5-10

5.3.1 S-D orientation

S-D orientation includes six factors: relational interaction, ethical interaction, individual interaction, empowered interaction, concerted interaction, and developmental interaction. Based on Table 5-3, it could be seen that all observed variables have factor loading greater than 0.6, with the highest factor loading on AEM2 (0.944) and the lowest is AEM4 (0.705), whereas the item-to-total correlations for each value from 0.643 to 0.882. For relational interaction, the Eigenvalue is 3.255, cumulative explained variance is 81.385%, Cronbach's alpha is 0.924. For ethical interaction, the Eigenvalue is 3.079, cumulative explained variance is 76.973%, Cronbach's alpha is 0.899. For individual interaction, the Eigenvalue is 3.121, cumulative explained variance is 78.023%, Cronbach's alpha is 0.906. For empowered interaction, the Eigenvalue is 3.165, cumulative explained variance is 79.124%, Cronbach's alpha is 0.909. For concerted interaction, the Eigenvalue is 2.891, cumulative explained variance is 72.264%, Cronbach's alpha is 0.870. For developmental interaction, the Eigenvalue is 3.159, cumulative explained variance is 78.972%, Cronbach's alpha is 0.910.

Table 5-3 Results of Factor Analysis and Reliability Test for S-D Orientation

Research Items	Factor loading	Eigenvalue	Cumulative Explained Variance (%)	Item-to-total correlation	Cronbach's alpha
Relational interaction					
ARI3	0.916	3.255	81.385	0.845	0.924
ARI2	0.906			0.829	
ARI1	0.896			0.813	
ARI4	0.891			0.805	
Ethical interaction					
AEI3	0.915	3.079	76.973	0.834	0.899
AEI2	0.901			0.806	
AEI1	0.886			0.786	
AEI4	0.803			0.672	
Individual interaction					
AII3	0.900	3.121	78.023	0.815	0.906
AII2	0.883			0.788	
AII1	0.880			0.783	
AII4	0.870			0.767	
Empowered interaction					
AEM2	0.944	3.165	79.124	0.882	0.909
AEM3	0.910			0.825	
AEM1	0.919			0.840	
AEM4	0.775			0.643	
Concerted interaction					
ACI3	0.874	2.891	72.264	0.758	0.870

ACI2	0.869			0.756	
ACI4	0.846			0.716	
ACI1	0.810			0.669	
Developmental interaction					
ADI3	0.917	3.159	78.972	0.852	0.910
ADI1	0.880			0.779	
ADI4	0.879			0.788	
ADI2	0.878			0.775	

5.3.2 The MOA framework

The MOA Framework includes three factors: motivation, opportunity, and ability. Based on Table 5-4, it could be seen that all observed variables have factor loading greater than 0.6, with the highest factor loading on BA3 (0.894) and the lowest is MA1 (0.681), whereas the item-to-total correlations for each value from 0.507 to 0.830. For motivation, the Eigenvalue is 5.890, cumulative explained variance is 69.856%, Cronbach's alpha is 0.926. For opportunity, the Eigenvalue is 2.996, cumulative explained variance is 74.888%, Cronbach's alpha is 0.887. For ability, the Eigenvalue is 2.761, cumulative explained variance is 69.021%, Cronbach's alpha is 0.826.

Table 5-4 Results of Factor Analysis and Reliability Test for the MOA Framework

Research Items	Factor loading	Eigenvalue	Cumulative Explained Variance (%)	Item-to-total correlation	Cronbach's alpha
Motivation					
BM3	0.885	4.890	69.856	0.830	0.926
BM4	0.870			0.811	
BM2	0.876			0.816	

BM1	0.866			0.802	
BM6	0.821			0.759	
BM7	0.768			0.692	
BM5	0.754			0.674	
Opportunity					
BO3	0.890	2.996	74.888	0.790	0.887
BO2	0.882			0.779	
BO4	0.869			0.758	
BO1	0.819			0.689	
Ability					
BA3	0.894	2.761	69.021	0.793	0.868
BA4	0.877			0.757	
BA2	0.853			0.729	
BA1	0.681			0.507	

5.3.3 Subjective norms

Based on Table 5-5, it could be seen that all observed variables have factor loading greater than 0.6, with the highest factor loading on CSU2 (0.901) and the lowest is CSU8 (0.800), whereas the item-to-total correlations for each value from 0.687 to 0.768, the Eigenvalue is 5.844, cumulative explained variance is 79.216%, Cronbach's alpha is 0.889.

Table 5-5 Results of Factor Analysis and Reliability Test for Subjective Norms

Research Items	Factor loading	Eigenvalue	Cumulative Explained Variance (%)	Item-to-total correlation	Cronbach's alpha
CSU2	0.901	5.844	79.216	0.768	0.889
CSU1	0.892			0.751	
CSU3	0.877			0.727	

CSO4	0.859			0.768	
CSO7	0.854			0.758	
CSO5	0.848			0.753	
CSO6	0.800			0.690	
CSO8	0.800			0.687	

5.3.4 Customer participation

Based on Table 5-6, it could be seen that all observed variables have factor loading greater than 0.6, with the highest factor loading on DCP3 (0.921) and the lowest is DCP5 (0.712), whereas the item-to-total correlations for each value from 0.585 to 0.851, the Eigenvalue is 3.543, cumulative explained variance is 70.866 %, Cronbach's alpha is 0.889.

Table 5-6 Results of Factor Analysis and Reliability Test for Customer Participation

Research Items	Factor loading	Eigenvalue	Cumulative Explained Variance (%)	Item-to-total correlation	Cronbach's alpha
DCP3	0.921	3.543	70.866	0.851	0.892
DCP4	0.901			0.824	
DCP2	0.883			0.793	
DCP1	0.771			0.652	
DCP5	0.712			0.585	

5.3.5 The brand outcomes

The brand outcomes include two factors: brand loyalty, and brand trust. Based on Table 5-7, it could be seen that all observed variables have factor loading greater than 0.6, with the highest factor loading on EBL1 (0.906) and the lowest is EBT2 (0.804), whereas the item-to-total correlations for each value

from 0.591 to 0.773. For brand loyalty, the Eigenvalue is 2.329, cumulative explained variance is 77.631%, Cronbach's alpha is 0.855. For the brand trust, the Eigenvalue is 2.184, cumulative explained variance is 72.813%, Cronbach's alpha is 0.810.

Table 5-7 Results of Factor Analysis and Reliability Test for the Brand Outcomes

Research Items	Factor loading	Eigenvalue	Cumulative Explained Variance (%)	Item-to-total correlation	Cronbach's alpha
Brand loyalty					
EBL1	0.906	2.329	77.631	0.773	0.855
EBL2	0.875			0.715	
EBL3	0.862			0.696	
Brand trust					
EBT1	0.883	2.184	72.813	0.707	0.810
EBT3	0.871			0.687	
EBT2	0.804			0.591	

5.3.6 Customer citizenship behaviors

The customer citizenship behaviors include three factors: recommendation, helping customers, and providing feedback. Based on Table 5-8, it could be seen that all observed variables have factor loading greater than 0.6, with the highest factor loading on HC2 (0.931) and the lowest is REM3 (0.859), whereas the item-to-total correlations for each value from 0.751 to 0.872. For recommendation, the Eigenvalue is 3.106, cumulative explained variance is 77.639%, Cronbach's alpha is 0.903. For helping customers, the Eigenvalue is 3.327, cumulative explained variance is 83.170%, Cronbach's

alpha is 0.903. For providing feedback, the Eigenvalue is 3.311, cumulative explained variance is 82.783%, Cronbach's alpha is 0.932.

Table 5-8 Results of Factor Analysis and Reliability Test for the Customer Citizenship Behaviors

Research Items	Factor loading	Eigenvalue	Cumulative Explained Variance (%)	Item-to-total correlation	Cronbach's alpha
Recommendation					
REM2	0.914	3.106	77.639	0.836	0.903
REM4	0.886			0.791	
REM1	0.865			0.757	
REM3	0.859			0.751	
Helping customers					
HC2	0.931	3.327	83.170	0.872	0.932
HC1	0.920			0.853	
HC3	0.905			0.830	
HC4	0.891			0.809	
Providing feedback					
PF4	0.914	3.311	82.783	0.846	0.930
PF2	0.911			0.837	
PF3	0.911			0.840	
PF1	0.904			0.827	

5.3.7 Perceived benefits of participation

Based on Table 5-9, it could be seen that all observed variables have factor loading greater than 0.6, with the highest factor loading on PB1 (0.871)

and the lowest is PB4 (0.842), whereas the item-to-total correlations for each value from 0.723 to 0.760, the Eigenvalue is 3.033, cumulative explained variance is 75.837 %, Cronbach's alpha is 0.893.

Table 5-9 Results of Factor Analysis and Reliability Test for Perceived Benefits of Participation

Research Items	Factor loading	Eigenvalue	Cumulative Explained Variance (%)	Item-to-total correlation	Cronbach's alpha
PB1	0.871	3.033	75.837	0.760	0.893
PB2	0.885			0.786	
PB3	0.885			0.790	
PB4	0.842			0.723	

5.3.8 Perceived ability

Based on Table 5-10, it could be seen that all observed variables have factor loading greater than 0.6, with the highest factor loading on PA3 (0.919) and the lowest is PA2 (0.870), whereas the item-to-total correlations for each value from 0.720 to 0.806, the Eigenvalue is 2.426, cumulative explained variance is 80.857 %, Cronbach's alpha is 0.881.

Table 5-10 Results of Factor Analysis and Reliability Test for Perceived Ability

Research Items	Factor loading	Eigenvalue	Cumulative Explained Variance (%)	Item-to-total correlation	Cronbach's alpha
PA3	0.919	2.426	80.857	0.806	0.881
PA1	0.908			0.783	
PA2	0.870			0.720	

5.4 The test of common method variance

According to Teo (2011), common method variance (CMV) refers to the overlap of variances between two variables due to the type of measurements rather than a true relationship of the variables. Campbell and Fiske (1959) stated that an outcome of CMV is an inflation of the observed correlations, thus may provide false support of the hypotheses.

In order to assess the issue of common method variance, firstly, a Harmon one-factor test was adopted and loaded all variables into a principal component factor analysis (Podsakoff et. al., 2003). The explained variance of a one-factor test is 41.69% of the rotated solution which is less than 50%. Second, discriminated validity was also performed by comparing the square root of the AVE (average variance extracted) with the Pearson correlations among the constructs. All AVE estimates as shown in Table 5-11 are greater than the corresponding inter-construct square correlation estimates. These empirical results suggested that the issue of common method variance is still under acceptance level. This study thus conducted further empirical testing in the following sections.

