SUSTAINABLE ORGANIZATIONAL PRACTICE AND CORPORATE CULTURE IMPACT ON BRAND IMAGE, CORPORATE IMAGE, AND BRAND LOYALTY: A CASE STUDY OF THAI CONSUMER DURABLES INDUSTRY

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ABSTRACT

Many companies nowadays implement sustainable practices internally, by integrating with organizational culture and operations. As a result, brand and corporate images are created, leading to customer's emotional attachment and ultimately brand loyalty. In the first stage, the qualitative approach was adopted to investigate how a company translates its full three-pillar sustainability into a sustainable brand and corporate images among consumers in Thailand. Manager interviews confirmed that the level of sustainability implementation evident on the website is fairly accurate. Consumers roughly translate this into brand and corporate images reflecting the degree of the company's sustainability. Consumers are quite aware of three-pillar sustainability, but often do not explicitly consider all three pillars in their product decisions. However, the long-term trend seems to be toward merging the separate market segments into a comprehensive, three-pillar sustainability-oriented segment. The later stage of this research is a quantitative study where SEM was adopted. The result confirms the findings from the literature that brand and corporate images contribute to emotional attachment, which is a precedence of brand loyalty.

KEY WORDS: SUSTAINABLE BRANDING, SUSTAINABLE OPERATIONS
                       MANAGEMENT, SUSTAINABLE CORPORATE CULTURE,
                       SUSTAINABLE BRAND IMAGE, SUSTAINABLE CORPORATE
                       IMAGE

227 pages

CONTENTS

CONTENTS (cont.)

CONTENTS (cont.)

LIST OF TABLES

LIST OF TABLES (cont.)

LIST OF FIGURES

LIST OF FIGURES (cont.)

CHAPTER I
INTRODUCTION

1.1 Introduction

Sustainability has become a critical issue in the modern world, and a great many constituencies have been conscious of the need to modify current practices. Sustainability is profoundly built by three pillars, namely social, environmental, and economic modules (Clune & Zehnder, 2020; Purvis, Mao, & Robinson, 2019). While these three pillars have been well integrated into conceptualization in macro scale (Sheth & Parvatiyar, 2021), not all companies implement all three pillars, and it is not yet clear whether consumers have started considering all three, rather than focusing on one. In addition, most academic research on branding does not cover comprehensive three-pillar sustainability. In branding perspective, a credible sustainable brand is the one that effectively integrates the three pillars of sustainability into its business operations and successfully builds a three-pillar brand image in customer's mind (Adnan, Ahmad, & Khan, 2017). However, it is questionable whether most companies actually integrate all three pillars into their communications, or rather merely select attributes which are sellable and marketable. Some evidence indicates that many consumers think of a single pillar, often the environmental one (Simpson & Radford, 2012).

Sustainability helps building brand image and corporate image with a growing segment of consumers in both direct and indirect means. Generally, brand image is built from the consumer's perception of brand attributes (Keller, Parameswaran, & Jacob, 2011). Consumers who value sustainability and ethical practice tend to prefer products, services, and brands which offer sustainability attributes. Consequently, these attributes perceived from the consumers finally become sustainable brand image. Sustainability thereby directly contributes to their emotional, if not only utilitarian needs. For those customers who are not quite aware of sustainability, it indirectly contributes to their needs through innovative products and services, as well as giving them an alternative to the existing products and services in the market.

The review of related literature on sustainable branding reveals that many studies have neglected the comprehensive concept of sustainability, but rather focused usually on either environmental or social performance. For this reason, "further managerial implications on a practical level with an integrated model that takes into account the social, environmental and economic performance for the creation of sustainability-oriented brand value" (El Zein et al., 2020, p.13) is needed. This study, therefore, aims to incorporate all 3 pillars of sustainability into the sustainable branding model. The branding model in this study focuses primarily on the genuine integration of sustainability into corporate practices, which should then be reflected in the marketing communications, rather than emphasizing mainly the marketing communication strategies. In other words, this research does not aim to assess a greenwashing strategy, to mention just the environmental pillar as an example.

1.2 Sustainability and Organizational Practice

There are many studies mentioning sustainability in merely one or two pillars and various research on how a firm implements green and/or social practices. Thus, it is important to understand whether managers in the real world actually integrate the comprehensive three pillars into their practices, or they focus on merely one or two pillars. It is also important to study how they implement the concept in their internal operations, and whether there are different degrees of sustainability implementation.

Many modern organizations adopt the concept of the triple bottom line (3BL) to evaluate their organizational performance. The 3BL model aims to evaluate a firm's performance not only by the financial bottom line, but also by its social and environmental performances (Khan et al., 2021). When integrating sustainability into business practice, the concept of sustainable operations management (SOM) is usually adopted. One of the very first definitions of sustainable operations management comes from Kleindorfer et al. (2005). Sustainability operations management was defined as "the set of skills and concepts that allow a company to structure and manage its business processes to obtain competitive returns on its capital assets without sacrificing the legitimate needs of internal and external stakeholders and with due regard for the impact of its operations on people and the environment" (p. 489). This proposed description

clearly implies that only social and environmental pillars were incorporated into the concept, and the economic pillar was obviously neglected, except in terms of micro-level corporate profitability. Thus far, most studies conducted afterwards still focus merely on one or two pillars. It is usually found that the term sustainability is used to represent the environmental attribute, social development, or circular economy. However, there are a few studies proposing that sustainable operations management which incorporates economic, environment and social coordinated development is the current trend (Liu et al., 2020; Nunes et al., 2022).

Sustainable products and services are the products of sustainable operations management, and are becoming a new standard in the market. They are favorable because of their socially and environmentally responsible images. These sustainable products and services contribute significantly to customer satisfaction and purchase intention (Armstrong et al., 2015; Fargnoli et al., 2018; Kimita et al., 2009; Moise et al., 2019; Pan & Nguyen, 2015; Panda et al., 2020). Therefore, it is natural for the managers to aim for such products and services to attract their customers. The discussion so far leads to the first research question, which is to examine managers' perspective of sustainable operations and how companies implement sustainability in their internal operations. The study will also address the pillars they integrate in the implementation and differentiate the degrees of sustainability implementation.

When the implementation of sustainability is well adopted throughout the organization, it creates sustainable organizational culture. Theoretically, organizational culture is the shared assumptions guiding behaviors of people in organizations and the collective behaviors conveyed to the new organizational members (Ravasi & Schultz, 2006; Schein, 2010). Therefore, sustainable corporate culture is simply the assumptions and behaviors about sustainability shared among the people in organizations, which are able to be conveyed to the new organizational members. Sustainable organizational culture includes open innovation culture, sustainable leadership, and teamwork.

Open innovation occurs when a firm uses the inflows and outflows of knowledge to encourage internal innovation, as well as to expand the markets for external use of innovation (Chesbrough, 2006). Sustainable leadership is the leadership style that aims to meet the needs of the current society, without compromising the benefit for the future generations (Hallinger & Suriyankietkaew, 2018; Hargreaves &

Fink, 2004). Teamwork culture is "a cooperative process that allows ordinary people to achieve extraordinary results" (Scarnati, 2001). These attributes are essential in creating the solid sustainable corporate culture. This leads to the second research question, which is how the managers in the industry create sustainable corporate culture and how it works inside companies. And what the differences in the culture among the companies with different level of sustainability are. Once again, the question of whether the comprehensive three pillars are integrated is raised.

1.3 Consumer Perception of Sustainable Brands

Various studies revealed a contribution of sustainable products and services, and sustainable corporate culture to brand image and corporate image among consumers (Chen, 2018; Hillestad et al., 2010; Kara et al., 2014; Su et al., 2015). Better brand image is one of the reasons why a company wants to be sustainable. Basically, brand image is consumers' perception and personal belief of a brand. This perspective is built through brand associations which held on consumers' memory (Keller, 2013). However, in application to sustainability, most of the studies have integrated merely one pillar into brand image at a time. Green and social brand image were very much topics of interest. Predictably, green brand image tends to attract people who value environmental sustainability. Green brand image is defined as "a set of perceptions of a brand in a consumer's mind that is linked to environmental commitments and environmental concerns" (Chen et al., 2020a). Likewise, social brand image attracts people who value socially responsible behavior (Kumar et al., 2021).

Customers' impressions and experience with a company results in corporate image (Mostafa et al., 2015). In other words, corporate image is simply a total picture of the firm (Andreassen, 2001). Similar to brand image, which has been well studied for a long time, the study of corporate image related to sustainability often integrates merely one or two pillars at a time. The image of social responsibility frequently results from CSR and social marketing activities which the firms have conducted (Chang & Yeh, 2017; Parguel et al., 2011; Zhao et al., 2012). For green corporate image, consumers tend to build their perceptions from both green marketing and tangible evidence such as

a certification assuring that the firm is environmentally cautious (Ann et al., 2006; Mukonza & Swarts, 2020).

