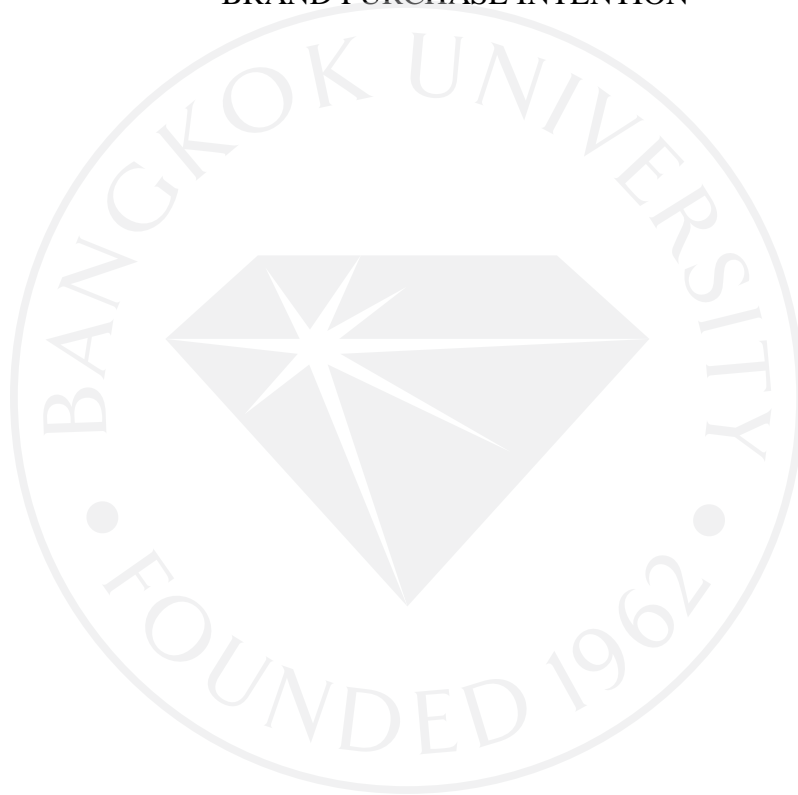
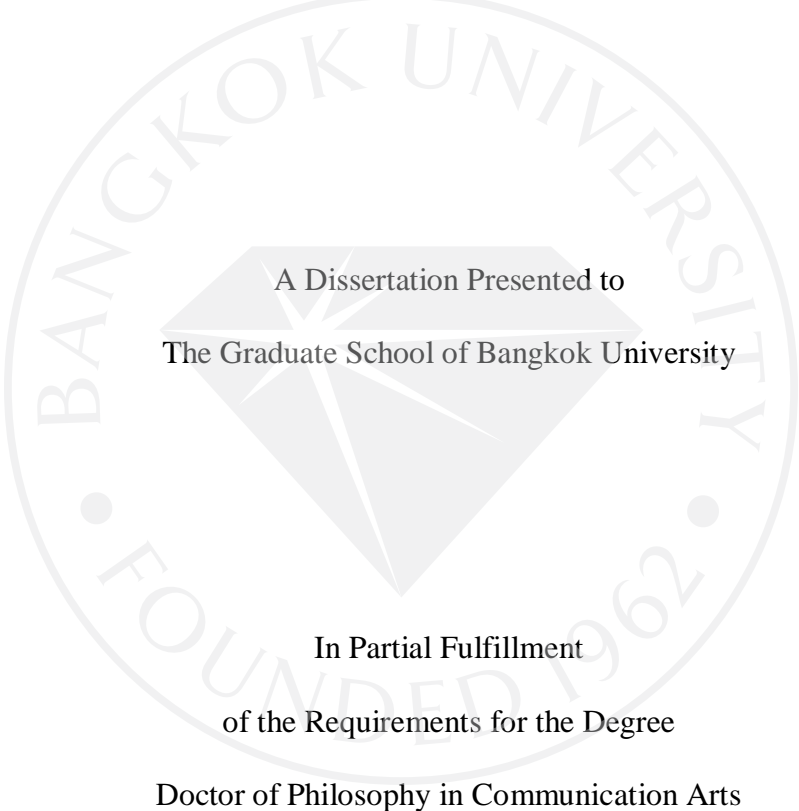


GOODS TO GOOD: EFFECT OF THAI CONSUMERS' AWARENESS OF  
CORPORATE SOCIAL INNOVATION (CSI) ON THE INNOVATION  
ADOPTION FACTORS, PREDICTORS OF BEHAVIORAL INTENTION, AND  
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A Dissertation Presented to  
The Graduate School of Bangkok University

In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy in Communication Arts

by

Sora Kaitkanarat

2020



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This dissertation has been approved  
for the Graduate School by



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Kaitkanarat, S. Ph.D. (Communication Arts), October 2020, Graduate School,  
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Goods to Good: Effect of Thai Consumers' Awareness of Corporate Social  
Innovation (CSI) on the Innovation Adoption Factors, Predictors of Behavioral  
Intention, and Brand Purchase Intention (231 pp.)

Advisors of dissertation: Assoc. Prof. Pacharaporn Kesaporn, Ph.D.

## ABSTRACT

This study examined the impact of Corporate Social Innovation (CSI) on the innovation adoption factors (including perceived relative advantage and perceived compatibility), predictors of behavioral intention (including subjective norm, attitude, and perceived behavioral control), and their purchase intention among Thai consumers. A total of 480 Bangkok residents aged between 25 to 40 years old were randomly selected. The results through Partial Least Square-Structural Equation Model (PLS-SEM) analysis with a significance level of 0.05 revealed six findings:

1) The awareness of CSI directly influenced the innovation adoption factors, predictors of behavioral intention, but not on purchase intention; 2) the awareness of CSI indirectly affected purchase intention, as mediated by each of the predictors of behavioral intention (including subjective norm, attitude, and perceived behavioral control), and as mediated by brand loyalty together with perceived relative advantage, 3) perceived relative advantage and attitude directly affected brand equity (including perceived quality and brand loyalty), 4) brand equity influenced attitude directly, 5) subjective norm and perceived behavioral control directly affected attitude, and 6) all

predictors of behavioral intention (including subjective norm, attitude, and perceived behavioral control) significantly influenced the purchase intention. The results of this CSI study fill the gap in the body of knowledge, and at the same time, create a potential framework for an organization to adopt this CSI practice for the sustainable betterment of both organization and society as a whole.



Approved: \_\_\_\_\_

Signature of Advisor

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Sora Kaitkanarat

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## CHAPTER 1

### INTRODUCTION

This chapter provides readers with background information on the topic of this research, the significance of the study, research questions, research objectives, and definition of terms.

#### 1.1 Background

Humanity faces various issues from environmental aspects, living quality, human rights, and sustainability in ways of living (Brown, 2018). “Global climate change” by NASA stated in the Global Climate Change Review that today, carbon dioxide is 413 Giga-tones per year, the highest in the past 650,000 years. The global temperature rises 1.8° F since 1880 (Lindsey & Dahlman, 2020), from which 17 of the 18 warmest years occurred between 2001 to 2018. The World Counts (2014) estimated that 2.2 billion tons of waste were deserted in oceans. Planetary Project (2017) reported that socioeconomic factors had interrupted the development of living quality and public health. Sadly, one billion people have no access to the national healthcare system.

Morality and the need for caring for one another have become increasingly essential to all. Especially in large corporations that possess advocate power that impacts many lives and holds wide reached responsibility to humanity in all the actions that they do, especially in areas of marketing activities and communication. “Most innovative companies in the world” (2018) estimated global advertising

spending at 558 billion US dollars in 2018, which is massive financial power. Such immense budgets could potentially craft even more positive impacts on global issues.

Blasco and King (2017) stated in The KPMG Survey of Corporate Responsibility Reporting that 60% of all industry sectors from 4,900 companies in 49 countries, including Thailand, showed a healthy rate in Corporate Social Responsibility (CSR), the highest since 1993. Henceforth, there are remaining opportunities to sustain these acts of goodwill even further.

A desire for sustainable social contribution and sustainability in helping one another is a global phenomenon that has been positioned at the top of global agendas. United Nations (2015) had emphasized on long-term social responsibility in order to sustain better quality of living not only for today but for many generations to come. All United Nations members adopted the Sustainable Development Goals (SDGs) in 2015 as a universal call to action to eliminate poverty, protect the planet, and ensure that all people enjoy peace and prosperity.

With only a decade left to accomplish the Sustainable Development Goals, 193 world leaders at the SDG Summit in September 2019 called for a decade of action and delivery for sustainable development to leave no one behind. UN Development Agency (UNDP) is well-placed to aid the implementation of the goals through their work in some 170 countries and territories, according to United Nations (2019). In Thailand, 40 leading conglomerates had pledged to deliver those goals. In only four years, the committed conglomerates have taken the development of Thailand, according to Bertelsmann Stiftung and Sustainable Development Solutions Network (2019) up to rank number 40 out of 162 countries participated in the evaluations, and rank number one in Asia.



However, with such top rank, the achievement in each of 17 goals still needed aggressive movement to be able to deliver 2030 commitments according to the report from Bertelsmann Stiftung and Sustainable Development Solutions Network (2018). Therefore, CSR as an obligation or a separate extension of the business is arguably no longer sufficient to the need for such a global phenomenon. The long term CSR is needed. A unique ecology demands Corporate Social Innovation (CSI), as doing good is not enough. The organization needs to do good forever as an integrated part of the business in order to leave no one behind.

#### 1.1.1 Development of Corporate Social Responsibility (CSR)

The key milestones on the development of CSR began in early 1950 with the search for a new model of a company and its new role in the world. The concept of CSR was first introduced by Bowen (1953), who suggested that there is an obligation of businessmen to 1) uphold policies, 2) make a decision, and 3) follow with action which is desirable in terms of the objectives and value of our society.

Following by the shift of social partnership and labor relations until late 1980, Carroll (1979) further defined CSR as a range of obligations that a firm has to society which consists of four elements which are 1) economic responsibilities, 2) legal responsibilities, 3) ethical responsibilities, and 4) discretionary responsibilities where discretionary responsibilities are loosely left to individual judgment or left to responsiveness to social expectation.

Madрахimova (2013) identified that from 1990 to 2000, the acceleration of globalization through the technology revolution expanded CSR into environmental caring until recently that sustainability has become the current focus of CSR.

Dahlsrud (2008) has concluded in the analysis that there are five fundamental

dimensions of CSR which are 1) environmental dimension, 2) social dimension, 3) economic dimension, 4) stakeholder dimension, and 5) voluntariness dimension. One distinct dimension, which in addition to earlier development of CSR, is the dimension of the environment.

Even though the CSR paradigm has become a significant pillar within business operations and the way that powerful and inspiring brands are built, Besley and Ghatak (2007) identified that CSR is dependable on profit-maximization in competitive markets. Various empirical studies supported the influential powers of CSR towards business performance and consumer purchase intention (Becker-Olsen, Cudmore, & Hill, 2006; Lee, Park, Rapert, & Newman, 2012; Mohr & Webb, 2005; Pino, Amatulli, De Angelis, & Peluso, 2016; Saeidi, Sofian, Saeidi, Saeidi, & Saeidi, 2015; Sen & Bhattacharya, 2001).

There are some remaining disputed views. However, Karnani (2010) argued against the practice of CSR that if private profits and public interests are aligned, the idea of CSR is irrelevant as firms are motivated by profitability, which will increase social welfare. On the contrary, if profitability and social welfare are in direct opposition, the practice of CSR will be ineffective as firms are unlikely to act for the public interest that is against stakeholder interest as there is no shared value to uphold.

#### 1.1.2 From Corporate Social Responsibility (CSR) to Corporate Social Innovation (CSI)

Closing the gap of “Shared Value,” Herrera (2015) has analyzed the framework of Corporate Social Innovation (CSI) and indicated three organizational components in CSI, which are 1) strategic alignment, 2) institutional elements, and 3) clarity in intent. The said components are accompanied by another set of three

institutional elements shown in Figure 1.1, which enable CSI processes, and that includes 1) stakeholder engagement, 2) operational structures and processes, and 3) organizational culture. “Co-creation” is identified as an opportunity when CSI is intergraded into a firm’s strategy and operations, thereby forming shared value and enhancing competitive advantage.

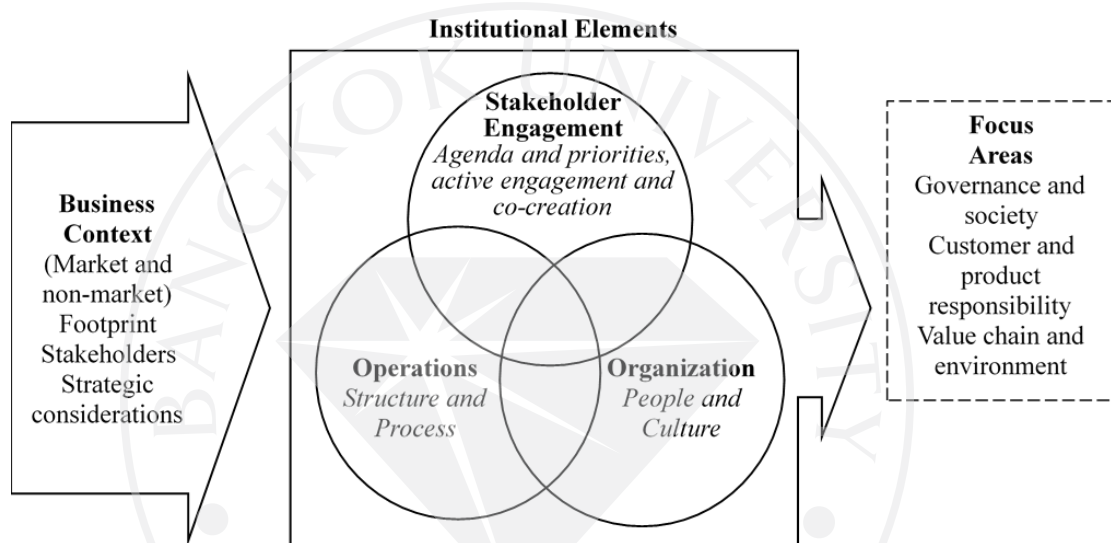


Figure 1.1: Institutionalizing Corporate Social Innovation

Source: Herrera, M. E. B. (2015). Creating competitive advantage by

institutionalizing corporate social innovation. *Journal of Business Research*, 68(7), 1468-1474.

There is instead a natural bridging from CSR to CSI. The companies that practice CSR could effortlessly evolve into CSI as CSR and Innovation are two dynamic paradigms that could coexist to create evolution in today’s brand building and communication world by forming a revolutionary conceptualization as Corporate

Social Innovation (CSI). Luo and Du (2015) identified that CSR could be a catalyst for innovation by verifying a strong linkage between CSR and Innovation. Their empirical results show that firms with more CSR activities exhibit a higher level of innovativeness.

According to the World Economic Forum, Wyman (2012) identified insights from global thought leaders participating in the forum. The framework of CSI 1) is directly aligned with the company's innovation agenda and business strategy, 2) leverages a company's core for-profit assets, such as human capital, value chains, and technology or distribution systems, and 3) is managed from within an organization's core operations or business units. Benefits to the companies include beyond just financial earnings but 4) also improvements to long-term competitiveness, including access to new markets or consumers, and strengthened supply chains and talent retention. Mirvis, Herrera, Googins, and Albareda (2016) further highlighted that knowledge exchange, as one of the competitive advantages, increases as firms invest more, maximize usage of social ties, and expand social impact in CSI activities. Numerous studies had later proved the impacts of CSR and Innovation on business' results. Han, Hsu, and Sheu (2010), for example, identified the correlation between hotels that practiced CSR and innovation to the level of purchase intention, similarly to a study from Asatryan and Asamoah (2014) that confirmed that consumers are more willing to use products and services from firms with social causes. Singh and Islam (2017) emphasized in their study that CSR efforts are related to purchase intention.

Mirvis and Googins (2017) distinguished CSI from CSR in six dimensions shown in Table 1.1, which is more integrated into business operation and shifts away

from the potential bias of conflicting commercial purposes between the commercial value of stakeholders and value for betterment. The elements are 1) strategic intent, 2) research and development in corporate assets, 3) employee development, 4) NGO or government partners, 5) social and eco-innovation and, 6) sustainable social change.

Table 1.1: CSR and CSI comparison

What Makes CSI Different?	
Traditional CSR	Corporate Social Innovation
Philanthropic Intent	Strategic Intent
Money, Manpower	R&D, Corporate Assets
Employee Volunteerism	Employee Development
Contracted Service Providers	NGO/ Government Partners
Social and Eco-services	Social and Eco-innovations
Social Good	Sustainable Social Change

Source: Mirvis, P., & Googins, B. (2017). *The new business of business: Innovating for a better world*. Retrieved from <https://www.conference-board.org/retrievefile.cfm?filename=TCB-GT-V2N1-The-New-Business-of-Business1.pdf&type=subsite>.

CSI has progressively been emerging worldwide. Violo (2018) has identified a nonexclusive list of a total of 25 firms across the globe that are practicing CSI.

Global enterprises such as Coca Cola, Unilever, and P&G are amongst those firms.

The emersion of CSI practice in Thailand can also be identified. True Corporation and SCG, for example, are two prime cases that have launched policies and practices that aligned with the five distingue dimensional of CSI (Mirvis & Googins, 2017).

True Corporation (2018) stated in their commitment statement that “True's sustainability strategy is to utilize our strengths in creative digital technologies and innovations that cultivate inclusiveness and empower sustainable development,” which aligns with the core characteristics of CSI. The practice is evidential via many innovation-driven activities shown in Figure 1.2.

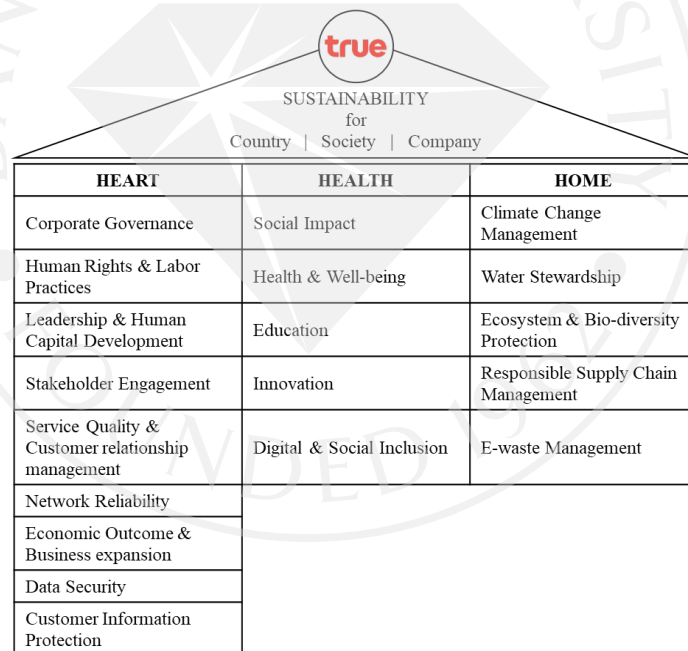


Figure 1.2: True Sustainability Framework

Source: True Corporation. (2018). *True sustainability*. Retrieved from

<http://www3.truecorp.co.th/new/sustain>.

The result of sustainability practices, which is aligned with the CSI framework, is shown via global recognition. True corporation is the only Thai telecommunication company selected as a member of the Dow Jones Sustainability Index 2018 and FRSE4Good Index Series in 2018.

In the case of SCG (2016), the strategic vision was clearly stated that “SCG will be well recognized as an innovative workplace of choice, and a role model in corporate governance and sustainable development.” SCG has been participating in CSI, the Cement Sustainability Initiative. CSI, in this light, is a global effort by 25 major cement producers that operate in more than 100 countries with the belief that there is a strong business case for the pursuit of sustainable development. This business case is also aligned with six characteristics of overarching terms of CSI, Corporate Social Innovation.

## 1.2 Problem Statement

While the sympathetic business approach paves the way brand is built and communicates through an active audience, the parallel phenomenon from digital and technology’s immersions brings forth dramatic changes in the way consumers are connected with the brand. According to Handley (2017), Magna global media agency forecasted that digital media would take 44 percent, or 237 billion US dollars, of all advertising money spent globally in 2018. The figure is reaching 50 percent, or 291 billion US dollars by 2020, which demonstrates a reflection to address the behavioral changes in consumers’ openness to digital and innovation. Corporate Social Responsibility (CSR) and Innovation are two paradigms that coexist to create

evolution in today's brand-building world by forming a revolutionary win-win conceptualization as Corporate Social Innovation (CSI).

CSR with its original ideology of doing "good," according to Bowen (1953), also has the potential to progress its fundamental concept into CSI. The evolution of the new paradigm of doing good together with providing good (product) for the business result is significant in developing a strategic direction as well as long term vision of the organization. Hence, CSI can expand the contribution to preserving the environment and achieving the sustainability of the enterprise. Wyman (2012) emphasized that CSI substantiates the company's innovation agenda and business strategy. Increasingly, they are succeeded from within a firm's core operations or business units. Benefits to the companies include not only financial returns but also improvements to continuing competitiveness, including entree to new markets or consumers, strengthened supply chains, and talent retention.

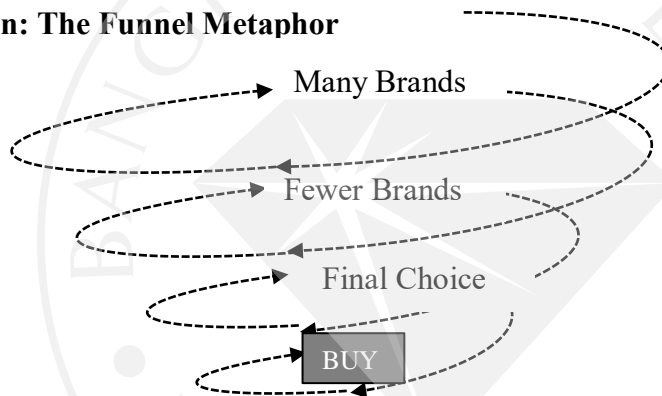
Despite the fact that CSI has a strong potential to create incremental value for both company and society, CSI is a relatively new paradigm with limited practice. Googins and Mirvis (2017) stated that "even innovation has been to the DNA of organizations, it has not stayed an integral part of a corporation's engagement with the society," which confines organizations in maximizing their potentials for betterment. This barrier limits the possible impact on both the wealth of the organization as well as betterment opportunities for society.

The issue may cause by a lack of validation towards CSI's positive impacts on business. Based on Lewis's AIDA Model and Townsend's Purchasing Funnel, the critical validation of marketing success is purchasing, which has also been confirmed by recent studies. Edelman (2010), for example, proposed a new marketing funnel



model in the digital era shown in Figure 1.3 with a comparison to the pre-digitized model. The modern consumer decision journey consists of more complication processes which must be included in this study in terms of consideration for adoption, evaluation process as well as purchase intention, which is the remaining identical factors between these two models. Ultimately, the purchase intention is the universal goal for marketers. This study, therefore, aims to identify the positive influential power of CSI on purchase intention.

#### Then: The Funnel Metaphor



#### Now: The Consumer Decision

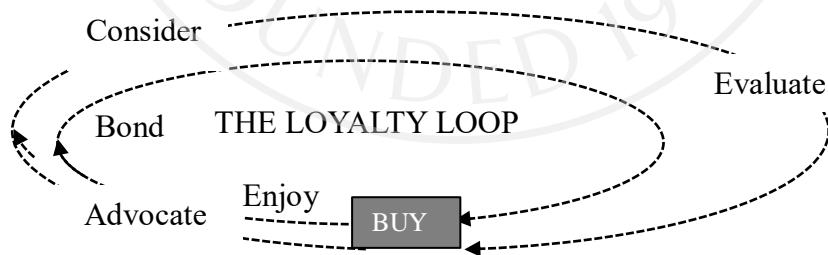


Figure 1.3: Marketing Funnel Model in the Digital Era

Source: Edelman, D. C. (2010). Branding in the digital age. *Harvard Business Review*, 88(12), 62-69.

Correlating to identifying purchasing or purchase intention, Wijaya (2012) has revisited the AIDA Hierarchy of Effects Model and confirmed that Awareness remains the starting point of the process. Even though there are various practices of CSI related, there is no clear evidence of the awareness of such activity or terminology to consumers. There is also a need to also ensure the CSI awareness in order to validate the influential power of CSI on purchase intention effectively.

The impact on purchase intention can be from several key components; one of the substantial factors influencing purchase intention is brand equity. Aaker (1992) defined awareness, perceived quality, brand loyalty, and brand associations as a set of brand assets and liabilities associated with the brand that adds or subtracts values from a product or service. This notion had been supported by various studies (Atilgan, Aksoy, & Akinci, 2005; Chi, Yeh, & Yang, 2009; Du, Bhattacharya, & Sen, 2010; Singh & Islam, 2017).

There are existing studies that identified the relationship between brand equity and influential power from CSR. Brand equity is a strategy to mediate the affective process, creating linkage from awareness to preference stage (Du, et al., 2010; Kumar & Priyadarsini, 2017). However, the study on the influential power of the CSI paradigm on brand equity and purchase intention remains limited.

Therefore, to bridge the knowledge gap, four main areas need to be examined which are 1) the influential power of the CSI paradigm on purchase intention, 2) the innovation adoption factors related to the practice of the CSI paradigm, 3) potential mediating factors of brand equity influencing purchase intention, and 4) potential variation of predictors on purchase intention.

### 1.3 Significance of the Study

The Corporate Social Innovation (CSI) concept is a contemporary paradigm that has not yet widely been studied. This research takes an initial step to fill the gap in the body of knowledge on the impact of CSI on purchase intention (PI) in order to verify the assumption of mutual benefits between firm, consumer, and society as a whole. “Most innovative companies” (2018) combined a total of 36,113 innovation patent grants in 2017 from the global top 10 most innovative companies in the world while global average investments on research and development budget remain opportune at 4% (Dutta, Lanvin, & Wunsch-Vincent, 2017).

To seize such an opportunity, the significance of this study is four-dimensional. The first dimension is for academia to fill the gap in the body of knowledge regarding the new paradigm of CSI and its potential impact on the purchase intention. The second dimension is for the professional communicator in clarifying the relationship between newly evolved concepts of CSI and brand purchase intention. If CSI and brand purchase intention are found correlated, communication strategy can now consider CSI as a part of the persuasive communication, which could potentially drive further purchases.

On the decision-maker side of brand building, the third dimension is a benefit to marketers who could make an informed decision in creating marketing's impact from CSI, which could potentially evolve or incorporate into their business operations. Lastly, the fourth dimension is favorable to consumers and society at large, as the core value of CSI is a means for the betterment of lives and society. Identifying the positive impact of CSI on the business's result will expand the focus

of marketers into this giving and the caring area, which will create win-win solutions and betterment for all, leaving no one behind.

#### 1.4 Research Questions

To positively fill the gap in the body of knowledge for scholars as well as raising the impact of the implementation of a professional CSI approach on the strategic behavior of firms, this study will measure the following four research questions:

RQ1: Does awareness of corporate social innovation (CSI) significantly influence the innovation adoption factors, predictors of behavioral intentions, and purchase intention of CSI brand among Thai consumers?

RQ2: Do innovation adoption factors of CSI practicing brand significantly influence the brand equity of the CSI practicing brand amongst Thai consumers?

RQ3: Does brand equity of CSI practicing significantly influence predictors of purchase intention of CSI practicing brand among Thai consumers?

RQ4: Do brand equity and predictors of purchase intention of CSI practicing brand significantly influence the purchase intention among Thai consumers?

#### 1.5 Objectives of the Research

This research aims to achieve the following four research objectives:

1.5.1 To explore the influence of awareness of corporate social innovation (CSI) on the innovation adoption factors, predictors of behavioral intentions, and purchase intention of CSI brand among Thai consumers

1.5.2 To examine the influence of the innovation adoption factors of CSI practicing brand on the brand equity of the CSI practicing brand amongst Thai consumers.

1.5.3 To explore the influence of brand equity of CSI practicing on predictors of purchase intention of CSI practicing brand among Thai consumers.

1.5.4 To explore the influence of brand equity and predictors of purchase intention of CSI practicing brand on their purchase intention among Thai consumers.

## 1.6 Scope of Study

This study is designed to understand the influential impact of a brand that practices Corporate Social Innovation (CSI) on purchase intention. This study intends to identify if purchase intention can be impacted by having an awareness of CSI by verifying relevant mediating variables as well as a direct impact from CSI awareness. The quantitative survey will be carried out to Bangkok residents age between 25 to 40 who are not a rejecter to innovation. This research does not represent any specific brand.

## 1.7 Definition of Terms

Corporate Social Responsibility (CSR) this term refers to a commitment to improving community well-being through discretionary business practices and contributions of corporate resources (Kotler & Lee, 2005)

Corporate Social Innovation (CSI) this term denotes the idea that a company should be directing resources towards innovation within areas that will do societal or environmental good (Googins & Mirvis, 2012). The US Chamber of Commerce

Foundation claimed that the CSI 1) derives from the vision of the company, 2) bring employee at the center of effort, 3) nurture intrapreneurship, 4) use social section for R&D, 5) reset philanthropy to innovation, and 6) engage a board spectrum of interests using connective technology and social media for innovation (Googins & Mirvis, 2012).

Awareness of CSI (PAW) awareness consists of two dimensions, which are 1) intensity and 2) extent. The intensity of brand awareness specifies how effortlessly consumers recall a particular brand that practices CSI. The extent of brand awareness connotes the possibility of acquiring and consuming products and services through the utilization of CSI (Kleinrichert, Ergul, Johnson, & Uydaci, 2012). Therefore, the operational definition of awareness is the degree of awareness towards CSI, measuring through the level of awareness towards CSI and level of understanding from the CSI concepts stimuli.

Purchase Intention (PI) this term refers to the willingness of a customer to buy a particular product or a specific service (Aaker, 1992). The operational definition of purchase intention is the degree of intention to purchase products or services of CSI practicing brand. Yuksel (2016) had quantified as 1) intention to consider, 2) consider purchasing, 3) intent to purchase, 4) try the product, and 5) actual purchase.

Brand Equity (BE) this term refers to a set of assets and liabilities linked to a brand, its name, and symbol, which adds to or subtracts from the value provided by a product or service to a business and/or to that business's customers (Aaker, 1991). The researcher will examine brand equity, which composes of several vital constructs as follows:

1) Brand Awareness (BA) this term is associated with the functions of brand identities in consumers' recollection and can be measured by how well the consumers can recognize the brand under various conditions (Keller, 1993).

2) Perceived Quality (Q) this term is the consumer's perception of the overall quality or superiority of a product or service concerning its intended purpose, relative to alternatives. Perceived quality includes 1) an actual or objective quality regarding the extent to which the product or service delivers superior service, 2) the nature and quantity of ingredients, features, or services included, 3) manufacturing quality which conformance to specification, the "zero defect" goal (Aaker, 1991). The operational definition of perceived quality is the degree of superiority, durability, reliability, high function, and overall quality towards products and services of CSI practicing brand (Yoo & Donthu, 2001).

3) Brand Loyalty (L) this term encapsulates how likely a consumer will be to change to another brand, especially when that brand makes an adjustment in price, product features, communication, or distribution (Aaker, 1991). The operational definition of brand loyalty is the degree of likelihood to purchase only products or services from CSI practicing brand, and the degree of likelihood to never buy other replacement brands (Yoo & Donthu, 2001).

Innovation adoption indicator this term emphasizes the perceived attributes of innovation that are considered to have a significant influence on the ability to be adapted to innovation (Rogers, 2003).

Perceived Relative Advantage (RA) this attribute is the degree to which innovation is perceived as better than the idea it replaces. The better the perceived relative advantage of an innovation, the more rapid its rate of adoption is likely to be.

The operational definition of perceived relative advantage is the degree of perceived superior benefit and value of the products and services from the CSI practicing brand comparing to the none CSI practicing brand. Atkinson (2007) identified superior benefits and values as 1) more fun, 2) more interesting, 3) easier to use, 4) can provide better knowledge, 5) better usage, and 6) providing a real advantage over other solutions.

Perceived Compatibility (CP) this attribute is the degree to which an innovation is perceived as being constant with the values, past experiences, and requirements of potential adopters. The operational definition of perceived compatibility is the degree of suitability from using products and services from CSI practicing brand to the expected benefit and lifestyle. Atkinson (2007), and Amaro and Duarte (2015) recommended that the compatibility is 1) fit with individual behavior, 2) fit with individual lifestyle, 3) provocative name of products or services, 4) help to learn more, 5) more relevant to individual need, and 6) fit with individual-related activity.

Predictor of Behavioral intent the predictors of behavioral intent improved the predictive power of behavior or reasoned action. Ajzen (1985) proposed the predictors of behavioral intent in the Theory of Planned Behavior to explain human behavior in all possible complexity.

Attitude (AT) this term is determined by Ajzen (1985) as an individual accessible belief about the behavior, where a belief is well-defined as the subjective probability that the behavior will produce an inevitable outcome such as believing in brands that do good. The operational definition of attitude is the degree of emotional benefit, value, and positivity in using products and services from CSI practicing



brand, which encompasses of 1) good idea, 2) pleasant idea, 3) enjoy ability, 4) appealing, 5) value, and 6) benefit (Amaro & Duarte, 2015).

Subjective Norm (SN) this term is a perception of an individual about the particular behavior, which is influenced by the judgment of significant others. (Ajzen, 1985). The operational definition of the subjective norm is the degree of acceptability and supportiveness from significant others (relative, trusted person, or society) towards the usage of products and services from the CSI practicing brand, which are 1) the opinion of important people in life, 2) influence of important people in life, 3) influential behavior of important people in life, and 4) expectation of important people in life (Ajzen, 2002).

Perceived Behavioral Control (BC) this term is a perception of an individual regarding ease or difficulty of performing the particular behavior (Ajzen, 1985). The operational definition of perceived behavioral control is the degree of self-confidence in making purchase decision to use products and services from CSI practicing brand, which includes 1) controllable level of self-decision making, 2) confidence to control, 3) controllability, 4) positivity to future control, and 5) confident in self-capability (Ajzen, 2002).

Millennial generation this term is identified by the Nielsen Media Research (2017) as males and females who were born from 1977 to 1995. This generation is recognized as the most open to innovation and has the highest usage and engagement to digital and technology.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter capitalizes the existing body of knowledge by reviewing the literature most relevant to research objectives. Emphasizing on the area of corporate social responsibility, corporate social sustainability, corporate social innovation, and purchase intention. The literature review provides the depth of understanding of the current relationships, frameworks, and constructs that pave the way to identifying gaps in the body of knowledge, which lead to the development of hypotheses.

The following sections access the development of Corporate Social Responsibility (CSR) to the emersion of Corporate Social Innovation (CSI) prior to a discussion regarding impacts on purchase intention. Potential mediating factors are thoroughly undertaken by reviewing related brand equity model studies and related studies under the two theoretical frameworks, which are 1) Diffusion of Innovation Theory and 2) Theory of Planned Behavior.

To conclude this chapter, the research gap in the current body of knowledge is identified, along with an overview of hypothesized connections between CSI and the purchase intention model. This conceptual model framework for CSI influential power on purchase intention leads to the formation of the research framework and questionnaire development in the following chapter.

## 2.2 Evolution of Corporate Social Responsibility

The paradigm of Corporate Social Responsibility (CSR) was pioneered by Howard R. Bowen through the publication of the book titled 'Social Responsibilities of the Businessman' in 1953, which is evidently a landmark regarding the beginning of the modern period of literature on this subject (Bowen, 2013). The focuses of CSR during the 1950s skewed toward employees and the workforce. Bowen (1953) suggested that corporations do not only produce goods and services but also care for workplace conditions and social responsibility to enhance the wellbeing of employees.

The evolution of CSR has been identified into four eras according to Carroll (2008) which are 1) the philanthropic era which companies focused on donating to charities, 2) the awareness era which CSR became more recognized as an overall responsibility of the business and its community, 3) the issue era which organization emphasized more on a specific issue that somewhat related to the organization purpose, and 4) the responsiveness era where social concern has an impact on organizational behavior and development of its products and services.

During the 1960s, the scope of CSR had been extended beyond the corporate-related factors. Davis (1960) defined CSR by arguing that it is a businessman's decisions and actions taken for reasons beyond direct economic or technical interest to the firm. Committee for Economic Development (1971) stated that businesses are requested to assume broader responsibilities to society and a more comprehensive range of human values, which leads to change in expectation from the society that each organization has to fulfill.