Table 5-11 Correlations among the Research Constructs

Ability	0.83	0.51	0.37	0.75	0.77	0.66	0.73	0.42	0.61	0.72	0.75	0.75	0.45
Brand loyalty	0.43	0.88	0.77	0.53	0.34	0.45	0.34	0.43	0.34	0.42	0.37	0.37	0.40
Brand trust	0.30	0.64	0.85	0.44	0.41	0.47	0.43	0.52	0.29	0.33	0.38	0.47	0.45
Customer participation	0.64	0.47	0.38	0.84	0.66	0.69	0.69	0.44	0.61	0.75	0.69	0.69	0.51
Helping customer	0.67	0.30	0.36	0.60	0.91	0.71	0.76	0.51	0.72	0.72	0.86	0.77	0.54
Motivation	0.59	0.40	0.41	0.63	0.66	0.83	0.66	0.56	0.76	0.69	0.69	0.67	0.57
Opportunity	0.63	0.30	0.37	0.61	0.69	0.60	0.86	0.50	0.62	0.66	0.82	0.83	0.50
Perceived ability	0.36	0.38	0.45	0.39	0.47	0.50	0.44	0.89	0.48	0.41	0.49	0.51	0.65
Perceived benefit	0.52	0.30	0.26	0.55	0.67	0.69	0.56	0.42	0.87	0.67	0.73	0.59	0.55
Providing feedback	0.64	0.37	0.28	0.68	0.67	0.64	0.60	0.37	0.62	0.91	0.71	0.71	0.55
Recommendation	0.65	0.32	0.33	0.62	0.79	0.64	0.73	0.43	0.66	0.66	0.88	0.77	0.59
S-D Orientation	0.68	0.35	0.41	0.65	0.73	0.64	0.77	0.47	0.56	0.69	0.72	0.80	0.57
Subjective norms	0.38	0.34	0.38	0.45	0.48	0.51	0.44	0.57	0.49	0.49	0.53	0.53	0.89

Notes: Italicized values on the diagonal are the square roots of the AVE and represent Fornell-Lacer's criteria; values below the diagonal are the correlations between constructs. Values above the diagonal are the HTMT value

5.5 Evaluation of the measurement model

To verify the dimensionality and reliability of the construct of this study, PLS has been applied to find the outer loading, AVE, CR, and Cronbach's alpha value. Table 5-12 shows that all outer loading of all the questionnaires are higher than 0.6, all AVE values are higher than or approaching 0.6, and Cronbach's alpha of all factors are acceptable, which all exceed the generally accepted guideline from Hair et al. (2017). So that, we can now conclude that all the questionnaire items show a high degree of internal consistency, and their factors are appropriated to be used for further analysis.

The AVEs of research constructs are ranged from 0.727 to 0.831, which are mostly higher than the benchmark of 0.5 as recommended and demonstrate satisfactory reliability and convergent validity of the research constructs. The Cronbach's alpha coefficients are ranged from 0.893 to 0.932, which are acceptable with the criteria of 0.7, and confirm the internal consistency of the measurement items. The CR coefficients are ranged from 0.829 to 0.951, which are much higher than the criteria of 0.6, which suggests that the variance share by the respective indicator is robust. Based on the above discussion, it can be concluded that the reliability and convergent validity of the research model is appropriate, which enables us to proceed to an evaluation of the structural model.

Table 5-12 Evaluation of the measurement model

Construct	AVE	Composite Reliability (C.R)	Cronbach's Alpha
S-D orientation	0.813	0.845	0.924
Motivation	0.698	0.814	0.926
Opportunity	0.748	0.822	0.887
Ability	0.684	0.798	0.849
Subjective norms	0.792	0.819	0.868
Customer Participation	0.728	0.923	0.892
Brand loyalty	0.775	0.911	0.855
Brand trust	0.727	0.888	0.810
Recommendation	0.776	0.932	0.903
Helping customers	0.831	0.951	0.932
Providing feedback	0.827	0.943	0.930
Perceived benefits of participation	0.757	0.875	0.893
Perceived ability	0.808	0.926	0.881

The research hypotheses were tested using parameter estimates of the path between research constructs. Using a sample of 425, a non-parametric bootstrapping procedure was performed with 5000 sub-samples to obtain the statistical significance of each path coefficient for hypothesis testing. The goodness-of-fit (GoF) index is used to measure the overall fitness between the data and the model. Following Vinzi et al. (2010), GoF greater than 0.36 is

considered to be large, 0.25 is described as medium, while 0.10 is described as small. The GoF of this structural model is 0.57, which is considered to be large. This result confirmed that the structural model is appropriate with predictive power.

Table 5-13 shows the results of hypothesis testing. For the influence of firm factors, the empirical results show that S-D orientation has a positive influence on customer participation ($\beta=0.106$, $t=6.403$), it indicated that hypothesis H1 was supported.

For the influence of individual factors, the empirical results show that motivation has a positive influence on customer participation ($\beta=0.179$, $t=11.711$), opportunity has a positive influence on customer participation ($\beta=0.248$, $t=2.595$), and ability has a positive influence on customer participation ($\beta=0.154$, $t=9.621$). Thus, hypotheses H2 H3 H4 were supported. For the influence of social factors, the empirical results show that subjective norms have a positive influence on customer participation ($\beta=0.043$, $t=3420$), Thus, hypothesis H5 was supported.

For the relationship between customer participation on brand outcomes. The empirical results show that customer participation has a positive influence on brand loyalty ($\beta=0.253$, $t=4.719$), brand trust ($\beta=0.339$, $t=5.6729$). Thus, hypotheses H6a, H6b were supported.

For the relationship between customer participation on customer citizenship behaviors. The empirical results show that customer participation has a positive influence on recommendation ($\beta=0.440$, $t=6.028$), helping customers ($\beta=0.492$, $t=8.317$). Thus, hypotheses H7a, H7b, H7c were supported.

Table 5-13 The Hypothesis Testing Results

Hyps	Path	Beta	t-value
1	SD Orientation → Customer Participation	0.106	6.403***
2	Motivation → Customer Participation	0.179	11.711***
3	Opportunity → Customer Participation	0.248	2.595**
4	Ability → Customer Participation	0.154	9.621***
5	Subject norms → Customer Participation	0.043	3.420**
6a	Customer Participation → Brand Loyalty	0.253	4.719**
6b	Customer Participation → Brand Trust	0.339	5.6729***
7a	Customer Participation → Recommendation	0.440	6.028***
7b	Customer Participation → Helping Customer	0.492	8.317***
7c	Customer Participation → Providing Feedback	0.456	9.584***

Noted: *** p<0.01, ** p<0.01, *p<0.05

5.6 Mediating of Customer Participation

In this study, customer participation was considered the mediator effect for multiple direct effects. This study was followed by Hair et al., (2017) and Baron and Kenny (1986) to test mediating effects. Following their guideline, there are two types of no mediating effect (direct-only mediation and no effect non-mediation), and two types of mediation (partial and full mediation). If the direct effect is significant but not the indirect effect, the path involves direct-only non-mediation. If both the direct and indirect effect is insignificant, the path involves no-effect non-mediation. Regarding mediation effects, partial mediation refers to both direct and indirect effects that are significant and point in the same direction; while full mediation refers to the indirect effect is significant and direct effect is not significant.

Bootstrapping method (5000 sub-samples) was used to evaluate the significance of mediating (Hair et al., 2017). The results show that customer participation significantly mediated the relationship between S-D orientation and customer citizenship behaviors with indirect effects ($\beta=0.208$; $t= 3.152$), but insignificant mediated brand outcomes ($\beta=0.023$, $t=1.399$). The next step is to assess the significance of direct effects from S-D orientation and brand outcomes ($\beta=0.314$, $t=5.158$) and customer citizenship behaviors ($\beta=0.244$; $t=4.420$), which represented statistical significance. Follow the procedure mentioned above, it could be concluded that customer participation partially mediated S-D orientation and customer citizenship behaviors, but have no mediation with brand outcomes

Similar, as shown in table 5-14, customer participation significantly mediated the relationship between motivation and brand outcomes and customer citizenship behaviors with indirect effects ($\beta=0.143$, $t= 1.98$) ($\beta=0.117$; $t= 2.871$). The next step is to assess the significance of direct effects from motivation and brand outcomes ($\beta=0.165$; $t=1.970$) and customer citizenship behaviors ($\beta=0.184$, $t=2.499$), which represented statistical significance. Follow the procedure mentioned above, it could be concluded that customer participation partially mediated motivation, and brand outcomes and customer citizenship behaviors.

Furthermore, customer participation also significantly mediated the relationship between opportunity and brand outcomes and customer citizenship behaviors with indirect effects ($\beta=0.215$, $t= 3.512$) ($\beta=0.109$; $t= 2.703$). The next step is to assess the significance of direct effects from opportunity and brand outcomes ($\beta=0.254$; $t=3.728$) and customer citizenship behaviors ($\beta=0.145$, $t=2.744$), which represented statistical significance. Follow the procedure mentioned above, it could be concluded that customer participation partially mediated opportunity and brand outcomes and customer citizenship behaviors.

As shown in table 5-14, customer participation also significantly mediated the relationship between ability and brand outcomes and customer citizenship behaviors with indirect effects ($\beta=0.037$, $t= 1.974$) ($\beta=0.137$; $t= 3.765$). The next step is to access the significance of direct effects from ability and brand outcomes ($\beta=0.118$; $t=2.445$) and customer citizenship behaviors ($\beta=0.191$, $t=4.064$), which represented statistical significance. Follow the procedure mentioned above, it could be concluded that customer participation partially mediated ability and brand outcomes and customer citizenship behaviors.

Besides that, customer participation significantly mediated the relationship between subjective norms and customer citizenship behaviors with indirect effects ($\beta=0.047$; $t= 2.956$), but insignificant mediated brand outcomes ($\beta=0.121$, $t=1.780$). The next step is to access the significance of direct effects from subjective norms and brand outcomes ($\beta=0.196$, $t=2.325$) and customer citizenship behaviors ($\beta=0.087$; $t=2.638$), which represented statistical significance. Follow the procedure mentioned above, it could be concluded that customer participation partially mediated subjective norms and customer citizenship behaviors, but have no mediation with brand outcomes.

Finally, as shown in table 5-14, customer participation also significantly mediated the relationship between social norms and brand outcomes and customer citizenship behaviors with indirect effects ($\beta=0.101$, $t= 2.790$) ($\beta=0.049$; $t= 1.982$). The next step is to access the significance of direct effects from ability and brand outcomes ($\beta=0.123$; $t=2.017$) and customer citizenship behaviors ($\beta=0.127$, $t=2.428$), which represented statistical significance. Follow the procedure mentioned above, it could be concluded that customer participation partially mediated social norms and brand outcomes and customer citizenship behaviors.

Table 5-14. Mediation Results

VARIABLES						
IV	Med	DV	Direct effect	t-value (p value)	Indirect effect	t-value (p-value)
S-D Orientation	CP	Brand outcomes	0.314	5.158***	0.023	1.399
		CCB	0.244	4.420**	0.208	3.152**
Motivation	CP	Brand outcomes	0.165	1.970*	0.143	1.98*
		CCB	0.184	2.499**	0.117	2.871**
Opportunity	CP	Brand outcomes	0.254	3.728**	0.215	3.512**
		CCB	0.145	2.744**	0.109	2.703**
Ability	CP	Brand outcomes	0.118	2.445**	0.037	1.974*
		CCB	0.191	4.064**	0.137	3.765**
Subjective norms	CP	Brand outcomes	0.196	2.325**	0.121	1.780
		CCB	0.087	2.638**	0.047	2.956**

CP=Customer participation; CCB= Customer citizenship behaviors

Noted: *** p<0.001; ** p<0.01, *p<0.05

5.7 Moderating effects testing

5.7.1 The moderating effect of perceived benefit of participation

To evaluate the moderating effect of perceived benefit of participation moderator, this study use K mean method to cluster the respondents into two

groups for each independent variable and moderators variable. Therefore, respondents divided into four groups (1) low participation/ low perceived benefit; (2) low participation/ high perceived benefit; (3) high participation/ low perceived benefit; and (4) high participation/ high perceived benefit. The ANOVA show results used to compare the mean values of dependent variables are shown in Figure 5-1. These results showed that when customer participation is high, respondents with a higher level perceived benefit of participation tend to have higher brand loyalty ($F=88.97$, $p<0.000$), brand trust ($F=79.33$, $p<0.000$); recommendation ($F=87.83$, $p<0.000$), helping other customers ($F=95.06$, $p<0.000$), and providing feedback ($F=101.76$, $p<0.000$). The level of perceived benefit of participation will strengthen the positive of customer participation on brand loyalty, brand trust, recommendation, helping customers, and providing feedback. Therefore, H8a H8b H8c H8d, and H8e are supported.