It can be seen that there are not many studies on such concepts in the sense of comprehensive three pillars despite the fact that brand and corporate images have been studied for decades. Therefore, it is essential to understand whether and how customers incorporate the three-pillars into brand and corporate images built in their mind, and whether they actually see them in the brands they purchase. This leads to the third and fourth research questions in this study. The third question is to understand the phenomenon of how customers build their perceptions of brand image and corporate image. And to what extent they use full three-pillar sustainability or focus on only one or two pillars. The fourth research question is how well the company's internal efforts at sustainability (operations & corporate culture) translate into consumer perceptions of brand image and corporate image.

1.4 Emotional Attachment and Brand Loyalty

These issues are critical because brand image and corporate image have a major impact on emotional attachment to the brand (Ali, 2018; A. Barreda et al., 2013; Nyagadza et al., 2020). Past studies indicate that emotional attachment is among the most important determinants of brand loyalty (Lewin et al., 1939; Loureiro, 2012; Mostafa & Kasamani, 2021; Shahid et al., 2022; So et al., 2013; Sohail, 2022), and brand loyalty is the main objective of building a brand for most organizations. Emotional attachment is an emotional bond between an individual and a specific item, which can be, for example, a brand (Thomson et al., 2005). Customers who are emotionally attached to a brand tend to demonstrate brand loyalty behaviors, even in unusual market conditions (A. Barreda et al., 2013; Loureiro, 2012; Mostafa & Kasamani, 2021). Therefore, emotional attachment is a crutial component that needs to be addressed in the branding model. The past study from Barreda et al. (2013) shows that brand image is an antecedent of brand emotional attachment. However, the concept is just beginning to be applied in sustainable branding research. Unsurprisingly, there are very limited studies on customer's emotional attachment to the comprehensive sustainability pillars.

Among those few studies on sustainability and emotional attachment, the green pillar is usually examined. Wu et al. (2021) suggested that a green emotional attachment is the bond that links a customer to the specific environmental attribute by involving affection, passion, and connection. This emotional attachment may lead to the willingness to pay price premium. In order to understand how emotional attachment is created, the researcher has raised the last research question: whether sustainable brand image and sustainable corporate image impact emotional attachment, which is an important determinant of brand loyalty.

1.5 The Conceptual Model

For convenience so the discussion in Chapter 2 can be followed more easily, the conceptual model which will be tested in the study is summarized and previewed in Figure 1. This demonstrates that we will use a sustainable branding model consisting of 3 levels. Level 1 is the implementation of sustainability into organizational practice and culture. Such corporate culture helps develop innovative solutions and increases the ability to understand customers' needs (Njoroge, Anderson, & Mbura, 2019). All organizational functions and sustainability pillars shall be integrated properly to ensure the outcome of sustainability in level 2, which is when consumers perceive the content of sustainability formed in the first level. We should be clear, however, that the research does not aim to identify feasible or 'best' models for implementing sustainability internally. To see how well internal operations translate into external brand image, it is necessary to examine how much companies actually practice sustainability, but the exact mechanisms are not needed.

Consequently, customer perception eventually forms emotional attachment to the brands in level 3, which finally contributes to brand loyalty (Sohail, 2022). The qualitative study was adopted to understand sustainability thinking and implementation in companies, and how consumers perceive sustainability of the company and its products. This assesses the degree to which internal elements translate into consumer perceptions. The quantitative study is employed to examine the relationship of consumer perception to emotional attachment in level 2. The quantitative stage also demonstrates the link between emotional attachment and brand loyalty, level 3 of the model. Level 3

is not a major focus in this research, but it is necessary to confirm that this well-established link does hold in the context here.
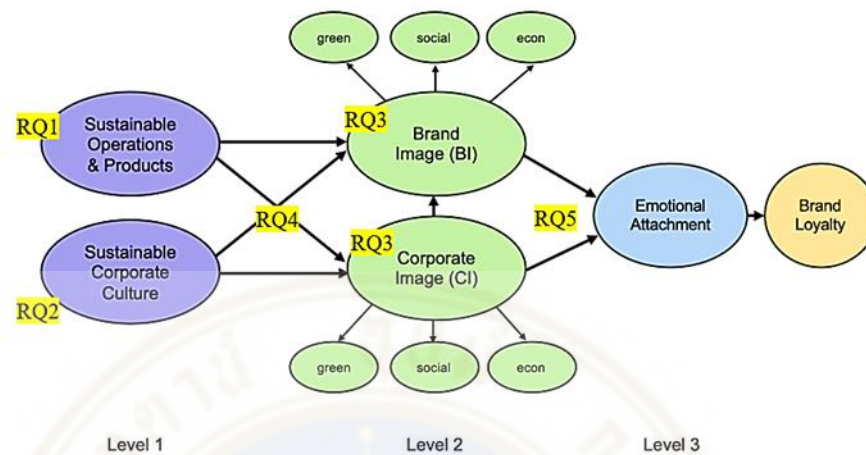
Figure 1.1 The proposed conceptual model with research questions addressed

As mentioned earlier several times, there is currently limited literature studied on sustainable branding, which incorporated all 3 pillars. Most research of such topics mentioned only one or two pillars at a time. Thus, this study aims to understand the meaning of the concepts shown in Figure 1.1, to explore the relationship of such concepts, and to understand the phenomenon of how the fully three-pillar sustainable brand is crafted, in the context of these6 comprehensive sustainability pillars.

The study will address five following research questions.

1. What is managers' understanding of sustainable operations and how do companies implement sustainability in their internal operations? Do they address the full set of three-pillar issues? Can we identify different degrees of sustainability implementation?

2. What is managers' understanding of sustainable corporate culture, and how does it work inside companies? Does it integrate issues across the three pillars? What are the differences in the culture among the companies with different level of sustainability?

3. How do consumers use sustainability issues to build their perceptions of brand image and corporate image? To what extent do they use full three-pillar sustainability vs. focus on only one or two pillars?

4. How well do the company's internal efforts at sustainability (operations & corporate culture) translate into consumer perceptions of brand image and corporate image?

5. Does sustainable brand image and sustainable corporate image impact emotional attachment, which is an important determinant of brand loyalty?

The discussion of the concepts, measurement, and justification for the constructs and links will be stated in the next section. Here, however, it is useful to note again that objectives 1 and 2 aim simply to find out what companies do, particularly if they address all of the pillars. Assessing, for example, how efficient the operations management systems are, or how effective the management model is for achieving sustainability, is beyond the scope of this research. We simply need to know what the companies do in order to see if how consumers perceive them is related to what they do, objective 4.

1.6 The Research Approach

The discussion above has already noted that research on sustainable branding which integrates the comprehensive 3 pillars of sustainability is rare. Therefore, it is not appropriate to approach the study with purely quantitative methodology in the beginning. Qualitative research is usually needed to develop deeper knowledge in cases where the issues are not yet very well known (Doz, 2011; Eriksson & Kovalainen, 2008a). This implies that mixed methods research is preferred in such cases to ensure the benefits from both qualitative and quantitative approaches. The mixed methods research is defined as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study" (Johnson & Onwuegbuzie, 2004, p. 17). This hybrid approach is capable of addressing many research question and combination questions, as well as bridging the gap between quantitative and qualitative research (Johnson & Onwuegbuzie, 2004).

As seen in Figure 1.2, the researcher chose the time sequential decision to perform such mixed methods in this study (Creswell, 2014; Johnson & Onwuegbuzie, 2004). The brands selected for both qualitative and quantitative studies are all Thai local brands selling household durables. Household durables are the high-involvement products where consumers have interest and personal relevance in a brand, and thereby tend to plan their purchase with effortful information processing (Harrigan et al., 2018; Juster, 1966; Wang et al., 2017). Therefore, the result of this study may not fully apply with buyers of low-involvement products such as fast moving consumer goods. In addition, the researcher selected the brands under the large-scale companies, both listed and not listed in the Stock Exchange of Thailand. Details of these and the following procedures will be discussed in Chapter 3, here is just an overview so the reader is aware of how the research was implemented while reading about conceptual development.
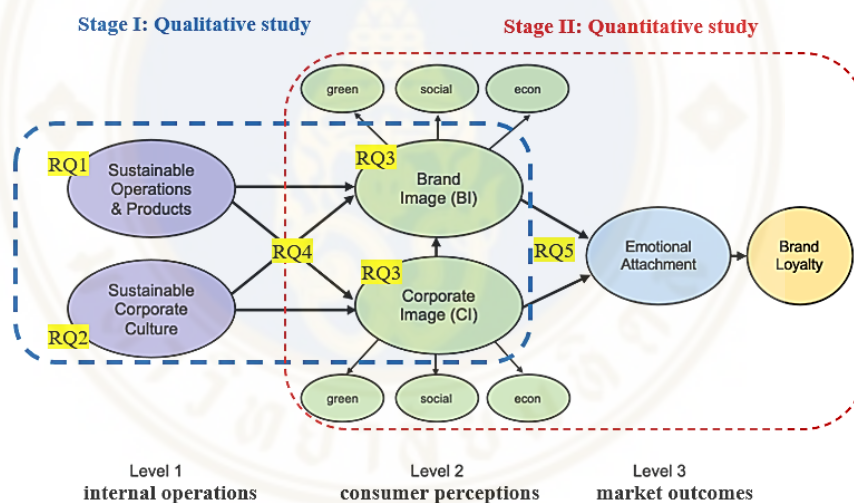
Figure 1.2 The proposed conceptual model showing the stage of qualitative and quantitative studies

The researcher set the criteria to select the brand and perform the search including the nationality of the organization, the size, the industry, and the practice of sustainability. In total, 9 companies fell into the criteria. Five of them are the public companies listed in the Stock Exchange of Thailand (SET). The chosen corporates were then scored according to their level of sustainability integration and execution. The scoring criteria were adopted from a sustainability assessment for Dow Jones

Sustainability Index (DJSI). Despite many sustainability indexes available, DJSI was the only one that incorporates all comprehensive three modules of sustainability, including economic, environmental, and social dimensions. Each industry has its own industry criteria (S&P Global, 2021).