Johnson (1971) began an idea of answering to specific needs in a more signified scopes that a socially responsible organization balances the multiplicity of interests instead of just focusing on profitability where the interests of employees, suppliers, dealers, local communities, and the nation should also be taken into considerations. Sethi (1975) further segmented CSR into two elements, which are ‘social obligation’ and ‘social responsiveness.’ While social obligation is forced by market or law, social responsibility is a free will of the firm to fulfill and elevate social values and expectations of performance.

In the course of mid-1970s, Post and Preston (2012) capitalized various definitions of CSR during 1975 as 1) idea of legal responsibility to others in an ethical sense, 2) charitable contribution through social consciousness, 3) legitimacy in being proper, and 4) higher standards of behavior on businessmen than on citizens at large. The popular CSR issues during the 1970s identified by Holmes (1978) were pollution control, charities, community affairs, recruitment or development of minorities, and support of education.

The concept of CSR had evolved through the extension of Performance or Responsiveness as an essential process during the 1980s. Wartick and Cochran (1985) advanced the concept of CSR to be Corporate Social Performance through the ‘Corporate Social Performance Model,’ which extended the three-dimensional integration of responsibility, responsiveness, and social issues, as shown in Table 2.1.

Table 2.1: The Corporate Social Performance Model

Principles	Processes	Policies
Corporate Social Responsibilities	Corporate Social Responsiveness	Social Issue Management
1. Economic 2. Legal 3. Ethical 4. Discretionary	5. Reactive 6. Defensive 7. Accommodative 8. Proactive	9. Issues Identification 10. Issues Analysis 11. Response Development
Directed at: 1. The Social Contract of Business 2. Business as a Moral Agent	Directed at: 1. The Capacity to Respond to Changing Societal Conditions 2. Managerial Approaches to Developing Responses	Directed at: 1. Minimizing “Surprises” 2. Determining Effective Corporate Social Policies
Philosophical Orientation	Institutional Orientation	Organizational Orientation

Source: Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. *Academy of Management Review*, 10(4), 758-769.

Muirhead (1999) additionally characterized this period of corporate contributions during the late 1980s as ‘diversification and globalization.’ In this era, global enterprises had more focus on creating a dedicated position to corporate giving and CSR.

Emerging into the year 2000, Husted (2000) presented a contingency theory of Corporate Social Performance (CSP) as a function of the ‘fit’ between social issue and corporate strategies and structures which led to the integration of elements such as corporate social responsiveness, issues management, and stakeholder management. A gap of expectations determined the aim of CSP. The model shown in Figure 2.1 integrates partial elements of the construct of Corporate Social Responsibility (CSR), corporate social responsiveness, issues management, and stakeholder management, which dramatizes the importance of ‘fit’ between social issues and internal corporate strategy.

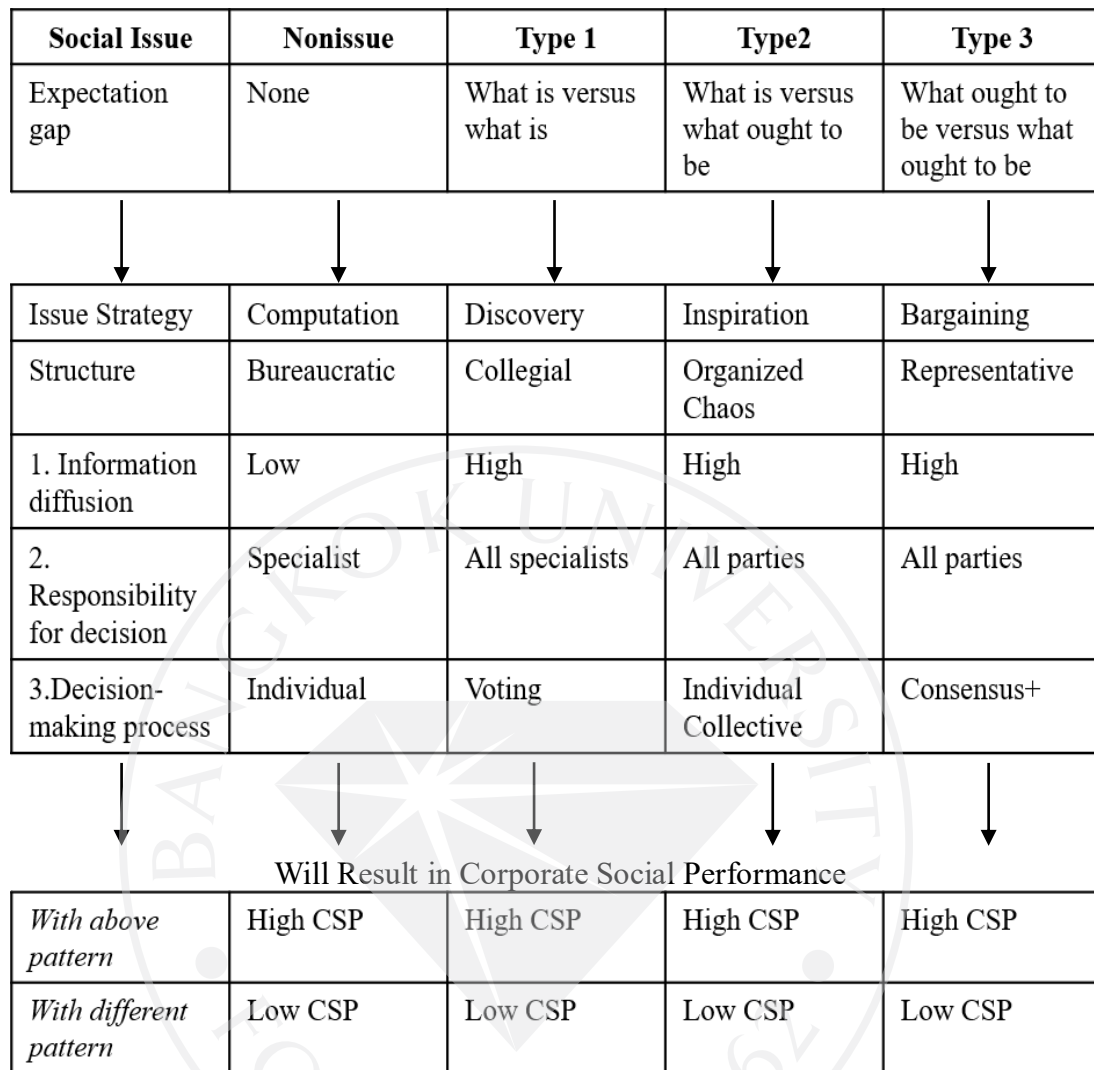


Figure 2.1: Issue-Contingent Model of Corporate Social Performance

Source: Husted, B. W. (2000). A contingency theory of corporate social performance.

*Business & Society*, 39(1), 24-48.

Additionally, to identify the 'fit,' European Communities (2001) defined that CSR is a conceptual model where companies integrate social and environmental concerns in their business operations and business interaction with stakeholders voluntarily.

Meehan, Meehan, and Richards (2006) later proposed a more unified approach as the 3C-SR model (Figure 2.2) to create a conceptual framework of a holistic CSR practice. The model was developed from the original three-domain approach to CSR of Schwartz and Carroll (2003). The three-domain approach focuses on economic, legal, and ethical dimensions. This model, presented as a Venn diagram, offered an alternative to an earlier conceptualization of CSR. The ethical standards and social objectives the organization subscribes to are manifested in its mission, strategic objectives, strategy programmes, corporate policies, and corporate culture.



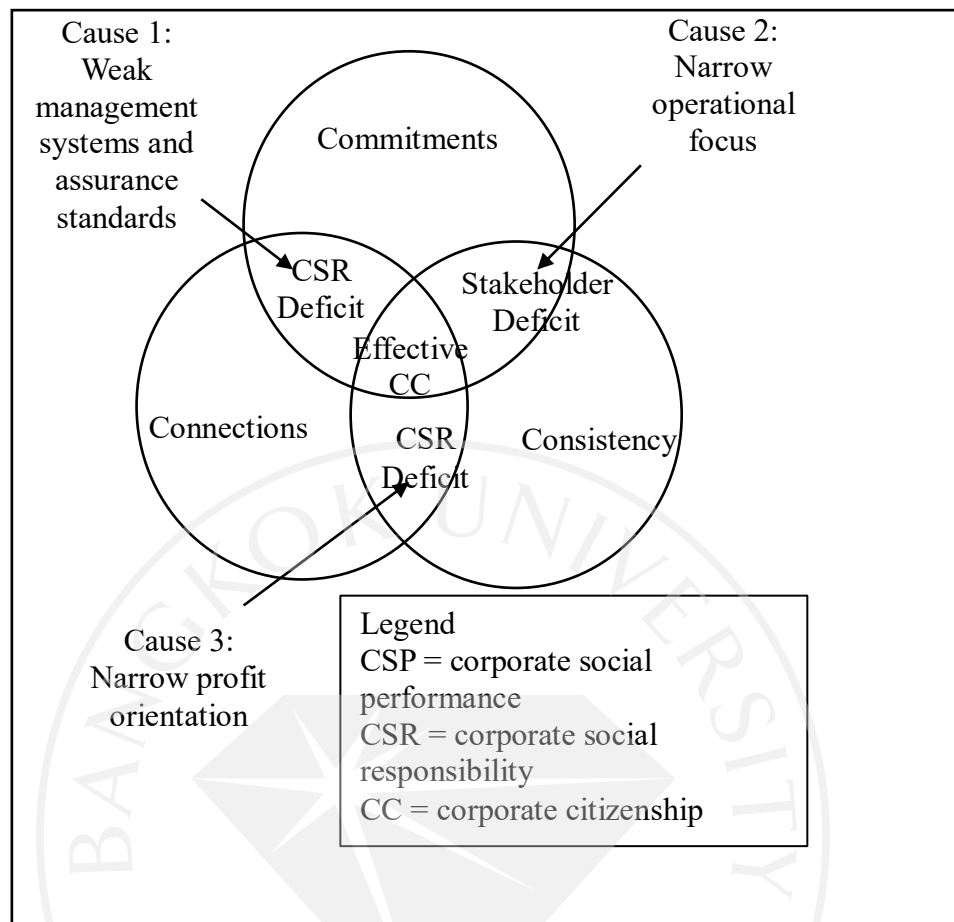


Figure 2.2: The 3C-SR Model

Source: Meehan, J., Meehan, K., & Richards, A. (2006). Corporate social responsibility: The 3C-SR model. *International Journal of Social Economics*, 33(5/6), 386-398.

The subsequent era of CSR had extended into a new construct of ‘Sustainability.’ Crowther and Martinez (2004) summarized that CSR during the late 1990s to mid-2000s had three basic principles which are 1) sustainability, 2) accountability, and 3) transparency. Sustainability is a new paradigm in this

globalization era where the concern is on the effect of the action taken in the present can have an impact on the future. Through different needs of human, society, environment as well as the organization, Prieto-Carrón, Lund-Thomsen, Chan, Muro, and Bhushan (2006) summarized a need to go beyond the 'one size fits all' approach to CSR which also led to significant policy implications.

To identify a specific fit for the sustainability concept, Miller and Blair (2009) applied the input-output model, which can be used for forecasting future impact in sustainability construct as well as identifying demand for the dimension of CSR. The basis of the Leontief input-output model is generally a model for the economy of a whole country or region by observed data of a specific geographic region (community, state, and county). The model calculates if the input equals the output to determine if consumptions equal productions to find the production level if external demand is given.

Over half a century, the evolution of CSR has been advancing its concept into the next level one step at a time. Demonstrated in Table 2.2 and Figure 2.3, Waddock (2004) encapsulated terminology and categorized constructs in the CSR paradigm, which evolve from the notion of responsiveness to a relationship, performance, ethic, specific business functions, community involvement, and business citizenship.

Table 2.2: Key Terms/competing Ideas in the Evolution of Corporate

<ul style="list-style-type: none"> <li>• Corporate social responsibility (CSR – CSR1) <ul style="list-style-type: none"> <li>a. Corporate social responsiveness (CSR2)</li> <li>b. Carroll’s pyramid of corporate responsibilities</li> <li>c. Corporate social rectitude/ ethics (CSR3)</li> <li>d. Corporate social religion (CSR4)</li> </ul> </li> <li>• Corporate social performance (CSP)</li> <li>• Alternative CSR3s <ul style="list-style-type: none"> <li>a. Corporate social relationships</li> <li>b. Corporate social reputation</li> </ul> </li> <li>• Corporate responsibility (CR)</li> <li>• Stakeholder approach/ theory <ul style="list-style-type: none"> <li>a. Instrumental, descriptive, normative, narrative</li> <li>b. Stakeholder management</li> <li>c. Stakeholder relationships</li> <li>d. Stakeholder engagement</li> </ul> </li> <li>• Business ethics and values, including nature-based values <ul style="list-style-type: none"> <li>a. Economizing</li> <li>b. Power aggrandizing</li> <li>c. Ecologizing</li> <li>d. Attunement</li> </ul> </li> <li>• Boundary-spanning functions including: <ul style="list-style-type: none"> <li>a. Issues management</li> <li>b. Public affairs</li> <li>c. Employee relations</li> <li>d. Investor relations</li> <li>e. Public relations</li> <li>f. Customer relations</li> <li>g. Supplier relations</li> <li>h. Corporate community relations (CCR)</li> <li>i. Etc.</li> </ul> </li> <li>• Corporate community involvement (CCI)</li> <li>• Corporate citizenship (CC) <ul style="list-style-type: none"> <li>Business citizenship</li> <li>Citizenship/Responsibility</li> </ul> </li> </ul>
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Source: Waddock, S. (2004). Parallel universes: Companies, academics, and the progress of corporate citizenship. *Business and Society Review*, 109(1), 5-42.

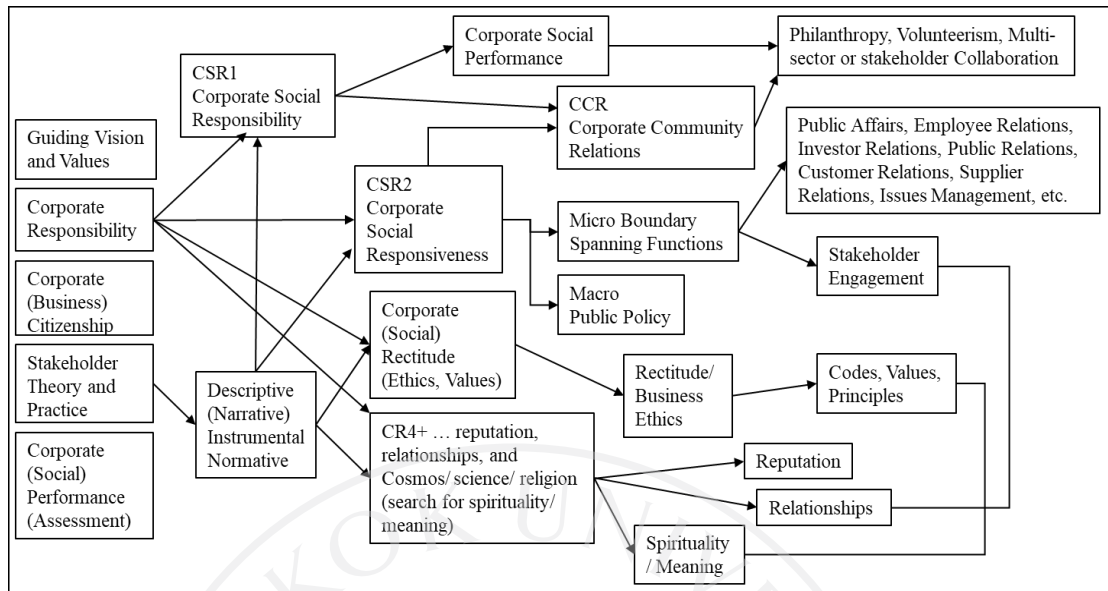


Figure 2.3: A Schematic Diagram of Corporate Citizenship/Responsibility.

Source: Waddock, S. (2004). Parallel universes: Companies, academics, and the progress of corporate citizenship. *Business and Society Review*, 109(1), 5-42.

Mosca and Civera (2017) concluded that regardless of various conceptualizations of CSR, all converge towards more integrated practices throughout the supply chain. To be genuinely embraced CSR, it is crucial that the organization has to redesign the business model and a form of company repositioning as CSR is also one of the ways to cost-saving and creating a significant impact on the efficiency and reputation of the company.

### 2.3 Revolutionize Corporate Social Responsibility to Corporate Social Innovation

The next era of the integrated practices of CSR with identified fit throughout the value-chain is 'Innovation' MacGregor and Fontrodona (2008) explored the fit between CSR and innovation and identified two related models, as demonstrated in Figure 2.4.

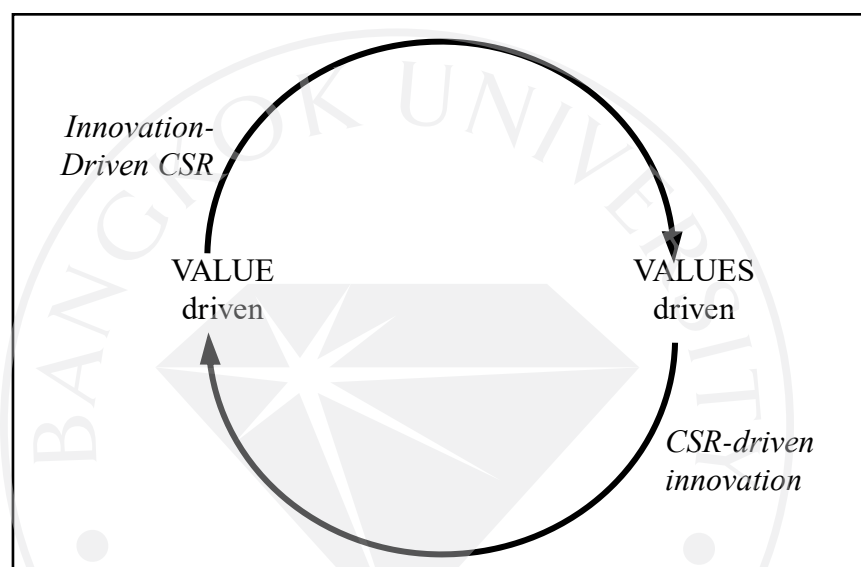


Figure 2.4: The Virtuous Circle of CSR and Innovation

Source: MacGregor, S., & Fontrodona, J. (2008). *Exploring the fit between CSR and innovation*. Retrieved from <https://ssrn.com/abstract=1269334>.

First, CSR-driven innovation generates the result of products and services that have some impact on social purpose as it is driven by the value for the creation of social products and services. The second model is Innovation-driven CSR, which is more associated with creating a social process. Though the outcome may not be solely

social related, organizations may use either the CSR-centric motivation or innovation-centric approach. While the typology of business is more for intrinsic value and profit, a typology of CSR generates linkage to community and environment. The co-existence of CSR and innovation can drive profitability into either internal organization or external society, depending upon the originality of the business intend.

Battaglia, Testa, Bianchi, Iraldo, and Frey (2014) verified that CSR has a significant correlation with regard to the innovation process from the technical and the organizational point of view as well as the intangible performances. The notion is further confirmed by Luo and Du (2015) through their empirical study that recognized the relationship between CSR and innovation. The result demonstrated that an organization with superior CSR activities exhibits higher innovativeness capability and launched more new products.

CSR and innovation had slowly emerged in recent decades through the advancement in the CSR process to become Social Innovation. Phillips, Ghobadian, O'Regan, and James (2015) had reviewed that the interest in social innovation has been accelerating recently with the focus on the role of the entrepreneur, networks, systems, institutions and the formation of cross-sectoral partnerships. The 'system of innovation' approach demonstrated the means of overcoming the profit-organization to be more on the mutual benefits of both financial and social. Mirvis, Herrera, Googins, and Albareda (2016) confirmed that companies seek innovation in CSR to create shared value ultimately.

CSR and social innovation gradually emerge into the Corporate Social Innovation (CSI) (Rexhepi, Kurtishi, & Bexheti, 2013). CSI involved institutional and social system change, which demands multifaceted interaction between each party and widens opportunity (Westley & Antadze, 2010).

Corporate Social Innovation (CSI), as an emerging terminology, is a revolution from the original conceptual idea of Corporate Social Responsibility (CSR). The US Chamber of Commerce Foundation represented by Googins and Mirvis (2012) had characterized CSI into six key elements, which are 1) social vision of the company, 2) bring employee at the center of effort, 3) nurture intrapreneurship, 4) use social section for R & D, 5) reset philanthropy to innovation and, 6) engage a broad spectrum of interests using connective technology and social media for innovation. These six elements create a framework of a primary independent variable for measurement.

CSI creates a new paradigm that consists of seeking innovative solutions to many environmental and social problems of the entire world—solutions that, at the same time, generate economic benefits for businesses (Popoli, 2017). Shan and Ling (2020) emphasized that CSI is a much-needed practice in today's world. Humans experience a rapid change of economy, social problem, and health pandemic, a new normal of living because CSI brings more business and social value to enterprises, which enable the organization to provide the innovative solutions.

Doi (2020) recently identified the importance of 'exclusiveness' in CSI. Each individual enterprise has a uniqueness and core value to obtain in both pragmatic and cognitive legitimacies. There are four crucial factors for the exclusivity which are 1) environment, 2) external human resource, 3) internal culture, and 4) internal technical

ability. CSI focused on solving a social problem while generating social value and economic value, which requires a strong commitment to driving social change (Esen & Maden-Eyiusta, 2019). There is a necessity to consider such sensitivity by identifying the persuasive impact of CSI as a linkage between CSI and direct benefit to the brand since the relationship remains unsubstantiated (Global Business Barometer, 2008).

#### 2.4 Influential Impacts of Corporate Social Responsibility on Purchase Intention

According to the Economist Intelligence Unit Survey (2008), based on the responding firms, 53.5 percent agreed that CSR is an essential cost of doing business, and 53.3 percent agreed that it gives the firm a distinctive position in the market. Recent studies by Iqbal, Qureshi, Shahid, and Khalid (2013) have confirmed the notion of the business impact from CSR, evidenced in the finding that companies should attempt to go for corporate social responsibility activities if they would like to gain the benefits of their brand image. For those companies that are not involved in Corporate Social Responsibility, activities can alternate their brand equity or brand image only if they begin to work on the Corporate Social Responsibility concept.

To effectively measure the business impact, the essential business performance indicator is purchase intention (PI). Aaker (1992) specified purchase intention (PI) as a willingness of a consumer to purchase a particular product or a specific service, which is a willingness of the consumer to adopt products or services of a specific brand or business. Regardless of any marketing investment, the final goal is to navigate the sale.



Asatryan and Asamoah (2014) had confirmed the relationship between CSR and purchase intention and the relationship between CSR and product quality from their research, that consumers are willing to patronize products and services from firms that involve themselves in social causes. CSR activities also proved useful for predicting quality. The implementation of a CSR approach is an essential element enabling the enterprise to stand out and capture additional market share. The absence of these measures CSR had often been considered by the leaders of these companies as the main obstacle to gain notoriety by the enterprise (Moskolai & Boubakary, 2016).

In light of various studies confirming the relationship between business impact and CSR, there are several intriguing studies that provoke curiosity in different impacts from different dimensions of CSR. Marquina (2010) conducted a study, which indicated that consumers do not show the same level of preference for the various aspects of CSR. The attribute of CSR that contributed most to an individual's utility is a company's environmental commitment. This attribute is seen to be greater than giving to worthy causes and is preferred over a good labor practice. Consumers are sensitive to the definition of the attributes of CSR. These constructs and the variables have captured the substantial sources of variability in choice behavior by the set of attributes in the observed element of the utility expression. Since the CSI concept is an evolution from CSR, it is motivating to study the assumption that CSI would have a positive influence on the PI.

## 2.5 Mediating Factors Influencing Purchase Intention

Purchase Intention (PI) is the willingness of a consumer to purchase a particular product or a specific service. PI is a dependent variable that potentially depends on several external and internal factors. To unmistakably identify the influential impact of CSI on Purchase Intention, two factors must be included in the study, interrelation effects and innovation elements.

First, Aaker's (1992) brand equity model has identified five brand equity components: 1) brand loyalty, 2) brand awareness, 3) perceived quality, 4) brand associations, and 5) other proprietary assets. Aaker defined brand equity as the set of brand assets and liabilities linked to the brand that add value to, or subtract value from, a product or service. These assets comprise brand loyalty, awareness, perceived quality, and associations. This definition stresses 'brand-added value'; however, his model does not make a strict distinction between added value for the customer/consumer and added value for the brand owner/company.

Interrelated relationships and factors that impact components within brand equity had been supported by various studies. Atilgan, et al. (2005) identified that correlations of the four exogenous constructs (Perceived quality, Brand loyalty, Brand associations, and Brand awareness) were significant and all positive. These constructs are somehow interlinked with one another and cannot be completely isolated from the whole brand equity phenomenon.

Through the research structure shown in Figure 2.5, Chi, et al. (2009) concluded that there are significant relations among brand awareness, perceived quality, and brand loyalty with purchase intention. Furthermore, brand loyalty mediates the effects between brand awareness and purchase intention.

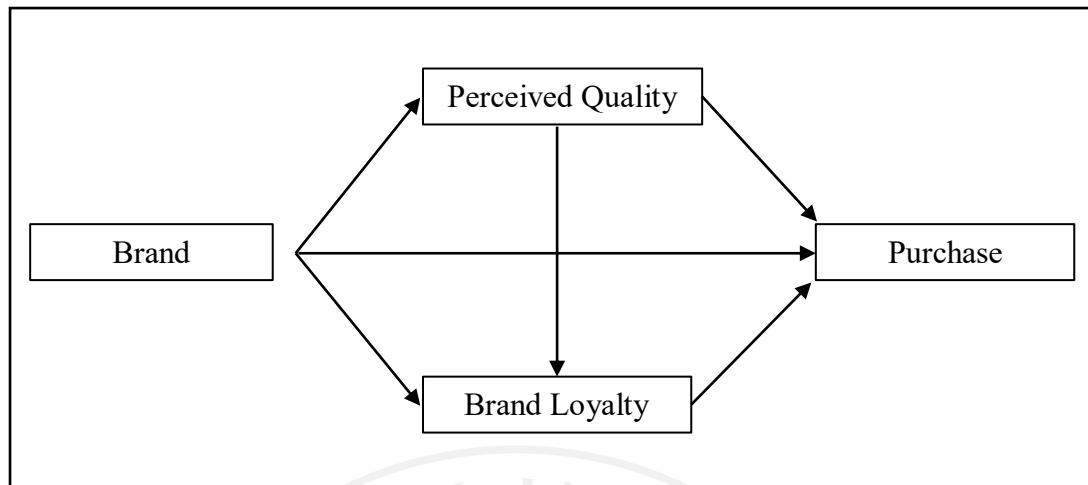


Figure 2.5: Research Structure

Source: Chi, H. K., Yeh, H. R., & Yang, Y. T. (2009). The impact of brand awareness on consumer purchase intention: The mediating effect of perceived quality and brand loyalty. *The Journal of International Management Studies*, 4(1), 135-144.

A more extensive model was proposed by Du, et al. (2010), which demonstrated in Figure 2.6. Purchase intention and brand loyalty are two indicators that can measure the correlation of impact from CSI, where an additional factor of innovation or the usage of product for CSR has to be injected into the framework.

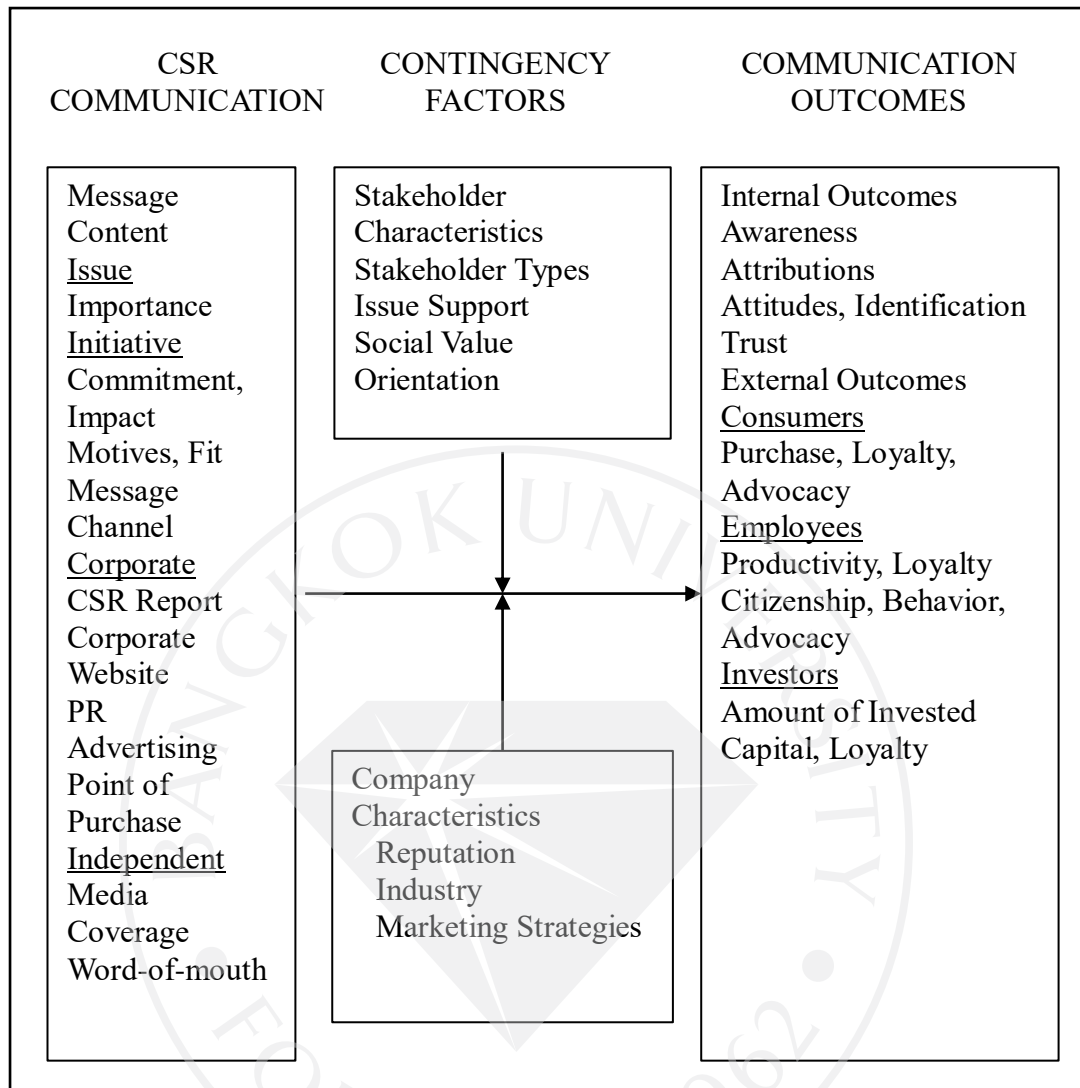


Figure 2.6: Impact of CSR Communication

Source: Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication.

*International Journal of Management Reviews*, 12(1), 8–19.

The Brand Equity Measurement Model showed no separate relationship among dimensions. Perceived quality and brand loyalty are the important variables in the measurement model of Brand Equity, where perceived quality forms a positive attitude, strong perception, as well as reasons to purchase. Therefore, it was predicted to increase the value of Brand Equity directly, or by increasing the brand loyalty beforehand, where the brand becomes the first choice of consumers (cognitive loyalty) and because it is purchased repeatedly (behavior loyalty). Ultimately, the communication of CSR was also expected to increase the value of the brand (Jamira, Oktavia, & Junaidi, 2016).

The effect of brand equity had been identified by Kumar and Priyadarsini (2017) through their study on the impact of Corporate Social Responsibility on service performance in the banking business. The result indicated that if the brand is doing well in their social responsibility and the brand image is more perceived by their customers, the service performance would improve for the banks.

Coexisting with CSR, brand equity is a valid mediating variable that shows the positive sign in driving business impact as Singh and Islam (2017) highlighted in their study that brand equity resulting from increased CSR efforts is potentially related to the purchase intention. It is plausible that consumers tend to gravitate towards those brands that are associated with CSR.

## 2.6 Theoretical Framework

### 2.6.1 Diffusion of Innovation Theory

Corporate Social Innovation (CSI) is a future-facing paradigm that inherits 'Innovation' as an essential construct that could be examined through an innovation adoption theory. The Diffusion of Innovation Theory (DOI) was developed by E.M. Rogers in 1962 (Rogers, 2010). Innovation is defined as an idea, practice, or object perceived as new by an individual or other unit of adoption that encompasses five attributes which are: 1) relative advantage, 2) compatibility, 3) complexity, 4) trialability, and 5) observability (Rogers, 1983).

The Diffusion of Innovation (DOI) refers to the process that occurs as people adopt a new idea, product, practice, philosophy, and another type of innovation. The main rudiments in the diffusion of new ideas are 1) an innovation 2) that is communicated through specific channels 3) over time 4) among the members of a social system (Rogers, 1983).

To have a clear understanding of different types of personal attitude towards innovation adoption, Roger (2003) had also characterized five adopter segments by placing standard deviation (SD) from the average time of adoption ( $\bar{x}$ ) shown in Figure 2.7, where only the initial few are opened to the new idea and adopt the innovation. Roger discussed that over time, the innovation is diffused amongst the population until a saturation point is achieved, and occasionally, a sixth segment is added as non-adopters or rejecters.

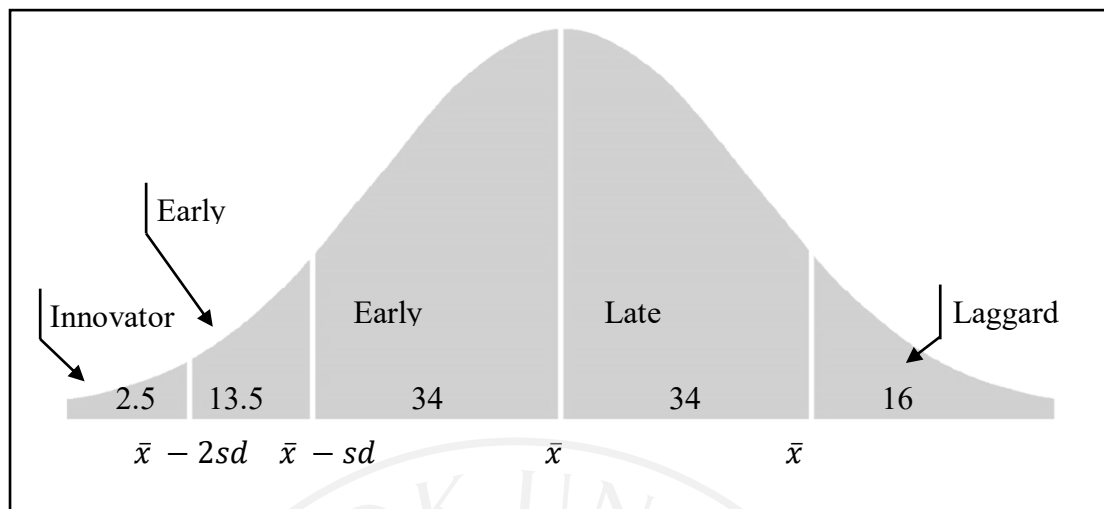


Figure 2.7: Adopter Categorization Based on Innovativeness (Innovation Adoption Cycle)

Source: Rogers, E. M. (1983). *The diffusion of innovation* (3<sup>rd</sup> ed.). New York, NY: The Free.

Stimulatingly, Moore (1991) had revisited the adoption cycle model and identified a chasm shown in Figure 2.8. This revised adoption cycle model demonstrated cracks in the curve between each phase of the cycle, which represents a disassociation between any two groups, which determines the level of difficulty to accept the new product if it is presented the same way as it was to the group at the immediate left. The most substantial crack can be considered a chasm. This modified concept indicates the need to tailor five attributes of innovation to each segment in order to close the gap effectively.