Table 5-15. The Results of Perceived Benefit of Participation Moderator

Name of Factor	Low Customer Participation		High Customer Participation		F-value (p)	Duncan
	1. Low PB (n=94)	2.High PB (n=77)	3.Low PB (n=39)	4. High PB (n=215)		
Brand Loyalty	3.97	4.26	4.80	5.28	88.97 (0.000)	12,4,3
Brand Trust	4.59	5.13	5.5	5.76	79.33 (0.000)	1,2,34
Recommendation	4.14	5.13	5.14	5.9	87.83 (0.000)	1,24,3
Helping Customer	4.11	5.26	5.02	5.99	95.06 (0.000)	1,42,3
Providing Feedback	3.74	4.48	4.79	5.86	101.76 (0.000)	1,24,3



Figure 5-1: The moderating effects of perceived benefit of participation

5.7.2 The moderating effect of perceived ability

To evaluate the moderating effect of perceived ability moderator, this study use K mean method to cluster the respondents into two groups for each independent variable and moderators variable. Therefore, respondents were divided into four groups (1) low participation/ low perceived ability; (2) low participation/ high perceived ability; (3) high participation/ low perceived ability; and (4) high participation/ high perceived ability. The ANOVA show results used to compare the mean values of dependent variables are shown in

Figure 5-2. These results showed that when customer participation is high, respondents with higher level perceived ability tend to have higher brand loyalty ($F=31.84$, $p<0.000$), brand trust ($F=26.73$, $p<0.000$); recommendation ($F=67.69$, $p<0.000$), helping other customers ($F=65.15$, $p<0.000$), and providing feedback ($F=79.55$, $p<0.000$). The level of perceived ability will strengthen the positive effect of customer participation on brand loyalty, brand trust, recommendation, helping customers, and providing feedback. Therefore, H9a H9b H9c H9d, and H9e are supported.

Table 5-16. The Results of Perceived Ability Moderator

Name of Factor	Low Customer Participation		High Customer Participation		F-value (p)	Duncan
	1. Low PA (n=72)	2.High PA (n=99)	3.Low PA (n=42)	4. High PA (n=212)		
Brand Loyalty	3.87	4.27	4.65	5.31	31.84 (0.000)	4,13,2
Brand Trust	4.36	5.18	5.19	5.75	26.73 (0.000)	4,13,2
Recommendation	4.21	4.89	5.39	5.87	67.69 (0.000)	4,1,3,2)
Helping Customer	4.21	4.94	5.30	5.96	65.15 (0.000)	4,1,3,2
Providing Feedback	3.88	4.21	5.24	5.79	79.55 (0.000)	41,3,2

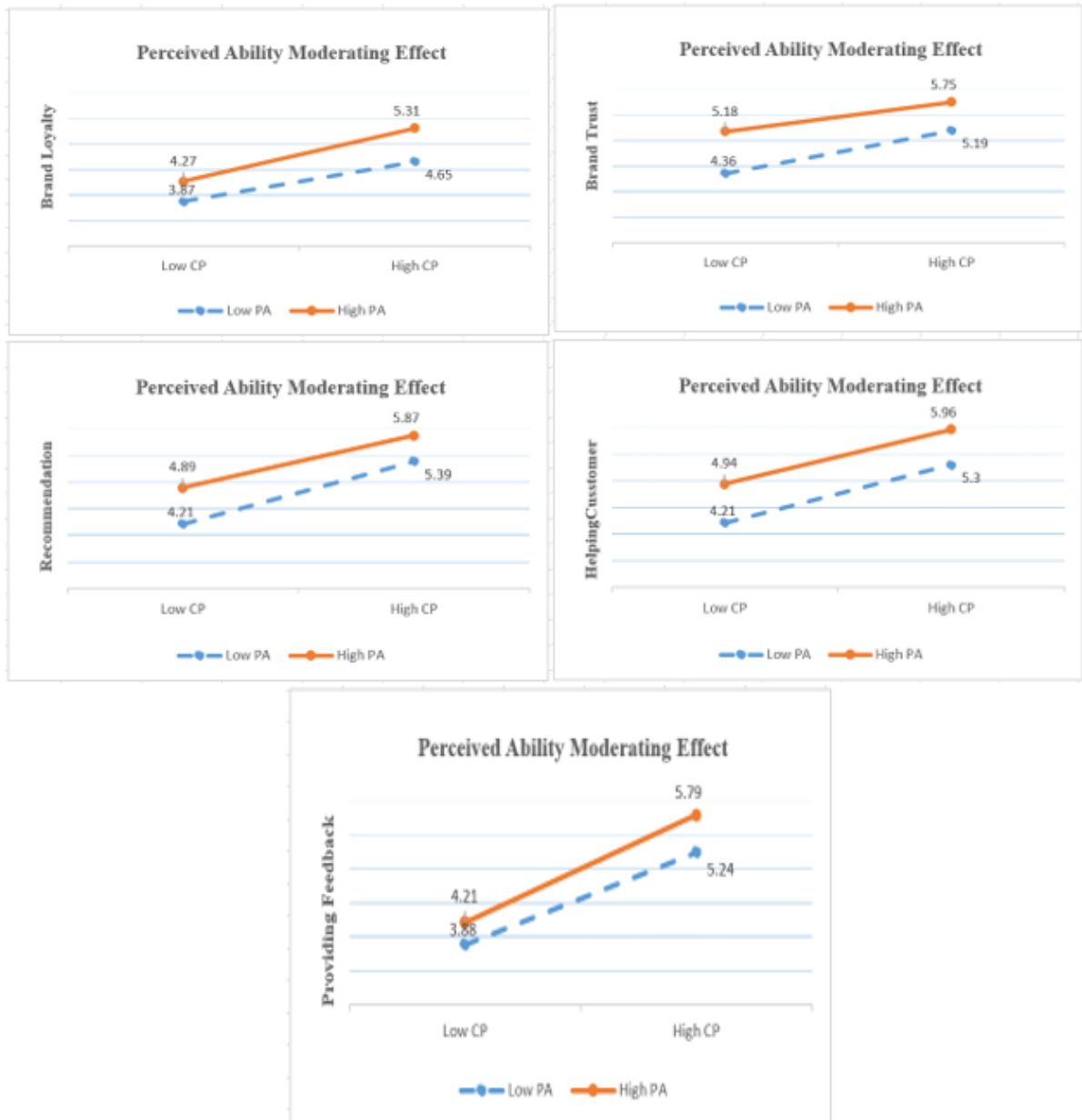


Figure 5-2: The moderating effects of perceived ability

CHAPTER SIX

CONCLUSION AND SUGGESTION

In this chapter, the conclusion, implication and limitations, and future research directions are presented.

6.1 Conclusions

In this study, the influences of firm factor (S-D orientation), individual factors (motivation, opportunity, and ability), and social factors (subjective norms) on CP were investigated. The relationship between CP and brand outcomes and CCB were also identified. Furthermore, the moderating roles of perceived benefits of participation and perceived ability were also verified.

A comprehensive model was developed to integrate the antecedents, mediator, and moderators of CP and its effects on CCB. Twenty hypotheses were developed and tested in this study. A summary of the empirical results for the hypotheses testing is shown in Table 6-1.

Table 6-1 Summary of the Results of the Hypotheses Testing

Hyps.	Hypothesis statement	Results
1	S-D Orientation has a positive influence on customer participation	Supported ($\beta=0.106$ $p<0.01$)
2	Motivation has a positive influence on customer participation	Supported ($\beta=0.179$ $p<0.001$)
3	Opportunity has a positive influence on customer participation	Supported ($\beta=0.248$ $p<0.05$)
4	Ability has a positive influence on customer participation	Supported ($\beta=0.154$ $p<0.01$)
5	Subjective norms have a positive influence on customer participation	Supported ($\beta=0.043$ $p<0.05$)
6a	Customer participation has a positive influence on brand loyalty	Supported ($\beta=0.253$ $p<0.06$)

6b	Customer participation has a positive influence on brand trust	Supported ($\beta=0.339$ $p<0.05$)
7a	Customer participation has a positive influence on recommendation	Supported ($\beta=0.440$ $p<0.01$)
7b	Customer participation has a positive influence on helping other customers	Supported ($\beta=0.492$ $p<0.01$)
7c	Customer participation has a positive influence on providing feedback	Supported ($\beta=0.456$ $p<0.01$)
8a	The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and brand loyalty.	Supported ($F=88.97$ $p<0.001$)
8b	The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and brand trust.	Supported ($F=79.33$ $p<0.001$)
8c	The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and recommendation.	Supported ($F=87.83$ $p<0.001$)
8d	The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and helping customers.	Supported ($F=95.06$ $p<0.001$)
8e	The perceived benefit of participation has a positive moderating effect on the relationship between customer participation and providing feedback.	Supported ($F=101.76$ $p<0.001$)
9a	The perceived ability has a positive moderating effect on the relationship between customer participation and brand loyalty.	Supported ($F=31.84$ $p<0.001$)
9b	The perceived ability has a positive moderating effect on the relationship between customer participation and brand trust.	Supported ($F=26.73$ $p<0.001$)
9c	The perceived ability has a positive moderating effect on the relationship between customer participation and recommendation.	Supported ($F=67.69$ $p<0.001$)
9d	The perceived ability has a positive moderating effect on the relationship between customer	Supported ($F=65.15$

	participation and helping customers.	p<0.001)
9e	The perceived ability has a positive moderating effect on the relationship between customer participation and providing feedback.	Supported (F=79.55 p<0.001)

Based on the results of this study, several conclusions can be drawn as follows. First, firms recognize CP provides benefits in developing a new service model and achieving a sustainable competitive advantage and superior performance (Fang et al., 2008). Firms, especially in the service industry, are aggressively designing programs that allow customers to assume the activities of employees to enhance the opportunity for employee-customer interactions (Vargo and Lusch, 2004). S-D orientation focusing on integration and co-creation can result in resource integration, customer trust, and commitment, and a sense of perceived value (Vargo and Lusch, 2004), which all facilitate customer participation.

Second, customers are more and more participate in co-creation activities through SNS. Motivation, opportunity, and ability are the key which driving of the willingness to co-create by participation (Bettiga et al., 2017). Customers with high motivation will value and enjoy participating in the SNS in order to create benefits for others, but not necessarily for themselves. Furthermore, customers who have opportunities such as time availability will be able to participate in the SNS. In the other words, when customers are in a conducive situation, they will be able to participate in the SNS. Moreover, customers, who have knowledge and skill, will have more motivation and be a willingness to participate in the SNS.

Thirdly, social factors have a significant and positive influence on CP when customer behaviors are influenced by normative beliefs, which were developed by peers, relatives, or friends, an individual can shape his/ her behaviors based on their beliefs on the others (Liao, Chen, and Yen, 2007; Yadav et al., 2015). Customers who share values with their peers, relatives, or

friends about their experience or similar objectives in SNS are more likely to both frequently use SNS to achieve the shared goals

Fourthly, CP has a significant and positive influence on CCB. These results are in line with previous studies (Anaza, 2014; Heese et al., 2005; Zhu et al, 2016), and also suggest that CP is a crucial psychological reaction within SNS. Customers can provide significant information for businesses based on their knowledge as well as their experience through SNS, which are important communication channels for the firms. Customer recommendations can help firms promote their products in a variety of different channels, customers helping other customers can reduce the stress on sale forces, and customer feedback can help firms improve service quality and product development. In essence, scholars in recent years have considered customers to be “partial employees” of the firms they use (Zhu et al., 2016). Customers with higher levels of CCB through favorable recommendations, helping other customers, and providing feedback to the firms will result in higher customer satisfaction, higher competitive advantage, and better profit.

Finally, this study also proved that the influence of CP on CCB will be amplified by the creation of incentives to motivate CP. Dong et al. (2014) argued that finding a good fit between what a customer prefers and what is offered by CP is very important. The fit between job and customer will promote the perceived benefits of CP, which will lead to positive outcomes such as higher CCB, better customer satisfaction, and higher business performance. Therefore, under conditions in which customers perceive greater benefits from participation, the influence of CP on brand outcomes (brand loyalty and brand trust) and CCB (such as recommendation, helping other customers, and providing feedback) will be significantly amplified.