In the first stage, the qualitative in-depth interview was used to develop better understanding of the concepts and to assess whatever literature items are available for the measurement of each construct. An exploratory approach was adopted. Since specific data was needed, rather than general, to help explore such concepts in detail, particular individuals who specialize in the topics or work in the field are needed to participate in the in-depth interview (Kristensen & Ravn, 2015; Patton, 2002). Three managers from different departments were chosen from 3 companies with high, medium, and low level of sustainability. (Determination of the levels is discussed in detail later.) Research in Thailand shows managers in different functions, though within the same firm, may have different priorities and differing opinions about what is important (Suwannaporn & Speece, 2010). The three specific companies were selected through personal network since the researcher has been working in the industry. Personal networks are useful in Asian culture with strong traditions of business secrecy, working through personal networks and references is the most effective way to access the information in Asian business culture (Kainzbauer & Hunt, 2021; Srijumpa et al., 2004).

For the customer interviews, snowball sampling was adopted, which is useful to select the participants when the populations are difficult to reach (Goodman, 2011). Finding consumers in general is not difficult, but making sure they match up with the brands covered in this research could be problematic. There are not really a few dominant companies, rather, market share is fairly widely diffused across many companies. The initial respondents—the seeds—were selected through the researcher's personal networks to ensure that they are knowledgeable and are able to give required information (Browne, 2005). In total, 9 customers from 3 different brands, which are identical to ones in the managers' study, were selected to participate in the in-depth interviews.

In the second stage, the statistical quantitative approach was adopted to test the direction and magnitude of the relationship of brand and corporate images to

emotional attachment and brand loyalty numerically. The results from the qualitative study, together with the findings from the literature, were used to develop the quantitative questionnaires. The questionnaires were initially tested for content validity through expert opinion and the Index of Item Objective Congruence (IOC) method (Hasson et al., 2000; Thorn & Deitz, 1989). In total, 4 experts were chosen from academic and business fields. The pilot study was conducted with 27 respondents who are the customers of the selected brands and concerned about sustainability. Discussion below develops why the target for sampling is sustainability-concerned customers, rather than just general customers. Basically, examining this specific segment is more useful for understanding sustainable brand image than examining people who do not care much about sustainability. After analyzing the result from the pilot test and eliminating a few problematic items, the questionnaire was again modified and ready to be distributed. In total, there were 308 eligible cases returned for the quantitative analysis.

The study was conducted in Bangkok, Thailand, where the concept of sustainability has long existed and developed to fit with the local context. This localized sustainability model is called Sufficiency Economy Philosophy (SEP). Because the majority of Thais are Buddhists, Thai people's perspectives and lifestyles have been greatly influenced from Buddhism (Limanonda, 1995; Neff et al., 2008). SEP, which was originated from King Rama IX after Thailand's economic crisis in 1997, is also one form of Buddhist economy. SEP is not a topic in this research, but as part of the context background, it guarantees at least some degree of sustainability awareness in companies and consumers. Because such local sustainability concept has been widely adopted in various industries (Kantabutra, 2019, 2007), the companies and consumers are somewhat familiar with the concept of sustainability, even if not the Western terminology. Therefore, Thailand is a suitable place to examine a sustainability model integrated within the local context.

1.7 Contributions

As noted several times, the concept of sustainable branding in the sense of 3-pillar sustainability is somewhat rare, and scholars in the area have called for more

examination of this issue. Therefore, this study contributes to the knowledge corpus of the concepts. The concepts of sustainable operations and products, and sustainable corporate culture were explained through the qualitative research with in-depth explanation in the sense of the 3-pillar context. The study shows some companies actually integrate the three-pillar sustainability into their practice, and reveals how they implement such concept. Some companies, however, still implement merely one or two pillars and call it sustainability.

This research also demonstrates the phenomenon of how consumers form the sustainable brand image and corporate image, and how they integrate the three pillars in such experience. It was found that most consumers with some sustainability consciousness recognize all three pillars, but do not necessarily use all of them to form their brand and corporate images in their minds. To some customers, all three pillars in one brand are preferable, while some of them think they are optional. Consumers, however, already recognize that sustainability includes the three-pillars, and see the current trend toward more consideration of all three, rather than just one.

The explanation of such phenomenon is useful for the managers in the industry in which they are able to adopt the concept of sustainability in their organizations with supporting research and detailed explanation. The study is also useful in confirming with empirical data the relationship among brand image, corporate image, and emotional attachment in the context of sustainability. Although there are several research on those links, the study in the comprehensive sustainability context is very rare.

Finally, the research on such concepts has mostly been done in the developed countries, but rarely in Southeast Asia. This research gives an example of the issues outside the developed regions, where the culture is somewhat different. This helps in assessing how generalizable the issues are across different cultural and region contexts.

1.8 Brief Overview of the Chapters

Chapter 2 contains the literature review, which starts by examining the concept of branding in the context of sustainability. Many studies have suggested there

are successful sustainable businesses and brands which resulted from an integration of sustainability concepts into multiple business practice (Peloza, Loock, Cerruti, & Muyot, 2012; Schultz & Block, 2015; Yazici, 2020). The most well-known theory is probably the three-pillar concept. In this framework, sustainability is built by three main components, namely social, environmental, and economic components (Purvis et al., 2019).

The literature review found that most studies focused on merely one pillar, and the studies which integrated comprehensive sustainability is rare. Therefore, the research on sustainable branding which is well integrated with all environmental, social, and economic components is needed (Taecharungroj et al., 2019). This chapter continues exploring the related topics, including the triple bottom line concept, corporate social responsibility (CSR), green marketing, and sustainable brands. Sections then discuss the process of how the conceptual model was created in detail. Such process includes 3 levels, which are the corporate implementation, the customer's perspective, and outcomes, emotional attachment and brand loyalty, and how those levels connect together.

Chapter 3 discusses the qualitative research, starting with detailed justification for using qualitative methods in this case, and then covering the results and analyses from the qualitative interviews. The study was divided into the internal corporate level and the customer perception level. For the corporate level, the in-depth interviews were conducted among nine managers from the selected companies. Similarly, nine customers from the same brands were selected to participate in the in-depth interviews for the customer level.

Chapter 4 demonstrates the quantitative part of this research. It describes questionnaire development for the survey, starting with where items were taken from the literature, adapting based on qualitative results, and the stages of expert opinion and scale purification from quantitative assessment of pilot results. The questions aim to test four hypotheses which explain the relationship of brand image, corporate image, emotional attachment, and brand loyalty, in the context of three-pillar sustainability.

The pilot test was conducted with 27 respondents. Snowball sampling, which was also used in the main study, was adopted. Snowball sampling technique is useful when the populations are specific and difficult to find (e.g., Atkinson & Flint,

2001), and help in adapting to particular cultural conditions (e.g., Sadler et al., 2010). Exploratory Factor Analysis (EFA) was used to gain a preliminary assessment of convergent and discriminant validity, and reliability. The final questionnaires were then distributed, and responded to by 315 respondents who value sustainability. At the end, 308 respondents were eligible for the main study after data cleaning.

After collecting the data, the overview of the basic summary statistics for the questionnaire items was performed. The researcher then examined the reliabilities of the sub-dimensions and sustainability pillars. Composite variables representing the concepts in the model were created from factor scores. Structural equation modeling (SEM) was chosen in this study because it aims to explain the relationships among multiple variables. SEM also examines the structure of interrelationships shown in the equations, which is similar to a series of multiple regressions. Such equations describe every relationships among variables and constructs (Hair et al., 2019). The result of SEM supports all 4 hypotheses.