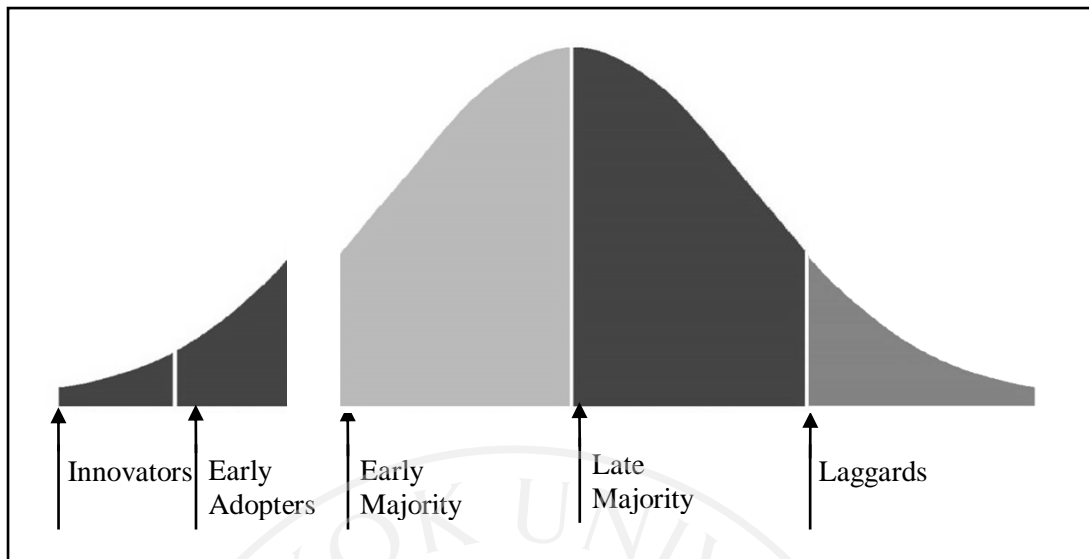


Figure 2.8: Revised Technology Adoption Cycle (Chasm)

Source: Moore, G. A. (1991). *Crossing the chasm: Marketing and selling technology products to mainstream customers*. New York, NY: HarperBusiness.

Moore (1999) proposed that there are four elements in crossing the chasm which are 1) targeting the point of attack through selecting a specific audience as an entry point, 2) assembling an invasion force by innovating products or services that are tailored to specific selected segment needs, 3) defining the battle develop compelling reasons that superior to other products or services, and 4) launching the invasion through distribution and pricing. Specific target with the relevant proposition is vital in the adoption process. In this light, this CSI study will be focusing mainly on those who are not within a segment of laggard nor a rejecter of the innovation in order to see a clear impact of CSI as well as reducing bias indication that may occur from an innovation rejecter.



The communication process for innovation adoption was formulated by Chen, Raible, and Kirkley (2008) as a decision framework shown in Figure 2.9. The four main elements include 1) characteristics of innovation, 2) communication channels, 3) time, and 4) social system to discourse the diffusion of Twitter and hashtag usage where knowledge and communication are crucial elements that begin and progress the adoption.

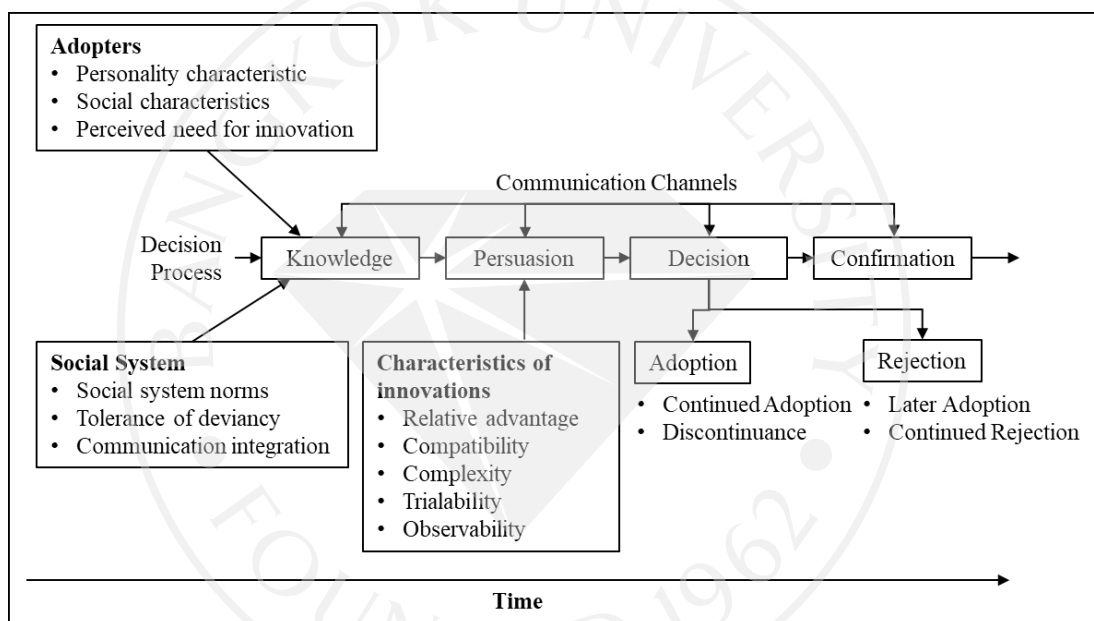


Figure 2.9: Decision Process Framework

Source: Chen, B., Raible, J., & Kirkley, D. (2008). *Applying the diffusion of innovation model to embrace web 2.0 technologies: Implementing an institutional strategy*. Presentation at the Sloan-C International Symposium, Carefree, AZ, May 7-9, 2008.

The Diffusion of Innovation Theory (DOI) has been empirically supported by its validity as a framework. Peslak, Ceccucci, and Sendall (2010) verified that the DOI model provides good indicators to predict and understand the usage of social networking. Their results showed that behavioral compatibility, relative advantage, complexity, and ease of trying are positively associated with intention to use social networking. However, even within the same business category, the influential power of each innovation attribute can be variegated by a different type of innovation. Though CSI is an innovative paradigm that may not directly impact the user of the products or services, it has potential influencing power to purchase intention. Therefore, knowledge and social system norms are crucial factors to be incorporated into this CSI study.

Al-Jabri and Sohail (2012) studied the impact of the variables based on DOI on the adoption of mobile banking shown in Figure 2.10. The results showed that not all factors have an impact on adoption. Trialability and complexity have no significant effect on adoption, while perceived risk has a negative impact on adoption. In this aspect, Nor, Pearson, and Ahmad (2010) concluded that relative advantage, compatibility, and trialability have a significant effect on attitude towards internet banking.

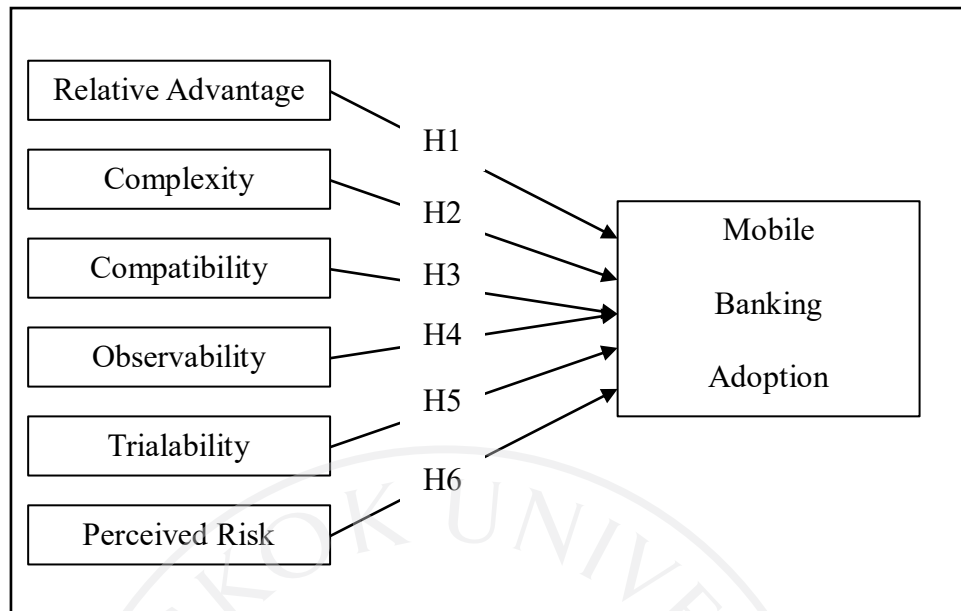


Figure 2.10: Mobile Banking Adoption Research Model

Source: Al-Jabri, I. M., & Sohail, M. S. (2012). Mobile banking adoption: Application of diffusion of innovation theory. *Journal of Electronic Commerce Research*, 13(4), 379-391.

Constructed on studies of Chen, et al. (2008) and Al-Jabri and Sohail (2012)

Relative Advantage and Compatibility are critical influential factors in the persuasion process. The mentioned variables were included in this study to unveil the potential impact of CSI on these two persuasion factors.

Beyond segmentation and innovation attributes, Roger (2010) had demonstrated five types of variables shown in Figure 2.11. The rate of innovation adoption was indicated where most scholars had focused more on the perceived

attribute factors rather than the other four elements of 1) type, 2) communication channels, 3) social system, and 4) change agent.

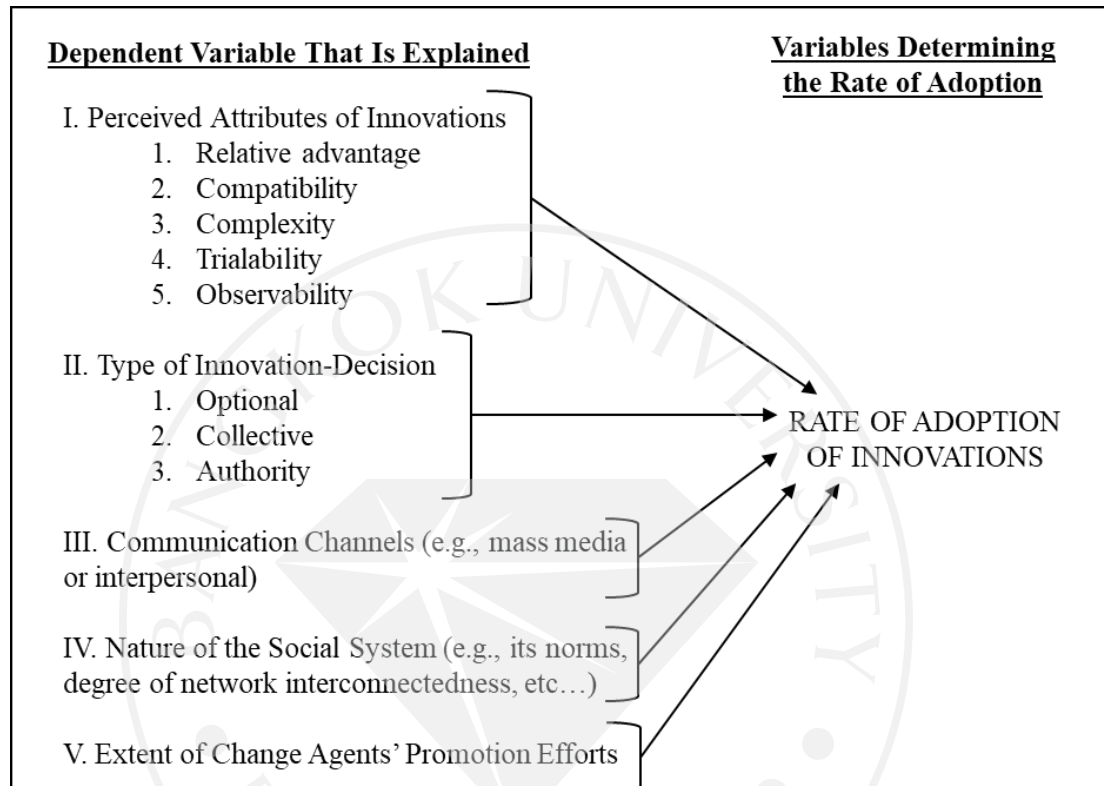


Figure 2.11: Variables Determining the Rate of Adoption of Innovations

Source: Rogers, E. M. (2010). *Diffusion of innovations* (4<sup>th</sup> ed.). New York, NY: The Free.

MacVaugh and Schiavone (2010) identified influential factors in adopting innovation beyond the degree of individual perceived innovation attribute. They stated that the adoption of innovation is affected by two main factors, which are 1) the degree to which innovation meets the significant technological, social, and learning

conditions encouraging its adoption, and 2) the degree to which innovation is considered useful in the individual domain, community domain, and industry/market domain. The study was also supported by Chen, et al. (2008), that incorporated the ‘benefiting to society’ to the adoption model. The social benefits range from the community level to a national level. The factor of benefit to society could become a mediated influencing factor to the adoption to potentially close the adoption ‘Chasm,’ especially with the construct of Corporate Social Innovation.

Diffusion of Innovation paradigm is an empirically proven practical framework in verifying characteristics of innovation that could potentially be adopted. The CSI concept is an emerging paradigm that related to innovation. To have a holistic framework, it is crucial to include the theory that provides best-fit indicators in predicting human behavior as well as having a strong linkage to DOI in the area of relative advantage, compatibility, and social norm is included to the theoretical framework.

#### 2.6.2 Theory of Planned Behavior

The Theory of Planned Behavior (TPB) proposed by Icek Ajzen in 1985 improved the predictive power of behavior or reasoned action. By incorporating perceived behavioral control into the assumptions, TPB aims to explain human behavior in all possible complexity. Ajzen (1985) proposed three types of considerations that guide human behavior. They are 1) belief about the likely consequences of the behavior (attitude), 2) beliefs about the normative expectations of others (subjective norm), and 3) beliefs about the presence of factors that may facilitate or constrain the performance of the behavior (behavioral control).

Ajzen (1991) reconfirmed that these three types of considerations are three conceptually independent variables that contribute to the formation of behavioral intentions that predict actual behavior. The formulated a conceptual framework was shown in Figure 2.12.

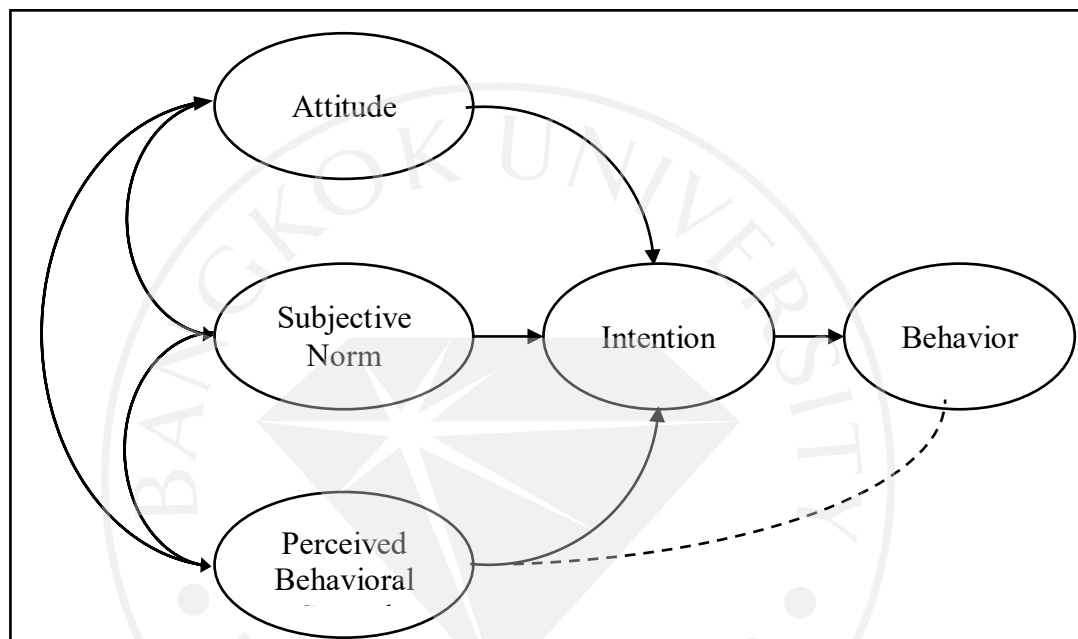


Figure 2.12: Theory of Planned Behavior Framework Model 1985

Source: Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.

Godin and Kok (1996) supported the efficiency of the theory in explaining intention significantly well where the attitude towards the action and perceived behavioral control are significantly identified in explaining variation in intention. Furthermore, the intention is an effective predictor of behavior in their study.

Ajzen (2006) had proposed additional factors into the model to enhance the accuracy of predictive intention indicators to behavior. Even though the influential power from external factors and social norms can influence intention, but undeniably, personal belief is one of the key motivations that can differ the level of intention. Personal behavioral beliefs could produce a favorable or unfavorable attitude towards the behavior, while normative beliefs can lead to perceived social pressure or subjective norm, and control beliefs can impact perceived behavioral control. Figure 2.13 shows a revisited of the schematic representation of the theory.

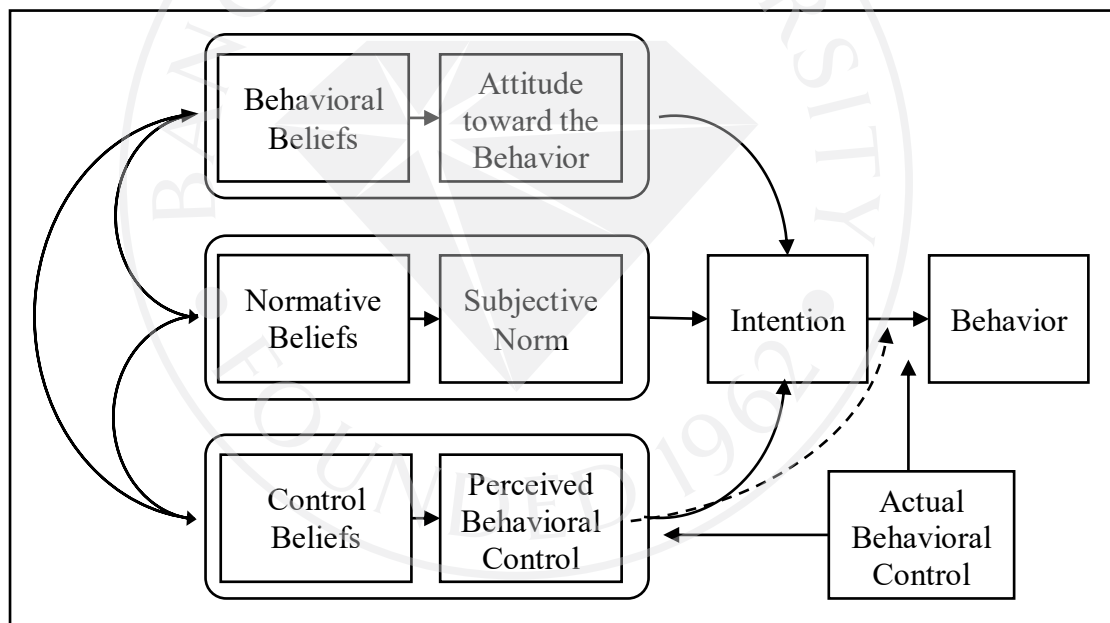


Figure 2.13: Theory of Planned Behavior Framework Model 2006

Source: Ajzen, I. (2006). *Constructing a theory of planned behavior questionnaire:*

*Conceptual and methodological considerations.* Retrieved from

<https://people.umass.edu/~ajzen/pdf/tpb.measurement.pdf>.

Montano and Kasprzyk (2015) developed a framework that includes external and uncontrollable variables into consideration. They argued that although direct determinants of intention are an attitude toward performing the behavior and their subjective norm associated with the behavior, there are some elements that individuals may not have complete volitional control over a behavior. The model shown in Figure

2.14 demonstrated the additional factor of ‘perceived control over the behavior’ to enhance the accuracy of predictability.

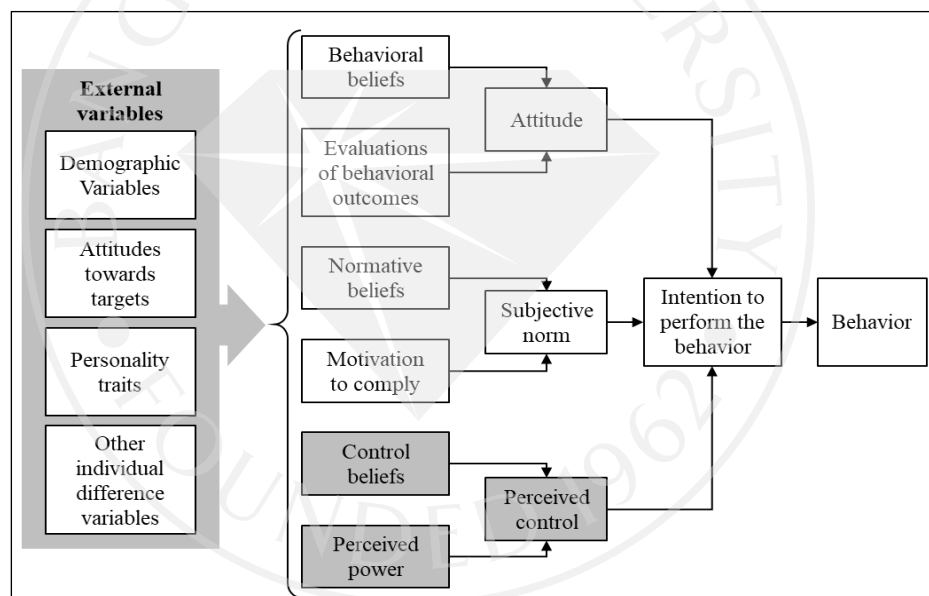


Figure 2.14: TPB Framework

Source: Montano, D. E., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior: Theory, research, and practice* (p. 95–124). San Francisco, CA: Jossey-Bass/Wiley.



Alam and Sayuti (2011) tested the TPB model as a predictor for purchasing intention (PI) towards Halal food products. The model was statistically significant and reconfirmed the robustness of TPB in providing a predictive indicator to PI.

In the area of CSR related, Han et al. (2010) used TPB as a model to identify purchase intention to environmentally preserved green-hotel. The results were consistent with the theory that attitude, subjective norm, and perceived behavioral control positively affected intention to stay at a green hotel among both consumers who actively practice eco-friendly activities and those who are not often engaged.

Moreover, Paul, Modi, and Patel (2016) conducted a study to predict green product consumption. Through structural-equation modeling (SEM), the empirical results showed that 'Consumer Attitude' and 'Perceived Behavioral Control' significantly predict PI, whereas 'Subjective Norm' does not. The analysis also suggested that TPB mediates the relationship between environmental concern and green products PI. The indicator from this study draws the assumption that CSR related business has the potential to overcome social pressure towards specific products and services.

In relation to CSR and Innovation, Wang, Fan, Zhao, Yang, and Fu (2016) examined the intention to adopt hybrid electronic vehicles using an extended model of TPB shown in Figure 2.15. The results confirmed that the three primary elements of TPB have mediating influence over the intention to adopt hybrid electronic vehicles.

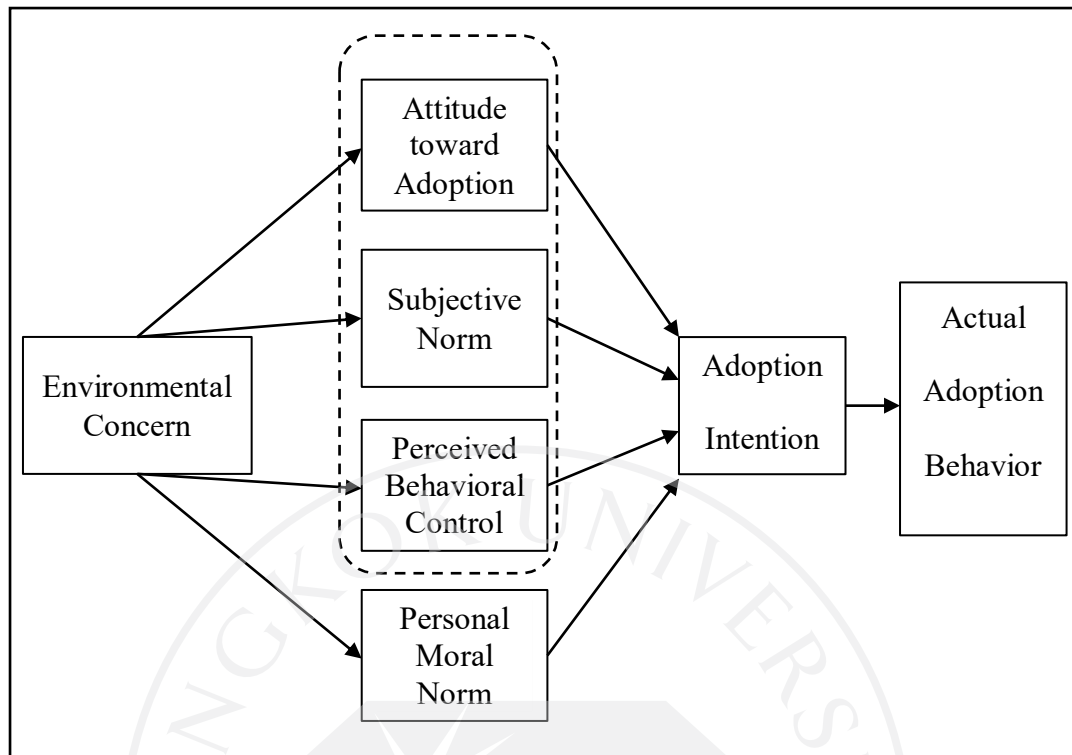


Figure 2.15: Research Framework: Consumer Intention to Adopt Hybrid Electronic Vehicle

Source: Wang, S., Fan, J., Zhao, D., Yang, S., & Fu, Y. (2016). Predicting consumers' intention to adopt hybrid electric vehicles: Using an extended version of the theory of planned behavior model. *Transportation*, 43(1), 123-143.

The Theory of Planned Behavior has proven its assumptions in predicting purchase intention in various products and services, including CSR and innovation-related. Therefore, the framework of this study will include TPB constructs to identify the level of PI from the impact of CSI.

Incorporating DOI together with TPB, Amaro and Duarte (2015) have developed an integrative theoretical model to examine determinants of intentions to purchase travel online, shown in Figure 2.16, which can be a foundational framework for this study.

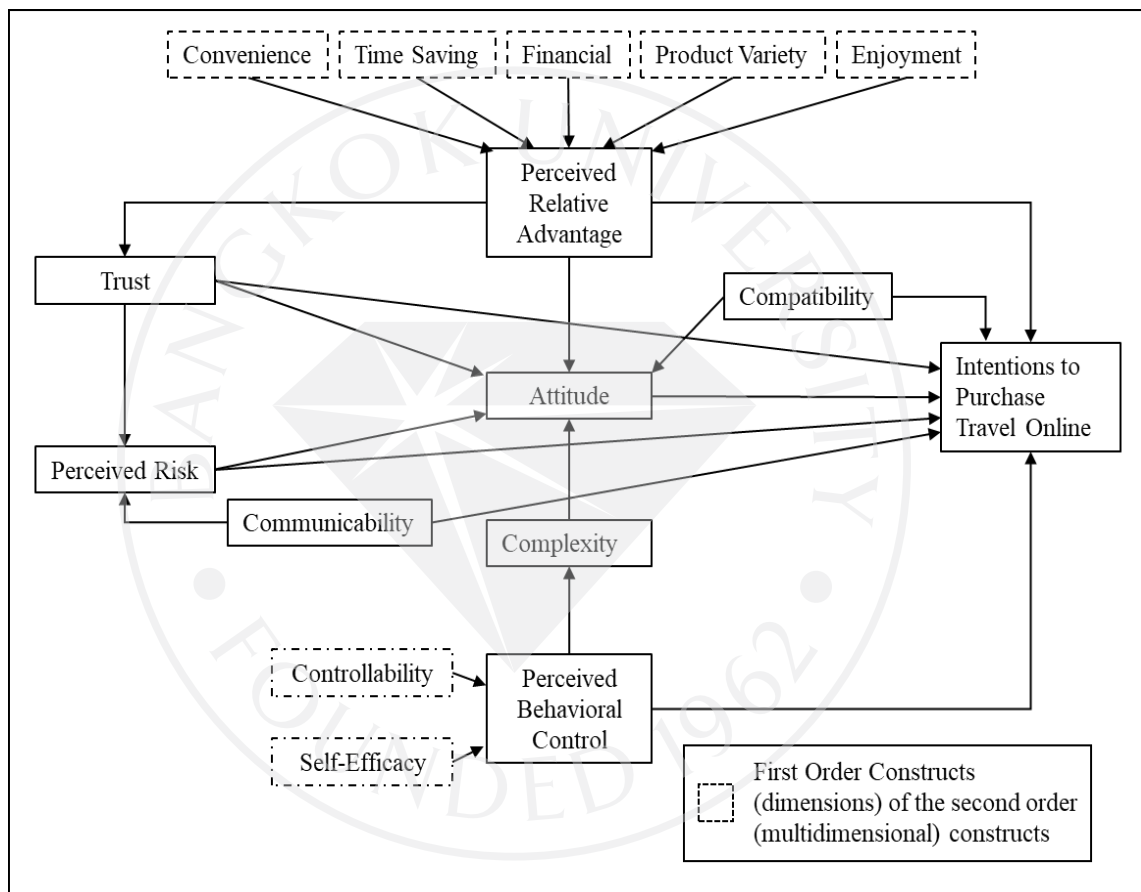


Figure 2.16: Amaro and Duarte (2015) Integrative Theoretical Model.

Source: Amaro, S., & Duarte, P. (2015). An integrative model of consumers' intentions to purchase travel online. *Tourism Management*, 46, 64-79.

Deriving from the result of literature reviews, there are three sections in organizing the conceptual model, which are 1) CSI as an independent variable, 2) knowledge and consideration of adoption process, and 3) purchase intention as an ultimate dependent variable of this CSI study.

The knowledge and consideration for the adoption section consist of the learnings from the Diffusion of Innovation Theory (DOI), brand equity literature, and Theory of Planned Behavior (TPB).

To validate the knowledge and understanding of the influential power of CSI, perceived relative advantage and perceived compatibility factors from DOI are incorporated first into the model as they are the primary influential factors in the adoption process that impacted by a specific innovative construct that infers to adoption (Al-Jabri & Sohail, 2012; Roger, 2003)

To understand the incremental impact of CSI on the potential brand that practices CSI, it is vital to incorporate brand equity into the model as the factors of brand equity associated with the CSI concept could have incremental influential power towards purchase intention during the consideration process. The brand equity was identified by empirical studies to be an impactful mediating factor influencing intention to a specific brand. It consists of the set of brand assets and liabilities linked to a brand that can potentially increase the value to product or service (Aaker, 1992).

The final section of the consideration process is derived from the Theory of Planned Behavior (TPB). The three main types of conservations, according to TPB, were confirmed by Ajzen (1991) to be the variables that directly contribute to the formation of behavioral intention that can predict actual behavior. The three factors of

TPB also have a direct influence on and are predictors of purchase intention (Alam & Sayuti, 2011; Chen, et al., 2008; MacVaugh & Schiavone, 2010).

To completely incorporate learning from literature, there are two eruditions from the literature reviews regarding 1) a relationship between brand equity model and Theory of Planned Behavior, and 2) a relationship between brand equity and purchase intention that must be captured in the development of the conceptual model.

The attitude from TPB and brand loyalty from brand equity were identified to have a unique relationship. Likewise, the attitude was found to have influential power and was an indicator of brand loyalty (Dick & Basu, 1994; Krystallis & Chrysochou, 2014).

The second learning underlined that even though brand equity was mainly identified as mediation factors between variables, brand loyalty, precisely, was also identified by several studies to have a direct influence on purchase intention (Chi, et al., 2009; Jamira, et al. 2016; Singh & Islam, 2017).

## 2.7 Conceptual Model

The nature of this research will be exploratory with the concentration on the influential impacts of Corporate Social Innovation (CSI) on Purchase Intention (PI) both directly as through various mediating variable which are 1) perceived relative advantage, and 2) perceived compatibility from Diffusion of Innovation theory; 3) perceived quality and 4) brand loyalty from Brand Equity Model; 5) subjective norm, 6) attitude, and 7) perceived behavioral control from Theory of Planned Behavior. The model is demonstrated in Figure 2.17.

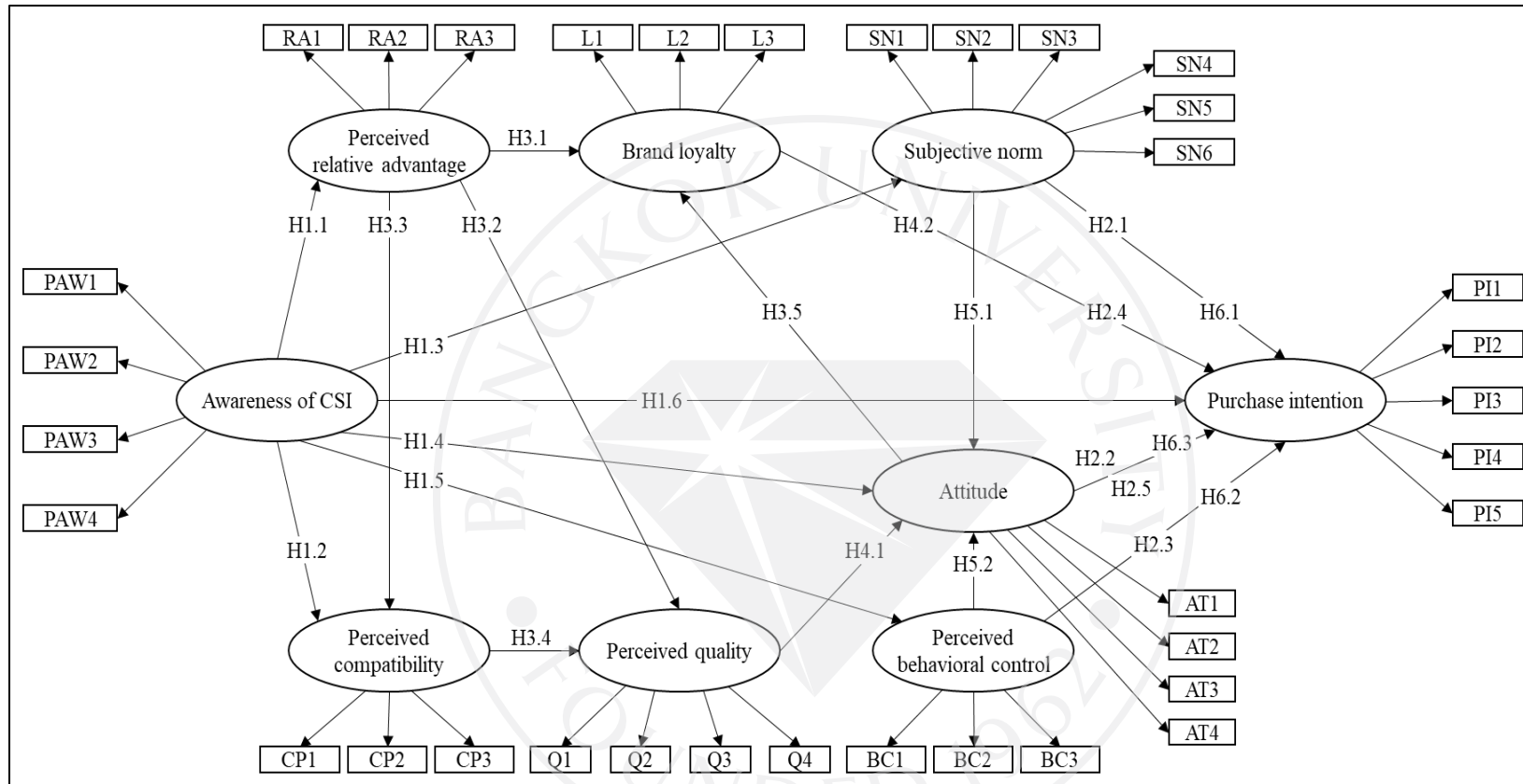


Figure 2.17: A Conceptual Framework of CSI Influential Power on the Innovation Adoption Factors, Predictors of Behavioral Intention, and Brand Purchase Intention

## 2.8 Research Hypotheses

This study intends to test the following six main research hypotheses:

Hypothesis 1: The awareness of Corporate Social Innovation (CSI) has a direct influence on innovation adoption factors, predictors of behavioral intentions, and purchase intention of CSI practicing brand amongst Thai consumers.

H1.1: The awareness of CSI has a direct influence on the perceived relative advantage of the CSI practicing brand amongst Thai consumers.

H1.2: The awareness of CSI has a direct influence on the perceived compatibility of the CSI practicing brand amongst Thai consumers.

H1.3: The awareness of CSI has a direct influence on the subjective norm of CSI practicing brands amongst Thai consumers.

H1.4: The awareness of CSI has a direct influence on attitude towards the CSI practicing brand amongst Thai consumers.

H1.5: The awareness of CSI has a direct influence on perceived behavioral control of CSI practicing brand amongst Thai consumers.