6.2 Implications

6.2.1 Academic Implications

This study has developed a comprehensive research model to incorporate the antecedents, mediators, consequences, and moderators of CP. This study contributes to the progress of the existing research on customer participation. Specifically, S-D logic was used to explain how co-creation capabilities (such as individual, relational, ethical, empowered, developmental, and concerted interaction) can create value and benefits from CP (Karpen et al., 2015).

In addition, the MOA framework can predict CP behavior in different situations. This study further identified that a customer's perception of their ability can increase their competence and confidence in CP if customers feel that they have sufficient knowledge and skill to engage in participation.

Furthermore, TPB (Ajzen and Fishbein, 1970) was introduced to identify social factors as one of the important factors for CP. It is argued that social factors might help customer decision-making when the customers have little experience of the product or service (Pahnila and Warsta, 2010). Therefore, social factors can positively influence the customer's desire to participate in the process of co-creation. Moreover, this study applies the TPB as underground theoretical basic, and integrate with firm and individual factors as potentially impact customer participation in social media to have a better understanding of the formation of customer' behaviors and improve the effectiveness of TPB on explaining their behaviors in social media

CP is one of the most important factors for successful operators to consider. Bendapudi and Leone (2003) argued that customers tend to enjoy the process of participation, which results in enhanced satisfaction. Gruen et al. (2007) suggested that CP will result in customer commitment and perceived support, which enhances CCB. Groth (2005) observed the concept from a

different perspective and regarded CP as a socialization process that will promote customers' social capital and the business' performance.

Finally, two moderators were employed to explain the acceleration effects of CP. The perceived benefits of participation and perceived ability are very critical because if customers understand what is required in the CP context, they are more likely to accept the role of service in the first place. If the customer perceives that their participation is important, it will empower them to engage in the CP process. Thus, under the condition of increased role identification, the influence of CP on its consequence will be significantly amplified.

6.2.2 Managerial Implications

This study highlights the antecedents, consequences, and moderators of CP. Several managerial implications can be drawn from the results of this study. First, as co-creation through interaction and resource integration will create value for the customer and promote service quality, managers should try to apply the philosophy of S-D logic to CP, and select customers who are familiar with co-creation events and participated in the familiar activities. Managers can get advantages from actionable guidance beyond the framework to help their firm execute and benefit from S-D orientation, which can enable co-creation value in the service exchange process.

Second, the MOA framework can be used as a practical framework for managers to understand customers' motivations, perceptions, and behaviors. Managers should design strategies to attract or capitalize on customers. Managers can encourage customers to experience the firm's offerings and services through different CP programs to support customers and fulfill customer needs. The firms can develop platforms and instruments (i.e., discussion forums, chat rooms, and so on) to enhance and facilitate the information and highlight customer participation (their contribution to the

social well-being). Marketing efforts should target customers to optimize CP and brand outcomes as well as customer citizenship behaviors.

Third, subjective norms were recognized as an influential variable for CP. Marketing managers need to design marketing activities to manipulate subjective norms through advertising, sales promotions, personal selling, and word-of-mouth. In particular, when the practices of CP are still not very popular, social influence can be provided as an important agent for CP. Marketing managers should communicate their messages to the communities that influence CP.

This study helps managers to have a better understanding and predict customer behaviors to share the activities or the contents posted on social media, which further leads to promote EWOM regarding the brand, especially when developing and launching new products or services. Furthermore, the managers can concentrate on their websites and Facebook fan pages as a strategic tool to promote and enhance customer participation with the brand. Rich information, high quality, and timely service will bring a good customer experience. Through online communities, managers can assure their customers of their interest in maintaining the relationship with the customers because understanding what customer needs or expectations are one of the important keys to achieve management effectively.

Brand outcomes are important factors in the relationship of the brand with the customer through social media. The results of this research indicated that it is fruitful for managers to adopt the CP approach to enhance the understanding of the influential factors that stimulates brand loyalty and brand trust. As CP can be considered to be a strategic tool, if a customer believes that they prefer their own tastes and preferences to enhance those offered by firms, then firms could try to think of creative ways to solicit customer ideas and suggestions to better embody idiosyncratic tastes. However, if satisfaction is more adversely affected than service quality, then firms should be cautious

when forcing customers to participate as the only service delivery option and be aware of the diminishing returns of CP even for customers with higher levels of perceived benefit and ability. In other words, under a higher level of perceived benefit and perceived ability, customers with a higher level of participation will result in a higher level of brand outcomes and citizenship behaviors. The managers should understand customer behaviors and enhance their participation in the community in order to improve their participation based on their positive perception of benefit found in the community. Besides that, the managers should identify customer interests and tailor the content of the community to these interests in order to improve qualities.

Based on the experience in SNS, SNS can prove to be a powerful and useful marketing tool and a long-term campaign for firms. The interaction process strengthens communication between firms and customers to improve corporate performance. The firms can enhance customer participation by strengthening positive customer behavior and emotion toward the brand, in the other words, customers have a sense of a brand or a firm. For example, Adidas, P&G, Skype have operationalized interaction with customers to reduce outcomes. Firms need to create incentives to motivate CP. The incentives may arise from the benefits customer perceive they will obtain from participation. If the incentive can be designed to fit the customer's needs, then the value it attains will be high. In this way, the perceived benefit of participation serves as a moderating variable that amplifies the influence of CCB.

6.3 Limitations and Future Research Directions

Despite its significant contributions, this study is also subject to a number of limitations, which inform the direction of future research. First, this study focused on young educated respondents, which may have biased the data. Kaiser et al., (2008) argued that young and educated customers may be more prone to socially desirable responses. Second, the convenience sampling in this research may also be biased due to the over and under-representation of

the samples from the population. Future research could use random sampling with a wider range of respondents.

Third, this study tried to investigate some important antecedents, consequences, and moderating variables for CP. However, the research constructs may not be inclusive. Therefore, the research model developed in this study should be subjected to more empirical validations in its current form or with some extensions by adding more research constructs. Finally, further drives of CP on brand outcomes and customer citizenship behaviors need to be investigated and scrutinized.



REFERENCES

1. Ahearne, M., Bhattacharya, C. B., and Gruen, T. (2005). Antecedents and consequences of customer-company identification: Expanding the role of relationship marketing. Journal of Applied Psychology, Vol.90 No.3, pp. 574-585.
2. Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In Action control (pp. 11-39). Springer, Berlin, Heidelberg.
3. Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, Vol. 50 No.2, pp.179-211.
4. Al Halbusi, H., Jimenez Estevez, P., Eleen, T., Ramayah, T., and Hossain Uzir, M. U. (2020). The roles of the physical environment, social servicescape, Co-created value, and customer satisfaction in determining tourists' citizenship behavior: Malaysian cultural and creative industries. Sustainability, Vol. 12 No. 8, pp. 3229-3251.
5. Al-Ghaith, W. (2015). Understanding social network usage: impact of co-presence, intimacy, and immediacy. International Journal of Advanced Computer Science and Applications, Vol. 6, No. 8, pp. 99-111.
6. Anaza, N. A. (2014). Personality antecedents of customer citizenship behaviors in online shopping situations. Psychology & Marketing, Vol. 31, No. 4, pp. 251-263.
7. Anaza, N. A., and Zhao, J. (2013). Encounter-based antecedents of e-customer citizenship behaviors. Journal of Services Marketing, Vol. 27, No. 2, pp.130-140.
8. Anderson, R. E., and Swaminathan, S. (2011). Customer satisfaction and loyalty in e-markets: A PLS path modeling approach. Journal of Marketing Theory and Practice, Vol.19 No.2, pp. 221-234.

9. Anh, P. N. T., and Thuy, P. N. (2017). The effects of interaction behaviors of service frontliners on customer participation in the value co-creation: a study of health care service. Service Business, Vol. 11, No. 2, pp. 253-277.
10. Aronson, E., Akert, R. M., and Wilson, T. D. (2010). *Sozialpsychologie*. Pearson Deutschland GmbH.
11. Assegaff, S., and Kurniabudi, E. F. (2016). Impact of extrinsic and intrinsic motivation on knowledge sharing in virtual communities of practices. Indonesian Journal of Electrical Engineering and Computer Science, Vol.1 No.3, pp. 619-626.
12. Auh, S., Bell, S. J., McLeod, C. S., and Shih, E. (2007). Co-production and customer loyalty in financial services. Journal of Retailing, Vol. 83, No. 3, pp. 359-370.
13. Bagozzi, R. P., and Dholakia, U. M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. International Journal of Research in Marketing, Vol. 23, No. 1, pp. 45-61.
14. Baron, R. M., and Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, Vol.51 Vol.6, pp.1173-1182.
15. Barreda, A., Nusair, K., Okumus, F., and Bilgihan, A. (2013). Developing a brand structure pyramid model for travel-related online social networks. Tourism Review, Vol. 68 No. 4, pp. 49-70.
16. Batra, R., and Ray, M. L. (1986). Situational effects of advertising repetition: The moderating influence of motivation, ability, and opportunity to respond. Journal of Consumer Research, Vol. 12, No. 4, pp.432-445.

17. Bendapudi, N., and Leone, R. P. (2003). Psychological implications of customer participation in co-production. Journal of Marketing, Vol. 67 No.1, pp.14-28.
18. Benkler, Y. (2004). Sharing nicely: On shareable goods and the emergence of sharing as a modality of economic production. Yale LJ, Vol. 114, pp. 273.
19. Ben-Shaul, M., and Reichel, A. (2018). Motives, modes of participation, and loyalty intentions of Facebook tourism brand page consumers. Journal of Travel Research, Vol. 57, No. 4, pp. 453-471.
20. Berry, J. W., Phinney, J. S., Sam, D. L., and Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. Applied Psychology, Vol.55 No.3, pp.303-332.
21. Bettencourt, L. A. (1997). Customer voluntary performance: Customers as partners in service delivery. Journal of Retailing, Vol. 73 No.3, pp.383-406.
22. Bettiga, D., Lamberti, L., & Noci, G. (2017). Do mind and body agree? Unconscious versus conscious arousal in product attitude formation. Journal of Business Research, 75, 108-117.
23. Bettiga, D., Lamberti, L., and Noci, G. (2018). Investigating social motivations, opportunity and ability to participate in communities of virtual co-creation. International Journal of Consumer Studies, Vol. 42, No. 1, pp. 155-163.
24. Bieg, S., Backes, S., and Mittag, W. (2011). The role of intrinsic motivation for teaching, teachers' care and autonomy support in students' self-determined motivation. Journal for Educational Research Online, Vol. 3, No. 1, pp. 122-140.
25. Binney, W., Hall, J., and Shaw, M. (2003). A further development in social marketing: application of the MOA framework and behavioral implications. Marketing Theory, Vol. 3, No. 3, pp. 387-403.

26. Bitner, M. J., Faranda, W. T., Hubbert, A. R., and Zeithaml, V. A. (1997). Customer contributions and roles in service delivery. International Journal of Service Industry Management, Vol. 8 No. 3, pp.193-205.
27. Bolton, R., and Saxena-Iyer, S. (2009). Interactive services: a framework, synthesis and research directions. Journal of Interactive Marketing, Vol. 23 No.1, pp.91-104.
28. Boudreau, J., Hopp, W., McClain, J. O., and Thomas, L. J. (2003). On the interface between operations and human resources management. Manufacturing and Service Operations Management, Vol. 5, No. 3, pp. 179-202.
29. Bowen, D. E. (1986). Managing customers as human resources in service organizations. Human Resource Management, Vol.25 No.3, pp.371-383.
30. Boxall, P., and Purcell, J. (2016). *Strategy and human resource management*. Macmillan International Higher Education.
31. Brodie, R. J., Ilic, A., Juric, B., and Hollebeck, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. Journal of Business Research, Vol.66 No.1, pp.105-114.
32. Brodie, R. J., Ilic, A., Juric, B., and Hollebeck, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. Journal of Business Research, Vol. 66 No.1, pp.105-114.
33. Buonincontri, P., Morvillo, A., Okumus, F., and van Niekerk, M. (2017). Managing the experience co-creation process in tourism destinations: Empirical findings from Naples. Tourism Management, Vol. 62, pp. 264-277.
34. Burns, A. C., & Bush, R. F. (1995). *Marketing Research* Prentice Hall. Inc. New Delhi.