Chapter 5 shows discussion and conclusions of the study, as well as the implications, limitations, and recommendation for further studies. Key findings from both qualitative and quantitative studies were demonstrated. It was found that the companies with higher sustainability scores have been attempting to incorporate all three sustainability pillars into their business practices and policies. This attempt was perceived by customers through their products and CSR initiatives they publicly communicated. Implementing sustainable operations and products, as well as creating sustainable corporate culture, were found to be the crucial tools when a company attempts to integrate such sustainability concepts into its organizational practice. Consumers tend to build sustainable brand image from their experience with the products and PR activities seen in various types of media.

There are conceptual and managerial implications. Since most empirical research on sustainable branding has largely focused on merely one pillar and mentioned merely from the marketing perspective, this research addresses this gap. For managerial implication, this study suggest integrating sustainable elements into business practice, rather than use it as merely a marketing tool, in order to create a genuine sustainable brand.

CHAPTER II
LITERATURE REVIEW

2.1 Brand Equity and Concept of Sustainability

In this era, a company's most valuable asset is often no longer tangible assets such as factories, plants, and real estate, but rather intangible assets like technology, intellectual properties, reputation, and brands (Keller, 2013). This discussion specifically examines the topic of branding, but the other intangible assets are clearly intertwined. To build a brand requires great effort with various compositions and consistency (Schultz & Block, 2015), but to sustain the brand demands for even greater determination. In the beginning, practitioners tended to focus on various marketing tools to create a brand. However, a number of the studies have evidenced successful sustainable business and brand which resulted from an integration of sustainability concepts into multiple business practice (Peloza, Loock, Cerruti, & Muyot, 2012; Schultz & Block, 2015; Yazici, 2020). In other words, a sustainable brand cannot be created only by marketing communication and activities, but also needs the integration of sustainability into organizational culture and practice.

Sustainability, of course, is not only a trend for business success, but also a new standard for every industry in the world, as can be seen from 2030 UN sustainable development goals aiming to develop a better future (UN, 2022). This discussion examines the integration of comprehensive sustainability to the branding model. It argues that marketing cannot simply pick-and-choose which parts of sustainability are most useful to brand image, but rather, must incorporate sustainability as a whole. Ultimately, the components of sustainability are intimately interconnected and form a coherent package. Taken alone, a single component by itself may not be 'sustainable' long term.

Sustainability theory is currently a somewhat open concept with different interpretations and various understandings based on diverse contexts. The most well-known theory is probably the three-pillar concept (Figure 2.1). In this framework,

sustainability is built by three main components, namely social, environmental, and economic components (Purvis et al., 2019). If any one of these pillars is missing, sustainability is unlikely to be successfully created. To simplify, sustainability should provide "social and economic benefits within planetary boundaries", (UNESCAP, 2018). The concept was built on the UN definition of sustainability, which was stated by Brundtland (1987) as "meeting the needs of the present without compromising the ability of future generations to meet their own needs". The practice to achieve this definition includes eco-development, which was defined by Sachs (1978) as "an approach to development aimed at harmonising social and economic objectives with ecologically sound management, in a spirit of solidarity with future generations." This approach was a balanced solution combining social, ecological, and economic pillars together.
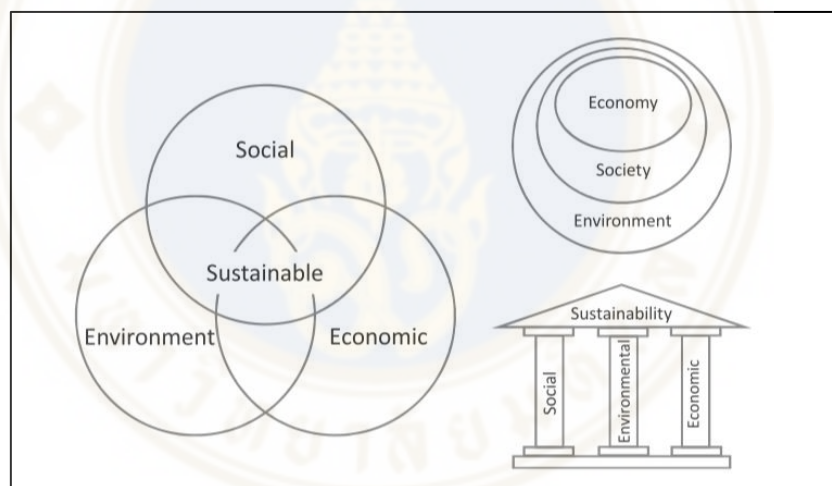
Figure 2.1 The 3-pillar framework

Source: Purvis et al. (2019)

According to Brown et al. (1987), the social perspective refers to continued satisfaction of basic human needs. The environmental or ecological perspective focuses on continued functioning and productivity of ecosystems, together with conservation of biological diversity and protection of genetic resources. The economic perspective involves the criteria of economic concern in a sustainable society. Although there was no clear origination of the three-pillar framework, such concept was created from various schools of thought. The two main thoughts mainly to address social and

ecological goals, and later integrated economic component when the economic growth was criticized to be a cause of social difficulties and environmental contamination. As a result, the tripartite components were balanced to achieve sustainability goals. This win-win concept is widely adopted because of its trade-off solution for all dimensions (Purvis et al., 2019). In other words, both social and environmental issues can be addressed, while maintaining decent economic performance at the same time.

The concepts of sustainability are the basics for the 2030 UN sustainable development goals, which are the guideline to achieve a sustainable future for everyone. The goals are basically the solutions of current global challenges, including inequality, climate change, poverty, environmental contamination, and peace and justice. Although these goals were not explicitly conducted from the three-pillar framework (Purvis et al., 2019), they address all three components effectively. "The 17 SDGs are integrated—that is, they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability" (UNDP, 2022).

Although there is some overlap and occasional ambiguity about where to allocate a SDG, Stockholm Resilience Centre has created the wedding cake model (see Figure 2.2), which categorizes the SDGs into the three pillars (Stockholm Resilience Centre, 2017).

Figure 2.2 The Stockholm Resilience Centre's SDGs "wedding cake"
Source: Stockholm Resilience Centre (2017)

Four following goals are compatible with the environmental pillar.

1) Ensure clean water and sanitation for all (=UNSDG #6)

2) Take urgent action to climate change (=UNSDG #13)

3) Conserve and sustainably use of seas, oceans, and marine resources. (=UNSDG #14)

4) Protect, restore, and promote sustainably use of terrestrial ecological systems (=UNSDG #15)

Eight following goals comply with the social pillar.

1) Decrease poverty worldwide (=UNSDG #1)

2) Reduce hunger and undernutrition, as well as and achieve food security and promote sustainable agriculture (=UNSDG #2)

3) Promote good health and well-being at all ages (=UNSDG #3)

4) Ensure quality education, as well as promote life-long learning (=UNSDG #4)

5) Promote gender equality and empower women and girls (=UNSDG #5)

6) Provide access to affordable and clean energy (=UNSDG #7)

7) Achieve safe, resilient, sustainable cities and communities (=UNSDG #11)

8) Promote peaceful societies and provide access to justice for all, with strong institutions. (=UNSDG #16)

And there are four goals, which are compatible with the economic pillar as follows.

1) Promote sustainable economic growth and decent work for all (=UNSDG #8)

2) Build resilient infrastructure and promote industry innovation (=UNSDG #9)

3) Encourage partnerships and international cooperation (=UNSDG #12)

4) Reduce inequalities within and among countries (=UNSDG #10)

There is one last goal, which is to encourage partnerships and international cooperation, to be created once all the rest 16 goals are fully synced.

The concept of sustainability in general can be integrated with the marketing concept. Often, sustainability in marketing is usually incorporated with and executed through marketing communications. However, a sustainable brand should not be created merely from marketing communications, but rather by integrating sustainability into business practices. This way, a brand that is sustainable can be genuinely created. The following discussion will examine sustainability from the marketing perspective.

2.2 The Study of Sustainable Branding

Most research in the early period did not mention directly about sustainable branding, but rather how sustainability influences the brand, both internally and externally. To illustrate the somewhat narrow way the branding literature has handled sustainability, a quick bibliographic review of the SCOPUS database on marketing journals was conducted by using the keyword search. Ineligible papers were excluded

after reviewing the abstracts. The criteria of inclusion was that sustainable branding is a key concept, a tool, an outcome, or a goal of the study. The researcher then categorized each study to align with the sustainability pillar—social, environment, and economic.

Three hundreds and thirty-three documents remained after the screening process with the review period from 2000-2021. Although the first studies on sustainable branding emerged in 1990s (Mainieri et al., 1997; Passingham & Battinson, 1991; Prothero, 1990), the topic had not yet attracted much interest until 2011, when the numbers of papers began to rise rapidly (see Figure 2.3).

Figure 2.3 Numbers of papers on sustainable branding published in marketing journals retrieved from SCOPUS from 2000-2021 (N=331)

The papers were then categorized to align with the three pillars by scanning keywords and abstracts (see Table 1.). Among 331 marketing articles on sustainable branding published in the past 21 years, about 41% of the papers focused on social pillar which mostly mentioned CSR. There were 34% and 3% emphasized on environmental and economic pillars respectively. In total, the studies which focused on merely one pillar of sustainability were combined up to 78% of the total numbers. Twelve percent

of total research mentioned two pillars, while merely 5 studies (2%) incorporated all three pillars of sustainability in the studies (see Table 2.1).