H1.6: The awareness of CSI has a direct influence on the purchase intention of the CSI practicing brand amongst Thai consumers.

HP2: The awareness of CSI has an indirect effect on the PI of CSI practicing brand amongst Thai consumers, as mediated by innovation adoption factors, brand equity factors, and predictors of behavioral intentions.

H2.1: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by subjective norms.

H2.2: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by attitude.

H2.3: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by perceived behavioral control.

H2.4: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by brand loyalty and perceived relative advantage.

H2.5: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by attitude, perceived quality, and perceived compatibility.

Hypothesis 3 The innovation adoption factors of CSI practicing brand and attitude have a direct influence on the brand equity of CSI practicing brand amongst Thai consumers.

H3.1: The perceived relative advantage of CSI practicing brand has a direct influence on brand loyalty of CSI practicing brand amongst Thai consumers.

H3.2: The perceived relative advantage of CSI practicing brand has a direct influence on the perceived quality of CSI practicing brands amongst Thai consumers.

H3.3: The perceived relative advantage of CSI practicing brand has a direct influence on the perceived compatibility of CSI practicing brand amongst Thai consumers.



H3.4: The perceived compatibility of CSI has a direct influence on the perceived quality of the CSI practicing brand amongst Thai consumers

H3.5: The attitude towards CSI practicing brand has a direct influence on the brand loyalty of CSI practicing brand amongst Thai consumers.

Hypothesis 4: The brand equity of CSI practicing brand has a direct influence on attitude and purchase intention of CSI practicing brand amongst Thai consumers

H4.1: The perceived quality of CSI practicing brand has a direct influence on the attitude of CSI practicing brand amongst Thai consumers.

H4.2: The brand loyalty of CSI practicing brand has a direct influence on the purchase intention of CSI practicing brands amongst Thai consumers.

Hypothesis 5: The subjective norms and perceived behavioral control of CSI practicing brand have a direct effect on attitude toward CSI practicing brand amongst Thai consumers.

H5.1: The subjective norm of CSI practicing brand has a direct influence on attitude towards the CSI practicing brand amongst Thai consumers.

H5.2: The perceived behavioral control of CSI practicing brand has a direct influence on attitude towards CSI practicing brand amongst Thai consumers.

Hypothesis 6: The predictors of behavioral intentions of CSI practicing brand have a direct influence on the purchase intention of CSI practicing brand amongst Thai consumers.

H6.1: The subjective norm for CSI practicing brand has a direct influence on the purchase intention of CSI practicing brand amongst Thai consumers.

H6.2: The perceived behavioral control of CSI practicing brand has a direct influence on the purchase intention of CSI practicing brand amongst Thai consumers.

H6.3: The attitude towards CSI practicing brand has a direct influence on the purchase intention of the CSI practicing brand amongst Thai consumers.



## CHAPTER 3

### METHODOLOGY

This research aims to prove the notion of the evolutionary paradigm of Corporate Social Innovation (CSI) and its impact on three crucial elements of Aaker (1991) brand's equity model which are perceived quality, brand loyalty, and purchase intention through theoretical frameworks of Diffusion of Innovation Theory together with Theory of Planned Behavior. For that reason, this chapter described details of the research methodology in the following five key elements which are 1) research design, 2) participants of the study, 3) research instrument and results of the pilot test, 4) data collection procedure, 5) statistical analysis, 6) ethical, and 7) profile of collected samples

#### 3.1 Research Design

This study proceeded with the quantitative approach. Quantitative research is the systematic empirical investigation in social science to observe specific phenomena via identifying the relationship between variables through statistical technique. By using a survey as the procedure for data gathering, the study aims to examine the relationship among variables and develop explanatory inference, analyzed through a statistical method of Structural Equation Modeling (SEM).

### 3.2 Participants of the Study

#### 3.2.1 Population

By means of Corporate Social Innovations, which is grounded upon future-facing innovation, the participants of this study are males and females who are currently living in Bangkok. Bangkok area is regarded as the most open-minded site to innovation adoption as they represent the highest consumption of digital and technology usage in Thailand, according to Nielsen Media Research (2017).

The study focused on those who are between 25 to 40 years old, of which Nielsen Media Research (2017) identified as the age range of individuals who are open to innovation and have the highest usage and engagement to digital and technology.

#### 3.2.2 Sample Size

Based on the population of males and females who are between 25 to 40 years old living in Bangkok with an open-minded attitude toward innovation, the sample size of this study had been calculated purposefully for Structural Equation Model (SEM) as the statistical process. PLS-SEM provides solutions with small sample sizes when models encompass many constructs and a large number of items (Hair, Hult, Ringle, Sarstedt, & Thiele, 2017; Willaby, Costa, Burns, MacCann, & Roberts, 2015).

Hair, Hult, Ringle, and Sarstedt (2016) recommended that sample size for structural equation model design can be driven by 1) significance level, 2) statistical power, 3) minimum coefficient of determination (R-squared value), and 4) the maximum number of arrows pointing at a latent variable. The research usually aims for a significant level of 95%, a statistical power of 80%, and R-squared values of at

least 0.25. Following the guideline of Marcoulides and Saunders (2006), the number of sample size for this study could be identified into 84 samples based on maximum arrows of eight pointing at a latent variable, purchase intention.

Nevertheless, there are various discussions on the accuracy of PLS-SEM regarding small sample size under the rule of ten samples per arrow to a latent variable. Goodhue, Lewis, and Thompson (2006) verified that even though PLS-SEM has distinct abilities that make greater appropriateness than other techniques, such as multiple regression and LISREL, however, it does not show special abilities with respect to statistical power at small sample sizes.

To ensure the accuracy and predictive power of this study, the researcher decided to use SEM statistical sample-size calculation tool for sample size identification. The SEM sample-size calculation was set the anticipated effect size as .2 (small to medium), the desired statistical power of .95, numerator latent variables of 9 variables, the numbers of observed variables are 35, and probability level at .05. The results of the calculation suggested sample size for the model structure of 460 samples.

To ensure the accuracy of the calculation, the researcher also decided to compare the calculation result using the G\*Power calculation program. G\*power was set the effect size f-square at 0.1 (small to medium), the statistical beta power level at 0.95, alpha error probability at 0.05, number of tested predictors at 35, and the total number of predictors at 35. The results from G\*Power suggested a similar sample size at 402 samples. In order to prevent any error or incompleteness from data gathering, the researcher decided to collect the data from a total of 480 samples for this CSI study.

### 3.2.3 Sampling Method

To ensure that each member of the population has an equal and known chance of being selected, the probability sampling framework using a systematic random sampling method was selected for this study. Systematic random sampling refers to a variety of selection techniques in which sample members are designated by chance, but with a known probability of selection. Every member and set of members have an equal chance of being included in the sample.

The systematic random sampling has two different processes based on two data collection approaches. The face-to-face data collection was collected through street intercepts on randomly selected dates with every third person who walks-by. The online data collection was collected through a list-based sampling frame. The contacts were arranged alphabetically and were assigned a sequential number. The sampling was drawn based on a random number generated that matches the number assigned to the contact.

A total of 1,187 samples were recruited based on the systematic random sampling approach, 257 from online, and 930 from face-to-face.

### 3.3 Research Instrument and Results of Pilot Test

The structured questionnaire was used to collect quantitative data. To ensure the reliability and validity of the questionnaire, the development of the research instrument had 2 phases, which are 1) instrument design based on literature review and adaptation from existing questionnaires, and 2) research instrument pilot test.

### 3.3.1 Research Instrument Design

The questionnaire of this study consisted of two sections, 1) personal information and 2) constructs testing. The constructs section includes 1) awareness of CSI, 2) perceived relative advantage, 3) perceived compatibility, 4) perceived quality, 5) brand loyalty, 6) perceived behavioral control, 7) subjective norm, 8) attitude toward CSI, and 9) purchase intention.

#### Part 1: Personal Information

The questionnaire contained questions regarding the respondent's demographic profile, along with questions regarding openness to innovation. The participants would be asked to fill in some personal information, which includes gender, age, occupation, household income, office or school location, and area of residence. Alongside demographic information, participants would be asked to choose attitudinal information regarding openness to innovation. According to the Diffusion of Innovation Theory, there are various adoption segments that differ in the level of openness to adopting innovation that may deviate the impact of CSI as the topic is encompassed of innovation at its core.

#### Part 2: Constructs Testing

The second section contained close-ended questions directed to the indicators with three approaches for the close-ended questions, which are Bipolar question, 5 points Likert scale, and 11 points Likert scale.

The questionnaire was arranged into seven sections based on the nine variables which are 1) awareness of CSI, 2) perceived relative advantage, 3) perceived compatibility, 4) perceived quality, 5) brand loyalty, 6) perceived behavioral control, 7) subjective norm, 8) attitude toward CSI, and 9) purchase intention.

The first section is awareness of CSI, which is an independent variable that measures the understanding of the CSI concept. The second section combines perceived relative advantage and perceived compatibility within the same section as both variables are related based on the Diffusion of Innovation Theory. The third section is the subjective norm, which must be measured separately based on the Theory of Planned Behavior, similar to the fourth section, which is the attitude.

The fifth section is a combination of perceived quality, brand loyalty, and perceived behavioral control. The last section focuses on purchase intention, which is the ultimate dependent variable to be measured.

Each indicator was selected to measure each construct based on existing measurement or adaption from similar studies, as shown in Appendix B.

In the first section, awareness is the first step in the adoption funnel as Aaker (1991) has formulated indicators to indicate the level of awareness ranged from spontaneous awareness, prompted awareness, and usage of the brand. On the foundation of items used in the literature and the definitions established in this study, awareness was measured based on 11-point likert-type scales, with anchors of zero represents not at all aware and 10 represents fully aware. The 11-point likert scale was adapted from Wu and Leung (2017) to measure the level of conceptual understanding or a CSI concept in this study. The scales from 0 to 10 are natural and easily comprehensible range to increase generalizability. The awareness scoring was measured both before and after the respondent has reviewed the concept of CSI. The awareness scoring measured before the respondent review the concept of CSI intended to identify the existing awareness of CSI, while the awareness scoring measured after the respondent review the concept of CSI was to identify the



awareness and understanding of the CSI concept. Those who answer zero were not included in this study as they are rejecter of innovation according to the sampling framework.

The second section begins with a perceived relative advantage. There are six indicators developed by Atkinson (2007) ranged from emotional values to functional values which are 1) more fun, 2) more interesting, 3) easier to use, 4) can provide better knowledge, 5) better usage, and 6) providing a real advantage over other solutions. The indicators of perceived compatibility were consolidated based on a study from Atkinson (2007), and Amaro and Duarte (2015). There are a total of six indicators which are 1) fit with my behavior, 2) fit with my lifestyle, 3) provocative name of products or services, 4) help to learn more, 5) more relevant to my need, and 6) fit with my related activity.

The third section is the subjective norm based on the Theory of Planned Behavior. Lada, Harvey Tanakinjal, and Amin (2009) adopted questionnaire items from Ajzen (2002) to identified indicators ranged from 1) opinion of important people in life, 2) influence of important people in life, 3) influential behavior of important people in life, and 4) expectation of important people in life.

The fourth section is the attitude. Attitude toward CSI consists of six indicators. Amaro and Duarte (2015) adapted questionnaire items from Ajzen to identify potential indicators of 1) good idea, 2) pleasant idea, 3) enjoyability, 4) appealing, 5) value, and 6) benefit.

The fifth section begins with the perceived quality. Yoo and Donthu (2001) had recommended the six indicators of 1) likelihood of having a high function, 2) excellent feature, 3) durability, 4) reliability, 5) consistency and 6) good quality based

on the original versions from Aaker (1991, 1996). In terms of brand loyalty, Yoo and Donthu (2001) were also indicated using three indicators of 1) brand is the first choice, 2) consider loyal to the brand, and 3) will never buy other replacement brands. The indicators of perceived behavioral control identified by Ajzen (2002, 2006) are 1) controllable level of self-decision making, 2) confidence to control, 3) controllability, 4) positivity to future control, and 5) confident in self-capability.

The final section is the purchase intention. Yuksel (2016) had specified five indicators for purchase intention ranged from 1) intention to consider, 2) consider to purchase, 3) intent to purchase, 4) try the product, and 5) actual purchase.

All items of each indicator to key variables, except the awareness, were measured using a 5-point Likert scale, with five being “strongly agree,” and one is “strongly disagree.” The awareness section was measured based on 11-point Likert-type scales, with anchors of 0 represents not at all aware, and 10 represents fully aware. Only the sections of current brand usage, CSI awareness, and understanding of CSI concept; Polar Yes-No question was applied to gain a definite degree of consensus from participants.

Based on the nine variables, the researcher had carefully selected a set of questions based on previous studies in order to ensure the accuracy of each indicator as well as their validities.

The indicators of the awareness were carefully selected from the existing study. Yoo, et al. (2000) provided strong empirical evidence of validity and reliability. The average variance extracted for each construct is at .72, which exceeded the acceptable level of .50 as recommended by Fornell and Larcker (1981a) while the

Cronbach's alphas of the original scale are above .70 in all indicator items which endorsed the reliability of their study.

The indicators of the perceived relative advantage were selected from Atkinson (2007). All six indicators were tested to be at a high level of reliability at .91. At the same time, validity was measured through factor loading scores of each selected questionnaire items were above .72, and Cronbach's alpha scores above .70 in all selected items.

Six indicators of the perceived compatibility were selected from the studies of Atkinson (2007) and Amaro and Duarte (2015). 'Fit with my behavior' and 'fit with my lifestyle' are the two indicators from Amaro and Duarte (2015) that achieved the high scores in convergent validity with average variance extract at .86. All selected measures from their studies were robust in terms of their reliability since composite reliability scored at .93, and all of Cronbach's alphas were higher than 0.7. The remaining indicators of 1) provocative name of products or services, 2) help to learn more, 3) more relevant to my need, 4) fit with my related activity were applied from the study of Atkinson (2007) where the factor scales were examined for reliability that shown factor loading score ranged from .5 to .75 and only Cronbach's alpha scales demonstrating acceptable reliability above .70 from Atkinson's study were used for this study.

The indicators of the subjective norm were selected from the study of Lada, et al. (2009), who adopted questionnaire items from Ajzen (2002). To assess the construct validity, a factor analysis with rotation was performed in their study. The total variance showed sufficient inter-correlations being present with measures of sampling adequacy values of 0.619 and 0.784, respectively. The criteria used to

identify the loadings were that each item should load 0.50 or greater on one factor and 0.35 or lower on another factor (Igbaria, Iivari, & Maragahh, 1995). Furthermore, the reliability coefficient of these indicators in their study showed a strong result at .84, which ensured the reliability of all selected indicators items.

The six indicators of attitude were adopted from the study of Amaro and Duarte (2015), adapted questionnaire items from Ajzen (2002). The reliability test of these adapted six indicators showed strong composite reliability at .94 in their study. All measures were also robust as Cronbach's alpha scores are higher than 0.7, except for controllability with 0.628. Discriminant validity was further assessed by extracting the factor and cross-loadings of all indicators to their respective construct. The result showed all indicators loaded on their respective construct more highly than on any other, confirming that the constructs are distinct in their study.

The six indicators of perceived quality and three indicators of brand loyalty were selected from the existing study. Yoo and Donthu (2001) demonstrated robust composite reliability above .84, which had the reliability test results of strong composite reliability at above .86. Only items from their study with original scores of a .70 or higher Cronbach's coefficient items of a construct were retained for this CSI study. The indicators of perceived behavioral control adopted from Ajzen (2002, 2006) were tested and had shown strong reliability at above .83.

The five indicators of purchase intention were selected from the study of Yuksel (2016). The indicators tested in Yuksel's study provide convergent validity ranges from .67 to .91, which were greater than .50, as recommended by Fornell and Larcker (1981b). The reliability of the measurement items of this study was measured

with Cronbach's alpha coefficient. The results of all factors shown the values ranged from .757 to .949, exceeding the .70 recommended by Nunnally and Bernstein (1994).

### 3.3.2 Pilot Test of the Research Instrument

Before the finalization of the research instrument, the survey, or the questionnaire construct, it is advantageous to conduct a pilot study to determine the adequacy of research instruments in both the reliability and validity of the questionnaire items (Van Teijlingen & Hundley, 2001).

#### 3.3.2.1 Pilot Test of Sample Size

Johanson and Brooks (2010) suggested that 30 representative participants from the sampling population are a reasonable minimum recommendation for a pilot study. However, the precision of parameter estimates increases as the sample size increases. Therefore, the researcher had decided to conduct a pilot study of a total of 50 samples. The fieldwork was conducted from July 1 to July 31 of 2019, via a systematic random sampling method using the street intercept approach as well as online data collection through a list-based sampling frame. Thirty-six samples were collected through street intercept, while the remaining 14 samples were collected through online.

#### 3.3.2.2 Pilot Test Analyses

Reliability and Validity are being analyzed to ensure the adequacy of the research instruments on the relevancy and appropriateness to the research objectives and research questions. To validate reliability, a tool of Cronbach's Alpha coefficient in statistic program was used. At the same time, construct validity was tested using Exploratory Factor Analysis (EFA), which is a statistical method used to unearth the underlying structure of a relatively large set of variables.

### 3.3.2.3 Pilot Test Results

To measure nine variables, a total of 48 indicators had been included in the research instrument for the pilot test. The numbers of indicators per each variable are between four to six indicators.

In terms of construct validity, the results of Exploratory Factor Analysis (EFA) of all 48 questions, see appendix A Table A3.1, were adequate as each loader is well beyond .50. At the same time, the eigenvalues are greater than 1.0, as verified by Costello and Osborne (2005).

In terms of reliability, Cronbach's alphas of all nine variables are higher than .70, which demonstrates strong reliability as recommended by Nunnally and Bernstein (1994). Nevertheless, to ensure that each question contributes to the study, the researcher also considered "Corrected Item-total Correlation" as a key statistical indicator for each specific question. The result of reviewing corrected item-total correlation, together with Cronbach's Alpha if Item Deleted, had identified 14 questions that need further adjustments (see appendix A Table A3.2).

To finalize the research instrument, questions that earn lower Corrected Item-Total Correlation less than 0.20 were removed. A total of 14 questions were removed. The removed questions were two awareness indicators, three relative advantage indicators, three perceived compatibility indicators, two attitude indicators, one perceived quality indicator, two perceived behavioral control indicators, and one purchase intention indicator. After the adjustment, each of the variables has at least three indicators to ensure its validity, which had been confirmed by Chin, Marcolin, and Newsted (2003) in their review of the regression and path analysis that the

average number of indicators observed for PLS-SEM analysis are three. This same number of indicators was also previously identified by Bollen (1989).

### 3.4 Data Collection Procedure

The data collection was conducted using two approaches, including 1) face-to-face survey and 2) online survey. The face to face survey was conducted along with the office building areas and mall areas. During the weekday, the data collection was conducted at office building areas during high traffic times of potential respondents, which are 1) before working hours between 7:30 to 9:00, 2) at lunchtime between 12:00–13:00, and after working hours between 17:00 to 18:30. On the weekend, the data collection was conducted at mall areas between 11:00 to 20:00. The face to face survey was conducted with a randomized street intercept approach with every third person who walked by. Both date and time for the street intercept were randomly selected by putting all the dates and times into a box and randomly drawn out.

The second approach was conducted through online research based on randomized sampling from lists of email connections, Facebook connections, and LinkedIn connections. The online data were collected through a list-based sampling frame where contacts were arranged alphabetically and assigned with sequential numbers. The researcher collected all the lists with assigned sequential numbers and placed them through a random sampling process prior invitation to participate in the study.

To begin the data collection of both approaches, informed consent was obtained prior to conducting each interview along with the explanation regarding the

purpose of the study in general terms, confidentiality policy, and guidelines regarding how to fill the questionnaire. The timeline of the research fieldwork for both face-to-face and online approaches was during August 1 to September 30, 2019.

### 3.5 Statistical Analysis

There are two parts in the data analysis, which are 1) descriptive statistics and 2) hypothesis analysis. The descriptive analysis includes demographic characteristics, and level of openness to innovation, which quantitatively describes features of the sample. The statistical analysis focused mainly on the second part of the data analysis, which is the hypothesis testing.

Partial Least Square-Structural Equation Model (PLS-SEM) was applied as the statistical analysis method. SEM is an analytic tool that has become a quasi-standard in marketing research (Babin, Hair, Boles, 2008; Hulland, 1999). Ullman and Bentler (2003) elaborated that Structural equation modeling (SEM) is a collection of statistical techniques. SEM examines a set of relationships between one or more independent variables (IVs) and one or more dependent variables (DVs), in which both IVs and DVs can be either factors or measured variables.

Structural equation modeling (SEM) is a multivariate statistical tool that syndicates correlation, regression, covariance, and causality. There are of two types: covariance-based and partial least square (PLS) based, which are (1) CB-SEM and (2) VB-SEM or so-called PLS-SEM (Hair, et al., 2016).

Covariance-based SEM (CB-SEM) is the most commonly used approach to SEM. CB-SEM focuses on covariance to explain the items' relationship. It is mostly used to confirm the theory. It is more suitable for a study derived from proven prior



theories and an established questionnaire. It solely supports reflective constructs and needs a sizable sample. Hair, Hult, Ringle, and Sarstedt (2017) elaborated that Covariance based-Structural Equation Modeling (CB-SEM) was the central method for analyzing multifaceted interrelationships between observed and latent variables.

Variance based-SEM (VB-SEM) or so-called Partial Least Square-SEM (PLS-SEM) is rather a novel approach that focuses on construct's prediction, theory exploration. Hair, et al. (2017) verified that Partial Least Square-SEM (PLS-SEM) has been increasingly significant in terms of academic usage relative to CB-SEM, especially in marketing communication management (Hair, Sarstedt, Ringle, & Mena, 2012). It is more commonly used for a study that has limited prior theory or limited questionnaire. It supports both reflective and formative contracts while opens rooms to support construct with a single indicator (item) and small sample. PLS-SEM also supports data sets with multicollinearity. PLS-SEM is a causal-predictive approach to SEM that accentuates prediction in statistical models (Sarstedt, Ringle, & Hair, 2017).

Hair, Risher, Sarstedt, and Ringle (2019) further addressed that most of the previous metrics applying to evaluate PLS-SEM results remain pertinent. However, it is crucial to acknowledge recently proposed metrics and methods, such as model comparison, exogenous and endogenous assessment, and latent class analysis. Hair, et al. (2019) compared that, although covariance-based SEM (CB-SEM) strongly depends on the notion of model fit, PLS-SEM has a different focus, which is most suitable for this CSI study.

Shmueli (2010) exploited that PLS-SEM principally focuses on the interplay between prediction and theory testing, in which results are validated accordingly. In this light, scholars have recently proposed novel evaluation methods that are explicitly

designed for PLS-SEM's prediction-oriented nature (Shmueli, Ray, Estrada, & Chatla, 2016), which were intergraded in analysis and results reporting approach.

Hair, et al. (2019) recommended various reasons to apply PLS-SEM. Three main reasons that PLS-SEM is most suitable for this CSI research study are, 1) if the analysis is to test theoretical framework from a prediction perspective, 2) when the structural model is complex and includes many constructs, indicators and model relationship, 3) to gain better understanding via exploring theoretical extension or combinations of established theories, and when sampling populations have potentially narrowed the size of the sampling population, especially in this study which to measure the impact of innovation, however, PLS-SEM also works well with large sample size.

Chin (2010) recommended that the effective way to analyze and report PLS-SEM analysis is to use the two-stage approaches, which are 1) reporting the outcome from the scaling or so-called outer model, and 2) from the structural model or inner model. Nevertheless, Hair, et al. (2012); Hair, Sarstedt, Pieper, and Ringle (2012) and Ringle, Sarstedt, and Straub (2012) concluded that most researchers had no precise way of reporting Partial Least Square-Structural Equation Modelling (PLS-SEM) analysis.

Latan and Ramli (2013) verified later that PLS-SEM provides specific elements for the academic and practitioner to report the outcome analysis using six approaches of the PLS-SEM inner models. These inner models are the 1) recursive, 2) interaction, 3) intervening, 4) second-order, 5) heterogeneity, and 6) multi-group models.

The recursive model analysis, according to Lanta and Ramli (2013), is the structural approach that has only one direction of causality and does not contain a direction of loop reaction. The model consists of exogenous and endogenous variables with the construct's indicators. Exogenous variables and endogenous variables are classes of variables that are used in the PLS-SEM method.

Exogenous variables or external origins are independent variables that are not presumed to be caused by other variables in the model, and rather, exogenous variables are determined outside the model and impose on the model. The endogenous variables or internal origins are variables assumed to be caused by another variable in the structural model. They could also be the predictor of other variables within the model.

The other four models of interaction, intervening, second-order, and heterogeneity, have slightly similar approaches to the recursive model with some specific purposes and limitations.

Interaction model analysis validates the interaction between the exogenous variable (predictor) and the endogenous variable (Henseler & Chin, 2010). Meanwhile, the intervening model analysis identifies the associations between the exogenous and endogenous constructs as influenced by the mediator variable. The intervening model analysis is focusing more on the significance of the mediating effects where a relationship between the exogenous and endogenous construct does not directly influence each other. The intervening model focuses on the assumption that constructs could be influenced by intervening variables (Latan & Ghazali, 2013).

The second-order model analysis often referred to as the hierarchical component model. There are four types of second-order constructs which are 1)

reflective first order and reflective second-order, 2) reflective first-order and formative second-order, 3) formative first-order and reflective second-order, and 4) formative first-order and formative second-order. There are two methods for the second-order model analysis. They are repeated-indicator method and two-stage method (Ringle, et al. 2012; Wetzels, Odekerken-Schroder, & Van Oppen, 2009). In principle, the way to report the outcome of the second-order model is also somewhat similar to the recursive model analysis.

Latan and Ramli (2013) identified that Heterogeneity model analysis is based on the assumption that data's features in structural model studies are homogenous, which is inappropriate and irrelevant if the collected data are characterized as component or segmentation. Therefore, the biased analysis will occur. The last inner model approach is the multi-group model analysis or so-called multisampling analysis. The purpose of this approach is to compare two or more data sets.

From analyzing the six approaches, the research identifies the recursive model analysis as the most effective model approach for this CSI study. The finding discussion is divided into two sections using the two-step approach, which are 1) the PLS-SEM outer model, and 2) the PLS-SEM inner model.

The PLS-SEM outer model defines the relationship between the indicator or item to its latent construct, which focuses on examining the reliability and validity of the data that represent the latent construct.

Hair, et al. (2017) recommended that the PLS-SEM outer model analysis must report three key elements which are 1) convergent validity, 2) internal consistency reliability, and 3) discriminant validity. The convergent validity includes loading, indicator reliability, and average variance extracted (AVE). The internal

consistency reliability comprises composite reliability and Cronbach's alpha. The discriminant validity is addressed by the heterotrait-monotrait ratio of correlations (HTMT). On top of these three elements, the indicator weight, p-value, and the standard error for the outer model PLS-SEM must also be reported.

The second stage in analyzing PLS-SEM is the inner models, which also recognized as the measurement models. The inner model analysis is applied to evaluate the relationships between the indicator variables and their corresponding construct. Hair, et al. (2017) recommended that the PLS-SEM inner model through recursive model analysis must report four metrics, which are 1) coefficient of determination or R-squared which revealed the strength of prediction of each endogenous variable, 2) predictive relevance or Q-squared, 3) size and significance of path coefficients, and 4) effect size or f-squared which determines the size of the influence of the exogenous variable on the endogenous variable. In addition, a t-value or p-value must be included to reject or accept the null hypothesis accurately.

To further analyze mediating effect within inner models, or so-call indirect impact, which involves third or more variables that interject an intermediate role in the relationship between the independent variable and dependent variable. Carrion, Nitzl, and Roldan (2017) addressed that to analyze mediating effect using PLS-SEM, there are four critical analyses shown in the figure 3.1 which are 1) indirect effect is calculated by the multiplication between path a to path b, 2) the strength of the indirect effect determines the size of the mediation, 3) a significant indirect effect is the only metric in identifying mediating effect which calculated through bootstrapping analysis, and 4) The significance of the direct effect (c') must be tested to determine the type of effect or mediation.

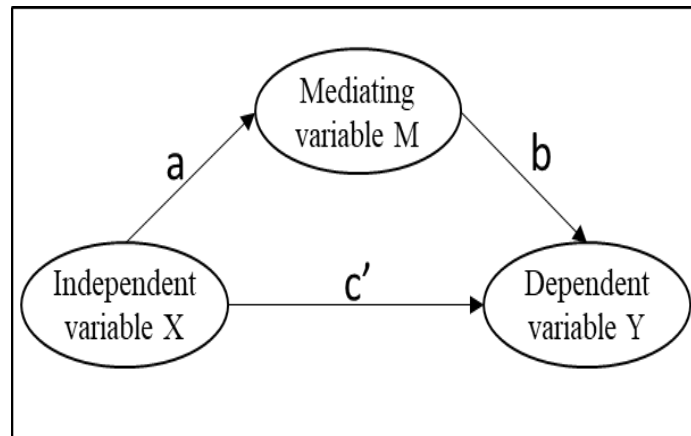


Figure 3.1: General Mediation Model

There are three types of mediation, full mediation, partial mediation, and no mediation. The full mediation is verified when the direct effect ( $c'$ ) is not significant, while the indirect effect is significant, while the no-mediation is the opposite. The no-mediation is determined when the indirect effect is not significant, but the direct effect ( $c'$ ) is significant. The partial mediation exists when both direct effect ( $c'$ ) and indirect effect are both significances (Carrion, et al., 2017).

To further analyze the accuracy of the mediating effect, the variance accounted for (VAF) can assist the mediation analysis. The indirect-to-total effect or VAF analysis calculates the strength of the mediating effect, especially in the case of partial mediating effect. VAF governs the extent to which the mediation process explains the dependent variable's variance (Hair, et al., 2017).

To sufficiently incorporate learning from literature into the statistical analysis of this CSI study, the PLS-SEM statistical analyses were performed in three steps.

### Step 1

The first step in analyzing the research results was verifying the reliability and validity of the relationships between the latent variables and their observed indicators under the PLS-SEM approach, so-called outer model analysis. The outer model analyzes a relationship between the indicator to its latent construct on both exogenous variables and endogenous variables that consists of three main metrics which are 1) convergent validity, 2) internal consistency reliability, and 3) discriminant validity.

### Step 2

Partial Least Squares-Structural Equation Modeling (PLS-SEM) was applied to identify the statistical differences on multiple continuums dependent variable by an independent grouping variable while controlling for covariate or multiple covariates. PLS-SEM was conducted to verify the exact effect of independent variables on dependent variables without interference, so-call inner model analysis. SmartPLS 3, the latest version of SmartPLS, was the statistical software for the analysis. Ringle, Wende, and Becker (2015) addressed that SmartPLS can analyze the complexity of PLS-SEM and provide a complete reading of convergence validity, internal consistency reliability, and discriminant validity, which are fundamental to PLS-SEM. Furthermore, critical statistical analyses can also be executed via SmartPLS, which included 1) R-squared, 2) Q-squared, 3) Path Coefficient, and 4) F-squared (Monecke & Leisch, 2012).

The independent variable in this CSI study is the awareness of Corporate Social Innovation (CSI). CSI was conceptualized as a particular feature of content,

characterized as beneficial content that audiences would be gratified. CSI was presented to participants as salient stimuli, as described in the methods section.

In this study, there are eight dependent variables which are 1) perceived relative advantage, 2) perceived compatibility, 3) perceived quality, 4) brand loyalty, 5) perceived behavioral control, 6) subjective norm, 7) attitude toward CSI, and 8) purchase intention.

### Step 3

The Partial Least Square-Structural Equation Model (PLS-SEM) continued to analyze the mediating effect through the SmartPLS 3 statistical analysis program to identify strength and significance. The mediation analysis calculated the specific indirect effect of potential mediating variables between awareness of CSI and purchase intention.

The analysis of specific indirect effect analyzed a total of five potential mediating variables and paths between awareness of CSI and purchase intention, which are 1) subjective norm, 2) attitude, 3) perceived behavioral control, 4) perceived relative advantage and brand loyalty, and 5) perceived compatibility, perceived quality, and attitude. The outcome of the indirect effect analyses was further analyzed to identify the type of mediation as well as the strength of the mediating effect to the total impact, the VAF value.

### 3.6 Protecting the Rights and Welfare of Human Research Subjects

To protect the rights and welfare of human research subjects recruited to participate in this CSI research study, the research had submitted the proposal and research instrument to the Ethics Committee for Human Research, Bangkok



University, in accordance with the Declaration of Helsinki. The research proposal and research instrument were approved on June 24, 2019, without revision needed. The certificate is evidenced in Appendix C.

### 3.7 Profile of Collected Samples

Participants for the study were recruited through a systematic random sampling approach. There were a total of 1,187 samples who were randomly recruited. Of those 1,187 samples, 707 samples were not included in this study due to the following two reasons; either they were 1) not willing to participate, or 2) did not meet the criteria of respondent profile as addressed in the sampling frame.

There are 298 potential respondents that were not willing to participate, while 239 potential respondents are not in the respondent qualification in terms of the age range. The latter group comprised those who are either older than 40 years old or younger than 25 years old, are not resident in Bangkok, or are identified to be rejecters of innovation.

## CHAPTER 4

### RESULTS

Chapter four summarized the process of data analysis and reported the descriptive findings and inferential findings of data using Partial Least Square-Structural Equation Model (PLS-SEM) analysis. The necessity of using PLS-SEM has been described in the methodology section in order to respond to the complex conceptual model that addressed the four research objectives and test all six main hypotheses of this study. The structured self-administered questionnaire was used as a research instrument to collect data, and the findings were analyzed through the statistical program SmartPLS Three.

The research results are reported in three main sections, which are 1) summary on findings of descriptive statistics, 2) research findings, and 3) summary of the research results.

#### 4.1 Summary on Findings of Descriptive Statistics

The descriptive statistic findings encompassed two sections, including 1) respondents' descriptive findings, and 2) indicators and variables' descriptive findings.

##### 4.1.1 Summary of Respondents' Descriptive Findings

A total of 480 samples were included in this CSI study from a total of 1,187 recruitments. The success recruitment rate of this study was 40.4%. The demographic data of these 480 respondents to the questionnaire encompasses gender, age range, occupation, household income, and educational level.

The gender profiles of these respondents were 50% male ( $n = 240$ ) and 50% female ( $n = 240$ ) as shown in Table 4.1.

Table 4.1: Frequency and Percentage of the Sample's Gender

Gender	Frequency	Percentage
Male	240	50%
Female	240	50%
Total	480	100%

*Note.*  $n = 480$

The age ranges of all respondents were between 25 years old to 40 years old, as scoped in the sampling frame, which was distributed into three ranges, which are 25 years old to 30 years old, 31 years old to 35 years old, and 36 years old to 40 years old.

As shown in Table 4.2, the descriptive finding revealed the largest group of respondents were those who aged 25 years old to 30 years old (40.6%,  $n = 195$ ), followed by those aged 36 years old to 40 years old (33.8%,  $n = 162$ ), and those aged 31 years old to 35 years old (25.6%,  $n = 123$ ), respectively.

Table 4.2: Frequency and percentage of the sample's age range

Age range	Frequency	Percentage
25-30 years old	195	40.6%
31-35 years old	123	25.6%
36-40 years old	162	33.8%
Total	480	100%

*Note.* n = 480

Table 4.3 revealed the descriptive findings that the largest household income of the respondents who participated in this study were between 20,000 to 29,999 Thai baht (THB), which encompassed 23.1% of the total respondents (n = 111). The second-largest group of respondents was 18.3% of those who have a household income between 30,000 to 39,999 THB (n = 88). The third-largest group of respondents had household income between 50,000 to 59,999 THB (14.8%, n = 71), followed by those who earned household income between 10,000 to 19,999 THB (14.6%, n = 70). The fifth-largest group of respondents had a household income between 40,000 to 49,999 THB (13.3%, n = 64), while the sixth group of respondents was 7.1% of those who have a household income higher than 80,000 THB (n = 34), followed by those who earned household income between 60,000 to 69,999 THB (4.6%, n = 22), and those who earned household income between 70,000 to 79,999 THB (2.3%, n = 11). The smallest group of respondents was 1.9% of those who have a household income lower than 10,000 THB (n = 9), respectively.