35. Casaló, L., Flavián, C., and Guinalú, M. (2007). The impact of participation in virtual brand communities on consumer trust and loyalty: The case of free software. Online Information Review, Vol. 31, No. 6, pp. 775-792.
36. Casidy, R., Phau, I., and Lwin, M. (2016). The role of religious leaders on digital piracy attitude and intention. Journal of Retailing and Consumer Services, Vol.32, pp.244-252.
37. Celebi, S. I. (2015). How do motives affect attitudes and behaviors toward internet advertising and Facebook advertising?. Computers in Human Behavior, Vol. 51, pp. 312-324.
38. Cha, M. K., Yi, Y., and Bagozzi, R. P. (2016). Effects of customer participation in corporate social responsibility (CSR) programs on the CSR-brand fit and brand loyalty. Cornell Hospitality Quarterly, Vol., 57, No. 3, pp. 235-249.
39. Chan, K. W., Yim, C. K., and Lam, S. S. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. Journal of Marketing, Vol.74 No.3, pp. 48-64.
40. Chathoth, P. K., Ungson, G. R., Harrington, R. J., & Chan, E. S. (2016). Co-creation and higher order customer engagement in hospitality and tourism services. International Journal of Contemporary Hospitality Management, Vol. 28 No. 2, pp. 222-245.
41. Chaudhuri, A., and Holbrook, M. B. (2002). Product-class effects on brand commitment and brand outcomes: The role of brand trust and brand affect. Journal of Brand Management, Vol. 10, No. 1, pp. 33-58.
42. Chen, C. W., Chang, M. L., Tseng, C. P., Chen, B. C., and Chang, Y. Y. C. (2013). Retracted: Critical human factor evaluation of knowledge sharing intention in taiwanese enterprises. Human Factors and

- Ergonomics in Manufacturing & Service Industries, Vol.23 No.2, pp.95-106.
43. Chen, M. F., and Tung, P. J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. International Journal of Hospitality Management, Vol. 36, pp. 221-230.
 44. Cheung, C. M., and Lee, M. K. (2010). A theoretical model of intentional social action in online social networks. Decision Support Systems, Vol.49 No.1, pp.24-30.
 45. Cheung, M. F., and To, W. M. (2017). The influence of the propensity to trust on mobile users' attitudes toward in-app advertisements: An extension of the theory of planned behavior. Computers in Human Behavior, Vol. 76, pp. 102-111.
 46. Ching, G. S., Tsay, W. R., Hu, Y. L., and Hung, C. H. (2017). Counterproductive work behaviors within academic institutions: A myth or a reality. International Journal of Research Studies in Psychology, Vol.6 No.1, pp.1-14.
 47. Chiu, W., Kwag, M. S., and Bae, J. S. (2015). Customers as partial employees: The influences of satisfaction and commitment on customer citizenship behavior in fitness centers. Journal of Physical Education and Sport, Vol. 15 No. 4, pp. 627-633.
 48. Chua, Y. P., and Chua, Y. P. (2017). Do computer-mediated communication skill, knowledge and motivation mediate the relationships between personality traits and attitude toward Facebook?. Computers in Human Behavior, Vol. 70, pp. 51-59.
 49. Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. MIS quarterly, Vol. 19 No. 2, pp.189-211.

50. Considine, J., Botti, M., and Thomas, S. (2005). Design, format, validity and reliability of multiple choice questions for use in nursing research and education. Collegian, Vol. 12 No.1, pp. 19-24.
51. Cossío-Silva, F. J., Revilla-Camacho, M. Á., Vega-Vázquez, M., and Palacios-Florencio, B. (2016). Value co-creation and customer loyalty. Journal of Business Research, Vol. 69 Vol. 5, pp. 1621-1625.
52. Curth, S., Uhrich, S., and Benkenstein, M. (2014). How commitment to fellow customers affects the customer-firm relationship and customer citizenship behavior. Journal of Services Marketing, Vol. 28, No. 2, pp. 147-158.
53. Dann, S. (2010). Redefining social marketing with contemporary commercial marketing definitions. Journal of Business Research, Vol. 63, No. 2, pp. 147-153.
54. Delgado-Ballester, E., and Munuera-Alemán, J. L. (2005). Does brand trust matter to brand equity?. Journal of Product & Brand Management, Vol. 14 No.3, pp.187-196.
55. Di Pietro, L., Di Virgilio, F., and Pantano, E. (2012). Social network for the choice of tourist destination: attitude and behavioural intention. Journal of Hospitality and Tourism Technology, Vol. 3. No.1, pp. 60-76.
56. Dong, B., Sivakumar, K., Evans, K. R., and Zou, S. (2014), Effect of customer participation on service outcomes: The moderating role of participation readiness, Journal of Service Research, Vol. 18 No. 2, pp. 160-176.
57. Duong, G. H., Wu, W. Y., and Le, L. H. (2020). The effects of brand page characteristics on customer brand engagement: moderating roles of community involvement and comedy production contents. Journal of Brand Management, Vol.27, pp.531-545.

58. Edward Miller, G. (1991). Asymptotic test statistics for coefficients of variation. Communications in Statistics-Theory and Methods, Vol. 20 No. 10, pp. 3351-3363.
59. Ennew, C. T., and Binks, M. R. (1999). Impact of participative service relationships on quality, satisfaction and retention: an exploratory study. Journal of Business Research, Vol.46 No.2, pp.121-132.
60. Erkmén, E., and Hancer, M. (2019). Building brand relationship for restaurants. International Journal of Contemporary Hospitality Management, Vol. 31, No. 3, pp. 1469-1487.
61. Fang, C., and Zhang, J. (2019). Users' continued participation behavior in social Q&A communities: A motivation perspective. Computers in Human Behavior, Vol.92, pp. 87-109.
62. Fang, E., Palmatier, R. W., and Evans, K. R. (2008). Influence of customer participation on creating and sharing of new product value. Journal of the Academy of Marketing Science, Vol.36 No. 3, pp.322-336.
63. Feng, X., Fu, S., and Qin, J. (2016). Determinants of consumers' attitudes toward mobile advertising: The mediating roles of intrinsic and extrinsic motivations. Computers in Human Behavior, Vol. 63, pp. 334-341.
64. Ferrer, J., Ringer, A., Saville, K., Parris, M. A., and Kashi, K. (2020). Students' motivation and engagement in higher education: the importance of attitude to online learning. Higher Education, pp. 1-22.
65. Firat, A. F., and Venkatesh, A. (1995). Liberatory postmodernism and the reenchantment of consumption. Journal of Consumer Research, Vol. 22 No.3, pp.239-267.
66. Fishbein, M., and Ajzen, I. (1975). Belief, attitude, intention and behavior, an introduction to theory and research. Reading, MA: Addison-Wesley.

67. Flavián, C., and Guinalú, M. (2006). Consumer trust, perceived security and privacy policy. Industrial Management & Data Systems, Vol. 106 No. 5, pp. 601-620.
68. Ford, W. S. Z. (1995), Evaluation of the indirect influence of courteous service on customer discretionary behavior. Human Communication Research, Vol. 22 No. 1, pp. 65-89.
69. Fornell, C., and Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: *Algebra and Statistics*.
70. France, C., Merrilees, B., and Miller, D. (2015). Customer brand co-creation: a conceptual model. Marketing Intelligence & Planning, Vol. 33 No.. 6, pp. 848-864.
71. Frei, F. X. (2006). Breaking the trade-off between efficiency and service. Harvard Business Review, Vol. 84 No.11, pp.92-103.
72. Füller, J., Mühlbacher, H., Matzler, K., and Jaweck, G. (2009). Consumer empowerment through internet-based co-creation. Journal of Management Information Systems, Vol. 26 No. 3, pp. 71-102.
73. Fullerton, G. (2005). The service quality–loyalty relationship in retail services: does commitment matter?. Journal of Retailing and Consumer Services, Vol.12 No.2, pp.99-111.
74. Gallan, A. S., Cheryl, B. J., Brown, S. W., and Bitner, M. J. (2013), Customer positivity and participation in services: An empirical test in a health care context, Journal of the Academy of Marketing Science, Vol. 41 No.3, pp. 338-356.
75. Gong, T. (2018). Customer brand engagement behavior in online brand communities. Journal of Services Marketing, Vol. 32 No.3, pp. 286-299,
76. Greaves, M., Zibarras, L. D., and Stride, C. (2013). Using the theory of planned behavior to explore environmental behavioral intentions in the workplace. Journal of Environmental Psychology, Vol. 34, pp. 109-120.

77. Grissemann, U. S., and Stokburger-Sauer, N. E. (2012). Customer co-creation of travel services: The role of company support and customer satisfaction with the co-creation performance. Tourism Management, Vol. 33 No. 6, 1483-1492.
78. Grönroos, C. (2011). Value co-creation in service logic: A critical analysis. Marketing Theory, Vol. 11 No.3, pp.279-301.
79. Groth, M. (2005). Customers as good soldiers: Examining citizenship behaviors in internet service deliveries. Journal of Management, Vol. 31 No.1, pp. 7-27.
80. Gruen, T. W., Osmonbekov, T., and Czaplewski, A. J. (2007). Customer-to-customer exchange: Its MOA antecedents and its impact on value creation and loyalty. Journal of the Academy of Marketing Science, Vol. 35 No.4, pp. 537-549.
81. Ha, H. Y., and Perks, H. (2005). Effects of consumer perceptions of brand experience on the web: Brand familiarity, satisfaction and brand trust. Journal of Consumer Behaviour: An International Research Review, Vol. 4 No.6, pp. 438-452.
82. Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., and Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. Journal of the Academy of Marketing Science, Vol.45 No.5, pp.616-632.
83. Hair, J. F., Ringle, C. M., and Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, Vol.19 No.2, pp. 139-152.
84. Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications. Long Range Planning, Vol. 45 No.5-6, pp. 320-340.

85. Halbesleben, J. R., and Buckley, M. R. (2004). Managing customers as employees of the firm: New challenges for human resources management. Personnel Review, Vol 33 No. 3, pp. 351-372.
86. Han, H. (2015). Travelers' pro-environmental behavior in a green lodging context: Converging value-belief-norm theory and the theory of planned behavior. Tourism Management, Vol. 47, pp. 164-177.
87. Han, H., and Kim, Y. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. International Journal of Hospitality Management, Vol. 29 No. 4, pp. 659-668.
88. Han, H., and Hwang, J. (2016). Cruise travelers' environmentally responsible decision-making: An integrative framework of goal-directed behavior and norm activation process. International Journal of Hospitality Management, Vol. 53, pp. 94-105.
89. Han, H., and Ryu, K. (2009). The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the restaurant industry. Journal of Hospitality & Tourism Research, Vol.33 No.4, pp. 487-510.
90. Han, H., and Yoon, H. J. (2015). Hotel customers' environmentally responsible behavioral intention: Impact of key constructs on decision in green consumerism. International Journal of Hospitality Management, Vol.45, pp. 22-33.
91. Han, H., Hsu, L. T. J., and Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. Tourism Management, Vol. 31 No. 3, pp. 325-334.
92. Hatch, M. J., and Schultz, M. (2010). Toward a theory of brand co-creation with implications for brand governance. Journal of Brand Management, Vol.17 No.8, pp.590-604.