Table 2.1 Numbers of past research of sustainable branding on the three pillars of sustainability, in marketing journals retrieving from SCOPUS from 2000-2021

Sustainable pillar focused in the study	Number of studies
Social	136 (41%)
Environmental	113 (34%)
Environment and social	22 (7%)
Social and economic	12 (4%)
Economic	9 (3%)
Environment and economic	5 (2%)
All three pillars (social, environmental, and economic)	5 (2%)
Unidentified	29 (9%)
Total	331 (100%)

As can be seen from Figure 2.3, the research in the last four years (2018-2021) accounts for up to 55% of the total numbers of research on sustainable branding. However, when the same analysis of the research focus on sustainability pillars have been conducted, it can clearly be seen that the proportion of the study on each pillar in the early years (2000-2017) and in the past 4 years (2018-2021) are very similar (see Figure 2.4). That is, most studies focused on merely one component of sustainability and studies which integrated comprehensive sustainability are rare.
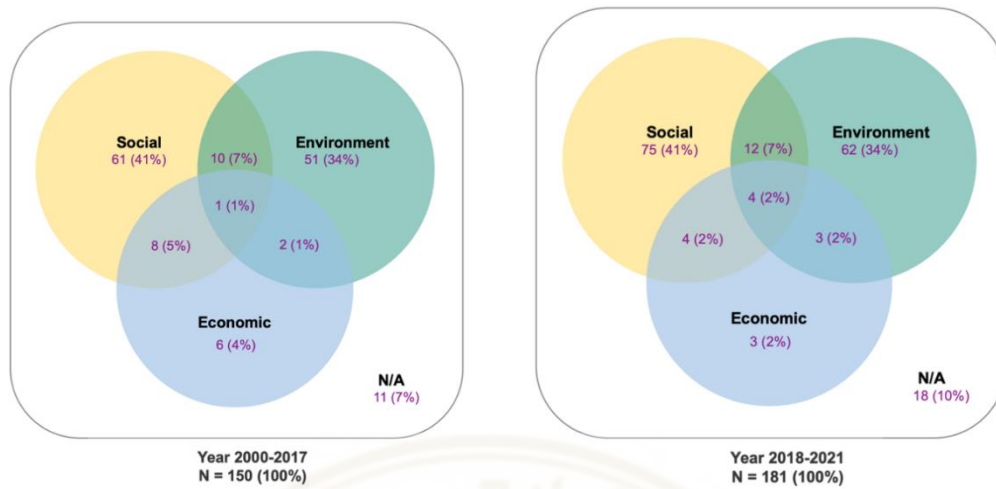
Figure 2.4 Numbers of past research of sustainable branding on the three pillars of sustainability, in marketing journals retrieving from SCOPUS from 2000-2017 and 2018-2021

A number of papers only talk about sustainability in general sense rather than focus on the particular pillars. As mentioned above, it is obvious that most marketing studies on sustainable branding did not integrate all three components of sustainability, whether in earlier or recent years. The research on sustainable branding which is well integrated with all environmental, social, and economic components thereby needs to be conducted (El Zein et al., 2020b).

Figure 2.5 shows the frequent keywords which occurred together in the studies. The minimum frequency of keyword occurrence shown in this diagram is 6. The size of the nodes refers to the frequency of the keyword occurrence, while the distance among the nodes implies how often the particular keywords were cited together. Most of the keywords associate with either the environmental or the social pillar. The three most frequent keywords are corporate social responsibility (CSR), sustainability, and green marketing. Most studies focused on the social pillar referred to CSR and how CSR influenced the brand and brand components. The research on the environmental pillar basically related to green marketing and green practice, which contribute to the green brand. And the economic pillar, only rarely addressed directly, usually referred to the circular and sharing economy. However, the keywords on the

economic pillar do not show up in the diagram because each of them has been appeared less than 6 times during the past 21 years.
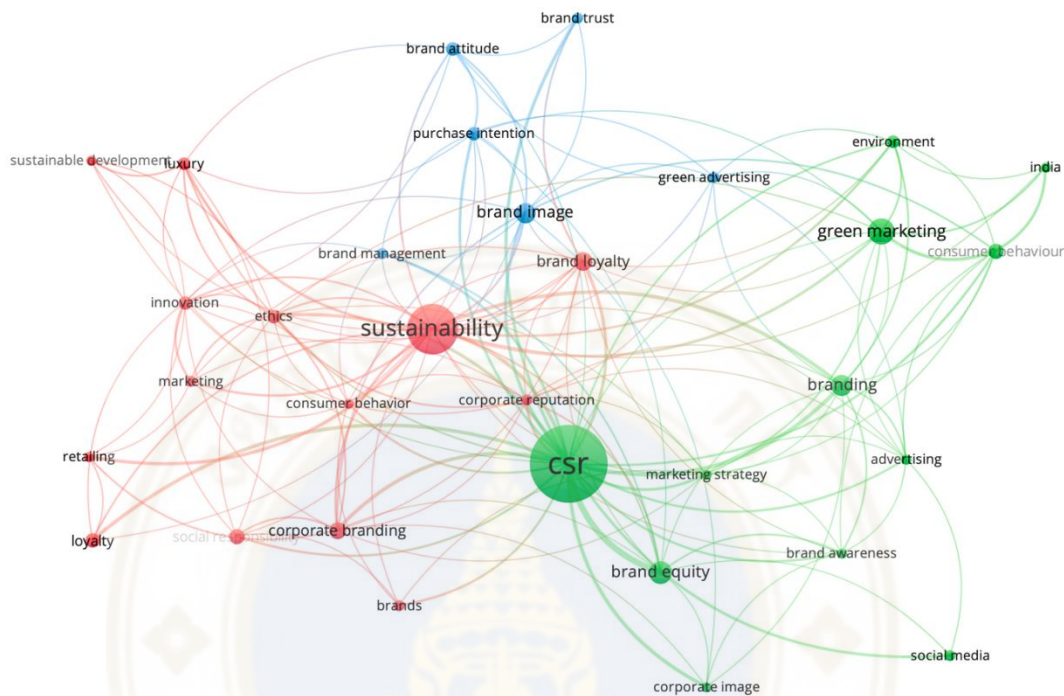
Figure 2.5 The diagram of co-occurrence keywords in sustainable branding in marketing journals retrieving from SCOPUS from 2000-2021 (N=331)

It is apparent that the economic pillar was mostly absent from the scholars' interests. There were merely 31 papers mentioned the economic pillar in the past 21 years. And only 9 of them focused primarily on the economic perspective. Therefore, better integrating the economic pillar in the sustainable branding context is an important part of filling the gap in comprehensive treatment of sustainability.

2.3 Economic Development and Sustainability

The concept of economic development was developed soon after the second world war because of a need for international efforts to assist the development in less advanced countries. This economic development required great environmental

resources, resulting in a rise in material well-being indicated by growth in per capita income and flow of goods and services. Later after 1950s, the term "economic growth" became synonymous with "economic development" in much mainstream discussion, which was a goal of most Western economic policies (Arndt, 1989; Purvis et al., 2019). In later 1960s, the modern environmental movement emerged. A concern for environmental issues was prioritized before an economic growth (Du Pisani, 2006; Purvis et al., 2019; Rome, 2003; Tulloch, 2013). And there the idea of limiting economic growth had been proposed with an accusation that the growth-based economy was unsustainable for the planet (Tulloch, 2013; Tulloch & Neilson, 2014; Van Der Heijden, 1999). Scholars argued that economic growth not only failed to solve social concerns, but was also often the actual cause of them. The president of the World Bank, McNamara, thereby demanded to recapture the profound framework of economic growth (Arndt, 1989).

Despite numerous critics on the economic growth against sustainability practice, UN has addressed this issue by promoting credible work and encourage sustainable economic development (UN, 2020). In this case, the highest growth rate is not a desired outcome, but rather an increase in employment opportunities, decrease in informal employment and the gender pay gap, and promoting safe environment for all workers. Therefore, economic growth can be either an obstacle or a complimentary element for sustainability practice. Excessive growth may result in severe social and environmental distresses, while balanced economic development can effectively contribute to the sustainability goal by promoting decent employment and safe work environment, as well as maintaining environmental-friendly practices.

This concern about rapid economic growth has been established for quite a long time. In the 1972 report commissioned by Club of Rome called the limits to growth (LTG), the authors proposed that the limits to growth on this planet will be reached within the next one hundred years if the world's growth trends in world population, industrialization, pollution, food production, and resource depletion remained unchanged. Therefore without substantial changes in resource consumption, "the most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity" (Meadows et al., 1972; Meadows & Randers, 2012). LTG is one of the very first Western concepts that concern about an excessive economic growth.