Table 4.3: Frequency and percentage of sample's monthly household income

Monthly household income (THB)	Frequency	Percentage
Lower than 10,000	9	1.9%
10,000 to 19,999	70	14.6%
20,000 to 29,999	111	23.1%
30,000 to 39,999	88	18.3%
40,000 to 49,999	64	13.3%
50,000 to 59,999	71	14.8%
60,000 to 69,999	22	4.6%
70,000 to 79,999	11	2.3%
Higher than 80,000	34	7.1%
Total	480	100%

*Note.* n = 480

In terms of education, the descriptive findings revealed that 66.9% of the total respondents earned a bachelor's degree (n = 321), while 9% of the total respondents completed a master's degree (n = 43). The third-largest group was 7.5% of those who were high school graduates (n = 36), followed by those who completed high vocational degrees (6.9%, n = 33). The fifth-largest group was 4.6% of respondents who had junior high school degree (n = 22), followed by those who had a vocational degree (3.1%, n = 15) and those who had elementary school degree (1.9%,

n = 9). The smallest group was those who earned doctorate or higher (0.2%, n = 1), respectively, as shown in Table 4.4.

Table 4.4: Frequency and Percentage of Sample's Educational Level

Educational level	Frequency	Percentage
Elementary school	9	1.9%
Junior high school	22	4.6%
High school	36	7.5%
Vocational	15	3.1%
High Vocational	33	6.9%
Bachelor's degree	321	66.9%
Master's degree	43	9.0%
Doctorate or higher	1	0.2%
Total	480	100%

*Note.* n = 480

Table 4.5 showed the mixture of respondents' occupation. The largest group of respondents at 61.7% were office workers (n = 296), while 17.7% of total respondents managed their own business (n = 85). The third-largest group of respondents at 10% was government officer or work for state enterprise (n = 48), while 6.7% of the total respondents was students (n = 32). The fifth-largest group of respondents was housewife (1.5%, n = 7), followed by lawyers (1%, n = 5), labor or

driver (0.6%,  $n = 3$ ), unemployed (0.4%,  $n = 2$ ), and other occupations (0.4%,  $n = 2$ ), respectively.

Table 4.5: Frequency and percentage of sample's occupations

Occupations	Frequency	Percentage
Office worker	296	61.7%
Own business	85	17.7%
Government officer or State enterprise	48	10.0%
Student	32	6.7%
Housewife	7	1.5%
Lawyer	5	1.0%
Labor or driver	3	0.6%
Unemployed	2	0.4%
Unemployed	2	0.4%
Others	2	0.4%
Total	480	100%

*Note.*  $n = 480$

#### 4.1.2 Summary of Indicators and Variables' Descriptive Findings

The summary of indicators and variables' descriptive analyses were performed to inspect the data collected for this CSI study. The nature of variables in this study was explored through statistical techniques in order to address the research

questions of this CSI study. There are two parts to complete the analysis of this section, which were 1) normality test, and 2) descriptive statistics.

#### 4.1.2.1 Normality Test

The normality test determines if a data set is well-modeled by a normal distribution to verify how likely it is for a random variable underlying the data set to be normally distributed. The normality test ensures that the samples have been drawn from normally distributed populations, within an acceptable tolerance.

The normality of the sample was analyzed from the values of the skewness and kurtosis tests. The skewness is a measure of the asymmetry of the probability distribution of a random variable about its mean, the amount and direction of skew. At the same time, the kurtosis is the height and sharpness of the central highest point in relation to a standard bell curve. The acceptable normality thresholds are recommended to be between -2 to 2 of skewness values and the values between -7 to 7 for kurtosis (Bryne, 2010; Curran, West, & Finch, 1996; Hair, Black, Babin, & Anderson, 2010).

Table 4.6 reviewed that all variables were acceptable according to the normality analysis. Even though, all variables had the level of skewness slightly towards the negative values between -1 to zero. The skewness results are within the acceptable value of skewness. Most of the values of kurtosis were a bit flat towards the negative values. Only the awareness of CSI has the kurtosis result slightly to the positive value. All the kurtosis values are between -.4 to .4, which are within ranges of acceptable value of kurtosis. The overall results showed that the distribution of the sample is normal.



Consequently, the collected data were acceptable and can be regarded as normal distribution through the random sample from the population. The residuals between the observed value and predicted value were relatively small to be fit into the structural model, thereby indicating that the sample is representative of the population.

Table 4.6: The Results of Variables' Normality Analysis

Variables	Frequency	Min.	Max	Mean	S.D.	Skewness	Kurtosis
Awareness of CSI	480	1.00	5.00	4.059	0.725	-0.767	0.335
Perceived relative advantage	480	2.00	5.00	4.357	0.743	-0.936	-0.351
Perceived compatibility	480	2.00	5.00	3.940	0.673	-0.458	-0.350
Perceived brand loyalty	480	1.33	5.00	3.815	0.712	-0.520	-0.028
Perceived quality	480	1.00	5.00	4.111	0.768	-0.446	-0.378
Subjective norm	480	1.50	5.00	3.771	0.664	-0.219	-0.599
Attitude	480	2.50	5.00	4.229	0.577	-0.588	-0.129
Perceived behavioral control	480	2.33	5.00	4.172	0.663	-0.798	-0.080
Purchase intention	480	2.20	5.00	4.097	0.574	-0.505	0.123
Valid N (listwise)	480						

Note. n = 480

#### 4.1.2.2 Descriptive Analysis

The descriptive analysis is best described with a concrete criterion (Moidunny, 2009). Regarding five-point scale measurement, the mean score 1.0 to 1.8 is considered very low, 1.81 to 2.60 is low, 2.61 to 3.20 is medium, 3.21 to 4.20 is high, and 4.21 to 5.00 is very high, respectively as shown in Table 4.7, while the criterial of 10-point likert scale suggested that mean score 1.00 to 2.80 is considered very low, 2.81to 4.60 is low, 4.61 to 6.40 is medium, 6.41 to 8.20 is high, and 8.21 to 10.00 is very high, respectively as shown in Table 4.7.

Table 4.7: The criteria for interpreting the mean of perceived relative advantage, perceived compatibility, brand loyalty, perceived quality, subjective norm, attitude, perceived behavioral, and purchase intention (5-point Likert scale)

Mean range	Interpretation
4.21-5.00	Very High
3.21-4.20	High
2.61- 3.20	Medium
1.81- 2.60	Low
1.00-1.80	Very low
8.21-10.00	Very High
6.41- 8.20	High

(Continued)

Table 4.7 (Continued): The criteria for interpreting the mean of perceived relative advantage, perceived compatibility, brand loyalty, perceived quality, subjective norm, attitude, perceived behavioral, and purchase intention (5-point Likert scale)

Mean range	Interpretation
4.61-6.40	Medium
2.81-4.60	Low
1.00-2.80	Very low

The descriptive analysis shown in Table 4.8 demonstrates that the means of all 35 indicators had the mean score above mid-point in both five-point likert scale ( $\bar{x} > 3.20$ ) and 10-point likert scale ( $\bar{x} > 6.40$ ), which indicated that the majority of the respondents highly agreed with each statement of the indicators to all nine variables.

The standard deviation values specified that the respondents had similar responses to each indicator, as the variability of standard deviation is rather low ( $\sigma < 1$ ). The only higher variability indicator ( $\sigma = 2.085$ ) was one indicator, the first indicator of awareness of CSI (PAW1), on the level of understanding towards the CSI concept, which was measured based on a 10-point likert scale.

To accurately describe the responses of samples towards the awareness of CSI, which encompassed indicators from both five-point likert scale and 10-point likert scale, the indicator PAW1 with 10-point likert scale was rescaled to five-point

likert scale for the calculation of the mean and standard deviation of awareness of CSI (Sambandam, 2006).

Table 4.8: The results of indicators' descriptive analysis

Variables and Indicators	Frequency	Min.	Max.	Mean	S.D.
Awareness of CSI	480	1.00	5.00	4.06	0.725
PAW1	480	1.00	10.00	6.62	2.085
PAW2	480	1.00	5.00	4.33	0.795
PAW3	480	1.00	5.00	4.29	0.840
PAW4	480	2.00	5.00	4.04	0.667
Perceived Relative Advantage	480	2.00	5.00	4.36	0.743
RA1	480	2.00	5.00	4.42	0.858
RA2	480	2.00	5.00	4.51	0.734
RA3	480	2.00	5.00	4.14	0.837
Perceived Compatibility	480	2.00	5.00	3.94	0.673
CP1	480	2.00	5.00	3.96	0.693
CP2	480	1.00	5.00	3.92	0.803
CP3	480	2.00	5.00	3.94	0.769

(Continued)

Table 4.8 (Continued): The Results of Indicators' Descriptive Analysis

Variables and Indicators	Frequency	Min.	Max.	Mean	S.D.
Brand Loyalty	480	1.33	5.00	3.82	0.712
L1	480	2.00	5.00	4.00	0.770
L2	480	1.00	5.00	3.71	0.858
L3	480	1.00	5.00	3.73	0.776
Perceived Quality	480	1.00	5.00	4.11	0.768
Q1	480	1.00	5.00	4.12	0.770
Q2	480	1.00	5.00	4.19	0.863
Q3	480	1.00	5.00	4.07	0.911
Q4	480	1.00	5.00	4.07	0.896
Subjective norm	480	1.50	5.00	3.77	0.664
SN1	480	2.00	5.00	3.87	0.770
SN2	480	2.00	5.00	3.81	0.819
SN3	480	1.00	5.00	3.81	0.790
SN4	480	1.00	5.00	3.70	0.854
SN5	480	1.00	5.00	3.78	0.838
SN6	480	1.00	5.00	3.65	0.846

(Continued)

Table 4.8 (Continued): The Results of Indicators' Descriptive Analysis

Variables and Indicators	Frequency	Min.	Max.	Mean	S.D.
Attitude	480	2.50	5.00	4.23	0.577
AT1	480	2.00	5.00	4.26	0.635
AT2	480	2.00	5.00	4.16	0.725
AT3	480	2.00	5.00	4.19	0.664
AT4	480	2.00	5.00	4.30	0.672
Perceived Behavioral Control	480	2.33	5.00	4.17	0.663
BC1	480	2.00	5.00	4.19	0.747
BC2	480	2.00	5.00	4.13	0.717
BC3	480	1.00	5.00	4.20	0.736
Purchase intention	480	2.20	5.00	4.10	0.574
P1	480	2.00	5.00	4.18	0.663
P2	480	2.00	5.00	4.07	0.626
P3	480	2.00	5.00	4.08	0.641
P4	480	2.00	5.00	4.07	0.743
P5	480	2.00	5.00	4.08	0.735

Note. n = 480

A summary of descriptive analysis means of all variables shown in Table 4.9 demonstrated overall scores obtained by averaging the response to the appropriate items were above 3.21, which revealed that the respondents consider all variables in

this study consist of a high degree of agreement regarding this study of CSI paradigm. The two variables of perceived relative advantage ( $\bar{x} = 4.357$ ) and attitude ( $\bar{x} = 4.229$ ) received a very high level of agreement ( $\bar{x} \geq 4.21$ ) while the remaining seven variables of perceived behavioral control ( $\bar{x} = 4.172$ ), perceived quality ( $\bar{x} = 4.111$ ), purchase intention ( $\bar{x} = 4.097$ ), awareness of CSI ( $\bar{x} = 4.059$ ), perceived compatibility( $\bar{x} = 3.940$ ), perceived brand loyalty( $\bar{x} = 3.815$ ), and subjective norm( $\bar{x} = 3.771$ ) were highly agreed respectively as the mean scores are between 3.21 and 4.20.

Table 4.9: The Summary of the Variables' Mean-Scores

Variables	Mean	S.D.	Meaning
Awareness of CSI	4.059	0.725	High
Perceived relative advantage	4.357	0.743	Very high
Perceived compatibility	3.940	0.673	High
Perceived brand loyalty	3.815	0.712	High
Perceived quality	4.111	0.768	High
Subjective norm	3.771	0.664	High
Attitude	4.229	0.577	Very high
Perceived behavioral control	4.172	0.663	High
Purchase intention	4.097	0.574	High

*Note.* n = 480

## 4.2 Research Findings

The research findings were reported in four sections, which are 1) outer model analysis and results, 2) inner model analysis and results, 3) mediating effect analysis and results, and 4) hypothesis testing and results.

### 4.2.1 Outer Model Analysis and Results

The outer model determines a relationship between the indicator to its latent construct on both exogenous variables and endogenous variables. However, if the variable from the structural model represents a single-item or observation, then this type of variable does not need to be evaluated in the outer model (Latan & Ghozali, 2012). At this stage, the researcher focused on examining the reliability and validity of the data that represent the latent construct.

The validity and reliability in outer model analysis comprise 1) convergent validity, 2) internal consistency reliability, and 3) discriminant validity.

#### 4.2.1.1 The Convergent Validity

The convergent validity refers to the degree to which two measures of constructs are theoretically related, and in fact, related in the study. The convergent validity is the degree to which the construct converges to describe the variance of its items. The convergent validity for PLS-SEM includes outer loading, indicator reliability, and average variance extracted (AVE).

In terms of outer loading, previous scholars (Chin, 1998; Gotz, Liehr-Gobbers, & Krafft, 2010; Hair, Ringle, & Sarstedt, 2011; Hulland, 1999; Latan & Ghozali, 2012) recommended that the outer loading for each of the construct items should be .6 or higher for research data that are for an exploratory purpose, and .7 or higher for the research data that are for a confirmatory purpose. While Hair, et al.



(2019) indicated that in examining the indicator loadings, the loadings above .708 are recommended, as the loadings and this level indicated that the construct represents more than 50% of the indicator's variance, thus providing acceptable item reliability. To ensure a sufficient level of outer loading, the researcher decided to accept the item results at .708 or higher.

In this study of the novel CSI topic, there are a total of nine variables which are exogenous variable of 1) awareness of CSI, endogenous variables of 2) attitude, 3) brand loyalty, 4) perceived behavioral control, 5) perceived compatibility, 6) perceived quality, 7) perceived relative advantage, 8) subjective norm, and 9) purchase intention. These nine variables have 35 indicators in total. The results from indicator outer loadings analysis found that all 35 indicators shown in Table 4.10 can be accepted to the model due to the value of each indicator exceed .708, as indicated in the literature.

Table 4.10: The results of indicator outer loading analysis

Variables and indicators	Outer loadings	Variables and indicators	Outer loadings	Variables and indicators	Outer loadings
Awareness of CSI		Perceived relative advantage		Perceived compatibility	
PAW1	0.743	RA1	0.938	CP1	0.869
PAW2	0.880	RA2	0.932	CP2	0.906
PAW3	0.909	RA3	0.882	CP3	0.895
PAW4	0.840				
L 1	0.890	Q 1	0.906	SN1	0.803
L 2	0.915	Q 2	0.891	SN2	0.808
L 3	0.853	Q3	0.895	SN3	0.800
		Q4	0.881	SN4	0.801
				SN5	0.841
				SN6	0.808

(Continued)

Table 4.10 (Continued): The results of indicator outer loading analysis

Variables and indicators	Outer loadings	Variables and indicators	Outer loadings	Variables and indicators	Outer loadings
Attitude		Perceived behavioral control		Purchase intention	
AT 1	0.836	BC 1	0.898	P1	0.821
AT 2	0.908	BC 2	0.905	P2	0.854
AT 3	0.839	BC 3	0.909	P3	0.808
AT 4	0.837			P4	0.827
				P5	0.898

*Note.* Outer loading value > .708 for acceptability

The second factor of the convergent validity is the indicator reliability, which is obtained by squaring outer loadings of reflective constructs. Indicator reliability is to be used together with outer loadings to give necessary and sufficient measurement to the relationship between the latent variable and its indicators. Hair, et al. (2017) recommended that .5 or above is the acceptable level of indicator reliability.

The results from indicator reliability shown in Table 4.11 identify that the values of all 35 indicators are above .5, which is the acceptable level of indicator reliability. The results of indicator reliability analysis align with the accepted results of outer loading values.

Table 4.11: The results of indicator reliability analysis

Variables and indicators	Indicator reliability	Variables and indicators	Indicator reliability	Variables and indicators	Indicator reliability
Awareness of CSI		Perceived relative advantage		Perceived compatibility	
PAW1	0.552	RA1	0.880	CP1	0.755
PAW2	0.774	RA2	0.869	CP2	0.821
PAW3	0.826	RA3	0.778	CP3	0.801
PAW4	0.706				
Brand loyalty		Perceived quality		Subjective norm	
L 1	0.792	Q 1	0.821	SN1	0.645
L 2	0.837	Q 2	0.794	SN2	0.653
L 3	0.728	Q 3	0.801	SN3	0.640
		Q 4	0.776	SN4	0.642
				SN5	0.707
				SN6	0.653

(Continued)

Table 4.11 (Continued): The results of indicator reliability analysis

Variables and indicators	Indicator reliability	Variables and indicators	Indicator reliability	Variables and indicators	Indicator reliability
Attitude		Perceived behavioral control		Purchase intention	
AT 1	0.699	BC 1	0.806	P1	0.674
AT 2	0.824	BC 2	0.819	P2	0.729
AT 3	0.704	BC 3	0.826	P3	0.653
AT 4	0.701			P4	0.684
				P5	0.806

*Note.* Indicator reliability values of  $>.5$  for acceptability

The final metric of the convergent validity is the average variance extracted (AVE). Fornell and Lacker (1981a) proposed the AVE as one of the elements for convergent validity that can be calculated by the reliability of the component score for the latent variable, and the outcome is more conservative than the composite reliability. The bigger the value of the construct AVE, the better is the discriminant validation that comes from correlation within the model constructs. The AVE value should be more than .5, which indicates that 50 % or more of the variance from the indicators can be explained (Chin, 2010; Hair, et al., 2019).

The results of AVE analysis reviewed that all nine variables have achieved the level of AVE value higher than .5 and can be accepted to the structural model, as demonstrated in Table 4.12.

Table 4.12: The results of the average variance extracted (AVE) analysis

Variable	AVE	Variable	AVE	Variable	AVE
Awareness	0.714	Perceived	0.842	Perceived	0.793
of CSI		relative		compatibility	
		advantage			
Brand	0.786	Perceived	0.798	Subjective	0.656
loyalty		quality		norm	
Attitude	0.732	Perceived	0.817	Purchase	0.709
		behavioral		intention	
		control			

*Note.* AVE value >.5 indicates an acceptable level.

Regarding the results of all three metrics, all indicators and variables are proven to pass the convergent validity criteria, which is the first assessment for the validity and reliability test of PLS-SEM. These quantified results identify that the indicators that are theoretically related are, in fact, related in this study.

#### 4.2.1.2 Internal Consistency Reliability

The internal consistency is a method of reliability testing to validate how well the items on a study that are proposed to measure the same construct produce similar results. If all identified items of each variable on a study measure the identical construct or idea, then the test has internal consistency reliability. The internal consistency reliability comprised composite reliability and Cronbach's alpha.

The composite reliability, so-called construct reliability, is the measurement metric for consistency reliability that was proposed by Joreskog's (1971). It is an indicator of the common variance among the observed variables used as an indicator of a latent construct (Fornell & Larcker, 1981b).

The higher values indicate higher levels of reliability. The composite reliability values are suggested to reach .6 or higher for the exploratory research and .7 or higher for confirmatory research (Bagozzi & Yi, 1988; Gotz, et al., 2010; Hair, et al., 2011; Latan & Ghazali, 2012). However, Diamantopoulos, Sarstedt, Fuchs, Wilczynski, and Kaiser (2012); Drolet and Morrison (2001) argued that the values of .95 and higher could be problematic, as they indicated that the items are redundant, thereby triggering inflated correlations among the indicators' error terms which resulted in reducing construct validity.

The results shown in Table 4.13 verified that the composite reliability values of all variables are at an acceptable level according to the given threshold from the literature as all values of the variables are higher than .6 and do not exceed .95.

Table 4.13: The Results of Composite Reliability Analysis

Variable	Composite reliability	Variable	Composite reliability	Variable	Composite reliability
Awareness of CSI	0.909	Perceived relative advantage	0.941	Perceived compatibility	0.920
Brand loyalty	0.917	Perceived quality	0.941	Subjective norm	0.920
Attitude	0.916	Perceived behavioral control	0.931	Purchase intention	0.924

*Note.* Composite reliability's values  $> .6$  to  $< .95$  indicates acceptable construct reliability.

Cronbach's alpha, which was developed by Lee Cronbach in 1951, is another measurement metric of internal consistency reliability that verifies how closely related a set of indicators are as a group, expecting correlation of indicators that measure the same construct. Cronbach's alpha assumes similar thresholds but produces lesser values than composite reliability.

Various literature on PLS-SEM and SEM proposed to focus on the composite reliability measurement rather than Cronbach's alpha. The reason is the composite reliability provides more accurate underestimation as the composite reliability measurement is not assumed to be equal across items, all indicators do not have the



same weight (Bagozzi & Yi, 1988; Chin, 2010; Hair, et al., 2011; Hair, et al., 2012; Raykov, 1998).

Even though Hair, et al. (2019) also addressed that Cronbach's alpha is a less precise measure of reliability. The items are unweighted, while composite reliability weights the items based on the construct indicators' loadings. Hence, this reliability is higher than Cronbach's alpha. Therefore, analyzing both Cronbach's alpha and composite reliability would present sufficient metrics for internal consistency.

Therefore, to provide accurate internal consistency reliability, the researcher decided to also analyze Cronbach's alpha together with composite reliability by taking into consideration the cautions from literature. The acceptable level of Cronbach's alpha, as recommended by Nunnally and Bernstein (1994), is .7 or higher, which demonstrates strong reliability.

The results of reliability analysis (Cronbach's alpha) confirmed that all indicators of each variable achieve an acceptable level of .7, as demonstrated in Table 4.14.

Table 4.14: The Results of Reliability Analysis

Variable	Number of indicators	$\alpha$	Variable	Number of indicators	$\alpha$
Awareness of CSI	4	0.864	Perceived relative advantage	3	0.906

(Continued)

Table 4.14 (Continued): The results of reliability analysis

Variable	Number of indicators	$\alpha$	Variable	Number of indicators	$\alpha$
Perceived compatibility	3	0.869	Brand loyalty	3	0.864
Perceived quality	4	0.916	Subjective norm	6	0.895
Attitude	4	0.877	Perceived behavioral control	3	0.888
Purchase intention	5	0.897			

*Note.* Cronbach's alpha values > .7 indicate acceptable reliability level.

The combined results of composite reliability and reliability analysis have confirmed that indicators of the outer model analysis have internal consistency reliability; that is, all selected items that measure the same construct produce similar results.

#### 4.2.1.3 The Discriminant Validity

The discriminant validity, the final element of the validity and reliability verification, is the extent to verify that a construct is empirically distinct from other constructs in the structural model. The discriminant validity can be addressed by the heterotrait-monotrait ratio of correlations (HTMT). HTMT is a novel method for measuring discriminant validity in partial least squares-structural equation modeling,

which is one of the critical building blocks of model evaluation (Henseler, Ringle, & Sarstedt, 2015).

Voorhees, Brady, Calantone, and Ramirez (2016) defined HTMT as the mean value of the item correlations across constructs relative to the symmetrical mean of the average correlations for the items measuring the exact same construct.

Discriminant validity problems are present when HTMT values are too high. The value above .90 suggests that discriminant validity is not present (Henseler, et al., 2015). Henseler, et al. (2015) further elaborated that if the constructs are theoretically more dissimilar, a lower, more conservative, the threshold value is recommended at .85 or lower to indicate an acceptable level of discriminant validity.

Along with these procedures, Henseler, et al. (2015) encouraged bootstrapping to be applied to test whether the HTMT value is significantly different from one or a lower threshold value such as .85 or .9, which should be defined based on the study context (Franke & Sarstedt, 2019).

The results of the HTMT analysis shown in Table 4.15 have confirmed that the discriminant validity has been established between every two reflective constructs as the value is below .85 in all of each relationship, as recommended in the literature. The analyzed results confirmed that each construct is empirically different from other constructs in the structural model.

Table 4.15: Heterotrait-monotrait ratio of correlations (HTMT) of CSI study

Variables	PAW	RA	PC	L	Q	SN	AT	BC	PI
Awareness of CSI									
Perceived relative advantage	0.614								
Perceived compatibility	0.575	0.634							
Brand loyalty	0.519	0.571	0.626						
Perceived quality	0.564	0.607	0.606	0.731					
Subjective norm	0.637	0.623	0.757	0.755	0.73				
Attitude	0.615	0.571	0.603	0.594	0.684	0.697			
Perceived behavioral control	0.519	0.49	0.491	0.425	0.594	0.586	0.667		
Purchase intention	0.599	0.567	0.583	0.642	0.659	0.713	0.748	0.728	

*Note.* HTMT values < .85 indicates acceptable level of significant difference.

In addition, Hair, Sarstedt, Pieper, and Ringle (2012); Hair, Sarstedt, Ringle, and Mena (2012) remarked that the indicator weight, t-value, or p-value and the standard error or standard deviation for the outer model PLS-SEM must be reported. Since PLS-SEM is a nonparametric method, therefore bootstrapping is applied to govern statistical significance (Chin, 1998).

In the case that the confidence interval of an indicator weight consists of zero, the weight is not statistically significant, which should be considered for removal from the measurement model. However, if an indicator weight is not significant, it is not necessarily interpreted as an indication of poor measurement model quality. Instead, the indicator's total contribution to the construct is considered (Cenfetelli & Bassellier, 2009).

However, according to Hair, et al. (2017), indicators with a nonsignificant weight should definitely be eliminated if the loading is also not significant.

Table 4.16 revealed the results of the indicator weight, level of significance (p-value), and standard deviation of all 35 indicators in this study. The outcomes identified that all the data points in each indicator tend to be very close to the mean with minimal deviation, and all values of the outer weights of each indicator are found to be significant.

Table 4.16: The Results of Outer Weights, Level of Significant and Standard

## Deviation Analyses

Variable and indicators	Outer weights	Sig.	SD	Variable and indicators	Outer weights	Sig.	SD
Awareness of CSI				Perceived relative advantage			
PAW1	0.285	0.000	0.016	RA1	0.355	0.000	0.007
PAW2	0.284	0.000	0.011	RA2	0.347	0.000	0.007
PAW3	0.308	0.000	0.010	RA3	0.389	0.000	0.011
PAW4	0.308	0.000	0.012				
Perceived compatibility				Brand loyalty			
CP1	0.357	0.000	0.012	L 1	0.417	0.000	0.013
CP2	0.383	0.000	0.011	L 2	0.381	0.000	0.010
CP3	0.382	0.000	0.011	L 3	0.329	0.000	0.011

(Continued)

Table 4.16 (Continued): The Results of Outer Weights, Level of Significant and Standard Deviation Analyses

Variable and indicators	Outer weights	Sig.	SD	Variable and indicators	Outer weights	Sig.	SD
Perceived quality				Subjective norm			
Q 1	0.269	0.000	0.008	SN1	0.204	0.000	0.008
Q 2	0.283	0.000	0.007	SN2	0.209	0.000	0.009
Q 3	0.270	0.000	0.007	SN3	0.194	0.000	0.009
Q 4	0.298	0.000	0.009	SN4	0.195	0.000	0.009
				SN5	0.214	0.000	0.007
				SN6	0.216	0.000	0.009
Attitude				Perceived behavioral control			
AT1	0.284	0.000	0.010	BC 1	0.348	0.000	0.010
AT2	0.320	0.000	0.009	BC 2	0.398	0.000	0.012
AT3	0.284	0.000	0.010	BC 3	0.360	0.000	0.011
AT4	0.280	0.000	0.010				

(Continued)

Table 4.16 (Continued): The Results of Outer Weights, Level of Significant and Standard Deviation Analyses

Variable and indicators	Outer weights	Sig.	SD	Variable and indicators	Outer weights	Sig.	SD
Purchase intention							
P1	0.238	0.000	0.007				
P2	0.238	0.000	0.007				
P3	0.217	0.000	0.007				
P4	0.247	0.000	0.007				
P5	0.247	0.000	0.006				

*Note.* Outer weight values > 0 with  $p$ -value < .05 for acceptability

#### 4.2.1.4 Outer model analysis and results conclusion

The results of validity and reliability in the outer model analysis are at a satisfactory level. All metrics verifying the three criteria of 1) convergent validity, 2) internal consistency reliability, and 3) discriminant validity meet all the specified thresholds, which confirmed the validity and reliability of indicators and constructs for this CSI study.

#### 4.2.2 Inner Model Analysis and Results

The inner model, so-called structural model, exhibits the relationships between the constructs being evaluated in order to verify a path model that connects



variables and constructs based on theory and logic (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). It specified the relationships between the independent and dependent latent variables. Four main metrics measured the inner model recommended by Hair, et al. (2017) are 1) coefficient of determination or R-squared, 2) predictive relevance or Q-squared, 3) size and significance of path coefficients, and 4) effect size or f-square.

Due to the nature of the structural model, the coefficients for the relationships between the constructs are resulting from estimating a series of regression equations. It is crucial that prior to assessing the structural relationships, collinearity must be examined to ensure the absence of bias on the regression results (Hair, et al., 2017). Collinearity is a problematic condition in which some of the predictor variables are highly correlated, which tend to inflate the variance of at least one estimated regression coefficient, cannot independently predict the value of the dependent variable, and potentially reduce statistical significance.

To identify the potential collinearity issue of this study, the latent variable scores of the predictor constructs in a partial regression were used to calculate the variance inflation factor (VIF) values. VIF values above five are indicative of likely collinearity issues among the predictor constructs. However, the collinearity problems can also ascend at lower VIF values of three to five (Becker, Ringle, Sarstedt, & Volckner, 2015; Mason & Perreault, 1991). If collinearity is an issue, a recurrently practiced solution is to create higher-order models that can be supported by theory (Hair, et al., 2017).

The results of the variance inflation factor (VIF) analysis shown in Table 4.17 unveiled that all VIF values of each indicator are lower than five, which

indicated the absence of collinearity issues among all the predictor constructs.

Twenty-nine indicators had VIF values below three, which showed the complete absence of collinearity for the analysis.

However, there is the likelihood of collinearity issues of six indicators that have VIF values above three. They are one indicator of awareness of CSI, two indicators of perceived quality, two indicators of perceived relative advantage, and one indicator of purchase intention. The researcher takes these issues into consideration when analyzing the results of hypothesis testing.

Table 4.17: The Results of Variance Inflation Factor Values (VIF) Analysis

Variables and indicators	VIF	Variables and indicators	VIF	Variables and indicators	VIF
Awareness of CSI		Perceived relative advantage		Perceived compatibility	
PAW1	1.531	RA1	4.975	CP1	2.079
PAW2	2.724	RA2	4.808	CP2	2.546
PAW3	3.427	RA3	2.100	CP3	2.363
PAW4	2.301				

(Continued)

Table 4.17 (Continued): The Results of Variance Inflation Factor Values (VIF)

## Analysis

Variables and indicators	VIF	Variables and indicators	VIF	Variables and indicators	VIF
Brand loyalty		Perceived quality		Subjective norm	
L 1	2.149	Q 1	3.374	SN1	2.079
L 2	2.770	Q 2	2.890	SN2	2.069
L 3	2.116	Q 3	3.016	SN3	2.071
		Q 4	2.546	SN4	2.065
				SN5	2.438
				SN6	2.038
Attitude		Perceived behavioral control		Purchase intention	
AT1	2.062	BC 1	2.607	P1	2.059
AT2	2.967	BC 2	2.421	P2	2.643
AT3	2.126	BC 3	2.744	P3	2.012
AT4	2.059			P4	2.192
				P5	3.372

*Note.* VIF values < 5 for acceptability while VIF values between 3–5 should be analyzed with caution.

#### 4.2.2.1 Coefficient of Determination (R-squared)

R-squared ( $R^2$ ) is a statistical measure of proximity of the data that are to the fit regression line.  $R^2$  determines the proportion of variance in the dependent variable that can be explained by the independent variable to demonstrate how well the data fit the regression model. Since the  $R^2$  measures the variance, which is explained in each of the endogenous constructs, therefore, it can also be considered a measure of the model's explanatory power (Shmueli & Koppius, 2011).

Hair, et al. (2017) reviewed that the adjusted R-squared ( $R^2$ ) is more recommended for usage in PLS-SEM than the  $R^2$  due to the reason that the value of the additional one exogenous variable is not necessarily changed, either increased or decreased.

The analysis for the inner model recursive approach can be performed from the adjusted  $R^2$  for each endogenous variable. This adjusted  $R^2$  is exposed for its reliable prediction. The interpretation of the adjusted  $R^2$  is that the bigger the value of the adjusted  $R^2$ , the stronger the model predictor for the variance explanation of the endogenous variable. The  $R^2$  values range from zero to one, with higher values indicating a greater explanatory power. Hair, et al. (2017) addressed that the values of adjusted  $R^2$  .25, .50, and .75 represent weak, moderate, and strong models, respectively, while Falk and Miller (1992) addressed that to have an explainable endogenous variable,  $R^2$  should be .10 or higher.

The results of the  $R^2$  analysis shown in Table 4.18 magnified that all dependent variables can be explained by the variables within this structural model. However, the proportion of explanatory differs from variable to variable. Purchase intention (Adjusted  $R^2 = .612$ ) and attitude (Adjusted  $R^2 = .531$ ) are two variables

that could be moderately explained by the independent variable as the adjusted  $R^2$  values exceed .5, which means more than 50% of these two dependent variables can be caused by the independent variable. The remaining five dependent variables of perceived quality (Adjusted  $R^2 = .384$ ), perceived compatibility (Adjusted  $R^2 = .369$ ), brand loyalty (Adjusted  $R^2 = .352$ ), subjective norm (Adjusted  $R^2 = .313$ ), and perceived relative advantage (Adjusted  $R^2 = .296$ ), could also be weakly explained by the independent variable as the adjusted  $R^2$  values of these variables are above .25 but do not exceed .5 while perceived behavioral control (Adjusted  $R^2 = .206$ ) reached the acceptable level (Adjusted  $R^2 > .10$  to  $< .25$ ).

Table 4.18: The Results of the Coefficient of Determination (Adjusted  $R^2$ ) Analysis

Variables	Adjusted R-squared
Awareness of CSI (Independent Variable)	
Perceived relative advantage	0.296
Perceived compatibility	0.369
Brand loyalty	0.352
Perceived quality	0.384
Subjective norm	0.313
Attitude	0.531
Perceived behavioral control	0.206
Purchase intention	0.612

*Note.* Adjusted  $R^2$  values of .10, .25, .50, and .75 represent acceptable, weak, moderate, and strong models.

#### 4.2.2.2 Predictive Relevance (Q-squared)

Predictive relevance or Q-squared ( $Q^2$ ) is the so-called predictive sample reuse (Geisser, 1974; Stone, 1974).  $Q^2$  represents the synthesis from the cross-validation function and function fitting between the observed variable prediction and parameter construct estimation.  $Q^2$  predicts the data points of indicators. A  $Q^2$  value larger than zero for a particular endogenous latent variable specifies the PLS-SEM path model has predictive power for this construct. Hair, et al. (2017) concluded that the  $Q^2$  predictive relevance of .02, .15, and .35 signifies a weak, moderate, and strong model, respectively.

The results of predictive relevance ( $Q^2$ ) analysis shown in Table 4.20 demonstrated that all endogenous variables in this structural model are well reconstructed and have predictive relevance for this construct. Purchase intentions ( $Q^2 = .431$ ) and attitude ( $Q^2 = .386$ ) are two endogenous variables that have strong predictive relevance as the  $Q^2$  values exceed .35. Each of the remaining six endogenous variables of perceived quality ( $Q^2 = .303$ ), perceived compatibility ( $Q^2 = .291$ ), brand loyalty ( $Q^2 = .270$ ), perceived relative advantage ( $Q^2 = .247$ ), the subjective norm ( $Q^2 = .204$ ), and perceived behavioral control ( $Q^2 = .167$ ) have moderate predictive relevancy since their  $Q^2$  values are above .15 but do not exceed .35, respectively.

Table 4.19: The results of predictive relevance ( $Q^2$ ) analysis

Variables	$Q^2$
Awareness of CSI	
Perceived relative advantage	0.247
Perceived compatibility	0.291
Brand loyalty	0.270
Perceived quality	0.303
Subjective norm	0.204
Attitude	0.386
Perceived behavioral control	0.167
Purchase intention	0.431

*Note.*  $Q^2$  values of .02, .15, and .35 signify a weak, moderate, and strong model.

#### 4.2.2.3 Size and Significance of Path Coefficients

There are two metrics to be analyzed in this analysis, which are 1) size and 2) path coefficients. The most common size measures in path modeling convey a similar interpretation to the multiple regression model where the adjusted  $R^2$  value of the dependent variable or endogenous variable indicates the percentages of such endogenous variable is explained by the model as provided in the results presented in the Table 4.19.