93. Hau, L. N. (2018), The role of customer operant resources in health care value creation, Service Business, doi:10.1007/s11628-018-00391-0
94. Heese, H. S., Cattani, K., Ferrer, G., Gilland, W., & Roth, A. V. (2005). Competitive advantage through take-back of used products. European Journal of Operational Research, Vol.164 No.1, pp. 143-157.
95. Henseler, J., Ringle, C. M., and Sarstedt, M. (2012). Using partial least squares path modeling in advertising research: basic concepts and recent issues. In Handbook of research on international advertising. *Edward Elgar Publishing*.
96. Ho, S. C., Ting, P. H., Bau, D. Y., and Wei, C. C. (2011). Knowledge-sharing intention in a virtual community: A study of participants in the chinese wikipedia. Cyberpsychology, Behavior, and Social Networking, Vol. 14 No. 9, pp. 541-545.
97. Hoyer, W. D., and MacInnis, D. (2007). *Consumer behavior*. Boston, MA: Houghton Mifflin.
98. Hsieh, A. T., Yen, C. H., and Chin, K. C. (2004). Participative customers as partial employees and service provider workload. International Journal of Service Industry Management, Vol. 15 No. 2, pp.187-199.
99. Hsu, C. L., and Lin, J. C. C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. Information and Management, Vol. 45 No.1, pp. 65-74.
100. Hsu, C. L., Chang, C. Y., and Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. Journal of Retailing and Consumer Services, Vol. 34, pp. 145-152.

101. Huang, Y. M. (2016). The factors that predispose students to continuously use cloud services: Social and technological perspectives. Computers & Education, Vol. 97, pp. 86-96.
102. Hung, S. Y., Chen, C. C., Yeh, R. K. J., and Huang, L. C. (2016). Enhancing the use of e-learning systems in the public sector: A behavioural intention perspective. Electronic Government, an International Journal, Vol.12No.1, pp.1-26.
103. Hunter, J. E., and Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings*. SAGE.
104. Hussein, R., and Hassan, S. (2017). Customer engagement on social media: how to enhance continuation of use. Online Information Review, Vol. 41, No. 7, pp.1006-1028.
105. Ida, E. (2017). The Role of Customers' Involvement in Value Co-creation Behaviour is Value Co-creation the Source of Competitive Advantage?. Journal of Competitiveness, Vol. 9 Vol. 3, pp. 51-66.
106. Iwasaki, S., and Fry, M. D. (2016). Female adolescent soccer players' perceived motivational climate, goal orientations, and mindful engagement. Psychology of Sport and Exercise, Vol. 27, pp. 222-231.
107. Jaworski, B. J., and MacInnis, D. J. (1989). Marketing jobs and management controls: toward a framework. Journal of Marketing Research, Vol. 26 Vol. 4, pp. 406-419.
108. Johnston, C., and Mash, E. J. (1989). A measure of parenting satisfaction and efficacy. Journal of Clinical Child Psychology, Vol.18 No.2, pp. 167-175.
109. Jones, T., and Taylor, S. F. (2007). The conceptual domain of service loyalty: how many dimensions?. Journal of Services Marketing, Vol. 21 No.1, pp. 36-51.

110. Joshi, Y., and Rahman, Z. (2017). Investigating the determinants of consumers' sustainable purchase behaviour. Sustainable Production and Consumption, Vol. 10, pp. 110-120.
111. Jung, J. Y. (2014). Predictors of attitudes to gifted programs/provisions: Evidence from preservice educators. Gifted Child Quarterly, Vol. 58 No.4, pp. 247-258.
112. Jung, N. Y., Kim, S., and Kim, S. (2014). Influence of consumer attitude toward online brand community on revisit intention and brand trust. Journal of Retailing and Consumer Services, Vol.21 No.4, pp. 581-589.
113. Kadic-Maglajlic, S., Micevski, M., Arslanagic-Kalajdzic, M., and Lee, N. (2017). Customer and selling orientations of retail salespeople and the sales manager's ability-to-perceive-emotions: A multi-level approach. Journal of Business Research, Vol. 80, pp. 53-62.
114. Kaiser, R. B., Hogan, R., & Craig, S. B. (2008). Leadership and the fate of organizations. American Psychologist, Vol.63 No.2, 96-110.
115. Kamboj, S., and Joshi, R. (2020). Examining the factors influencing smartphone apps use at tourism destinations: a UTAUT model perspective. International Journal of Tourism Cities, Vol. 23, pp.679-700.
116. Kamboj, S., and Rahman, Z. (2016). The influence of user participation in social media-based brand communities on brand loyalty: age and gender as moderators. Journal of Brand Management, Vol. 23 No. 6, pp. 679-700.
117. Kamboj, S., Sarmah, B., Gupta, S., and Dwivedi, Y. (2018). Examining branding co-creation in brand communities on social media: Applying the paradigm of Stimulus-Organism-Response. International Journal of Information Management, Vol. 39, pp. 169-185.

118. Kang, J., Tang, L., and Fiore, A. M. (2014). Enhancing consumer–brand relationships on restaurant Facebook fan pages: Maximizing consumer benefits and increasing active participation. International Journal of Hospitality Management, Vol. 36, pp.145-155.
119. Karpen, I. O., Bove, L. L., and Lukas, B. A. (2012), Linking service-dominant logic and strategic business practice: A conceptual model of a service-dominant orientation, Journal of Service Research, Vol. 15 No. 1, pp. 21-38.
120. Karpen, I. O., Bove, L. L., Lukas, B. A., and Zyphur, M. J. (2015). Service-dominant orientation: measurement and impact on performance outcomes. Journal of Retailing, Vol. 91 No.1, pp.89-108.
121. Keh, H. T., and Teo, C. W. (2001). Retail customers as partial employees in service provision: a conceptual framework. International Journal of Retail & Distribution Management, Vol 29 No.8, pp.370-378.
122. Kelley, S. W., Donnelly Jr, J. H., and Skinner, S. J. (1990). Customer participation in service production and delivery. Journal of Retailing, Vol.66 No.3, pp.315-336.
123. Kellogg, D. L., Youngdahl, W. E., and Bowen, D. E. (1997). On the relationship between customer participation and satisfaction: two frameworks. International Journal of Service Industry Management, Vol. 8 No. 3, pp. 206-219.
124. Kelman, H. C. (1974). Attitudes are alive and well and gainfully employed in the sphere of action. American Psychologist, Vol. 29 No.5, pp.310-324.
125. Kennedy, E., and Guzmán, F. (2016). Co-creation of brand identities: consumer and industry influence and motivations. Journal of Consumer Marketing, Vol. 33 No. 5, pp.313-323.
126. Kim, H., Hur, D., and Schoenherr, T. (2015). When buyer-driven knowledge transfer activities really work: A motivation–opportunity–

- ability perspective. Journal of Supply Chain Management, Vol. 51 No.3, pp.33-60.
127. Kim, S. H., and Seock, Y. K. (2019). The roles of values and social norm on personal norms and pro-environmentally friendly apparel product purchasing behavior: The mediating role of personal norms. Journal of Retailing and Consumer Services, Vol.51, pp. 83-90.
 128. Kristianto, B. (2017). Factors Affecting Social Network Use by Students in Indonesia. Journal of Information Technology Education, Vol. 16 No. 1, pp. 1-35.
 129. Kristof, A. L. (1996), Person- organization fit: An integrative review of its conceptualizations, measurement, and implications. Personnel Psychology, Vol. 49 No.1, pp. 1-49.
 130. Kristof- Brown, A. L., Zimmerman, R. D., and Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta- analysis OF person– job, person–organization, person–group, and person–supervisor fit. Personnel Psychology, Vol.58 No.2, pp.281-342.
 131. Kujur, F., and Singh, S. (2017). Engaging customers through online participation in social networking sites. Asia Pacific Management Review, Vol. 22 No. 1, pp. 16-24.
 132. Kulviwat, S., Bruner II, G. C., and Al-Shuridah, O. (2009). The role of social influence on adoption of high tech innovations: The moderating effect of public/private consumption. Journal of Business Research, Vol. 62 No.7, pp.706-712.
 133. Kumar, S., and Megha, K. (2018). Co-creation a new method of building brand loyalty & innovation. International Journal of Management (IJM), Vol.9 No.6, pp.13-23.
 134. Laroche, M., Habibi, M. R., and Richard, M. O. (2013). To be or not to be in social media: How brand loyalty is affected by social

- media?. International Journal of Information Management, Vol.33 No.1, pp.76-82.
135. Lee, K. H., Bonn, M. A., & Cho, M. (2015). Consumer motives for purchasing organic coffee. International Journal of Contemporary Hospitality Management. Vol. 27 No.6, pp.1157-1180
136. Lengnick-Hall, C. A., Claycomb, V. C., and Inks, L. W. (2000). From recipient to contributor: examining customer roles and experienced outcomes. European Journal of Marketing, Vol 34. No.3/4, pp.359-383
137. LePine, J. A., Erez, A., and Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: a critical review and meta-analysis. Journal of Applied Psychology, Vol. 87 No.1, p.52-65.
138. Leung, X. Y., and Bai, B. (2013). How motivation, opportunity, and ability impact travelers' social media involvement and revisit intention. Journal of Travel & Tourism Marketing, Vol. 30 No.1, pp.58-77.
139. Lewer, J. J., and Van den Berg, H. (2007). Religion and International Trade: Does the sharing of a religious culture facilitate the formation of trade networks?. American Journal of Economics and Sociology, Vol. 66 No. 4, pp.765-794.
140. Li, M. W., Teng, H. Y., and Chen, C. Y. (2020). Unlocking the customer engagement-brand loyalty relationship in tourism social media: The roles of brand attachment and customer trust. Journal of Hospitality and Tourism Management, Vol. 44, pp. 184-192.
141. Liao, C., Chen, J. L., and Yen, D. C. (2007). Theory of planning behavior (TPB) and customer satisfaction in the continued use of e-service: An integrated model. Computers in Human Behavior, Vol. 23 No.6, pp.2804-2822.

142. Lin, T. C., Lai, M. C., and Yang, S. W. (2016). Factors influencing physicians' knowledge sharing on web medical forums. Health Informatics Journal, Vol. 22 No. 3, pp. 594-607.
143. Lin, Z., Chen, Y., and Filieri, R. (2017). Resident-tourist value co-creation: The role of residents' perceived tourism impacts and life satisfaction. Tourism Management, Vol. 61, pp. 436-442.
144. Lipsey, M. W., and Wilson, D. B. (2001). The way in which intervention studies have "personality" and why it is important to meta-analysis. Evaluation and the Health Professions, Vol. 24 No.3, pp.236-254.
145. Llopis, O., and Foss, N. J. (2016). Understanding the climate–knowledge sharing relation: The moderating roles of intrinsic motivation and job autonomy. European Management Journal, Vol. 34 No.2, pp.135-144.
146. Lusch, R. F., Brown, S. W., and Brunswick, G. J. (1992). A general framework for explaining internal vs. external exchange. Journal of the Academy of Marketing Science, Vol. 20 No.2, pp.119-134.
147. Lusch, R. F., Vargo, S. L., and O'brien, M. (2007). Competing through service: Insights from service-dominant logic. Journal of Retailing, Vol. 83 No.1, pp.5-18.
148. Lusch, R. F., Vargo, S. L., and Tanniru, M. (2010). Service, value networks and learning. Journal of the Academy of Marketing Science, Vol. 38 No.1, pp.19-31.
149. Ma, W. W., and Chan, A. (2014). Knowledge sharing and social media: Altruism, perceived online attachment motivation, and perceived online relationship commitment. Computers in Human Behavior, Vol. 39, pp.51-58.