This concept of equitable development is fairly similar to the perspective of some versions of Buddhist economy and Sufficiency Economy. Buddhist economics is one form of sustainable economy which emerged in Buddhist countries such as Thailand. Buddhist perspectives are often the starting point of applying the western concept of sustainability in Thailand (Speece, 2019). Sufficiency Economy Philosophy (SEP) is a unique localized framework of sustainability in Thailand, which is one form of Buddhist economy (Kantabutra, 2019; Song, 2020). The main idea stemmed from Buddhist philosophy of middle path, in which the essence of such concept are moderation, reasonableness, and self-consciousness (Piboolsravut, 2004). Following the Buddhist framework, economic development shall be treated in moderate and reasonable pace. Because both Buddhist economy and SEP suggest highly ethical and moral practices, they logically comply with the sustainability goal. This is a macro-level application, but these practices may be adopted in micro scale as well, and the next section examines application to business practice.

2.4 Sustainability in Business Practice

According to Salzmann, Ionescu-Somers, & Steger (2005), the concept of sustainability emerged in the business literature in the 1960s. That is when practitioners in the industry realized that proper decisions and practice involved social and environmental issues which need to be addressed to achieve long-term business success. Such issues include improving reputation, and employee recruitment and retention. A company must be responsible to its stakeholders and their interests, rather than focus merely on shareholders' needs (Freeman, 1984). According to Freeman (1984), stakeholders is "any group or individual who can affect or is affected by the achievement of the organization's objectives". In the business context, stakeholders then refer to parties who have both direct and indirect relationship with a company, including employees, investors, suppliers, government, and the broader society. This comes to an environmental concern in which it affects people in the community directly. Much discussion was initially on corporate social responsibility, which is when an organization acquired and returned to the society, through various groups (Montiel, 2008), such as employees, communities, and countries.

Soon after 1990, the concept of the business case for sustainability (BCS) was being debated by many scholars, with varying degrees of agreement or disagreement about the economic rationale of sustainable corporate management. In other words, BCS refers to "a strategic and profit-driven corporate response to environmental and social issues caused through the organization's primary and secondary activities" (Salzmann et al., 2005). Such sustainable business practice was believed to increase corporate reputation, leading to effective employee recruitment and retention, which finally resulting in lower operating cost (Salzmann et al., 2005). BCS was originally created from the sustainability idea, which aligned with the 3-pillar framework adopted in macro level. However, it was often used simply to benefit shareholders, rather than to achieve the genuine sustainable social, environmental, and economic goals (Schultz & Block, 2015). For this reason, BCS was adopted mostly in theoretical level, with a failure to fit in the broader definition of sustainability very well at the level of actual implementation.

In an era of social and environmental awareness, government agencies, policy makers, entrepreneurs, and consumers are highly cautious about the sustainability of market practice (Morrish et al., 2019). The studies of an integration of sustainability to micromarketing are emerging recently (Shultz & Peterson, 2019). Because macromarketing examines the relationship among markets, marketing, and the society (Hunt & Burnett, 1982), macromarketing sustainability refers to an integration of sustainability elements into those components. Studies on this macromarketing sustainability involves various dimensions, which are compatible with the 3-pillar concept. The study from Shultz & Peterson (2019) incorporates social dimension, including employment, population growth, education, and income distribution. Environmental dimension consists of energy use, alternative energy, organic agriculture, and biodiversity. The economic dimension refers to GDP and public debt. This clearly evidenced that macromarketing sustainability leans towards the 3-pillar framework. However, the presence of sustainability in macro scale is not enough to create the complete sustainability environment. Shultz (2017) suggested that constructive engagement by individuals, organizations, and governments are essential to achieve human and environmental well-being in long term. This practice involves

agencies in both macro and micro levels, to achieve the comprehensive picture of sustainability.

The environmental issue had often been prioritized in corporate concerns because of the continuous growth of the green market segment. This was a result from an increase of critical environmental issues, including water and air contamination, oil spills, and nuclear waste. Environment, safety, and protective issues turned out to be a primary concern for policymakers and stakeholders. Thus, the organizations have to contend more with core green practices to shape their green products into a sustainable brand (Chen et al., 2020a; Sharma & Joshi, 2019), which ultimately contribute to reputation and profitability. Those companies use sustainability element to differentiate their market position because consumers have increased their concerns on environment and prefer green products (Norman & MacDonald, 2004). In this case, the environmental pillar seems to be used to symbolize sustainability, while the social and economic pillars were absent.

Similarly, the use of social branding is widely adopted among firms because many consumers now hesitate to support unethical businesses. CSR activities were proven to be a good contribution to brand image and corporate reputation (Chang & Yeh, 2017; Lai et al., 2010), which is advantageous for marketing purposes. As a result, environmental and economic pillars are not represented very strongly in the discussion of CSR, leading to a weak sustainability initiative. The reason that business practice often focuses merely on either environmental or social pillar is because it possesses an ability to benefit the shareholders, which is a shallow perspective of sustainability. However, the economic pillar is somewhat oriented toward a company in the triple bottom line concept, and there is not necessarily any contradiction between carefully implemented sustainability and benefits to the company.

2.5 The Triple Bottom Line Concept

Whilst the three-pillar concept can be applied to a macro scale in general, the triple bottom line (3BL) framework is often used as a management tool at a firm level (Norman & MacDonald, 2004). The triple bottom line framework is frequently used to measure business performance for an enterprise. The idea behind the 3BL model

is that a firm's success should not be evaluated by only the financial bottom line, but also by its social and environmental performances. The 3BL comprises of 1) social sustainability, which emphases on social development and human capital; 2) environmental sustainability, which focuses on resource management that leaves the least footprint to the planet; and 3) economic sustainability, which entails company's profitability and liquidity (Khan et al., 2021).

These 3 components are similar to social, environmental, and economic components in the three-pillar concept in the macro level, although the economic part is not very explicitly oriented toward external considerations. In the 3BL concept, one needs to be responsible for society and environment, while maintaining its profitability and decent growth. This way, the firms which have adopted 3BL are capable of being the good citizens, while successfully satisfying their stakeholders (Chaudhuri & Jayaram, 2019; Elkington, 1997; Norman & MacDonald, 2004; Sharma & Joshi, 2019).

This approach is similar to the 3-pillar framework, in which all social, environmental, and economic components need to be balanced to achieve the sustainable goal. In addition, a cooperation from various business units needs to be conducted to achieve the comprehensive 3BL and sustainability in the corporate level. Neither any sustainability pillar nor business function should be treated as a standalone function. One of the most concerning issues regarding 3BL is whether the performances can be measured empirically. Some scholars believe all social, environmental, and financial performances can be measured in objective ways via related indexes, while some argue that the measurement of the social and environmental components is relatively subjective and unrealistic (Norman & MacDonald, 2004). Because the concept of 3BL has been discussed and used in the business world for more than twenty years and there is still an argument on how to measure 3BL's performances, further question is raised whether this 3BL can be practically adopted or it is merely somewhat of a theoretical ideology.

2.6 Corporate Social Responsibility (CSR)

Probably the most common way to communicate the message of sustainability to the public is simply to integrate sustainability concepts into

organizational culture and business practices (Page & Fearn, 2005). Corporate Social Responsibility (CSR) activities are normally adopted to convey such message. CSR is a type of international private business self-regulation consisting of economic responsibilities, legal responsibilities, ethical responsibilities, and philanthropic responsibilities (Carroll, 1991; Sheehy, 2015). The ultimate goal of CSR is to encourage a positive outcome through an organization's activities on its stakeholders (Fontaine, 2013). To be economically responsible, an organization needs to be profitable, in order to be an effective economic unit in the society. Legal responsibilities are basic social responsibility to comply with rules and regulations promulgated by the government. Ethical responsibilities embrace practices approved by societal members even though they may not be required by law. Ethical responsibilities include not only social standards and norms, but also consideration of expectations or concerns from stakeholders. To be philanthropically responsible, companies should respond to society's expectation to be responsible corporate citizens. This refers to activities engaged in promoting human welfare and goodwill (Carroll, 1991).

More companies have been investing great efforts and resources into CSR initiatives. Such investment creates the moral capital as well as enhance the reputation and creditability of the corporations (Hur et al., 2014). The use of CSR varies among organizations. One might communicate CSR activities to build brand personality to be morally superior to the competitors, as well as maintain its sustainable and ethical characteristics (Brunk & de Boer, 2020; Madrigal & Boush, 2008). When CSR is implemented proactively and genuinely, it clearly has positive impact on environmental and social outcomes. It also leads to better financial situation by enhancing consumers' purchase intention, maximizing shareholder value, minimizing cashflow risk, and contribute to corporate image and customer satisfaction (Becker-Olsen et al., 2006; Nguyen et al., 2020; Nirino et al., 2019; Saeidi et al., 2015). As a result, it helps contributing to the local economy. In this case, the use of CSR is compatible with both 3BL in the firm level and 3-pillar framework in the macro scale. However, if CSR implementation is reactive, it can be perceived as a substitution of PR tool rather than a genuine attempt of a company to be responsible for environment and society (Fan, 2005). This is related to "CSR-washing" (Pope & Waeraas, 2016; Devin, 2016), which is briefly addressed in more detail below.