A path coefficient indicates the direct effect of a variable expected to be a cause on another variable expected to be an effect. Path coefficients are standardized because they are estimated from correlations. Garson (2016) notified that path weights

vary from minus one to plus one. The weights closest to one reflect the strongest paths, while the weights closest to zero reflect the weakest paths. The sum of direct and indirect effect is considered as the total effect, which can be calculated by the result of multiplying all indirect effect paths plus the direct effect path (Hair, et al., 2017). Hair, et al. (2017) further emphasized that a path coefficient must be validated through t-value or p-value in order to verify its significance in terms of the relationship between variables.

The results of path coefficients analysis shown in Table 4.21 unveiled that from the total of 18 relationships between caused-variables and effected-variables within the inner model analysis, all relationships have significantly positive connections where the caused-variables have a direct effect on effected-variable. From a total of 18 relationships within the CSI structural model, 17 relationships had exceptionally significant relationships as the *p*-value is lower than .001. The only relationship that had a significant level higher than .001 is the direct relationship between awareness of CSI and purchase intention with the *p*-value of .035.

Table 4.20: The results of path coefficients and significant level analysis

Variables	PWA	RA	PC	L	Q	SN	AT	BC	PI
Awareness of CSI		0.546***	0.273***			0.561***	0.561***	0.561***	0.561*
<i>p</i> -value		0.000	0.000			0.000	0.000	0.000	0.035

(Continued)



Table 4.20 (Continued): The results of path coefficients and significant level analysis

Variables	PWA	RA	PC	L	Q	SN	AT	BC	PI
Perceived relative advantage			0.416***	0.328***	0.370***				
<i>p</i> -value			0.000	0.000	0.000				
Perceived compatibility					0.333***				
<i>p</i> -value					0.000				
Brand loyalty									0.177***
<i>p</i> -value									0.000
Perceived quality							0.232***		
<i>p</i> -value							0.000		
Subjective norm							0.231***		0.157***
<i>p</i> -value							0.000		0.001
Attitude				0.356***					0.236***
<i>p</i> -value				0.000					0.000

(Continued)

Table 4.20 (Continued): The results of path coefficients and significant level analysis

Variables	PWA	RA	PC	L	Q	SN	AT	BC	PI
Perceived behavioral control							0.269***		0.326***
<i>p</i> -value							0.000		0.000
Purchase intention									
<i>p</i> -value									

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

#### 4.2.2.4 Effect Size (f-squared)

Effect size or f-squared ( $f^2$ ) is a statistical notion that measures the strength of the relationship between two variables on a numeric scale. It indicated whether a construct has a substantive impact on another one. Cohen (1988) capitalized on the values of  $f^2$  that, the value of .02, .15, and .35 represent small, medium, and large  $f^2$  effect sizes, respectively.

The results of effect size ( $f^2$ ) analysis shown in Table 4.22 supported the path coefficients analysis in an almost identical way because the ranking of the strength of relationships is in a similar order to the results from path coefficients analysis.

The only main difference identified by  $f^2$  analysis is the direct relationship between awareness of CSI and purchase intention, which did not reach the minimum threshold of .02 even though it showed an indication of statistically significant relationship from path coefficient analysis.

Therefore, there are a total of 17 relationships that have a substantive impact from caused-construct to effected-construct. The two relationships that have large effect sizes are 1) awareness of CSI and subjective norm ( $f^2 = .458$ ) and 2) awareness of CSI and perceived relative advantage ( $f^2 = .424$ ).

There are four relationships that have medium effect sizes which are 1) awareness of CSI and perceived behavioral control ( $f^2 = .262$ ), 2) perceived relative advantage and perceived compatibility ( $f^2 = .193$ ), 3) perceived behavioral control and purchase intention ( $f^2 = .165$ ), and 4) perceived relative advantage and perceived quality ( $f^2 = .152$ ), respectively.

The remaining 11 relationships have rather small effect sizes which are, 1) attitude and brand loyalty ( $f^2 = .145$ ), 2) perceived compatibility and perceived quality ( $f^2 = .123$ ), 3) perceived relative advantage and brand loyalty ( $f^2 = .123$ ), 4) perceived behavioral control and attitude ( $f^2 = .100$ ), 5) awareness of CSI and perceived compatibility ( $f^2 = .083$ ), 6) attitude and purchase intention ( $f^2 = .069$ ), 7) perceived quality and attitude ( $f^2 = .057$ ), 8) subjective norm and attitude ( $f^2 = .054$ ), 9) brand loyalty and purchase intention ( $f^2 = .044$ ), 10) awareness of CSI and attitude ( $f^2 = .038$ ), and 11) subjective norm and purchase intention ( $f^2 = .026$ ), respectively.

Table 4.21: The results of effect size ( $f^2$ ) analysis

Variables	PWA	RA	PC	L	Q	SN	AT	BC	PI
Awareness of		0.424	0.083			0.458	0.038	0.262	0.011
CSI									
Perceived			0.193	0.123	0.152				
Relative									
Advantage									
Perceived					0.123				
Compatibility									
Brand									0.044
Loyalty									
Perceived							0.057		
Quality									
Subjective							0.054		0.026
Norm									
Attitude				0.145					0.069
Perceived							0.100		0.165
Behavioral									
Control									
Purchase									
Intention									

Note.  $f^2$  values of .02, .15 and .35 represent small, medium and large effect sizes.

#### 4.2.3 Mediating Effect Analysis and Results

The mediating effect measures the indirect effect within the inner model. The analysis of the mediating effect analyzes the power of third or more variables mediating between the independent variable (awareness of CSI) and the dependent variable (purchase intention). The mediating effect analysis identifies and explains the underlining mechanism of the relationship between variables via the inclusion of the third or more hypothetical variables, the mediator variable.

Two key metrics measured the mediating effect are 1) the size and significance of the specific indirect effect, and 2) the variance accounted for (VAF) (Carrion, et al., 2017; Hair, et al., 2017).

##### 4.2.3.1 Size and Significance of the Specific Indirect Effect

The size and significance of specific indirect effects identify the mediating effect along the paths between the independent variable and the dependent variable. The results show in Table 4.22 statistically confirmed the mediating effect from all paths, including perceived behavioral control (Specific indirect effect = .149\*\*\*,  $p < .001$ ), subjective norm (Specific indirect effect = .088\*\*,  $p < .01$ ), attitude (Specific indirect effect = .040\*\*,  $p < .01$ ), brand loyalty and perceived relative advantage (Specific indirect effect = .032\*\*,  $p < .01$ ), and attitude, perceived quality, and perceived compatibility (Specific indirect effect = .005\*,  $p < .05$ ), respectively.

Table 4.22: The Result of Size and Significance of the Specific Indirect Effect

## Analysis

Mediating Paths	Specific	SD.	<i>p</i> -value
indirect effect			
PAW → SN → PI	0.088	0.028	0.002
PAW → AT → PI	0.040	0.014	0.005
PAW → BC → PI	0.149	0.024	0.000
PAW → RA → L → PI	0.032	0.010	0.001
PAW → CP → Q → AT → PI	0.005	0.002	0.013

*Note:* SD. = Standard Deviation

## 4.2.3.2 The Variance Accounted For (VAF)

The variance accounted for (VAF) analyzed the extent to which the mediation process explains the dependent variable's variance. To further categorize the type of mediating effect or confirm the mediation impact, Hair, et al. (2017) recommended that the VAF values of lower than .2, between .2 to .8, and more than .8 represent no mediation, partial mediation, and full mediation, respectively.

The result shown in Table 4.23 reconfirmed the results of specific indirect effect analysis because the ranking of the VAF values is in a similar order. The only main difference is the mediation effect from the path of attitude, perceived quality, and perceived compatibility. The VAF value of this path did not reach the minimum threshold of .2, which signified that this mediation path does not sufficiently explain the dependent variable's variance, purchase intention.

The remaining four paths can be characterized as partial mediation. The VAF values of all these four paths are between .2 and .8, including perceived behavioral control (VAF = .639), subjective norm (VAF = .512), attitude (VAF = .323), and brand loyalty and perceived relative advantage (VAF = .0276), respectively.

Table 4.23: The results of variance accounted for analysis

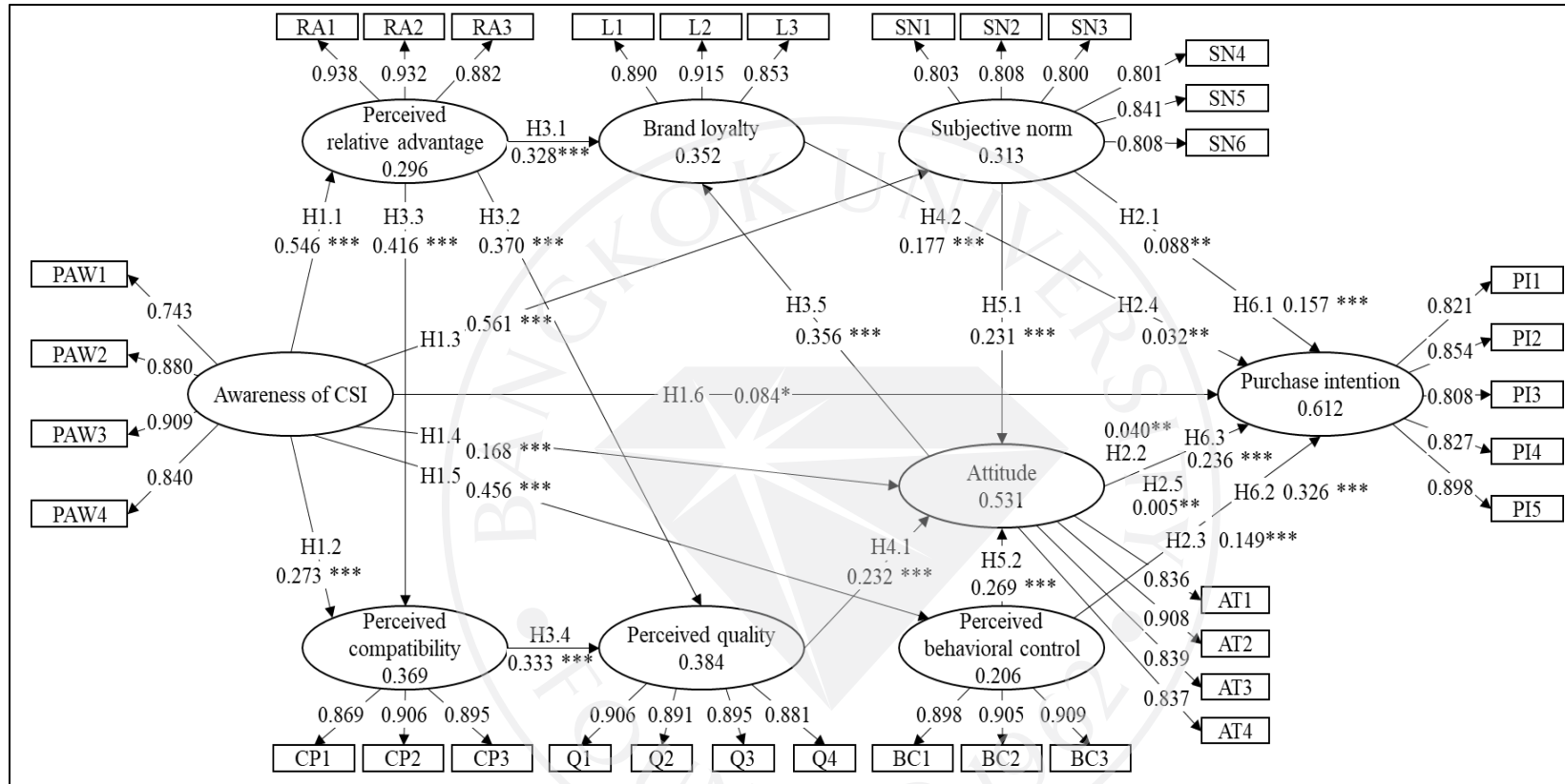
Mediating Paths	Specific indirect effect	VAF	VAF (%)	Type of Mediation
PAW → SN → PI	0.088**	0.512	51.2%	Partial
PAW → AT → PI	0.040**	0.323	32.3%	Partial
PAW → BC → PI	0.149***	0.639	63.9%	Partial
PAW → RA → L → PI	0.032**	0.276	27.6%	Partial
PAW → CP → Q → AT → PI	0.005**	0.056	5.6%	No mediation

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\* $p < .001$ , and VAF values of  $< .2$ ,  $.2$  to  $.8$ , and  $> .8$

represent no mediation, partial mediation and full mediation.

#### 4.2.4 Hypothesis Testing and Results

This CSI study aims to verify six main hypotheses that encompass 23 sub-hypotheses. The overall results of PLS-SEM analysis that verified all 23 sub-hypotheses are demonstrated in Figure 4.1.



\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 4.1: PLS-SEM Analysis Results of the CSI Conceptual Model.



Hypothesis 1: The awareness of Corporate Social Innovation (CSI) has a direct influence on innovation adoption factors, predictors of behavioral intentions, and purchase intention of CSI practicing brand amongst Thai consumers.

H1.1: The awareness of CSI has a direct influence on the perceived relative advantage of the CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis indicated that awareness of CSI has strong influential power (Path Coefficient = 0.546\*\*\*,  $p < .001$ ) on perceived relative advantage of the CSI practicing brand and can predict Thai consumers' perceived relative advantage of the CSI practicing brand at the rate of 29.6% with large effect size (Adjusted  $R^2 = 0.296$ ,  $f^2 = 0.424$ ). Therefore, sub-hypothesis 1.1 is supported by this study.

H1.2: The awareness of CSI has a direct influence on the perceived compatibility of the CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis showed that awareness of CSI directly influenced perceived compatibility of CSI practicing brand and predicted Thai consumers' perceived compatibility of CSI practicing positively at the rate of 36.9% with small effect size (Path Coefficient = 0.273\*\*\*,  $p < .001$ , Adjusted  $R^2 = 0.369$ ,  $f^2 = 0.083$ ). The sub-hypothesis 1.2 is statistically proven to be supported.

H1.3: The awareness of CSI has a direct influence on the subjective norm of CSI practicing brands amongst Thai consumers.

The results of PLS-SEM analysis showed that awareness of CSI had the strongest influential power in this structural model (Path Coefficient = .561\*\*\*,  $p < .001$ ). The awareness of CSI significantly influenced the subjective norm of CSI practicing brand with a large effect size ( $f^2 = .458$ ) and predicted their subjective

norm positively at the rate of 31.3% (Adjusted  $R^2 = .313$ ). Therefore, this sub-hypothesis 1.3 is supported by the statistical analysis of this study.

H1.4: The awareness of CSI has a direct influence on attitude towards the CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis found that the awareness of CSI had a direct influential power on Thai consumers' attitude towards CSI brand (Path Coefficient = .168\*\*\*,  $p < .001$ ) and predicted their attitude towards the CSI practicing brand positively at the rate of 53.1% with a small effect size (Adjusted  $R^2 = .531$ ,  $f^2 = 0.038$ ). Consequently, sub-hypothesis 1.4 is supported by the statistic results of this CSI study.

H1.5: The awareness of CSI has a direct influence on perceived behavioral control of CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis found that the awareness of CSI had a direct influence on Thai consumers' perceived behavioral control of CSI practicing brand and predicted their perceived behavioral control positively at the rate of 20.6% (Path Coefficient = .456\*\*\*,  $p < .001$ , Adjusted  $R^2 = .206$ ) with a medium effect size ( $f^2 = 0.262$ ). The sub-hypothesis 1.5 is statistically proven to be supported.

H1.6: The awareness of CSI has a direct influence on the purchase intention of the CSI brand practicing amongst Thai consumers.

The results of PLS-SEM analysis found that the awareness of CSI had a direct influence on Thai consumers' purchase intention of the CSI brand (Path Coefficient = .084\*,  $p < .05$ ). However, the strength of a relationship or effect size was very small ( $f^2 = .011$ ), because the effect size did not meet the statistical

acceptability standard of .02. Therefore, this sub-hypothesis 1.6 falls short in rejecting the null hypothesis in the structural model of this CSI study.

To conclude the hypothesis one, five out of six of the relationships within the first hypothesis are statistically supported by the results of PLS-SEM analysis. The awareness of CSI had a direct influence on innovation adoption factors and predictors of behavioral intentions amongst Thai consumers, including subjective norm (Path Coefficient = .561\*\*\*), perceived relative advantage (Path Coefficient = 0.546\*\*\*), perceived behavioral control (Path Coefficient = .456\*\*\*), perceived compatibility (Path Coefficient = 0.273\*\*\*), and attitude (Path Coefficient = .168\*\*\*), respectively.

Though the awareness of CSI did not significantly influence purchase intention statistically; however, the overall awareness of CSI, together with other related variables within this CSI structural model can predict positive purchase intention at a strong level of 61.2% (Adjusted  $R^2 = .612$ ).

Hypothesis 2: The awareness of CSI has an indirect effect on the purchase intention of CSI practicing brand amongst Thai consumers, as mediated by innovation adoption factors, brand equity factors, and predictors of behavioral intentions.

H2.1: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by subjective norms.

The results of PLS-SEM analysis identified that the subjective norm has a mediating effect (Specific indirect effect = .088\*\*,  $p < .01$ ) on the influential relationship from the awareness of CSI on purchase intention. Subjective norm partially mediates (VAF = .512) the influential impact of the awareness of CSI on

purchase intention at 51.2%. Therefore, sub-hypothesis 2.1 is supported by the statistic results of this CSI study.

H2.2: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by attitude.

The results of PLS-SEM analysis identified that attitude has a mediating effect (Specific indirect effect = .040\*\*,  $p > .01$ ) on the relationship between the awareness of CSI and purchase intention. Attitude partially mediates (VAF = .323) the influential impact of awareness of CSI on purchase intention. Consequently, the sub-hypothesis 2.2 is statistically proven to be supported.

H2.3: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by perceived behavioral control.

The results of PLS-SEM analysis confirmed that the perceived behavioral control has a mediating effect (Specific indirect effect = .149\*\*\*,  $p < .001$ ) on the relationship between the awareness of CSI and purchase intention. Perceived behavioral control partially mediates (VAF = .639) the influential power from awareness of CSI on purchase intention and can explain purchase intention at 63.9%. Therefore, the sub-hypothesis 2.3 is statistically proven by this CSI study.

H2.4: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by brand loyalty and perceived relative advantage.

The results of PLS-SEM analysis shown that brand loyalty and perceived relative advantage have a mediating effect (Specific indirect effect = .032\*\*,  $p < .01$ )

on the relationship between the awareness of CSI and purchase intention. Brand loyalty and the perceived relative advantage partially mediate ( $VAF = .276$ ) the influential power from the awareness of CSI on purchase intention towards CSI practicing brand. Therefore, the sub-hypothesis 2.4 is statistically proven to be supported by this CSI study.

H2.5: The awareness of CSI has an indirect effect on the purchase intention of the CSI practicing brand amongst Thai consumers, as mediated by attitude, perceived quality, and perceived compatibility.

The results of PLS-SEM analysis found that attitude, perceived quality, and perceived compatibility, somewhat, have a mediating effect (Specific indirect effect =  $.005^{**}$ ,  $p < .01$ ) on the relationship between the awareness of CSI and purchase intention. However, the VAF analysis shown the value of the mediation process explaining the dependent variable (purchase intention) was too low ( $VAF = .056$ ). The VAF values did not meet the statistical acceptability standard of  $.2$ . Consequently, this sub-hypothesis 2.5 falls short in rejecting the null hypothesis in the structural model of this CSI study.

To conclude the second hypothesis, four out of five of the mediating effect analyses are statistically proven. The results of PLS-SEM analysis confirmed that the awareness of CSI has an indirect effect on the purchase intention of CSI practicing brand. The mediating effects demonstrated through four different paths within the CSI structural model, including perceived behavioral control (Specific indirect effect =  $.149^{***}$ ), subjective norm (Specific indirect effect =  $.088^{**}$ ), attitude (Specific indirect effect =  $.040^{**}$ ), and brand loyalty and perceived relative advantage (Specific indirect effect =  $.032^{**}$ ), respectively.

Hypothesis 3: The innovation adoption factors of CSI practicing brand and attitude have a direct influence on the brand equity of CSI practicing brand amongst Thai consumers.

H3.1: The perceived relative advantage of CSI practicing brand has a direct influence on brand loyalty of CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis confirmed that the perceived relative advantage of CSI practicing brand had a direct influence on brand loyalty of the CSI brand (Path Coefficient = .328\*\*\*,  $p < .001$ ). The perceived relative advantage of CSI practicing predicted Thai consumers' brand loyalty of CSR practicing brand positively at the rate of 35.2% with medium effect size (Adjusted  $R^2 = .352$ ,  $f^2 = .123$ ). Therefore, sub-hypothesis 3.1 is supported by the results of this study.

H3.2: The perceived relative advantage of CSI practicing brand has a direct influence on the perceived quality of CSI practicing brands amongst Thai consumers.

The results of PLS-SEM analysis discovered that the perceived relative advantage of CSI practicing brand directly influenced Thai consumers' perceived quality of CSI practicing brand (Path Coefficient = .370\*\*\*,  $p < .001$ ). The perceived relative advantage of CSI practicing predicted Thai consumers' perceived quality of CSI practicing brand positively at the rate of 38.4% with a medium effect size (Adjusted  $R^2 = .384$ ,  $f^2 = .152$ .) The sub-hypothesis 3.2 is supported by the PLS-SEM analysis results of this study

H3.3: The perceived relative advantage of CSI practicing brand has a direct influence on the perceived compatibility of CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis confirmed that the perceived relative advantage of CSI practicing brand had a direct influence on the perceived compatibility (Path Coefficient = .416\*\*\*,  $p < .001$ ). The perceived relative advantage of CSI practicing brand predicted Thai consumers' perceived compatibility of CSI brand at the rate of 36.9% with a moderate influence at medium effect size (Adjusted  $R^2 = .369$ ,  $f^2 = .193$ ). Therefore, the sub-hypothesis 3.3 is supported by this CSI study.

H3.4: The perceived compatibility of CSI has a direct influence on the perceived quality of the CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis confirmed that the perceived compatibility of CSI directly influenced the perceived quality of the CSI brand (Path Coefficient = .333\*\*\*,  $p < .001$ ). The perceived compatibility of CSI practicing brand predicted Thai consumers' perceived quality at the rate of 38.4 % with a small effect size (Adjusted  $R^2 = .384$ ,  $f^2 = .123$ ). The sub-hypothesis 3.4 is statistically supported by the results of this study.

H3.5: The attitude towards CSI practicing brand has a direct influence on the brand loyalty of CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis found that the attitude towards CSI practicing brand directly influenced the brand loyalty of CSI practicing brand (Path Coefficient = .356\*\*\*,  $p < .001$ ). The attitude towards CSI practicing brand predicted the brand loyalty of CSI practicing brand at the rate of 35.2% with a medium effect size (Adjusted  $R^2 = .352$ ,  $f^2 = .145$ ), therefore, this CSI study supports the sub-hypothesis 3.5.

To conclude the third hypothesis, all five sub-hypotheses are supported by the statistical results of PLS-SEM analysis. The innovation adoption factors of CSI practicing brand and the attitude are statistically proven to have a direct influence on the brand equity of CSI practicing brand amongst Thai consumers, including perceived relative advantage influenced perceived compatibility (Path Coefficient = .416\*\*\*), perceived relative advantage influenced perceived quality (Path Coefficient = .370\*\*\*), attitude influenced brand loyalty (Path Coefficient = .356\*\*\*), perceived compatibility influenced perceived quality (Path Coefficient = .333\*\*\*), and perceived relative advantage influenced brand loyalty (Path Coefficient = .328\*\*\*), respectively.

Hypothesis 4: The brand equity of CSI practicing brand has a direct influence on attitude and purchase intention of CSI practicing brand amongst Thai consumers.

H4.1: The perceived quality of CSI practicing brand has a direct influence on the attitude of CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis revealed that the perceived quality of the CSI brand directly influenced the attitude of Thai consumers on CSI practicing brand (Path Coefficient = .232\*\*\*,  $p < .001$ ). The perceived quality of CSI practicing brand predicted attitude of CSI practicing brand positively at the rate of 53.1% with a small effect size (Adjusted  $R^2 = .531$ ,  $f^2 = .057$ ). The sub-hypothesis 4.1 is supported by the statistical analysis results of this CSI study.

H4.2: The brand loyalty of CSI practicing brand has a direct influence on the purchase intention of CSI practicing brands amongst Thai consumers.



The results PLS-SEM analysis discovered that the brand loyalty of CSI practicing brand directly influenced Thai consumers' purchase intention of the CSI brand (Path Coefficient = .177\*\*\*,  $p < .001$ ). The brand loyalty of CSI practicing predicted Thai consumers' purchase intention positively at the rate of 61.2% with a small effect size (Adjusted  $R^2 = .612$ ,  $f^2 = .044$ ). The sub-hypothesis 4.2 is statistically proven to be supported.

To conclude the fourth hypothesis, both sub-hypotheses are statistically supported by the results of this study. The brand equity of CSI practicing brand is proven to have a direct influence on attitude and purchase intention of CSI, including perceived quality influenced attitude (Path Coefficient = .232\*\*\*,  $p < .001$ ), and brand loyalty influenced purchase intention (Path Coefficient = .177\*\*\*,  $p < .001$ ), respectively.

Hypothesis 5: The subjective norms and perceived behavioral control of CSI practicing brand have a direct effect on attitude toward CSI practicing brand amongst Thai consumers.

H5.1: The subjective norm of CSI practicing brand has a direct influence on attitude towards the CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis confirmed that the subjective norm of CSI practicing brand directly influenced the attitude towards the CSI brand (Path Coefficient = .231\*\*\*,  $p < .001$ ). The subjective norm of CSI practicing brand predicted the attitude positively at the rate of 53.1% with a small effect size (Adjusted  $R^2 = .531$ ,  $f^2 = .054$ ). Consequently, the sub-hypothesis 5.1 is supported by the PLS-SEM results of this study.

H5.2: The perceived behavioral control of CSI practicing brand has a direct influence on attitude towards CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis found that the perceived behavioral control of the CSI brand had a direct influence on the attitude of Thai consumers towards CSI brand (Path Coefficient = .269\*\*\*,  $p < .001$ ). The perceived behavioral control of the CSI brand predicted the attitude towards CSI practicing brand at the rate of 53.1% with moderate influence and small effect size (Adjusted  $R^2 = .531$ ,  $f^2 = .100$ ). Therefore, the sub-hypothesis 5.2 is statistically supported by the results of this study.

To conclude the fifth hypothesis, both sub-hypotheses are statistically supported by the results of this study. The subjective norms and perceived behavioral control of CSI practicing brand is statistically proven to have a direct influence on attitude toward CSI practicing brand, including perceived behavioral control influenced attitude (Path Coefficient = .269\*\*\*), and subjective norm influenced attitude (Path Coefficient = .231\*\*\*), respectively.

Hypothesis 6: The predictors of behavioral intentions of CSI practicing brand have a direct influence on the purchase intention of CSI practicing brand amongst Thai consumers.

H6.1: The subjective norm for CSI practicing brand has a direct influence on the purchase intention of CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis confirmed that the subjective norm of CSI practicing brand had a direct influence on the purchase intention of CSI practicing brand (Path Coefficient = .157\*\*\*,  $p < .001$ ). The subjective norm of CSI practicing brand predicted Thai consumers' purchase intention positively at the rate of

61.2% with a small effect size (Adjusted  $R^2 = .612$ ,  $f^2 = .026$ ). The sub-hypothesis 6.1 is supported by the results of this CSI study.

H6.2: The perceived behavioral control of CSI practicing brand has a direct influence on the purchase intention of CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis discovered that the perceived behavioral control of CSI practicing brand directly influenced (Path Coefficient =  $.326^{***}$ ,  $p < .001$ ). The perceived behavioral control of CSI practicing brand predicted Thai consumers' purchase intention positively at the rate of 61.2% with a medium effect size (Adjusted  $R^2 = .612$ ,  $f^2 = .165$ ). The sub-hypothesis 6.2 is supported by the PLS-SEM analysis results of this study.

H6.3: The attitude towards CSI practicing brand has a direct influence on the purchase intention of the CSI practicing brand amongst Thai consumers.

The results of PLS-SEM analysis found that the attitude towards the CSI brand directly influences their purchase intention (Path Coefficient =  $.236^{***}$ ,  $p < .001$ ). The attitude towards the CSI brand predicted Thai consumers' purchase intention of CSI brand at the rate of 61.2% with a small effect size (Adjusted  $R^2 = .612$ ,  $f^2 = .069$ ). The final sub-hypothesis, H6.3, is also supported by the statistical results of PLS-SEM analysis.

To conclude the final hypotheses, all three sub-hypotheses of the sixth hypothesis are supported by the PLS-SEM analysis results. The predictors of behavioral intentions of CSI practicing brand are statistically proven to have a direct influence on purchase intention. They can statistically predict (Adjusted  $R^2 = .612$ ) purchase intention of CSI practicing brand amongst Thai consumers, including

perceived behavioral control influenced purchase intention (Path Coefficient = .326\*\*\*), attitude influenced purchase intention (Path Coefficient = .236\*\*\*), and subjective norm influenced purchase intention (Path Coefficient = .157\*\*\*), respectively.

#### 4.3 Summary of the Results

The results of the Partial Least Square-Structural Equation Model (PLS-SEM) analysis on the overall conceptual model and each of the 23 relationships within six hypotheses have unveiled the complexity of cause-effect relationship models with latent variables of this CSI study.

A total of 21 relationships are found to be statistically accurate and supported by this study. The remaining two relationships of, 1) the awareness of CSI and purchase intention of CSI practicing brand, and 2) the mediating effect of attitude, perceived quality, and perceived compatibility in-between awareness of CSI and purchase intention are lack of statistical evidence to support their significances as shown in Table 4.24.

Table 4.24: The Summary Results of Hypotheses Testing

Hypotheses		Paths	Results
HP1	H 1.1	$PAW \rightarrow RA$	Supported
	H 1.2	$PAW \rightarrow CP$	Supported
	H 1.3	$PAW \rightarrow SN$	Supported
	H 1.4	$PAW \rightarrow AT$	Supported
	H 1.5	$PAW \rightarrow BC$	Supported
	H 1.6	$PAW \rightarrow PI$	Null
HP2	H 2.1	$PAW \rightarrow SN \rightarrow PI$	Supported
	H 2.2	$PAW \rightarrow AT \rightarrow PI$	Supported
	H 2.3	$PAW \rightarrow BC \rightarrow PI$	Supported
	H 2.4	$PAW \rightarrow RA \rightarrow L \rightarrow PI$	Supported
	H 2.5	$PAW \rightarrow CP \rightarrow Q \rightarrow AT \rightarrow PI$	Null
HP3	H 3.1	$RA \rightarrow L$	Supported
	H 3.2	$RA \rightarrow Q$	Supported
	H 3.3	$RA \rightarrow CP$	Supported
	H 3.4	$CP \rightarrow Q$	Supported
	H 3.5	$AT \rightarrow L$	Supported
HP4	H 4.1	$Q \rightarrow AT$	Supported
	H 4.2	$L \rightarrow PI$	Supported
HP5	H 5.1	$SN \rightarrow AT$	Supported
	H 5.2	$BC \rightarrow AT$	Supported

(Continued)

Table 4.24 (Continued): The summary results of hypotheses testing

Hypotheses			Paths	Results
HP6	H 6.1	SN	$\rightarrow$ PI	Supported
	H 6.2	BC	$\rightarrow$ PI	Supported
	H 6.3	AT	$\rightarrow$ PI	Supported

*Note.* PAW = awareness of CSI, RA = perceived relative advantage, CP = perceived compatibility, Q = perceived quality, L = brand loyalty, SN = subjective norm, AT = attitude, BC = perceived behavioral control, and PI = purchase intention.

The results of this study shade light to the research objectives and research questions that 1) the awareness of CSI has direct influential power on the innovation adoption factors and predictors of behavioral intentions, and the awareness of CSI indirectly influences the purchase intention of CSI brand among Thai consumers, 2) the innovation adoption factors of CSI practicing brand have a direct influence on the brand equity of the CSI practicing brand amongst Thai consumers, 3) The brand equity of CSI practicing directly influences the predictors of purchase intention of CSI practicing brand among Thai consumers, and 4) the brand equity and predictors of purchase intention have influential power and predictive power on the purchase intention of CSI practicing band among Thai consumers.

## CHAPTER 5

### DISCUSSION

This chapter discussed the critical examination of the statistical findings statistically evidenced in the previous chapter. The analysis and elucidations are based on a review of the literature and theories, together with the researcher's analytical views and interpretations.

The discussions are addressed in seven main sections which are 1) introduction, 2) summary of descriptive findings and discussion, 3) hypotheses summary and discussion, 4) recommendation for future application, 5) recommendation for future research, 6) conclusion of the study, and 7) limitations of the study.

#### 5.1 Introduction

The purpose of this study is to verify the influential impact of Corporate Social Innovation (CSI) towards purchase intention, and other factors related to business practices and brand communications. This study explores an opportunity to stimulate informed decisions in practicing CSI for professionals as well as fill in the gap in the body of knowledge for academia.

The conceptual model of this study was developed from a triangulation of Diffusion of Innovation Theory, Brand Equity Model, and the Theory of Planned Behavior. The study was carried out in Bangkok Metropolitan to collect 480 samples within the sampling framework. Through the Partial Least Squared-Structural Equation Model analysis (PLS-SEM), the results of this study unveiled a substantial

potential for the long-term practice of CSI. The concept of CSI that influenced various factors of marketing and brand communications was addressed in the conceptual model that is verified by six main hypotheses, composing of 23 relationships in this CSI study.

## 5.2 Summary of Descriptive Finding and Discussion

### 5.2.1 Summary of Sample's Descriptive Findings and Discussion

The demographic information of 480 millennial Thais responded to the questionnaire include the sample's personal information, which comprised of gender, age range, household income, educational level, and occupation. The samples who responded to the survey were equally spread between male and female at 50% to 50%. The largest group of the samples who responded to the survey were young millennial Thais age between 25 to 30 years old, which encompassed 40.6% of the total collected samples.

Furthermore, the descriptive findings identified that 84.1% of the total samples are those who have household income between 10,000 to 59,999 Thai baht (THB), which consisted of 20,000 to 29,999 at 23.1%, 30,000-39,999 at 18.3%, 50,000–59,999 at 14.8%, and 10,000–19,999 at 14.6%. The higher income group beyond 59,999 consisted of 9.4%, while only 1.9% earns below 10,000 THB. Most of the samples, at 66.9% of total samples, who responded to this study have a bachelor's degree.

### 5.2.2 Summary of Variables' Descriptive Findings and Discussion

The samples responded to this study had been drawn from a normally distributed populations, and can be representative of the population, according to the



results of the normality tests (Hair, et al., 2010); as a result, the collected data was accepted to this study (Skewness = -1 to 0, Kurtosis = -.4 to .4).

The descriptive analysis reviewed that Thais consumers highly agreed ( $\bar{x} > 3.21$ ) with each of all 35 indicators (Moidunny, 2009). As a result, all nine variables were agreed at a high level and a very high level. Thai consumers agreed with perceived relative advantage and attitude at a very high level of the agreement ( $\bar{x} > 4.20$ ). The results suggested that both the tangible values that impact perceived relative advantage and the emotional values that impact attitude are highly crucial to Thai consumers in regards to the CSI practicing. The perceived behavioral control, perceived quality, purchase intention, awareness of CSI, perceived compatibility, perceived brand loyalty, and the subjective norm was highly agreed by the respondents who responded to this study.

### 5.3 Hypotheses Summary and Discussion

The results of this study have proven that the awareness of the brand that practiced CSI has an influential impact on purchase intention. Furthermore, the awareness of CSI also has both a direct impact on crucial factors that have a strong tendency to be a predictor of purchase intention as well.

This study has a total of six hypotheses that addressed by 23 sub-hypotheses, examining 23 relationships between nine different factors on the direct and indirect impact of CSI. Twenty-one relationships were found to be statistically supported based on the results of the Partial Least Squares-Structural Equation Model (PLS-SEM) analysis.

This CSI study has statistically demystified five thought-provoking notions underlining the practice of CSI. Through the proposed conceptual model with a total of nine variables, the five identified notions that bring S.M.I.L.E. to the discussion of such a positively powerful CSI concept are 1) superiority, 2) mediating, 3) influence, 4) linkage, and 5) evolution.