150. MacInnis, D. J., and Jaworski, B. J. (1989). Information processing from advertisements: Toward an integrative framework. Journal of Marketing, Vol.53 No.4, pp.1-23.
151. MacInnis, D. J., Moorman, C., and Jaworski, B. J. (1991). Enhancing and measuring consumers' motivation, opportunity, and ability to process brand information from ads. Journal of Marketing, Vol. 55 No. 4, pp. 32-53.
152. Magnusson, P. R., Matthing, J., and Kristensson, P. (2003). Managing user involvement in service innovation: Experiments with innovating end users. Journal of Service Research, Vol. 6 No.2, pp.111-124.
153. Marcoulides, G. A., and Saunders, C. (2006). Editor's comments: PLS: a silver bullet?. MIS Quarterly, pp.niii-ix.
154. Mathis, E. F., Kim, H. L., Uysal, M., Sirgy, J. M., and Prebensen, N. K. (2016). The effect of co-creation experience on outcome variable. Annals of Tourism Research, Vol. 57, pp. 62-75.
155. Matikiti, R., Mpinganjira, M., and Roberts-Lombard, M. (2017). Social media in tourism: Establishing factors influencing attitudes towards the usage of social networking sites for trip organisation. Acta Commercii, Vol. 17 No.1, pp.1-13.
156. Mayer, R. C., Davis, J. H., and Schoorman, F. D. (1995). An integrative model of organizational trust. Academy of Management Review, Vol. 20 No. 3, pp.709-734.
157. Meuter, M. L., and Bitner, M. J. (1998). Self-service technologies: extending service frameworks and identifying issues for research. In *American marketing association. Conference proceedings*, Vol. 9, p. 12. American Marketing Association.
158. Meuter, M. L., Bitner, M. J., Ostrom, A. L., and Brown, S. W. (2005), Choosing among alternative service delivery modes: An investigation of

- customer trial of self-service technologies., Journal of Marketing, Vol. 69 No.2, pp. 61-83.
159. Mishra, V., and Vaithianathan, S. (2015). Customer personality and relationship satisfaction: Empirical evidence from Indian banking sector. International Journal of Bank Marketing. Vol. 33 No. 2, pp. 122-142.
160. Mustak, M., Jaakkola, E., Halinen, A., and Kaartemo, V. (2016), Customer participation management: developing a comprehensive framework and a research agenda, Journal of Service Management, Vol. 27 No.3, pp. 250-275.
161. Navaneethakrishnan, K., and Sathish, A. S. (2020). it's all about brand love-expressing through purchase intention, brand trust and brand attitude. Journal of Critical Reviews, Vol. 7 No. 4, pp. 313-318.
162. Oliver, R. L. (1999). Whence consumer loyalty?. Journal of Marketing, Vol. 63 No. 4, pp.33-44.
163. Ordanini, A., and Parasuraman, A. (2011). Service innovation viewed through a service-dominant logic lens: a conceptual framework and empirical analysis. Journal of Service Research, Vol.14 No.1, pp. 3-23.
164. O'Reilly, N. J., and Madill, J. J. (2007). Evaluating social marketing elements in sponsorship. Social Marketing Quarterly, Vol. 13 No.4, pp.1-25.
165. Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington Books/DC Heath and Com.
166. Pahnla, S., and Warsta, J. (2010). Online shopping viewed from a habit and value perspective. Behaviour & Information Technology, Vol. 29 No.6, pp.621-632.
167. Parrado, S., Ryzin, G.G., Bovaird, T., and Löffler, E. (2013), Correlates of co-production: Evidence from a five-nation survey of citizens. International Public Management Journal, Vol. 16 No.1, pp. 85-112.

168. Payne, A. F., Storbacka, K., and Frow, P. (2008). Managing the co-creation of value. Journal of the Academy of Marketing Science, Vol. 36 No.1, pp.83-96.
169. Pee, L. G., and Lee, J. (2015). Intrinsically motivating employees' online knowledge sharing: Understanding the effects of job design. International Journal of Information Management, Vol. 35 No.6, pp. 679-690.
170. Peterson, R. A., and Brown, S. P. (2005). On the use of beta coefficients in meta-analysis. Journal of Applied Psychology, Vol. 90 No.1, 175-181.
171. Petre, A., Stegorean, R., & Gavrea, C. (2017). The use of social media in recruitment applicants' perception. Managerial Challenges of the Contemporary Society. Proceedings, Vol. 10 No.2, pp. 9-13.
172. Podsakoff, P. M., and Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. Journal of Management, Vol.12 No.4, pp. 531-544.
173. Prahalad, C. K., and Ramaswamy, V. (2004), Co-creation experiences: The next practice in value creation. Journal of Interactive Marketing, Vol. 18 No.3, pp. 5-14.
174. Radaelli, G., Lettieri, E., Mura, M., and Spiller, N. (2014). Knowledge sharing and innovative work behaviour in healthcare: A micro-level investigation of direct and indirect effects. Creativity and Innovation Management, Vol.23 No.4, pp. 400-414.
175. Ramaswamy, V. (2009). Leading the transformation to co-creation of value. Strategy and Leadership, Vol 37 No.2, pp.32-37
176. Reinholt, M. I. A., Pedersen, T., and Foss, N. J. (2011). Why a central network position isn't enough: The role of motivation and ability for knowledge sharing in employee networks. Academy of Management Journal, Vol. 54 No. 6, pp. 1277-1297.

177. Ribbink, D., Van Riel, A. C., Liljander, V., and Streukens, S. (2004). Comfort your online customer: quality, trust and loyalty on the internet. Managing Service Quality: An International Journal.
178. Rothschild, M. L. (1999). Carrots, sticks, and promises: A conceptual framework for the management of public health and social issue behaviors. Journal of Marketing, Vol. 63 No.4, pp.24-37.
179. Sarmah, B., Kamboj, S., and Kandampully, J. (2018). Social media and co-creative service innovation: an empirical study. Online Information Review, Vol. 42, pp.1146-1179.
180. Schmid, B., and Adams, J. (2008). Motivation in project management: The project manager's perspective. Project Management Journal, Vol. 39 No. 2, pp.60-71.
181. Schroer, J., and Hertel, G. (2009). Voluntary engagement in an open web-based encyclopedia: Wikipedians and why they do it. Media Psychology, Vol. 12 No.1, pp. 96-120.
182. Seliaman, M. E. (2013). Exploring the adoption of online discussion forums for knowledge sharing and social relations among virtual communities. In 2013 World Congress on Computer and Information Technology (WCCIT) (pp. 1-5). IEEE.
183. Shang, R. A., Chen, Y. C., and Liao, H. J. (2006). The value of participation in virtual consumer communities on brand loyalty. Internet Research, Vol 14 No. 4, pp. 398-418.
184. Siemsen, E., Balasubramanian, S., and Roth, A. V. (2007). Incentives that induce task-related effort, helping, and knowledge sharing in workgroups. Management Science, Vol. 53 No.10, pp.1533-1550.
185. Sohail, M. S., and Al-Jabri, I. (2017). Evolving factors influencing consumers' attitudes toward social media marketing and its impact on social media usage. International Journal of Marketing, Communication and New Media, Vol.2. Pp. 3-25.

186. Song, H. J., Lee, C. K., Kang, S. K., and Boo, S. J. (2012). The effect of environmentally friendly perceptions on festival visitors' decision-making process using an extended model of goal-directed behavior. Tourism Management, Vol. 33 No.6, pp. 1417-1428.
187. Tajvidi, M., Wang, Y., Hajli, N., and Love, P. E. (2017). Brand value Co-creation in social commerce: The role of interactivity, social support, and relationship quality. Computers in Human Behavior, 105238.
188. Talih Akkaya, D., Akyol, A., and Golbaşı Simşek, G. (2017). The effect of consumer perceptions on their attitude, behavior and purchase intention in social media advertising. Marmara University Journal of Economic & Administrative Sciences, Vol. 39 No.2.
189. Taylor, S., and Todd, P. (1995). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. International Journal of Research in Marketing, Vol. 12 No.2, pp.137-155.
190. Teh, C. H., & Chin, R. T. (1988). On image analysis by the methods of moments. IEEE Transactions on pattern analysis and machine intelligence, Vol. 10 No.4, pp. 496-513.
191. Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. Personality and Social Psychology Bulletin, Vol.22 No.8, pp. 776-793.
192. Tether, B. S., and Tajar, A. (2008). Beyond industry–university links: Sourcing knowledge for innovation from consultants, private research organisations and the public science-base. Research Policy, Vol. 37 No.6-7, pp.1079-1095.
193. Tu, Y., Neuhofer, B., and Viglia, G. (2018). When co-creation pays: stimulating engagement to increase revenues. International Journal of Contemporary Hospitality Management.Vol. 30 No. 4, pp. 2093-2111.

194. Van Tonder, E., & de Beer, L. T. (2018). New perspectives on the role of customer satisfaction and commitment in promoting customer citizenship behaviours. South African Journal of Economic and Management Sciences, Vol.21 No.1, pp.1-11.
195. Vargo, S. L., & Lusch, R. F. (2004), The four service marketing myths: remnants of a goods-based, manufacturing model, Journal of Service Research, Vol. 6 No. 4, pp. 324-335.
196. Vargo, S. L., & Lusch, R. F. (2008), From goods to service (s): Divergences and convergences of logics, Industrial Marketing Management, Vol. 37 No.3, pp. 254-259.
197. Vargo, S. L., and Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. Journal of the Academy of Marketing Science, Vol.36 No.1, pp. 1-10.
198. Vinzi, V. E., Trinchera, L., and Amato, S. (2010), PLS path modeling: from foundations to recent developments and open issues for model assessment and improvement, In *Handbook of partial least squares* (pp. 47-82). Springer, Berlin, Heidelberg.
199. Von Hippel, E. (2001). User toolkits for innovation. Journal of Product Innovation Management: An International Publication Of The Product Development & Management Association, Vol. 18 No.4, pp. 247-257.
200. Wang, J. L., Jackson, L. A., Wang, H. Z., and Gaskin, J. (2015). Predicting social networking site (SNS) use: Personality, attitudes, motivation and internet self-efficacy. Personality and Individual Differences, Vol. 80, pp. 119-124.
201. Wang, X. (2015). Using attitude functions, self-efficacy, and norms to predict attitudes and intentions to use mobile devices to access social media during sporting event attendance. Mobile Media & Communication, Vol. 3 No. 1, pp.75-90.

202. Wang, Y., Wu, J., & Yang, Z. (2013), Customer participation and project performance: The mediating role of knowledge sharing in the Chinese telecommunication service industry, Journal of Business-to-Business Marketing, Vol. 20 No. 4, pp. 227-244.
203. Weng, J., Hsieh, Y. C., Adnan, M. Z., and Yi, L. H. (2020). The motivation for Muslim customers' participation in the sharing economy. Resources, Conservation and Recycling, Vol. 155.
204. Wikström, S. (1996). Value creation by company-consumer interaction. Journal of Marketing Management, Vol. 12 No.5, pp.359-374.
205. Xie, L. S., Peng, J. M., and Huan, T. C. (2014). Crafting and testing a central precept in service-dominant logic: Hotel employees' brand-citizenship behavior and customers' brand trust. International Journal of Hospitality Management, Vol 42, pp. 1-8.
206. Yadav, R., and Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. Journal of Cleaner Production, Vol. 135, pp.732-739.
207. Yadav, R., Chauhan, V., and Pathak, G. S. (2015). Intention to adopt internet banking in an emerging economy: a perspective of Indian youth. International Journal of Bank Marketing, Vol.33, No.4, pp.530-544.
208. Yang, S., Song, Y., Chen, S., and Xia, X. (2017). Why are customers loyal in sharing-economy services? A relational benefits perspective. Journal of Services Marketing, Vol. 3 No. 1, pp. 48-62.
209. Yen, H. J., Hsu, H-Y. H. and Huang, C-Y. (2011), Good soldiers on the web: Understanding the drivers of participation in online communities of consumption. International Journal of Electronic Commerce, Vol. 15 No. 4, pp. 89-120.