One concept of executing CSR is geosocial development, which refers to responsible practice of a firm towards various stakeholders, resulting in sustainable development. This concept complies with the integration of 17 sustainable development goals from UN, in which various sustainable practices shall be well aligned altogether. To achieve the goal of corporate sustainability, firms adopting geosocial development shall balance interests and demands of stakeholders. Consequently, this practice would generate long-term profitability and success, while having possibility of a decline in short-term benefit (Freeman, 1984; Ketprapakorn & Kantabutra, 2019). Geosocial development is the systematic way for an organization to take responsibility to the society, including environment and local culture, through an investment in the community (Kantabutra, 2019). A study from Kantabutra et al (2010) also showed positive relationship between the practice of stakeholder focus and geosocial development. Because different perceptions of stakeholders result in different perceived corporate reputation and brand equity, one way to enhance stakeholder-oriented strategy is to enhance stakeholder-perceived benefits and happiness, resulting in increase in corporate reputation and brand equity (Winit & Kantabutra, 2017).

An important part of action in taking responsibility to environment and society can be performed through responsible production process, including reduce the waste and focus on employees' health and safety. This is the foundation of much of the green marketing focus on the environmental pillar (discussed below in the discussion of Level 1). Brand image in green marketing builds on environmentally sustainable products.

2.7 Green Marketing

The environmental issue is no longer an intangible ideology but rather becoming a mainstream for general consumers. The green market segment has rapidly grown since early 1990s. Such green consumers apparently have preference on the products which are environmental friendly. Green marketing was thereby adopted by many companies to respond such consumers' needs (Chen et al., 2020a). Green marketing basically refers to all marketing activities creating a positive influence or reduce the negative impact of their practices on the environment. These marketing

activities are specifically developed to trigger and sustain customers' green attitudes (Chen & Chang, 2012; Jain & Kaur, 2004).

Because of the environmental rules and regulations that were emerging, business companies attempted to adjust their business strategies to seize the green opportunities. Green marketing was adopted as a tool for such purpose. Executing green marketing has been proved to be advantageous. One can access to the larger target market as well as differentiate its position by expanding to the green segment. Because the number of green customers is growing, it is rational for a corporation to adapt their marketing strategies to be compatible with the consumers' needs. Green marketing can be strategized to be either proactive or defensive according to business strategies.

However, green marketing alone could not drive the whole company to be fully environmentally friendly. The biggest challenge for most companies is an integration of the environmental element into their corporate culture and practice, rather than the green brand alone (Chen & Chang, 2012; Peattie & Ratnayaka, 1992). Therefore, a coherent integration of business functions needs to be created to achieve the ultimate green organization.

2.8 Sustainability Practices in Macro and Micro Levels

While sustainability is effectively integrated in macro level, at least conceptually, it is somewhat less common for a firm to successfully integrate a genuine full 3-pillar concept of sustainability into its business practice, especially in marketing and branding. The challenge is sometimes surface-level perceptions about conflict of shareholders' interest, which is financial profitability, and the practice of sustainability, which initially may require extra time and cost. In addition, other than in strongly sustainability-oriented market segments, many consumers are hesitant to trade off the sustainability attribute with price premium (Sharma & Joshi, 2019). Therefore, the best way to fully incorporate the authentic sustainability concept into the business is when consumers demand for one. Fortunately, the market is moving that way. In that case, shareholders' interest can be served, while a firm is able to fully comply the 3-pillar framework. The BCS and 3BL concepts should be adopted practically and realistically.

For the social dimension, it is common for a firm to employ CSR initiatives to encourage consumers' purchase decisions and to differentiate oneself from the others (Becker-Olsen et al., 2006). A number of studies have indicated that proactive social initiatives lead to an improvement in consumers' beliefs, attitudes, and purchase intention (Becker-Olsen et al., 2006); a firm takes CSR initiatives to attract more consumers who value social responsibility. For the environmental pillar, most companies are aware that integrating "green" elements result in customers' preference and purchase intention for green customers (Norman & MacDonald, 2004). Most companies have thereby integrated either CSR or green practice and refer it as sustainability because of the growing awareness of social and environmental concerns.

As discussed above, some companies began addressing sustainability issues (or the three components of 3BL) some time ago, although in the beginning, somewhat haphazardly and without much integration across the pillars. For example, already in the early 1990s it was apparent that consumer markets were beginning to assess the impact of packaging on the environment. "Corporate executives who sit back and take a wait-and-see attitude in regard to defining their internal strategy for an environmental packaging program will face a rude awakening" (Casey, 1992). Some companies took such advice seriously, others essentially conducted green-washing public relations campaigns (Leonidou et al., 2011). But even early on, Casey (1992, p. 18) was clear that simple green-washing was not a very good solution: "Today's consumer will not accept a so-called green package that is not an improvement over previous efforts and in addition, costs more."

"Greenwashing can be placed at the intersection of two firm behaviors: poor environmental performance and positive communication about environmental performance" (Dangelico & Vocalelli, 2017, pp. 1269). The term, of course, is specific to the environmental pillar, but the concept can be applied to the other pillars as well, although as noted above, there is not much research examining the economic pillar. For the social component, however, there is sometimes a gap between claims and reality; e.g., "gender-washing" in CSR inclusivity claims (Walters, 2022). Pope & Waeraas (2016) say "CSR-washing" is less prevalent than popularly thought, although they define it specifically as "false claims", implying a somewhat uncritical view of presenting only incomplete information. The green-washing definition just above

(Dangelico & Vocalelli, 2017) is about correspondence of claims and performance, not false information. Sometimes, information may technically be truthful, but only partial, and full information would indicate that the CSR performance somewhat less impressive than what is claimed (Devin, 2016).

Such "sustainability-washing" may be present, and it is important to be aware of it when it is, but it is not the focus of this research. Here, the discussion is on companies that actually do implement sustainability to some degree. Many do in Thailand. In macro level, the economic dimension refers to the balanced economic growth, resilient infrastructure, and international partnerships and cooperation (UN, 2022). In corporate level, therefore, it may refer to the balanced growth, resilient ability, and shared resources among organizations. In the case of Thailand, integrating SEP into the business practice is an example of being economically responsible. As mentioned earlier, SEP was integrated into business strategies to achieve sustainability in the corporate level. Similar to the macro scale, a company shall include the three concepts of moderation, reasonableness, and self-consciousness into its organizational culture and practice (Piboolsravut, 2004). This way, the ultimate economic goal is no longer to maximize profitability for shareholders, but rather to balance the interests for all stakeholders.

Ideally all three pillars are required to align together in multiple a firm's business functions. No one pillar can be disregarded in order to create the comprehensive integration of sustainability within the organization itself. This practice shall ultimately be compatible with the macro level to ensure sustainability in the whole economic cycle.

2.9 Sustainable Brand

A sustainable brand is the one that effectively integrates all three pillars of sustainability, namely social, environmental, and economic components into its business operations (Sharma & Joshi, 2019a). Many companies, however, focus mainly on environmental practices in the name of sustainability despite the fact that all three components need to be considered (Kleindorfer et al., 2005; Longoni et al., 2014; Seuring & Müller, 2008; Sharma & Joshi, 2019). Such companies use green element to

attract customers because they have increased their concerns on environment and prefer green products (Norman & MacDonald, 2004). "Green brand is recognized as the one, which minimizes the harmful effects on the environment and encouraging long-term economic development" (Papista & Krystallis, 2013). The consumer-centric approach is adopted to ensure the sustainable connection between customers and green brands in the long run.

Past research also showed the preference for green brands among pro-environmental consumers (Chang, 2011; Kushwaha & Sharma, 2016; Seegebarth et al., 2016). Because of the lack of well-developed international environmental standards, these brands often adopt the concept of sustainable operations and demonstrate their sustainable practices by developing supply chains (Sharma & Joshi, 2019). Although consumers prefer a greener brand, there is evidence showing the green brand attribute is not sufficient to motivate widespread brand-switching behavior, especially when the green brand is coupled with premium pricing, as e.g., Casey (1992) discussed long ago. This implies that consumers who are concerned about the environment is willing to pay for a green attribute, while the mainstream mass segment may not. However, green quality does offer a greater reputational benefit (Wymer & Polonsky, 2015). This preference of green brand clearly indicates the presence of the environmental pillar and the absence of the other two—social and economic pillars—in sustainable branding from this one-pillar approach.