#### 5.3.1 Superiority

The superiority of CSI was discovered as the CSI concept was seen to be superior to the current practice and compatible with the current needs of Thai consumers, which demonstrated the potential of adoption of the CSI practicing brands. Awareness of CSI was identified by this study to have a strong influential power. It can be a predictor of the perceived relative advantage of the CSI brand, based on the results of sub-hypothesis 1.1. This result supported that the CSI phenomenon that incorporated innovation within its concept can potentially replace the traditional CSR model in Thailand. As Rogers (1983) suggested that perceived relative advantage is the degree to which an innovation is perceived as being superior to the ideas that are superseded or being replaced.

Despite the fact that the impact of awareness of CSI can potentially be even more substantial in generating perceived competitive advantage if it is related to a well-established brand, as addressed by Vaccaro (2008) that the level of influential power from brand awareness towards perceived competitive advantage could differ by the establishment of the brand as well as marketing and communication initiatives, especially in cause marketing campaigns, henceforth, this study reviewed that, Thai consumers are more receptive to the concept of CSI since even without clear

association with any specific brand, CSI does have influential power on perceived relative advantage among Thai consumers.

Furthermore, the awareness of CSI directly influenced the perceived compatibility of CSI practicing brand, based on the result of sub-hypothesis 1.2. This relationship magnified the merit of CSI as perceived compatibility, which is the degree to which innovation is perceived as being constant with the existing values, past experiences, and needs of potential adopters (Rogers, 1983).

This supportive finding indicated the positive influential and predictive power of CSI as it is aligned with the previous study conducted by Ax and Greve (2017) that confirmed the positiveness of the content related to awareness could enhance compatibility as well as mediating to behavioral intention. This finding demonstrated that Thai consumers perceived the CSI concept to have similar value to the existing value that their expectation, if not better, compared to current CSR practice. This result created an excellent opportunity for CSI to replace CSR with potentially minimal hesitation in value replacement.

### 5.3.2 Mediating

The mediating factors for purchase intention was realized since the power of the CSI concept was mediated rather than having a full direct impact as proven by the results of the second hypothesis. Even though empirical literatures that have proven the direct relationship between Corporate Social Responsibility (CSR), the earlier stage of CSI, and purchase intention (Bianchi, Bruno, & Sarabia-Sanchez, 2019; Kim & Lee, 2012; Lee & Shin, 2010; Mulaessa & Wang, 2017; Wigley, 2008). There is no existing direct reference on the concept of CSI.

The absent of the direct impact from the CSI concept to purchase intention is, arguably, due to the innovative nature of this paradigm shift, which is rather conceptual in nature where respondents could not tangibly perceive the immediate value of CSI adequately to make a clear decision towards purchase intention on the brands that practiced CSI. Chen, et al. (2008) addressed in the decision framework that two of the four main elements in the adoption of innovation are communication and time that enhanced knowledge and understanding towards specific innovation, which led to the enhancement of innovation adoption.

Another arguable reason is the level of openness to the innovation of the respondents in this CSI study. Ho and Wu (2011) identified that consumer innovativeness moderates the relationship between influential factors and adoption intention for innovative products. This CSI study only excluded innovation rejector and recruited all five segments of consumers in terms of openness to innovation adoption into the data collection, including laggards according to the Diffusion of Innovation Theory (Rogers, 2010).

Even the statistical result does not support the direct influential impact of the CSI concept on purchase intention. The researcher saw the significant merit of this initial indication, as it pioneers the learning that has the potential to connect CSI to business operations and communications in a sustainable way, supported by the results of meditating impacts generated by the power of the awareness of CSI practicing.

All of the predictors of behavioral intentions mediated the influential power of CSI on purchase intention. Subjective norm, attitude, and perceived behavioral control had a mediating effect that could explain the purchase intention, which

coincided with various standing literature (Godin & Kok, 1996; Han, et al., 2010; Paul, et al., 2016).

Han, et al. (2010) applied the Theory of Planned Behavior (TPB) to explain the relationship between the purchase intention to environmentally preserved green-hotel. Their results emphasized that the subjective norm positively affected intention to stay at a green-hotel, mediating the awareness of the green-hotel. Furthermore, the influential power of CSI that drives the impact of the mediating factors also reconfirmed the TBP. Ajzen (1985) anticipated three types of considerations that guided human behavior, where the subjective norm reflected the normative expectations of others, which influenced particular intention to perform a behavior. This supported result specified that the CSI has influential power on other's views towards an individual to purchase the CSI practicing brand. It persuaded significant-others or social pressure to have positive expectations towards the action of an individual regarding the brand that practices CSI in Thailand.

It is noteworthy that the subjective norm is one of the critical factors to mediate the influential power of the awareness of CSI on the purchase intention of CSI practicing brand. Thailand is one of the countries that value collectivism at the highest level ("The culture compass", 2020). The Thais' collectivist societies people belong to a group that takes care of them for belonging and loyalty. The commitment to significant others is above many other societal rules.

The proven mediating powers of attitude and perceived behavioral controls supported the existing literature (Godin & Kok, 1996; Paul, et al., 2016). Godin and Kok (1996) reinforced the efficiency of the theory in explaining intention significantly well. The perceived behavioral control was significantly identified in

explaining variation in behavioral intention in their review of the TPB applications to health-related behaviors. Twenty years later, Paul, et al. (2016) reconfirmed the significant mediating power of the perceived behavioral control on purchase intention in their green product study.

Ajzen (1985) theorized that the degree of favorable or unfavorable evaluation of an individual's attitude reflected the outcomes of performing the action in a person's consideration. The result of this CSI study reconfirmed this assumption. It is notable that, in the view of Thai consumers, the awareness of CSI can create a favorable attitude towards the CSI practicing brand. Such a positive attitude can significantly predict and mediate the awareness of CSI on the purchase intention of CSI practicing brand.

The perceived behavioral control, according to the TPB proposed by Ajzen (1985), denoted a perception of an individual in their ability to perform an intended behavior to the degree that reflects an actual behavioral control. The perceived behavioral control had the strongest predictor and mediating effect amongst the three predictors of the TPB amongst Thai consumers, according to the results of this CSI study.

### 5.3.3 Influence

The influence of CSI was explicated since the awareness of CSI influenced all factors that lead to the purchase intention in this CSI study, as proven by the results of the first hypothesis. Even though CSI is an innovative paradigm, but CSI has a robust influential power to the level that can influence both innovation adoption factors and predictors of behavioral intentions, which coincided with various existing studies (Coleman, Bahnan, Kelkar, & Curry, 2011; Dodd & Supa, 2011; Jalilvand,

Ebrahimabadi, & Samiei, 2011; Johe & Bhullar, 2016; Lu, Chang, & Chang, 2014; Mi, Chang, Lin, & Chang, 2018; Montano & Kasprzyk, 2015; Rezai, Mohamed, Shamsudin, & Chiew (2010); Thongprasert, 2012).

Peslak, et al. (2010) verified that perceived compatibility and perceived relative advantage are positively associated with intention to use social networking. While Wang, et al. (2016) examined in their study of the intention to adopt hybrid electronic vehicles using an extended model of the Theory of Planned Behavior (TPB) and found that the awareness of social cause along with innovation influenced each of the three primary elements of the TPB. The three factors of TPB can predict behavioral intention to adopt the hybrid electronic-vehicles.

Nonetheless, the direct influential power from awareness toward behavioral intention is rather challenging. Montano and Kasprzyk (2015) identified the controllable and uncontrollable factors that could mediate behavioral intention based on the Diffusion of Innovation (DOI) model that attempt to explain the critical factors to the adoptions of innovation which included perceived relative advantage and perceived compatibility (Rogers, 1983). Wang, et al. (2016) addressed that all three primary elements of the TPB framework have mediating influence over the intention to adopt a hybrid electronic vehicle where both studies began with awareness.

With high regards to the existing studies and theoretical frameworks, even though the awareness of CSI does not have a direct influential impact on purchase intention. The CSI remains a powerful factor for Thai consumers regarding the purchase intention. This structural model can predict the purchase intention related to CSI at 61.2%, which is considered a robust model, as identified by Hair, et al. (2017). The awareness of CSI has a direct influential impact on various key variables,

including the innovation adoption factors and the predictors of behavioral intentions of the CSI practicing brand in Thailand.

#### 5.3.4 Linkage

The Linkage of theories and model had been unveiled through the power of CSI. By the triangulated approach of Diffusion of Innovation Theory, Brand Equity, and Theory of Planned Behavior, the influential power of the CSI concept generated the relationships across variables from different theories that support various existing literature.

Tan and Chou (2007) addressed in their study on mobile service that, for new products and services, the intermediate role of perceived quality and perceived compatibility enhance the level of adoption. Their study interlinked DOI and Brand Equity to observe the mediating effects. Furthermore, Amaro and Duarte (2015) verified the interlinkage between the Diffusion of Innovation Theory and the Theory of Planned Behavior that mediated the influential power of digital solutions on purchasing travel online. The three factors of TPB have mediating effects and can be predictors of the adoption of the innovation of hybrid electric vehicles (Wang, et al., 2016).

Through these impactful mediating factors, this CSI study has unveiled the interlinkage between the Diffusion of Innovation Theory, the Theory of Planned Behavior, and Brand Equity that mediated the influential power from the awareness of CSI on purchase intention towards CSI practicing brand. These interlinked factors, based on the results of the CSI structural model analysis, can potentially be the framework to enhance the power of CSI, and at the same time, influence the purchase



intention of the CSI practicing brand. It is noteworthy that these mediating factors can facilitate the adoption of the pioneering concept of CSI amongst Thai consumers.

### 5.3.5 Evolution

The evolution of CSI had demonstrated a strong potential. It is satisfactory to confirm that the purchase intention of Thai consumers towards the CSI practicing brand can be predicted. This predictability can create win-win solutions for both business and society. The results of this pioneering study in Thailand can be the beginning of the evolutions in the area of business practice, theories integration, and a potential model for the adoption of social innovation.

The CSI concept in itself is a revolutionary one that combines value for business together with the value for the society and wellbeing of others. By proving the positive impacts of the CSI practicing brand on purchase intention, the business could evidently evolve itself into the next model of business operation where selling goods and going good can coexist through the practice of CSI.

This study of “Goods to Good: Effect of Thai Consumers’ Awareness of Corporate Social Innovation (CSI) on Brand Purchase Intention” identified predictability of purchase intention at 61.2%, which skews towards a strong predictability result. The CSI conceptual model of this study can be an initial foundation for CSI practicing; especially, the conceptual framework has been holistically verified through the triangulated theories ranges from awareness, adoption factors, brand equity values, and predictive indicators of behavioral intent.

Weigel, Hazen, Cegielski, and Hall (2014) addressed that the integration between the Diffusion of Innovation Theory (DOI) and the Theory of Planned Behavior (TPB) is a foundation of a framework in understanding the adoption of

innovative paradigm. Furthermore, the awareness of the brand in relation to innovation can enhance purchase intention more than general awareness (Wu & Ho, 2014). The results of this CSI study responded to their recommendations in identifying the connecting relationship between the two theories, and beyond, in order to identify an even more solid foundation for future examination of the adoption propensity of a specific innovation such as CSI.

Enhancing the awareness of CSI is the key to potentially enhance purchase intention. There are several pieces of literature reconfirmed knowledge is the factor that increases the influential power of DOI on purchase intention and together with a clear understanding of the characteristic of innovation can encourage even more positive results (Agag & El-Masry, 2016; Van Slyke, Lou, & Day, 2002).

It is vital to note that the practice of CSI in Thailand can create an influential impact on the purchase intention towards the CSI practicing brand amongst Thai consumers. Symonteniously, during the adoption process, the CSI can influence innovation adoption factors, brand equity, as well as predictors of behavioral intent amongst Thai consumers.

Even though Thailand is one of the leading countries in the adoption of technology and digital lifestyle, but at the same time, Thais live in a collectivist culture. (“The culture compass”, 2020; “Digital 2020 global digital overview”, 2020). The results of this CSI study demystified the crucial factors influencing the adoption process and factors facilitating the behavioral intent within the complexity of Thais.

#### 5.4 Recommendation for Future Application

To take a full benefit of the significance of this study, the recommendations for future application of this CSI study are identified into four dimensions which are 1) recommendation for academia, 2) recommendation for practitioners, 3) recommendation for policymakers, and (4) recommendation for society as a whole.

##### 5.4.1 Recommendations for Academia

This CSI study has identified three main developments that can fill the gap in body knowledge and initial advancement from a theoretical point of view. First, this study fills the gap in the body of knowledge that the practice of CSI concept has influential power on purchase intention, which is an extension of the existing literature that mainly studied the impact of CSR, the former conceptual paradigm of CSI. The results of this CSI study can be a reference point for other likeminded academia who interests in the new paradigm of CSI and its impact, especially toward the business result.

The second recommendation for academia is the advancement in the area of triangulation of theories from this CSI study. The statistically proven linkage between Diffusion of Innovation Theory (DOI), Brand Equity Model, and Theory of Planned Behavior (TPB) has shaded new lights to the potential methodological triangulation for the potential studies that relate to innovation. These three theories, altogether, addressed the consumers' consideration journey in purchasing a specific brand that ranges from awareness, adoption factors, brand equity, and factors to predict or enhance purchase intention in both personal factors and social influencing factors. Academia who has an interest in the innovation-related topics can initially apply this triangulated methodology for their studies. Each of the correlated variables and

influential power between specific variables in this triangulated methodology has already provided innovation adoption criteria, predictors of intentional behavior formation, as well as impact to equity of the brand.

Furthermore, with high regard to existing literature, the research studies that have triangulated theoretical constructs using PLS-SEM, arguably, remain limited (Hooi, Abu, & Rahim, 2018). This CSI study fills the gap in the body of knowledge through multidimensional constructs to enhance the understanding of overall intention to adopt specific innovation through advanced statistic method, PLS-SEM.

The third recommendation is the identification of the level of the predictive power of critical variables within these three theories, which could be further prioritized for the future study to come in order to have an even more effective conceptual model in regard to the CSI paradigm and other innovation-related topics. Academia who has interests in the same variables can strategize the conceptual model based on the results of the statistically confirmed relationship and predictive power of each variable from this CSI study in order to strengthen their studies and hypotheses.

#### 5.4.2 Recommendations for the Practitioners

The results of this CSI study have verified three recommendations for the practitioner. First, practitioners, who are brand owners, can use the results of this CSI study as a reference point to have an informed decision to incorporating the CSI practice as part of their marketing strategy and product development. The concept of CSI is proven to not only benefit the society but also provide benefits to the business in the form of enhancing purchase intention.

The second recommendation for practitioners, who are communicators, is the communication framework. Communicators can use the conceptual framework and

the results of this CSI study to create a potential communication framework for the brand that aims to practice CSI. Because the CSI conceptual framework already incorporated all crucial communications factors within its variables as well as proven impacts and level of significance of each factor to potentially create an effective communication strategy and plan, which encompasses three key elements.

The first key element is that Diffusion of Innovation Theory (DOI) related to CSI has identified the critical factors of adoption together with a type of possible knowledge needed to ensure the success of the adoption, relative advantage, and compatibility. The second element is regarding Theory of Planned Behavior (TPB) related to CSI. The communication should communicate both to selected individuals as well as to the society to create a holistic impact on attitude, perceived behavioral control, and subjective norm from the social influential power. The third element is the brand equity, which is a mediating factor that helps drive the positive purchase intention of the brand that practices CSI.

The third recommendation to practitioners, who are sale professions, is to have a new identified tool to help enhance the sale potential of the brand on top of their current solutions and strategies to create purchase intention, which will result in enhancing the sale. Sale professions can use the results of this CSI study to support their decision in using CSI as another marketing communication tool. The CSI can create an incremental sale on top of their existing sale tools because this CSI study has successfully identified the potential prediction of purchase intention at 61.2%.

#### 5.4.3 Recommendations for the Policymakers

By reasons of the climatic and other issues that emerge from different dimensions that impact both business and society at large such as Coronavirus

(COVID-19) outbreak, PM 2.5, natural disaster together with low GDP prediction, and high depth of each household. Policymakers must identify a win-win solution that supports both the high quality of living and economic enhancement.

Policymakers can utilize the finding of this CSI study as a supplied information to have an alternative solution in driving large corporations to sustain the business, society, and the environment altogether. The results of this CSI study can support policymakers to set a general caused of action and corporate compliance guidelines to drive the desired outcome in creating a win-win solution for business and society through CSI.

#### 5.4.4 Recommendations for Society as a Whole

The results of this CSI study have signified three recommendations for society as a whole. The Thai society holds the influential power to the adoption of CSI on the related triangle of Thai consumers, practitioners, as well as policymakers.

First, society holds the power that can influence Thai consumers on the adoption of CSI practicing brands. The results of this study decoded the positive power of the society that if the society voices out the expectation towards the adoption of a good-will brand, the individual consumer will likely to follow.

At the same time, the society also has the power to signify the need for doing good, practice CSI to practitioners. Together with the influential power on each consumer, the practitioners will likely adopt the CSI into their marketing and communications if they see an apparent demand from individual consumers, as well as society.

Lastly, society can also influence policymakers on regulating the practice of CSI to the organizations, either to expand the adoption to more related businesses or

to fasten the adoption process. Ultimately, to have a better society as a whole, members of society can now have the influential power to bring an ideal concept to the real world through CSI.

### 5.5 Recommendations for Future Research

The researcher encourages future studies to seize these following five recommendations.

To reduce the level of bias towards the concept of CSI in terms of the understanding gap, the first recommendation for future CSI studies is to identify tangible CSI practice in the real world as a stimulus for the study to be the reference point for the research participants, for instance, the practice of CSI from SCB (Siam Commercial Bank) or the practice of CSI from SCG (Siam Cement Group). The concrete CSI stimulus can create a solid frame of reference for the respondents when considering the impact of CSI practicing brand.

The second recommendation for future research to create a rich understanding of the impact of CSI towards consumers is to collect data and segment respondents based on the level of openness to innovation adoption. According to the Diffusion of Innovation Theory (DOI), a different level of openness to innovation adoption might have an effect on the degree of consumer adoption intention. By segmenting the respondents by the level of openness to innovation adoption, the future study can have a clear comparison that could validly identify the total effectiveness of the CSI concept on a variety segment of consumers.

The third recommendation is to incorporate the DOI adoption process into the conceptual model and the research design. The knowledge and time are two essential

factors to the degree of innovation adoption. By providing clear information about the CSI brand, its value, as well as allowing a period of time for observability can create a better understanding of the impact of the CSI concept without the barrier of conceptual clarification or understanding towards the novel paradigm.

The fourth recommendation is based on the Theory of Planned Behavior (TPB). Since the subjective norm is one of the predictors of behavioral intent, it is encouraging also to measure if the society will accept and encourage an individual to prefer a brand that practices CSI over a brand that does not practice CSI.

The final recommendation is the wishful hope of the researcher to have CSI study in different geographic parts of the nation and the world. To have a conclusive understanding of the impact of CSI at the national level as well as global level equips the global corporates to make an informed decision to adopt the CSI paradigm into their global business practices, which will potentially create a positive impact to all.

## 5.6 Conclusion of the Study

This “Goods to Good: Effect of Thai Consumers’ Awareness of Corporate Social Innovation (CSI) on the Innovation Adoption Factors, Predictors of Behavioral Intention, and Brand Purchase Intention” is a pioneer study that identified the relationship between the novel paradigm of CSI and the purchase intention. Twenty-one out of 23 relationships under the six main hypotheses were proven by PLS-SEM analysis to be statistically supported. The pioneered results proved that the CSI concept has influential power on adoption factors of innovation, brand equity, predictors of behavioral intents, and purchase intention. The study has also proven the triangulated framework and interlinkage between The Diffusion of Innovation Theory



(DOI), Brand Equity, and The Theory of Planned Behavior (TPB). This interlinkage innovated a new framework for the adoption process of innovation of Thai consumers, from the awareness to purchase intention.

Based on the results of this study, the researcher proposes the Corporate Social Innovation (CSI) adoption model that organizations can further utilize as a framework to practice the CSI. The CSI essentially encompasses shared values between business, consumers, and society altogether. The proposed CSI adoption model shown in Figure 5.1 demonstrates a Venn diagram of (1) company, (2) society, and (3) individual consumer.

The CSI adoption model is rooted in the logical relationship between the three parties concerning the business operation. Firstly, the relationship between the CSI practicing company and society is the shared value. The CSI practicing company provides value to the society that creates a mutual benefit to both company and society. Secondly, the relationship between society and an individual consumer is the influential power that society has on the consumers towards selecting or purchasing products or services from the CSI practicing company. Lastly, the relationship between an individual consumer and the company is the business impact, that consumer has the intention to purchase products or services from the CSI practicing company.

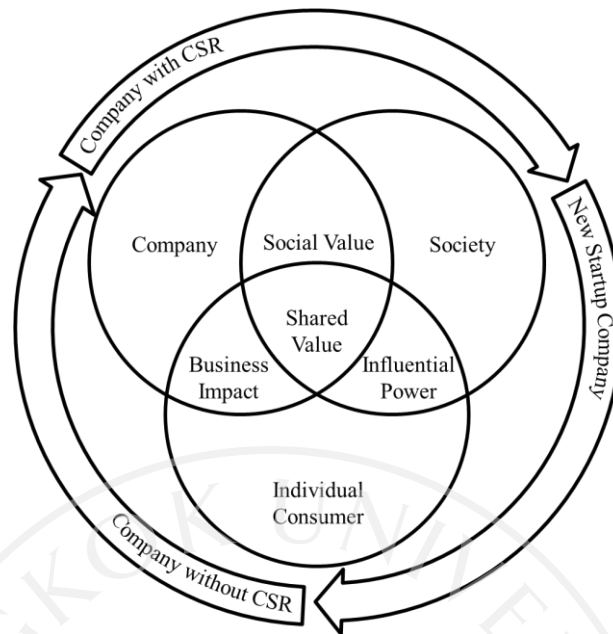


Figure 5.1: The Corporate Social Innovation (CSI) Adoption Model

On top of the logical relationships between company, society, and individual consumer, the CSI adoption model also provides a starting point and framework for a company with different levels of involvement in social responsibility. The starting points are identified under the basis that the company with different levels of business establishment and involvement with social responsibility has different interests to adopt the CSI. The CSI adoption model breathers on the three basic assumptions. First, the CSR practicing company is actively conducting business for the greater good of society. Such company is willing to evolve its operation to practice the CSI for its superior shared value to the CSR. Second, the non- CSR practicing company focuses more on business results and is willing to practice the CSI when there is a demand from consumers, and the positive business result is demonstrated. Third, the new startup company can start the business through the practice of CSI when the

company understands the demand of society and social value that will influence an individual consumer to be interested in the products or services of such new business.

In today's world, humanity lives uncertainty under the challenge of environmental aspects, living quality, human rights, and sustainability in ways of living. A need for a sustainable society where every organization help one another is a global agenda where CSI was found upon. The significant results of this CSI study paved the way for many likeminded academia and practitioners to have a framework to create mutual betterment for Thailand, for the region, and the world at large. Regardless of race, nationality, nor geolocation, the world can be one community. Each individual and each organization plays a role in creating betterment. The essences that are encapsulated within the results of this pioneered CSI study, which is corresponding to the statement that Ban Ki-moon, the secretary-general of the United nation, remarked at a G20 working dinner that “Sustainable development is the pathway to the future we want for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship, and strengthen governance. The new agenda will need a renewed, broad-based global partnership, particularly to mobilize finance and technology” (United Nations, 2013).

### 5.7 Limitations of the Study

There are four limitations identified in this study which are 1) lack of previous studies, 2) tangible case reference for CSI testing, 3) sample characteristic, and 4) data collection area.

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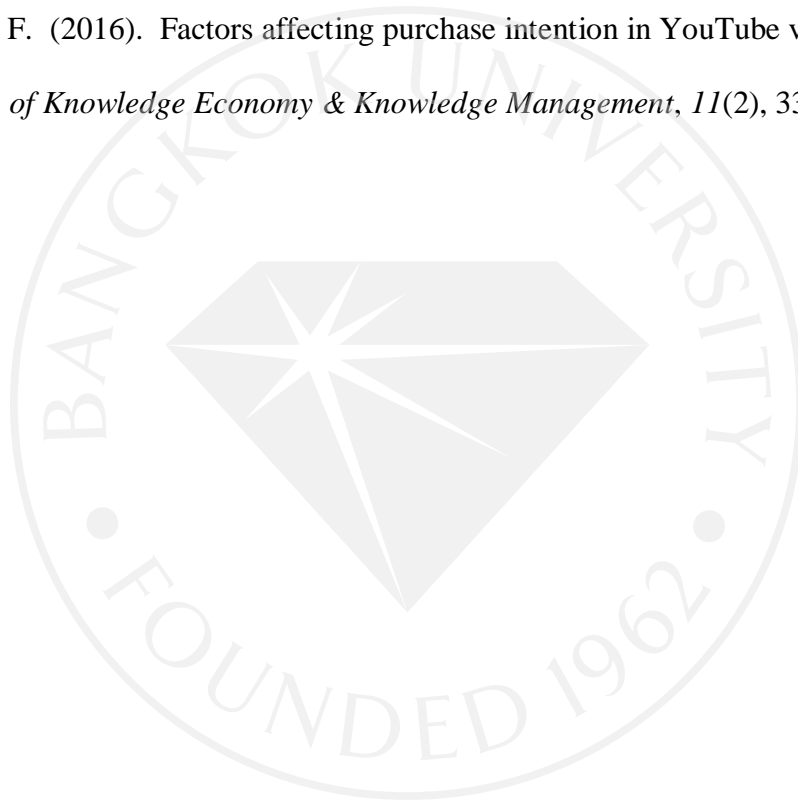


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## Appendix A

## Statistics Analysis

Table A3.1: Exploratory Factor Analysis Results from Pilot Testing

Variables and Indicators	Eigenvalues	Loadings	Variables and Indicators	Eigenvalues	Loadings
Awareness of CSI	3.586		Perceived Relative Advantage	3.874	
PAW1		.904	RA 1		.898
PAW2		.800	RA 2		.788
PAW3		.721	RA 3		.696
PAW4		.903	RA 4		.888
PAW5		.890	RA 5		.833
			RA 6		.693
Perceived Compatibility	3.587		Subjective Norm	4.632	
CP 1		.562	SN 1		.826
CP 2		.745	SN 2		.837
CP 3		.816	SN 3		.832
CP 4		.835	SN 4		.948
CP 5		.763	SN 5		.905
CP 6		.878	SN 6		.916
Attitude	3.512		Perceived Quality	3.706	
AT 1		.812	Q 1		.887

(Continued)

Table A3.1 (Continued): Exploratory Factor Analysis Results from Pilot Testing

Variables and Indicators	Eigenvalues	Loadings	Variables and Indicators	Eigenvalues	Loadings
AT 2		.778	Q 2		.845
AT 3		.608	Q 3		.736
AT 4		.800	Q 4		.907
AT 5		.721	Q 5		.917
AT 6		.847			
Brand Loyalty	2.435		Perceived Behavioral Control	2.733	
L 1		.882	BC 1		.680
L 2		.915	BC 2		.825
L 3		.905	BC 3		.762
			BC 4		.711
			BC 5		.709
Purchase Intention	4.460				
PI 1		.920			
PI 2		.858			
PI 3		.770			
PI 4		.877			
PI 5		.847			
PI 6		.894			

Note. n = 50

Table A3.2: Cronbach's Alpha Results from Pilot Testing

Variables	Indicator	Cronbach's Alpha	N of Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Awareness and Understanding of CSI		.901	5		
	P AW 3			.838	.860
	P AW 4			.691	.892
	P AW 5			.599	.910
	P AW 6			.832	.861
	P AW 7			.816	.866
Perceived Relative Advantage		.887	6		
	RA 1			.836	.848
	RA 2			.689	.869
	RA 3			.572	.886
	RA 4			.819	.846
	RA 5			.739	.861
	RA 6			.576	.886
Perceived Compatibility		.862	6		
	CP 1			.442	.874
	CP 2			.630	.843
	CP 3			.710	.828
	CP 4			.726	.825

(Continued)



Table A3.2 (Continued): Cronbach's Alpha Results from Pilot Testing

Variables	Indicator	Cronbach's Alpha	N of Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
	CP 5			.649	.840
	CP 6			.785	.812
Subjective Norm		.940	6		
	SN 1			.753	.936
	SN 2			.769	.935
	SN 3			.766	.935
	SN 4			.921	.915
	SN 5			.856	.924
	SN 6			.872	.922
Attitude		.855	6		
	AT 1			.697	.820
	AT 2			.671	.827
	AT 3			.474	.858
	AT 4			.689	.822
	AT 5			.592	.843
	AT 6			.750	.811

(Continued)

Table A3.2 (Continued): Cronbach's Alpha Results from Pilot Testing

Variables	Indicator	Cronbach's Alpha	N of Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Perceived Quality		.910	5		
	Q 1			.814	.882
	Q 2			.754	.895
	Q 3			.624	.919
	Q 4			.842	.878
	Q 5			.857	.872
Brand Loyalty		.883	3		
	L 1			.741	.864
	L 2			.803	.806
	L 3			.783	.827
Perceived Behavioral Control		.783	5		
	BC 1			.512	.770
	BC 2			.671	.704
	BC 3			.622	.721

(Continued)

Table A3.2 (Continued): Cronbach's Alpha Results from Pilot Testing

Variables	Indicator	Cronbach's Alpha	N of Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
	BC 4			.513	.757
	BC 5			.521	.757
Purchase Intention		.930	6		
	PI 1			.879	.906
	PI 2			.791	.918
	PI 3			.683	.931
	PI 4			.816	.915
	PI 5			.779	.920
	PI 6			.840	.912

Note. n = 50

## Appendix B

### Questionnaire Items

The final items that will be used in hypothesis testing are marked with \*.

#### CORPORATE SOCIAL INNOVATION (Googins & Mirvis, 2012)

##### Characteristics of Corporate Social Innovation\*

1. Create a social vision for the company
2. Bring employees to the center of the effort
3. Nurture entrepreneurship
4. Use the social sector for R&D and service support
5. Reset philanthropy to innovation
6. Engage a broad spectrum of interests using connective technology and

social media for innovation

#### BRAND EQUITY

Brand awareness/Unaided recall (Aaker, 1991)

*AU1.	Asked for the name of the brand (product category is mentioned)
*AU2.	Which of the brands are you aware of? (names of the brands provided)
*AU3.	Which of the following brands have you used before? (Brand recognition, based on aid, Recall, names of the brands were provided)

## Brand awareness/associations (Yoo &amp; Donthu, 2001)

*AW1.	I can recognize X among other competing brands.
AW2.	I am aware of X.
*AS1.	Some characteristics of X come to my mind quickly.
*AS2.	I can quickly recall the symbol or logo of X.
AS3.	I have difficulty in imagining X in my mind. (r)

## Perceived quality (Aaker, 1991, 1996; Yoo et al., 2000, 2001)

*PQ1.	Brand X offers products of very good quality.
*PQ2.	Brand X offers products of consistent quality.
PQ3.	Brand X offers very durable products.
*PQ4.	Brand X offers very reliable products.
PQ5.	Brand X offers products with excellent features.
*PQ6.	The likelihood that X would be functional is very high.

## Brand loyalty (Yoo &amp; Donthu, 2001)

*LO1.	I consider myself to be loyal to X.
*LO2.	X would be my first choice.
LO3.	I will not buy other brands if X is available at the store.

Remark: X indicates a brand name.

## DIFFUSION OF INNOVATION THEORY

Adoption Level (Savery, 2005)

AL 1.	I am venturesome and eager to be the first to try new innovations.
*AL 2.	I am always looking for innovations.
AL 3.	I adopt innovations and influence others to do so.
*AL 4.	My opinion about innovations is respected by peers.
AL 5.	I am willing to follow the lead of others in adopting innovations.
*AL 6.	I will adopt innovations but do not attempt to influence others to do so.
AL 7.	I need to be convinced of the advantage of innovations by peers.
AL 8.	I go along with innovations out of necessity.
*AL 9.	I am suspicious of innovations.
AL 10.	I am resistant to change.

Remark: Innovator (AL 1 & 2), Early Adopters (AL 3 & 4), Early Majority (AL 5 & 6), Late Majority (AL 7 & 8), Laggards (AL 9 & 10)

Relative Advantage (Atkinson, 2007)

RA1.	HealthQuest is better than using workbooks or paper and pencil tests for learning about health.
*RA2.	HealthQuest is more interesting than other materials I have used as part of a course.

*RA3.	Using HealthQuest made learning about health a better experience than I would have otherwise.
RA4.	I learned about health more quickly and easily because of using HealthQuest.
RA5.	I had more fun learning about my health because of using HealthQuest.
*RA6.	HealthQuest offered me real advantages over the way I usually take classes.

Compatibility (Atkinson, 2007; Amaro & Duarte, 2015)

CP1.	HealthQuest fits right into the way I like to take courses.
*CP2.	I think other classes should have programs like HealthQuest.
CP3.	The name “HealthQuest” made me want to use the program.
CP4.	HealthQuest helped me learn more about myself while also learning about health.
*CP5.	HealthQuest helped me to learn more about technology while also learning about personal health.
CP6.	Using the internet to purchase travel is compatible with the way I like to shop.
*CP7.	Using the Internet to purchase travel fits with my lifestyle.

## THEORY OF PLANNED BEHAVIOR

Attitude (Ajzen, 2002, 2006; Amaro & Duarte, 2015)

AT1.	<p>My exercising for at least 20 minutes, three times per week for the next three months would be</p> <p>Bad :_1_: 2_: 3_: 4_: 5_: Good</p> <p>Unpleasant :_1_: 2_: 3_: 4_: 5_: Pleasant</p>
*AT2.	<p>For me to walk on a treadmill for at least 30 minutes each day in the forthcoming month is</p> <p>Harmful :_1_: 2_: 3_: 4_: 5_: Beneficial*</p> <p>Pleasant :_1_: 2_: 3_: 4_: 5_: Unpleasant</p> <p>Bad :_1_: 2_: 3_: 4_: 5_: Good</p> <p>Worthless :_1_: 2_: 3_: 4_: 5_: Valuable*</p> <p>Enjoyable :_1_: 2_: 3_: 4_: 5_: Un-enjoyable</p>
AT3.	Consultation with physicians on drug-related problems is good.
*AT4.	Online travel shopping is a good idea.
AT5.	I like the idea of purchasing travel online.
*AT6.	Purchasing travel online would be pleasant.
AT7.	Purchasing travel online is appealing.



Subjective Norm (Ajzen, 2006; Lada et al., 2009)

SN1.	Most people who are important to me approve of my exercising for at least 20 minutes, three times per week for the next three months.
*SN2.	Most people like me exercised for at least 20 minutes, three times per week in the three months following their major heart surgery.  Unlikely :_1_: _2_: _3_: _4_: _5_: Likely
SN3.	Most people who are important to me think that  I should :_1_: _2_: _3_: _4_: _5_: I should not walk on a treadmill for at least 30 minutes each day in the forthcoming month.
SN4.	It is expected of me that I walk on a treadmill for at least 30 minutes each day in the forthcoming month.  extremely likely :_1_: _2_: _3_: _4_: _5_: extremely unlikely
SN5.	The people in my life whose opinions I value would  approve :_1_: _2_: _3_: _4_: _5_: disapprove of my walking on a treadmill for at least 30 minutes each day in the forthcoming month.
*SN6.	People who are important to me choose a Halal product.
SN7.	My family member prefers Halal products.
*SN8.	My friend would think that I should choose Halal products.

## Perceived Behavioral Control (Ajzen, 2002, 2006)

*BC1.	<p>I am confident that I can exercise for at least 20 minutes, three times per week for the next three months.</p> <p>True :_1_: _2_: _3_: _4_: _5_: False</p>
BC2.	<p>My exercising for at least 20 minutes, three times per week for the next three months is up to me.</p> <p>Disagree :_1_: _2_: _3_: _4_: _5_: Agree</p>
BC3.	<p>For me to walk on a treadmill for at least 30 minutes each day in the forthcoming month would be</p> <p>Impossible :_1_: _2_: _3_: _4_: _5_: Possible</p>
BC4.	<p>If I wanted to I could walk on a treadmill for at least 30 minutes each day in the forthcoming month.</p> <p>Definitely true :_1_: _2_: _3_: _4_: _5_: Definitely false</p>
*BC5.	<p>How much control do you believe you have over walking on a treadmill for at least 30 minutes each day in the forthcoming month?</p> <p>No control :_1_: _2_: _3_: _4_: _5_: Complete control</p>
*BC6.	<p>It is mostly up to me whether or not I walk on a treadmill for at least 30 minutes each day in the forthcoming month.</p>
*BC7.	<p>I am confident that I am capable of consulting with physicians on drug-related problems.</p>

### Consumer Purchase Intention

#### Attitude toward purchase (ATP) (Yuksel, 2016)

*ATP1.	After watching the video, I think positively toward purchasing.
ATP2.	After watching the video, I like purchasing.
*ATP3.	After watching the video, I feel good about purchasing.
ATP4.	After watching the video, my attitude toward purchasing is positive.