210. Yim, C. K., Chan, K. W., & Lam, S. S. (2012), Do customers and employees enjoy service participation? Synergistic effects of self-and other-efficacy. Journal of Marketing, Vol. 76 No.6, pp.121-140.
211. Youngdahl, W. E., Kellogg, D. L., Nie, W., and Bowen, D. E. (2003). Revisiting customer participation in service encounters: does culture matter?. Journal of Operations Management, Vol. 21 No.1, pp.109-120.
212. Yuan-shuh, L., & Monle, L. (2012). The joint effects of compensation frames and price levels on service recovery of online pricing error. Managing Service Quality, Vol. 22 No.1, pp. 4-20.
213. Zhang, H., Zhang, K. Z., Lee, M. K., and Feng, F. (2015). Brand loyalty in enterprise microblogs. Information Technology & People. Vol. 28 No. 2, pp. 304-326.
214. Zhang, T., Lu, C., and Kizildag, M. (2017). Engaging generation Y to co-create through mobile technology. International Journal of Electronic Commerce, Vol. 21 No.4, pp. 489-516.
215. Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. Journal of Management, Vol.36 No.2, pp.381-404.
216. Zhao, L., Yin, J., and Song, Y. (2016). An exploration of rumor combating behavior on social media in the context of social crises. Computers in Human Behavior, Vol. 58, pp.25-36.
217. Zhu, D. H., Sun, H., and Chang, Y. P. (2016). Effect of social support on customer satisfaction and citizenship behavior in online brand communities: The moderating role of support source. Journal of Retailing and Consumer Services, Vol. 31, pp. 287-293.

APPENDIX

SURVEY QUESTIONNAIRE

Dear Respondents

This academic questionnaire is to investigate the effects of firm factors (S-D Orientation), individual factors (motivation, opportunity, ability), and social factors (subjective norms) on customer participation toward social media behavior

You have been reported as one of the interested respondents for this study. We have taken the liberty of your joining to request your view point about these issues. Your countenance and assistance will be highly appreciated. We sincerely invite you to spend maximum of 20 minutes to complete the questionnaire below. No personal information will be made public. Please be assured that your answers will be kept in strict confidentiality. Please take the time to fill out this questionnaire as accurately as possible. Your help is crucial for this research and also for our understanding about the issue of customer participation. We deeply appreciate your kind cooperation

Thank you

Faithfully Yours

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Section 1: Social Media Preference

We sincerely appreciate your time and efforts to answer the following questions.

Your answer will be treated in strict confidential. For our information, would you please indicate your response on the following questions:

1. Have you ever used any social media?

A. YES

B. NO

2. If your answer is NO, please move to **section 9** of this questionnaire

3. Which social network do you usually use?

A. FACEBOOK

F. TWITTER

B. YOUTUBE

G. SKYPE

C. ZALO

H. VIBER

D. FACEBOOK

I. LINE

MESSENGER

J. LINKEDLN

E. TIKTOK

4. Among several available social media, which social network do you think that you use it very often and you interact with the highest satisfaction?

Please specify one social media that you use the most: _____

From now on, please answer all the questions referring to your experience of the social media that you have chosen above

Section 2: Service-Dominant Orientation

Based on the social media that you have chosen, please take a short look on the questions below related to service-dominant orientation, and then choose the level of agreement on each of the items below based on your opinions	Level of agreement						
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
Relational interaction							
ARI1 This social media makes me feel at ease during our dealings	1	2	3	4	5	6	7
ARI2 This social media tries to establish rapport with me	1	2	3	4	5	6	7
ARI3 This social media encourages two-way communication with me	1	2	3	4	5	6	7
ARI4 This social media shows genuine interest in engaging me.	1	2	3	4	5	6	7
Ethical Interaction							
AEI1 This social media does not try to take advantage of me	1	2	3	4	5	6	7
AEI2 This social media does not pressure me in any way	1	2	3	4	5	6	7
AEI3 This social media does not mislead in any way	1	2	3	4	5	6	7
AEI4 This social media does not try to manipulate me	1	2	3	4	5	6	7
Individual interaction							
AII1 This social media makes an effort to understand my needs	1	2	3	4	5	6	7
AII2 This social media is sensitive to my situation	1	2	3	4	5	6	7
AII3 This social media makes an effort to find out what kind of offering is most helpful to me	1	2	3	4	5	6	7
AII4 This social media seeks to identify my expectation	1	2	3	4	5	6	7
Empowered Interaction							
AEM1 This social media invites me to provide ideas or suggestions	1	2	3	4	5	6	7
AEM2 This social media encourages me to shape the service me receive	1	2	3	4	5	6	7
AEM3 This social media provides me with control over my experiences	1	2	3	4	5	6	7
AEM4 This social media let me interact with them in my preferred way	1	2	3	4	5	6	7
Concerted Interaction							

ACI1 This social media works together seamlessly in service to	1	2	3	4	5	6	7
ACI2 This social media acts as one unit when dealing with me	1	2	3	4	5	6	7
ACI3 This social media provides message to me that are consistent with other customers	1	2	3	4	5	6	7
ACI4 This social media ensure they have smooth procedures for interacting with me	1	2	3	4	5	6	7
Developmental Interaction							
ADI1 This social media shares useful information with me	1	2	3	4	5	6	7
ADI2 This social media helps me become more knowledge	1	2	3	4	5	6	7
ADI3 This social media provides me with the advice I need to use our offering successfully	1	2	3	4	5	6	7
ADI4 This social media offers expertise that I can learn from	1	2	3	4	5	6	7



Section 3: Individual Factors

Please take a short look on the questions below related to individual factors, and then choose the level of agreement on each of the items below based on your opinions	Level of agreement						
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
Motivation							
BM1 I will chance to learn about how to use this social media	1	2	3	4	5	6	7
BM2 I have changes to learn about useful social media	1	2	3	4	5	6	7
BM3 Using social media is certainly a good way to get information that I want	1	2	3	4	5	6	7
BM4 I can talk with people who share my interests on this social media	1	2	3	4	5	6	7
BM5 Through social media, I received timely and exclusive information	1	2	3	4	5	6	7
BM6 Using social media will allow me to synchronize updating my contact information (gmail, phone numbers)	1	2	3	4	5	6	7
BM7 The advertising via SNS customized to my profile is useful	1	2	3	4	5	6	7
Opportunity							
BO1 I have enough time to spend on this social media	1	2	3	4	5	6	7
BO2 Organization policy encourages my using this social media	1	2	3	4	5	6	7
BO3 I am frustrated by the downtime this social media	1	2	3	4	5	6	7
BO4 Internet connection helps me use this social media	1	2	3	4	5	6	7
Ability							
BA1 For me, it is easy to use	1	2	3	4	5	6	7
BA2 I have facilitated to use this social media	1	2	3	4	5	6	7
BA3 I have time to use this social media	1	2	3	4	5	6	7
BA4 I am very skill in shopping by using social media, in using social media websites	1	2	3	4	5	6	7

Section 4: Social factors

Based on the social media that you have chosen, please take a short look on the questions below related to social factor, and then choose the level of agreement on each of the items below based on your opinions	Level of agreement						
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
Subjective norms							
CSU1 People in my organization have recommended me to do participate in this social media	1	2	3	4	5	6	7
CSU2 My peers have recommended me to participate in this social media	1	2	3	4	5	6	7
CSU3 My immediate friends have recommended me to participate	1	2	3	4	5	6	7
CSU41 Most people who are important to me would want me socialize online	1	2	3	4	5	6	7
CSU5 People who influence my behavior encourage me to participate in social media	1	2	3	4	5	6	7
CSU6 I feel morally obligated to refute crisis-related rumors on social media during crisis	1	2	3	4	5	6	7
CSU7 I feel personally obligated to refute crisis-related rumors on social media during social crisis, such as not spreading misinformation	1	2	3	4	5	6	7
CSU8 My friends, my family and people who are important to me think I should refute crisis-related rumors through social media during social crisis	1	2	3	4	5	6	7

Section 5: Customer Participation

Based on the social media that you have chosen, please take a short look on the questions below related to customer participation, and then choose the level of agreement on each of the items below based on your opinions	Level of agreement						
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
DCP1 I spent a lot of time sharing information about my needs and opinions with the staff during the process	1	2	3	4	5	6	7
DCP2 I put a lot of effort into expressing my personal needs during the process	1	2	3	4	5	6	7
DCP3 I always provide suggestions for improving the service outcome	1	2	3	4	5	6	7
DCP4 I have a high level of participation in the process	1	2	3	4	5	6	7
DCP5 I am very much involved in deciding how the services should be provided	1	2	3	4	5	6	7

Section 6: Brand outcomes

Based on the social media that you have chosen, please take a short look on the questions below related to brand outcomes, and then choose the level of agreement on each of the items below based on your opinions	Level of agreement						
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
Brand Loyalty							
EBL1 I consider myself to be loyal to this social media	1	2	3	4	5	6	7
EBL2 I am committed to purchasing from this social media	1	2	3	4	5	6	7
EBL3 I am willing to pay more on my social media	1	2	3	4	5	6	7
Brand Trust							
EBT1 The social media gives me everything that I expected out of the product	1	2	3	4	5	6	7
EBT2 I rely on my social media	1	2	3	4	5	6	7
EBT3 The social media never disappointing me	1	2	3	4	5	6	7

Section 7: Customer Citizenship Behaviors

Please take a short look on the questions below related to customer citizenship behaviors, and then choose the level of agreement on each of the items below based on your opinions	Level of agreement						
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
Recommendation							
REM1 I refer fellow coworker to this social media	1	2	3	4	5	6	7
REM2 I recommend this social media to my family	1	2	3	4	5	6	7
REM3 I recommend this social media to my peers	1	2	3	4	5	6	7
REM4 I recommend this social media to people interested in social media	1	2	3	4	5	6	7
Helping customers							

HC1 I assist other customer if they need help	1	2	3	4	5	6	7
HC2 I help other with their services if they seem to have problems	1	2	3	4	5	6	7
HC3 I teach other customer to use the service correctly	1	2	3	4	5	6	7
HC4 I give advice to other customers	1	2	3	4	5	6	7
Providing feedback							
PF1 I fill out a customer satisfaction survey	1	2	3	4	5	6	7
PF2 I provide helpful feedback to customer service	1	2	3	4	5	6	7
PF3 I provide information when surveyed by this social network	1	2	3	4	5	6	7
PF4 I inform social media about the great service received by an individual employee	1	2	3	4	5	6	7



Section 8: Perceived Benefit of Participation

Please take a short look on the questions below related to customer satisfaction, and then choose the level of agreement on each of the items below based on your opinions	Level of agreement						
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
PB1 I get what I really want when I participate in this social media	1	2	3	4	5	6	7
PB2 I get my best service in a timely manner when I participate in this social media	1	2	3	4	5	6	7
PB3 I make it a good product and services when I participate in this social media	1	2	3	4	5	6	7
PB4 When I participate in this social media, it provided me with feeling of enjoyment	1	2	3	4	5	6	7

Section 9: Perceived Ability

Please take a short look on the questions below related to perceived risk, and then choose the level of agreement on each of the items below based on your opinions	Level of agreement						
	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
PA1 I am fully capable of choosing this social media myself	1	2	3	4	5	6	7
PA2 I am confident in my ability to choose this social media	1	2	3	4	5	6	7
PA3 Choosing a good social media is well within the scope of my abilities	1	2	3	4	5	6	7

Section 10: Respondent Information

We sincerely appreciate your time and efforts to answer the following questions. Your answer will be treated in strict confidentiality. For our information, would you please indicate your response in the following questions:

1. Gender
 - a. Male
 - b. Female
2. Age
 - a. Less than 30
 - b. 31-35
 - c. 36-40
 - d. 41-45
 - e. More than 46
3. Education
 - a. High school or lower
 - b. Bachelor degree
 - c. Master degree
 - d. Doctoral degree
4. Monthly Income
 - a. Less than 500 USD
 - b. 501 USD- 750 USD
 - c. 751 USD- 1000 USD
 - d. Higher than 1000 USD
5. Occupation
 - a. Education sector
 - b. Business sector
 - c. Industrial sector
 - d. Service sector
 - e. Students
 - f. Others
6. Hours of using internet per week
 - a. Less than 10 hours
 - b. 11-20 hours
 - c. 21-30 hours
 - d. Higher than 31 hour