#### Purchase Intention (PI) (Yuksel, 2016)

*PI1.	Given the chance, I would consider purchasing the products that are mentioned in the video in the future.
PI2.	It is likely that I shall actually purchase the products that are mentioned in the video in the near future.
*PI3.	Given the opportunity, I intend to purchase the products that are mentioned in the video.
*PI4.	I will try the products that are mentioned in the video in the future.
*PI5.	I intend to consider the products that are mentioned in the video in my future purchases.

## Appendix C

### Questionnaire

#### Participant Consent

You are being invited to participate in a research study titled “Impact of Corporate Social Innovation towards Purchase Intention.” This study is being done by Sora Kaitkanarat from Bangkok University

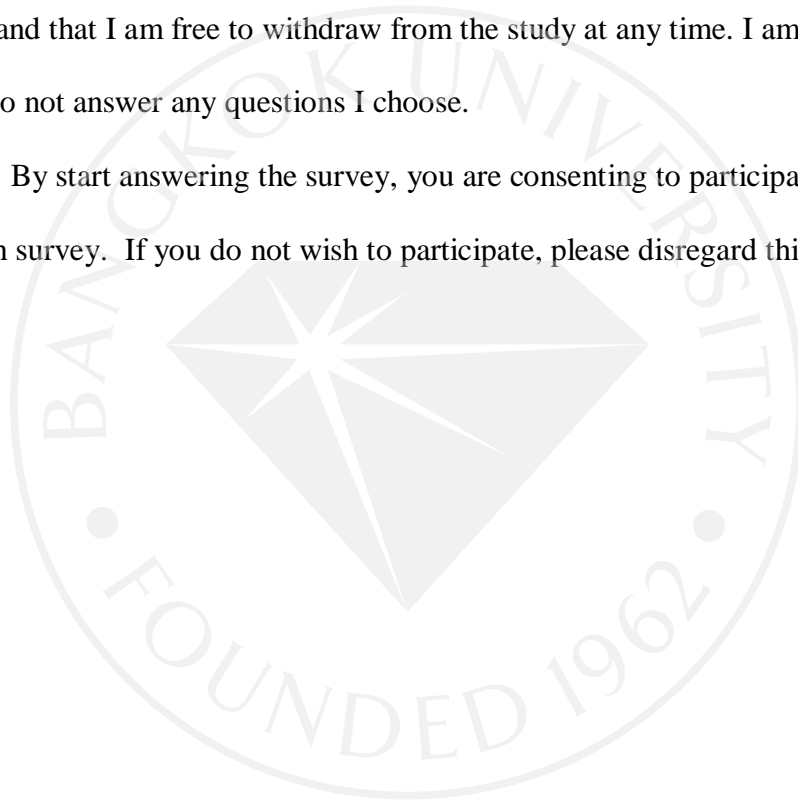
The purpose of this research study is a crucial part of the Doctoral Degree Dissertation and will take you approximately 20 minutes to complete. Your participation in this study is entirely voluntary, and you do not have to answer any questions you do not want to. Although your participation in this research may not benefit you personally, it will help us understand current practices, beliefs, and demographic factors related to measuring Corporate Social Innovation. We believe this study will provide valuable information about practicing Corporate Social Innovation that can be good for both companies and society.

We believe there are no known risks associated with this research study; however, as with any online related activity, the risk of a breach is always possible. To the best of our ability, your participation in this study will remain confidential, and only anonymized data will be published. We will minimize any risks by taking the following steps. Your name and email address will remain confidential and will be stored on a secured account. All completed surveys will be assigned a number. All data, including the data analysis, will be transmitted via a secure browser. Once the data analysis is complete, the online account and/or hardcopy will be terminated.

However, despite these safeguards, there is the possibility of hacking or other security breaches that could compromise the confidentiality of the information you provide.

Statement: I have read the preceding information describing this study. I am 18 years of age or older and freely consent to participate in the study. My decision to participate or to decline participating in this study is completely voluntary. I understand that I am free to withdraw from the study at any time. I am aware of my option to not answer any questions I choose.

By start answering the survey, you are consenting to participate in this research survey. If you do not wish to participate, please disregard this message.



## Questionnaire for Academic Purpose

Interviewing date \_\_\_\_\_ Start time \_\_\_\_\_

Finish time \_\_\_\_\_

Questionnaire number

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## Screening questions:

## Demographic Information

Instruction: Please check ☒ where you see applicable

S1) Gender

☐ (1) Male☐ (2) FemaleS2) Age: please state your age here   year old☐ (1) 24 or younger (stop the survey) ☐ (2) 25–30☐ (3) 31–35☐ (4) 36–40☐ (6) 41 or older (stop the survey)

S3) Education:

☐ (0) No Education☐ (1) Elementary School☐ (2) Junior High school☐ (3) High school☐ (4) Vocational☐ (5) High Vocational ☐☐ (6) Bachelor's Degree☐ (7) Master's Degree☐ (8) Doctorate or higher

S4) Occupation:

☐ (0) Unemployed☐ (1) Office worker☐ (2) Own business☐ (3) Official/ State Enterprise☐ (4) Student☐ (99) Others: (please state.....)

## S5) Work location or School location:

- ☐ (1) Bangkok (Please state location: .....)
- ☐ (2) Other provinces, not in Bangkok.....(Stop the survey)

## S6) You living residential

- ☐ (1) Bangkok (Please state location: .....)
- ☐ (2) Other provinces, not in Bangkok.....(Stop the survey)

## S7) Please state your range of monthly household income

- ☐ (1) Less than 10,000 Baht    ☐ (2) 10,000–19,999 Baht    ☐ (3) 20,000–29,999 Baht
- ☐ (4) 30,000–39,999 Baht    ☐ (5) 40,000–49,999 Baht    ☐ (6) 50,000–59,999 Baht
- ☐ (7) 60,000–69,999 Baht    ☐ (8) 70,000–79,999 Baht    ☐ (9) 80,000 Baht or more

## Adoption of Innovation

Instruction: Please select “Yes” if the statement is related to you or your lifestyle and select “No” if the statement is not related to you or your lifestyle.

S8)	I am always looking for innovations.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
S9)	My opinion about innovation is respected by peers.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
S10)	I will adopt innovations but do not attempt to influence others to do so.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
S11)	I am suspicious of innovation.	<input type="checkbox"/> Yes*	<input type="checkbox"/> No

Stop the survey is you answer “Yes” in question S11.

### PART I: Awareness and Understanding towards Corporate Social Innovation

Instruction: Please select from number 0 to 10 from your awareness towards

Corporate Social innovation where “10” is fully aware and “0” is not at all aware

1.1.1	Have you ever heard the term “Corporate Social Responsibility”?	0	1	2	3	4	5	6	7	8	9	10
1.1.2	Have you ever heard the term Corporate Social Innovation or (CSI)?	0	1	2	3	4	5	6	7	8	9	10

Instruction: Please ranks 1–5 scale based on your perception and feeling towards the statements below. (5 = strongly agree, 4 = agree, 3 = neither or natural, 2 = disagree, 1 = strongly disagree)

	Statement	5	4	3	2	1
1.1.3	The practice of Corporate Social Responsibility is similar to the practice of Corporate Social Innovation.					
1.1.4	CSI can make me recognize brand that practice better than brand that does not practice CSI.					
1.1.5	Characteristic of CSI can come to my mind quickly.					

Instruction: Please read the concept about Corporate Social Innovation below carefully, and provide the answer based on your perception and feeling towards the concept of Corporate Social Innovation (CSI).



### Stimuli

[Introducing CSI concept based on framework. Googins & Mirvis (2012)]

Characteristics of Corporate Social Innovation: US Chamber of Commerce

Foundation had characterized CSI into 6 key elements which are (1) social vision of the company, (2) bring employee at the center of effort, (3) nurture intrapreneurship, (4) use social section for R&D, (5) reset philanthropy to innovation and, (6) engage a board spectrum of interests using connective technology and social media for innovation.

Instruction: Please select from number 0 to 10 from your awareness towards

Corporate Social innovation where “10” is fully aware and “0” is not at all aware

1.2.1	Would you now understand the concept of Corporate Social Innovation or (CSI)?	0	1	2	3	4	5	6	7	8	9	10
1.2.2	Do you think some of the brands that you are using are practicing Corporate Social Innovation or CSI?	0	1	2	3	4	5	6	7	8	9	10

Stop the survey is you answer “No” (0) in question pAW1.

Instruction: Please ranks 1–5 scale based on your perception and feeling towards the statements below. (5 = strongly agree, 4 = agree, 3 = neither or natural, 2 = disagree, 1 = strongly disagree)

	Statement	5	4	3	2	1
1.2.3	The practice of Corporate Social Responsibility is similar to the practice of Corporate Social Innovation.					
1.2.4	CSI can make me recognize brand that practice better than brand that does not practice CSI.					
1.2.5	Characteristic of CSI can come to my mind quickly.					

## Part II: Relative Advantage and Compatibility

Instruction: Please ranks 1–5 scale based on your perception and feeling towards the statements below. (5 = strongly agree, 4 = agree, 3 = neither or natural, 2 = disagree, 1 = strongly disagree)

	Statement	5	4	3	2	1
2.1	Brand that practices CSI is more interesting than other brands that offer similar products and/ or services.					
2.2	Using brand that practice CSI is better than brand that does not practice CSI.					
2.3	I can learn about product or service of the brand than practices CSI more quickly than brand that are not practiced CSI.					

	Statement	5	4	3	2	1
2.4	Using Brand that practices CSI fits more with my lifestyle than brand that doesn't practices CSI.					
2.5	Brand that practices CSI fit right into the way I like to my preference.					
2.6	Purchasing the brand that practices CSI is the way I prefer to shop.					

### Part III: Subjective Norm towards brand that practice CSI concept

Instruction: Please ranks 1–5 scale based on your perception and feeling towards the statements below. (5 = strongly agree, 4 = agree, 3 = neither or natural, 2 = disagree, 1 = strongly disagree)

	Statement	5	4	3	2	1
3.1	Most people like me would consider using brand that practices CSI.					
3.2	The people in my life whose opinion I value would approve of me using brand that practices CSI.					
3.3	People who are important to me think that I should use brand that practices CSI.					
3.4	It's expected of me that I use the brand that practices CSI					
3.5	People in my life whose opinions I value would approve me to use brand that practices CSI.					

	Statement	5	4	3	2	1
3.6	My family member would prefer brand that practices CSI.					

#### Part IV: Attitude towards brand that practice CSI concept

Instruction: Please ranks 1–5 scale based on your perception and feeling towards the statements below. (5 = strongly agree, 4 = agree, 3 = neither or natural, 2 = disagree, 1 = strongly disagree)

	Statement	5	4	3	2	1
4.1	Using brand that practices CSI makes me feel 'pleasant'.					
4.2	Using brand that practices CSI makes me feel 'beneficial'.					
4.3	Using brand that practices CSI is 'valuable'.					
4.4	I like the idea of using brand that practice CSI.					

### Part V: Perceived Quality, Brand Loyalty and Perceived Behavioral Control

Instruction: Please ranks 1–5 scale based on your perception and feeling towards the statements below. (5 = strongly agree, 4 = agree, 3 = neither or natural, 2 = disagree, 1 = strongly disagree)

	Statement	5	4	3	2	1
5.1	Brand that practices CSI offers products or Service of very good quality.					
5.2	The likelihood that Brand that practices CSI would be functional very high.					
5.3	I feel that Brand that practices CSI offers very durable products.					
5.4	I feel that Brand that practices CSI offers products with excellent features.					
5.5	Brand that practices CSI would be my first choice.					
5.6	I consider myself to be loyal to Brand that practices CSI.					
5.7	I will not buy other brands if product from brand that practice CSI is available.					
5.8	It is mostly up to me whether or not I choose brand that practices CSI.					
5.9	It is possible that I will use brand that practices CSI.					
5.10	If I want to, I can use brand that practice CSI.					

### Part VI: Purchase Intention

Instruction: Please ranks 1–5 scale based on your perception and feeling towards True Corporation (5 = strongly agree, 4 = agree, 3 = neither or natural, 2 = disagree, 1 = strongly disagree)

	Statement	5	4	3	2	1
6.1	I think positively toward purchasing Brand that practices CSI					
6.2	I feel good about purchasing Brand that practices CSI					
6.3	I intend to purchase more of Brand that practices CSI					
6.4	After knowing the concept of CSI, I would like to purchase brand that practices CSI.					
6.5	It is likely that I shall actually purchase the products or services from brand that practices CSI.					

End of survey, thank you very much for your kind participation

### Questionnaire (Thai Version)

ขอเชิญคุณเข้าร่วมในการตอบแบบสอบถามเพื่องานวิจัยในเรื่อง ผลกระทบของนวัตกรรมสังคมองค์กรกับความตั้งใจในการซื้อสินค้า ที่จัดขึ้นโดย นาย สร เกียรติคุณรัตน์ นักศึกษาปริญญาเอกจากมหาวิทยาลัยกรุงเทพ

การวิจัยครั้งนี้เป็นส่วนหนึ่งของการการทำการวิทยานิพนธ์ปริญญาเอก ซึ่งจะรบกวนเวลาไม่เกิน 20 นาที ซึ่งการวิจัยนี้เป็นแบบสอบถามแบบสมัครใจ โดยที่คุณสามารถเลือกที่จะตอบหรือไม่ตอบคำถามก็ได้ โดยการวิจัยครั้งนี้มุ่งหวังที่จะสร้างความเข้าใจ วิเคราะห์ความเชื่อ และ ผลกระทบที่เกิดจากแบรนด์ที่มีการทำนวัตกรรมสังคมองค์กร

นักวิจัยจะเก็บข้อมูลทั้งหมดไว้เป็นความลับ โดยที่ผลรวมของงานวิจัยจะถูกตีพิมพ์โดยไม่มี การระบุชื่อผู้ร่วมตอบแบบสอบถาม หรือข้อมูลส่วนตัวอื่น ๆ แต่อย่างใด และข้อมูลทั้งหมดจะถูกจัดเก็บไว้ในระบบคอมพิวเตอร์ ที่มีระบบป้องกันข้อมูลเป็นอย่างดี ซึ่งหลังจากการวิเคราะห์ผลเป็นที่สำเร็จ ข้อมูลทั้งหมดจะถูกทำลาย

คำยินยอม: ฉันได้อ่านข้อมูลการจัดการงานวิจัยนี้แล้ว และฉันมีอายุมากกว่า 18 ปี ฉันสมัครใจที่จะเข้าร่วมในงานวิจัยครั้งนี้ โดยที่ฉันเข้าใจว่า ฉันสามารถเลือกที่จะตอบหรือไม่ตอบแบบสอบถามข้อใดก็ได้

กรุณาเริ่มตอบแบบสอบถามเพื่อเป็นส่วนหนึ่งของงานวิจัยในครั้งนี้ หรือถ้าคุณเลือกที่จะไม่ตอบแบบสอบถาม ทางนักวิจัยขอขอบคุณที่คุณสละเวลาอ่านข้อมูลเบื้องต้นนี้

## แบบสอบถามเพื่อประกอบการศึกษาเชิงวิชาการ

วันที่สัมภาษณ์ \_\_\_\_\_ เวลาเริ่มต้น \_\_\_\_\_  
 สิ้นสุด \_\_\_\_\_

แบบสอบถามเลขที่

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แบบสอบถามเพื่อคัดกรอง

## ข้อมูลเชิงประชากร

คำชี้แจง: กรุณาทำเครื่องหมาย ✓ ในช่องสี่เหลี่ยมเพื่อตอบคำถาม

S1) เพศ: ☐ (1) ชาย ☐ (2) หญิงS2) อายุ: กรุณาระบุตัวเลข ☐☐ ปี☐ (1) 24 ปีหรือต่ำกว่า (ยุติการสอบถาม) ☐ (2) 25-30 ☐ (3) 31-35☐ (4) 36 - 40 ☐ (6) 41 ปีขึ้นไป (ยุติการสอบถาม)

S3) การศึกษา:

☐ (0) ไม่ได้รับการศึกษา ☐ (1) ประถม ☐ (2) มัธยมต้น ☐ (3) มัธยมปลาย☐ (4) ปวช. ☐ (5) ปวส. ☐ (6) ป.ตรี ☐ (7) ป.โท☐ (8) ป.เอกหรือสูงกว่า

S4) อาชีพ:

☐ (0)ว่างงาน ☐ (1) พนักงานบริษัท ☐ (2) ค้าขายหรือธุรกิจส่วนตัว☐ (3) ข้าราชการ/พณ. รัฐวิสาหกิจ ☐ (4) นักเรียน หรือ นักศึกษา☐ (99) อื่น ๆ: (ระบุ.....)



S5) ที่ทำงานหรือสถานศึกษาปัจจุบัน:

- ☐ (1) กรุงเทพฯ (ระบุบริเวณ: .....)
- ☐ (2) ต่างจังหวัด.....(ยุติการสอบถาม)

S6) ที่อยู่อาศัยปัจจุบัน (ไม่จำเป็นต้องเป็นที่เดียวกับในทะเบียนบ้าน):

- ☐ (1) กรุงเทพฯ (ระบุบริเวณ: .....)
- ☐ (2) ต่างจังหวัด.....(ยุติการสอบถาม)

S7) ระดับรายได้ครัวเรือนโดยเฉลี่ยต่อเดือน

- ☐ (1) ต่ำกว่า 10,000 บาท      ☐ (2) 10,000–19,999 บาท      ☐ (3) 20,000–29,999 บาท
- ☐ (4) 30,000–39,999 บาท      ☐ (5) 40,000–49,999 บาท      ☐ (6) 50,000–59,999 บาท
- ☐ (7) 60,000–69,999 บาท      ☐ (8) 70,000–79,999 บาท      ☐ (9) ตั้งแต่ 80,000 บาทขึ้นไป

การเปิดรับ นวัตกรรม

คำชี้แจง: กรุณาทำเครื่องหมาย ✓ ในช่องสี่เหลี่ยมเพื่อตอบคำถาม โดยตอบ “ใช่” สำหรับแนวคิดที่ตรงหรือใกล้เคียงกับความรู้สึกของคุณมากที่สุด และตอบ “ไม่ใช่” สำหรับแนวคิดที่ไม่ตรงกับความรู้สึกของคุณมากที่สุด

S8)	ฉันเป็นคนที่ชอบมองหานวัตกรรมหรือสิ่งใหม่ ๆ	<input type="checkbox"/> ใช่	<input type="checkbox"/> ไม่ใช่
S9)	เพื่อน เชื่อในความรู้ในเรื่องนวัตกรรมหรือสิ่งใหม่ ๆ ของฉัน	<input type="checkbox"/> ใช่	<input type="checkbox"/> ไม่ใช่
S10)	ถึงแม้ฉันชอบที่จะลองใช้นวัตกรรมหรือสิ่งใหม่ ๆ อยู่เสมอ แต่ไม่เคยที่จะพยายามชวนให้ผู้อื่นทำตาม	<input type="checkbox"/> ใช่	<input type="checkbox"/> ไม่ใช่
S11)	ฉันไม่เชื่อมั่นในการใช้นวัตกรรมหรือสิ่งใหม่ ๆ เลย	<input type="checkbox"/> ใช่*	<input type="checkbox"/> ไม่ใช่
*ยุติการสอบถาม ถ้าตอบ “ใช่” ในคำถามที่ S11			

### ส่วนที่ 1: การรับรู้และความเข้าใจในเรื่อง นวัตกรรมสังคมองค์กร (CSI)

คำชี้แจง: กรุณาทำเครื่องหมาย ✓ ในช่องสี่เหลี่ยมเพื่อตอบคำถาม การรับรู้ที่มีต่อแนวความคิดเรื่อง นวัตกรรมสังคมองค์กร (Corporate Social Innovation) โดยที่ หมายเลข “10” คือ มั่นใจว่ารับรู้ เต็มสิบ และหมายเลข “0” คือ ไม่มีการรับรู้เลย

1.1.1	คุณเคยได้ยินเรื่องการทำธุรกิจที่มีความรับผิดชอบต่อสังคม และสิ่งแวดล้อมขององค์กร หรือ CSR หรือไม่?	0	1	2	3	4	5	6	7	8	9	10
1.1.2	คุณเคยได้ยินเรื่องการทำธุรกิจที่มีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อม อย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) หรือไม่?	0	1	2	3	4	5	6	7	8	9	10

คำชี้แจง: โปรดอ่านแต่ละข้อความอย่างละเอียด แล้วกรุณาตอบคำถามต่อไปนี้ โดยกาเครื่องหมาย ✓ ในช่องที่ใกล้เคียงกับความรู้สึกของคุณมากที่สุด โดยที่หมายเลข 5 = เห็นด้วยอย่างยิ่ง, หมายเลข 4 = เห็นด้วย, หมายเลข 3 = รู้สึกเฉย ๆ, หมายเลข 2 = ไม่เห็นด้วย และหมายเลข 1 = ไม่เห็นด้วยอย่างยิ่ง

	Statement	5	4	3	2	1
1.1.3	การทำธุรกิจที่ความรับผิดชอบต่อสังคมและสิ่งแวดล้อมขององค์กร หรือ CSR เหมือนกับการทำธุรกิจที่มีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
1.1.4	ฉันคิดว่าฉันจะจดจำ หรือระลึกถึงบริษัทหรือแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อม อย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) ได้มากกว่าบริษัทหรือแบรนด์ที่ไม่มี CSI					
1.1.5	ฉันคิดว่าฉันจะจดจำ หรือระลึกถึงบริษัทหรือแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) ได้ง่าย					

**คำชี้แจง:** โปรดอ่านความหมายของ Corporate Social Innovation หรือนวัตกรรมเพื่อความรับผิดชอบต่อสังคมและสิ่งแวดล้อมขององค์กร ที่เขียนไว้ด้านล่างอย่างละเอียดเพื่อตอบแบบสอบถามในช่วงต่อไป

มูลนิธิสภาหอการค้าอเมริกา (US Chamber of Commerce Foundation) ได้ให้กรอบนิยามของนวัตกรรมสังคมองค์กร (Corporate Social Innovation, CSI) หรือนวัตกรรมเพื่อความรับผิดชอบต่อสังคมและสิ่งแวดล้อมขององค์กร คือ (1) มีวิสัยทัศน์ในเรื่องของการพัฒนาสังคม (2) มีการใช้พนักงานเพื่อเป็นแกนนำในการพัฒนา (3) สนับสนุนเรื่องความคิดต่าง (4) ใช้การพัฒนาสินค้าและบริการเพื่อช่วยเหลือสังคม (5) พัฒนาเรื่องการให้และการช่วยเหลือผ่านนวัตกรรม (6) ใช้เทคโนโลยีและดิจิทัลเพื่อช่วงสังคมและสิ่งแวดล้อม

คำชี้แจง: กรุณาทำเครื่องหมาย ✓ ในช่องสี่เหลี่ยมเพื่อตอบคำถาม การรับรู้ที่มีต่อแนวความคิดเรื่องนวัตกรรมสังคมองค์กร (Corporate Social Innovation) โดยที่ หมายเลข “10” คือ มั่นใจว่ารับรู้เต็มสิบ และหมายเลข “0” คือไม่มีการรับรู้เลย

1.2.1	หลังจากที่ได้อ่านกรอบความคิดข้างต้น คุณเข้าใจในแนวทาง การทำธุรกิจที่ความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) มากน้อยแค่ไหน?	0	1	2	3	4	5	6	7	8	9	10
1.2.2	ฉันคิดว่าสินค้าหรือบริการของบางแบรนด์ที่ฉันใช้อยู่มีการทำธุรกิจที่มีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)	0	1	2	3	4	5	6	7	8	9	10

\*ยุติการสอบถาม ถ้าตอบ “ไม่เข้าใจ” (0) ในคำถามที่ pAW1

คำชี้แจง: โปรดอ่านแต่ละข้อความอย่างละเอียด แล้วกรุณาตอบคำถามต่อไปนี้ โดยกาเครื่องหมาย ✓ ในช่องที่ใกล้เคียงกับความรู้สึกของคุณมากที่สุด โดยที่หมายเลข 5 = เห็นด้วยอย่างยิ่ง, หมายเลข 4 = เห็นด้วย, หมายเลข 3 = รู้สึกเฉย ๆ, หมายเลข 2 = ไม่เห็นด้วย และหมายเลข 1 = ไม่เห็นด้วยอย่างยิ่ง

	Statement	5	4	3	2	1
1.2.3	การทำธุรกิจที่ความรับผิดชอบต่อสังคมและสิ่งแวดล้อมขององค์กร หรือ CSR เหมือนกับการทำธุรกิจที่มีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
1.2.4	ฉันคิดว่าฉันจะจดจำ หรือระลึกถึงบริษัทหรือแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) ได้มากกว่าบริษัทหรือแบรนด์ที่ไม่มี CSI					
1.2.5	ฉันคิดว่าฉันจะจดจำ หรือระลึกถึงบริษัทหรือแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) ได้ง่าย					

ส่วนที่ 2: ความได้เปรียบเชิงเปรียบเทียบ และความเข้ากันได้ (Relative Advantage and Compatibility)

คำชี้แจง: โปรดอ่านแต่ละข้อความอย่างละเอียด แล้วกรุณาตอบคำถามต่อไปนี้ โดยกาเครื่องหมาย ✓ ในช่องที่ใกล้เคียงกับความรู้สึกของคุณมากที่สุด โดยที่หมายเลข 5 = เห็นด้วยอย่างยิ่ง, หมายเลข 4 = เห็นด้วย, หมายเลข 3 = รู้สึกเฉย ๆ, หมายเลข 2 = ไม่เห็นด้วย และหมายเลข 1 = ไม่เห็นด้วยอย่างยิ่ง

	Statement	5	4	3	2	1
2.1	สินค้าหรือแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) น่าสนใจกว่าแบรนด์ที่มีสินค้าประเภทเดียวกันแต่ที่ไม่ได้ทำ					
2.2	การใช้ สินค้าหรือแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อ บริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคม องค์กร (CSI) ดีกว่าการใช้สินค้าที่ไม่ได้มีการทำธุรกิจแบบ CSI					
2.3	ฉันสามารถเรียนรู้เกี่ยวกับสินค้าหรือแบรนด์ที่ทำธุรกิจอย่างมี ความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) ได้เร็วกว่าแบรนด์ที่ไม่ได้ทำ ธุรกิจแบบ CSI					
2.4	การใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความ รับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือ นวัตกรรมสังคมองค์กร (CSI) เหมาะกับฉัน หรือวิถีการดำเนิน ชีวิต ไลฟ์สไตล์ของฉัน					
2.5	การใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความ รับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือ นวัตกรรมสังคมองค์กร (CSI) เป็นตัวเลือกที่ตรงกับความต้องการ ของฉัน					
2.6	การซื้อ สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความ รับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือ นวัตกรรมสังคมองค์กร (CSI) เป็นวิถีการใช้จ่ายที่ฉันเลือก					

### ส่วนที่ 3: บรรทัดฐานทางสังคม (Subjective Norm)

**คำชี้แจง:** โปรดอ่านแต่ละข้อความอย่างละเอียด แล้วกรุณาตอบคำถามต่อไปนี้ โดยกาเครื่องหมาย ✓ ในช่องที่ใกล้เคียงกับความรู้สึกของคุณมากที่สุด โดยที่หมายเลข 5 = เห็นด้วยอย่างยิ่ง, หมายเลข 4 = เห็นด้วย, หมายเลข 3 = รู้สึกเฉยๆ, หมายเลข 2 = ไม่เห็นด้วย และ หมายเลข 1 = ไม่เห็นด้วยอย่างยิ่ง

	Statement	5	4	3	2	1
3.1	คนส่วนใหญ่จะสนับสนุนฉันให้ใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
3.2	คนที่ฉันเคารพ และเชื่อในคำสอนของเขาจะเห็นด้วยที่ฉันใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อม อย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
3.3	คนที่มีผลสำคัญในชีวิตของฉันจะเห็นควรให้ฉันใช้สินค้าหรือบริการ ของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และ สิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
3.4	คนอื่น ๆ น่าจะคาดหวังให้ฉันใช้ สินค้าหรือบริการของ แบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อม อย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
3.5	คนที่ฉันเชื่อในคำแนะนำหรือแนวคิดของเขา สนับสนุนให้ฉันใช้ สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อ บริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคม องค์กร (CSI)					
3.6	คนในครอบครัวของฉันชอบมากกว่าที่ฉันจะใช้สินค้าหรือบริการของ แบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และ สิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					

#### ส่วนที่ 4: ทศณคติที่มีต่อแบรนด์ที่มีนวัตกรรมสังคมองค์กร (Attitude)

คำชี้แจง: โปรดอ่านแต่ละข้อความอย่างละเอียด แล้วกรุณาตอบคำถามต่อไปนี้ โดยกาเครื่องหมาย ✓ ในช่องที่ใกล้เคียงกับความรู้สึกของคุณมากที่สุด โดยที่หมายเลข 5 = เห็นด้วยอย่างยิ่ง, หมายเลข 4 = เห็นด้วย, หมายเลข 3 = รู้สึกเฉย ๆ, หมายเลข 2 = ไม่เห็นด้วย และ หมายเลข 1 = ไม่เห็นด้วยอย่างยิ่ง

	Statement	5	4	3	2	1
4.1	ฉันรู้สึกสบายใจที่จะใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน (CSI)					
4.2	ฉันคาดว่าจะได้รับประโยชน์จากการใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน (CSI)					
4.3	สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน (CSI) ทำให้ฉันรู้สึกคุ้มค่ามากขึ้น กว่าสินค้าที่ไม่ได้ทำ					
4.4	ฉันชอบแนวคิดที่จะใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					

#### ส่วนที่ 5: การรับรู้ถึงคุณภาพ ความภักดีในตราสินค้า และการรับรู้ถึงการควบคุมพฤติกรรม (Perceived Quality, Brand Loyalty, Perceived Behavioral Control)

คำชี้แจง: โปรดอ่านแต่ละข้อความอย่างละเอียด แล้วกรุณาตอบคำถามต่อไปนี้ โดยกาเครื่องหมาย ✓ ในช่องที่ใกล้เคียงกับความรู้สึกของคุณมากที่สุด โดยที่หมายเลข 5 = เห็นด้วยอย่างยิ่ง, หมายเลข 4 = เห็นด้วย, หมายเลข 3 = รู้สึกเฉย ๆ, หมายเลข 2 = ไม่เห็นด้วย และ หมายเลข 1 = ไม่เห็นด้วยอย่างยิ่ง

	Statement	5	4	3	2	1
5.1	แบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) จะให้สินค้าหรือบริการที่มีคุณภาพ					

	Statement	5	4	3	2	1
5.2	แบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) จะให้สินค้าหรือบริการที่มีประโยชน์ใช้งานสูง					
5.3	ฉันคิดว่าแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) มีสินค้าที่ทนทาน					
5.4	ฉันคิดว่าแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) มีสินค้าหรือบริการที่พิเศษ					
5.5	แบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) จะเป็นแบรนด์ที่ฉันเลือกเป็นอันดับแรก					
5.6	ฉันคิดว่าฉันจะซื้อสัตย์และไม่เปลี่ยนใจจากแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
5.7	ฉันจะไม่ซื้อสินค้าหรือบริการจากแบรนด์อื่น ถ้ามีสินค้าหรือบริการจากแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI) วางขาย					
5.8	ถ้าต้องเลือกใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน (CSI) ส่วนใหญ่ฉันน่าจะเป็นคนตัดสินใจเอง					
5.9	มีความเป็นไปได้ที่ฉันจะใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน (CSI)					
5.10	ถ้าสินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน (CSI) ตรงกับความต้องการของฉัน ฉันสามารถตัดสินใจซื้อได้เอง					



### ส่วนที่ 6: ความตั้งใจในการซื้อ (Purchase intention)


คำชี้แจง: โปรดอ่านแต่ละข้อความอย่างละเอียด แล้วกรุณาตอบคำถามต่อไปนี้ โดยกาเครื่องหมาย ✓ ในช่องที่ใกล้เคียงกับความรู้สึกของคุณมากที่สุด โดยที่หมายเลข 5 = เห็นด้วยอย่างยิ่ง, หมายเลข 4 = เห็นด้วย, หมายเลข 3 = รู้สึกเฉยๆ, หมายเลข 2 = ไม่เห็นด้วย และ หมายเลข 1 = ไม่เห็นด้วยอย่างยิ่ง

	Statement	5	4	3	2	1
6.1	เป็นไปได้มากที่ฉันจะซื้อหรือใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
6.2	ฉันรู้สึกดีกับการซื้อหรือใช้สินค้าหรือบริการ ของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
6.3	ฉันตั้งใจที่จะซื้อหรือใช้สินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อม อย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
6.4	หลังจากที่ฉันได้เข้าใจแนวคิดนวัตกรรมสังคมองค์กร (CSI) แล้ว ฉันอยากซื้อสินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					
6.5	เป็นไปได้มากที่ฉันจะซื้อสินค้าหรือบริการของแบรนด์ที่ทำธุรกิจอย่างมีความรับผิดชอบต่อบริษัท สังคม และสิ่งแวดล้อมอย่างยั่งยืน หรือนวัตกรรมสังคมองค์กร (CSI)					

ขอขอบคุณที่สละเวลาในการตอบแบบสอบถามครับ

## Appendix D

## Ethics in Human Research Certificate



**BANGKOK UNIVERSITY**  
THE EDUCATING UNIVERSITY

This is to certify that:

Research Title: Goods to Good: Effect of Thai Consumers' Awareness of Corporate Social Innovation (CSI) on Brand Purchase Intention


Researcher: Mr. Sora Kaitkanarat

Affiliation: Graduate School

Reference no. 96203002

has been reviewed and approved by the Ethics Committee for Human Research, Bangkok University, in accordance with the Declaration of Helsinki.

Date of approval: 24 June 2019



Assoc. Prof. Yothin Sawangdee, Ph.D.  
Chairman, Ethics Committee for Human Research  
Bangkok University

Ethics Committee for Human Research  
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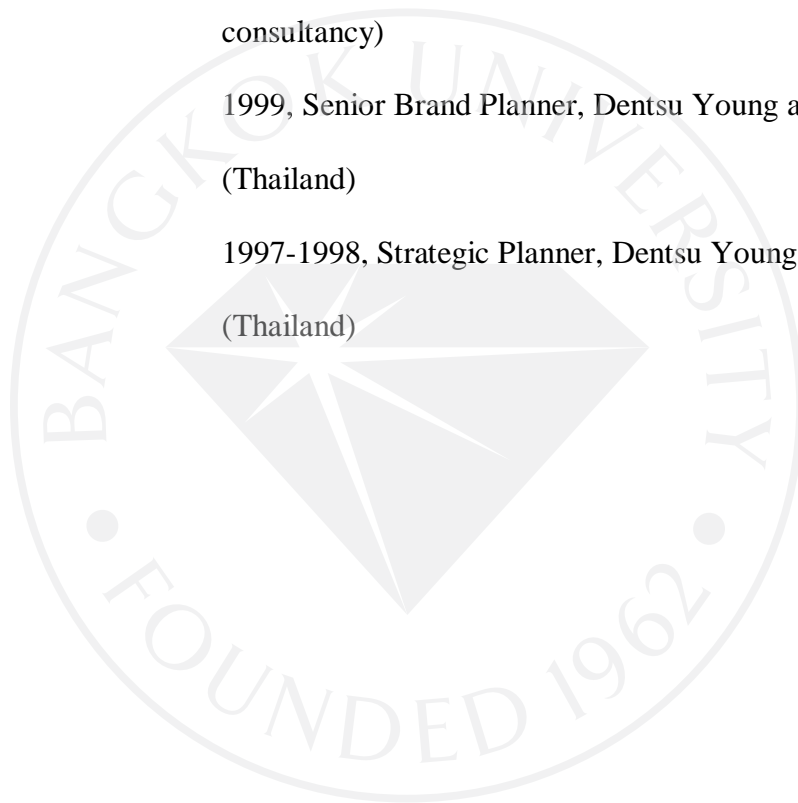
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