Similar to some incomprehensive sustainability practices in the business, some "sustainable" brands are used to maximize shareholders' financial benefit. For such brands, the priority of integrating sustainability attributes is somehow not to balance all three components, namely social, environmental and profitability, but rather to ensure healthy cashflow in long run. Many sustainable brands decided to integrate the environmental pillar because green is a trend. As a result, social and economic elements are usually absent from the brand development and organizational culture and practice. Similarly, some brands, especially at the corporate image level, focus mainly on CSR elements. In other words, genuine sustainable brands, which fully incorporate social, environmental, and economic components, are not commonly seen. This implies that the sustainable branding concept does not always fit well with the 3-pillar framework in the macro scale. Sometimes, this may be because companies are mainly

using 'sustainability' as a PR tool, and just pick out one aspect of sustainability in their efforts to convince consumers they are sustainable. Often, however, it could also be from incomplete understanding of three-pillar sustainability among companies that are do actually aim for sustainability.

Besides the need of a solid integration of the three sustainability pillars, all business functions also need to be fully combined. Neither marketing nor operations management unit alone can drive the whole company to be genuinely sustainable. A company shall not treat any business task as a standalone unit or else the sustainable brand can turn to be another short-term marketing campaign. Therefore, an integration of sustainability into multiple business functions is required to achieve a sustainable brand (Chen & Chang, 2012), which as well finally maximizes the shareholders' value.

Such integrations of both sustainability pillars and business functions can be categorized into three levels. The first level is basically the corporate level, where sustainability is integrated into business functions and culture. This is prerequisite for building a sustainable brand. Without actual sustainability implementation, any marketing communications about sustainability is simply green-washing (to use the environmental pillar as an example). The second level refers to the consumers' perceptions about a brand and a company, which results from the practice in level 1, and can be enhanced by marketing communications. And the third level is the ultimate goal of creating a brand, which is favorable response to the brand and ultimately brand loyalty.

2.9.1 Level 1 – The Corporate Level

One of the most important components of creating sustainability in an organization is the input into the process. A company has an option to identify the level and components of sustainability integrated to its business practice. Sustainable products and services are thereby created from the sustainable operations management, while the integration of sustainability into corporate vision results in sustainable corporate culture.

2.9.1.1 Sustainable Operations and Products

(1) Sustainable Operations Management. As the importance of the future of people and environment are gaining their concerns over time periods, triple

bottom line is adopted to most modern business to achieve sustainable achievements. Managers thereby are challenged to integrate health, social, environmental, and safety concerns into operations management. As a result, this integration leads to sustainable operation systems (Kleindorfer et al., 2005), resulting in sustainable products and services. Early work defined sustainability operations management (OM) as "the set of skills and leverages that allow a company to structure its business processes to achieve sustainable performance" (Kleindorfer et al., 2005). There were four main concerns enhancing successful outcome. Firstly, companies shall comply law and regulations strictly. Secondly, liability needs to be well managed with no negligence involved. Thirdly, employee health and safety are priority. Lastly, tools and management systems need to be regularly improved to form better product and process design.

Sustainable OM includes a set of rules that promote health, social, environmental, and safety benefit, aiming for sustainability in both macro and micro scales (Gimenez et al., 2012; Kleindorfer et al., 2005). As the field developed, the most common concept used for sustainable OM focused on cleaner production, which successfully integrates social, environmental, and economic components (de Oliveira Santos et al., 2020). Sustainable OM does not only provide the benefit for society and environment, but also the business profitability itself. As a result, successful sustainable OM leads to sustainable products and services, which significantly contribute to consumers' perception of the brands.

According to Gimenez et al. (2012), sustainability OM provides two major benefits. Firstly, firms need to be responsible for energy and resources they use in the operating system, finally resulting in the footprint they leave behind with the planet. The main idea of the activities focuses primarily on their production, transportation, recycling, and manufacturing process producing and creating the products. The ultimate goal of sustainable OM in this matter is therefore to reduce the footprint as much as possible (Kleindorfer et al., 2005). Secondly, organizations shall practice in a prudent and careful manner, to be responsible for their employees' health and safe work environment. They are also liable for contributing to the society. Practically, they often adopt CSR as a tool to contribute to the society. OM employs great numbers of people, which impact greatly to external community and local economy. And the firms themselves benefit from the practice by maximizing their

shareholders' financial interest. One of the popular approaches of sustainable OM is cleaner production. The cleaner production links social, environmental, and economic benefits to the firms' activities. This system leads to financial advantage as a result of the better management of energy, water, materials, waste, and people (de Oliveira Santos et al., 2020)

In summary, operations management has strong ability to contribute to the society, environment, and economy, which is clearly compatible with both the 3BL in the firm level and the 3-pillar concept in the macro level. Therefore, the integration of sustainability into the OM practice can significantly contribute to the sustainability.

(2) Sustainable Products and Services. Sustainable products and services result from sustainable OM and other types of sustainable practice in the organization. They are becoming a new standard in the market among customers. Numerous research showed sustainable products and services are believed to be social and environmental responsible, contribute significantly to customer satisfaction, purchase intention, and brand equity (Armstrong et al., 2015; Fargnoli et al., 2018; Kimita et al., 2009; Moise et al., 2019; Pan & Nguyen, 2015; Panda et al., 2020).

Sustainable products are items that provide social, environmental, and economic benefits concurrently, and have a positive impact on society and/or the environment. These products are the outcome of sustainable operations with social and environmental concerns during the production process, as well as a decent balance of stakeholders' interest and effective communications (Rocha et al., 2019; Sonetti & Lombardi, 2020; van Doorn et al., 2021). Similarly, sustainable service is defined as "the ability to promote sustainable behavior of a system of actors through the creation of different business models" (Villari, 2022) and "offerings that satisfy customer needs and significantly improve the social and environmental performance along the whole life cycle in comparison to conventional or competing offers" (Frank-Martin & Peattie, 2009). The sustainable service system design often goes beyond the product-service design, but rather focuses on purpose and function. Many times, sustainable service is developed to favor virtuous cycles on a large scale and encourage collaborative consumption, which contributes to the sharing economy (Roy, 2000; Villari, 2022).

According to Frank-Martin & Peattie (2009), sustainable products possess six attributes, including 1) customer satisfaction, 2) dual focus of both social and ecological benefits, 3) Aim for zero-waste with least permanent damage to the environment throughout the process, from selecting the material to selling and marketing approaches to the end of product life, 4) Contribution in significant improvement of socio-ecological problems on a global level, 5) Continuous improvement in knowledge and technologies to develop sustainable products according to social and environmental change, and 6) competitive market positioning in order to sustain the products over time periods. The six attributes of sustainable products mentioned above can be applied to sustainable service as well. Although this concept was proposed over ten years ago, the recent work on sustainable service still builds around this schema.

2.9.1.2 Sustainable Organizational Culture

Ravasi & Schultz (2006) defined organizational culture as shared assumptions guiding behaviors of people in organizations, while Schein (2010) identified it as collective behaviors and assumptions, which are conveyed to new organizational members. Organizational culture affects the way people interact within an organization as well as with related stakeholders. Therefore, this culture helps forming an organizational identity in stakeholders' mind. There are five dimensions of corporate culture identified by Flamholtz & Randle (2011), including customer treatment, people treatment, accountability and performance standard, innovation and adjustment, and process orientation. These five dimensions were tested to have positive impact with financial performance (Flamholtz, 2001). The past studies showed a green shared culture within an organization contributed to the potential of innovating green products (Chen et al., 2020b) and sustainable organizational culture empowered local communities (Musavengane et al., 2020).

Numerous studies have demonstrated that innovation is a crucial component of sustainable organizational culture, which leads to customer satisfaction as well as economic sustainability performance (Globocnik et al., 2020; Njoroge et al., 2019; Obal et al., 2020; Srisathan et al., 2020). Such culture was named "open innovation culture". According to Chesbrough et al. (2006), "open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and

expand the markets for external use of innovation, respectively". Creating an open innovation culture requires comprehensive understanding of leadership culture, teamwork culture, organizational climate, and employee empowerment.

One can demonstrate sustainable leadership by addressing sustainable challenges, including social, environmental, and economic issues. Sustainable leadership was defined as the leadership style that aims to fulfill the needs of the current society, without compromising the ability of future generations to prosper (Hallinger & Suriyankietkaew, 2018; Hargreaves & Fink, 2004). The common attributes of sustainable leadership includes emphasizing on leadership, rather than a unitary leader, focusing on long-term vision, aiming for broader goals that link organizations to society, ensuring ethical behavior, focusing on social responsibilities of leaders and organizations, encouraging innovation capacity, supporting systemic change, reassuring stakeholder engagement, and capacity building of stakeholders (Hallinger & Suriyankietkaew, 2018).

Scholars have studied this matter for quite a long time. One of the most well-known sustainable leadership models is the sustainable leadership pyramid from Avery & Bergsteiner (2011) where 23 factors contribute to the goal of sustainability (see Figure 2.6). These 23 practices can be categorized into social, environmental, and economic dimensions. Such practices extensively include internal human resource management, stakeholders' management, environmental and social contribution, managers' vision, and sustainable financial management. In addition, an innovative culture, which is fully integrated into business strategies, helps developing innovative solutions and increases the ability to understand customers' needs.
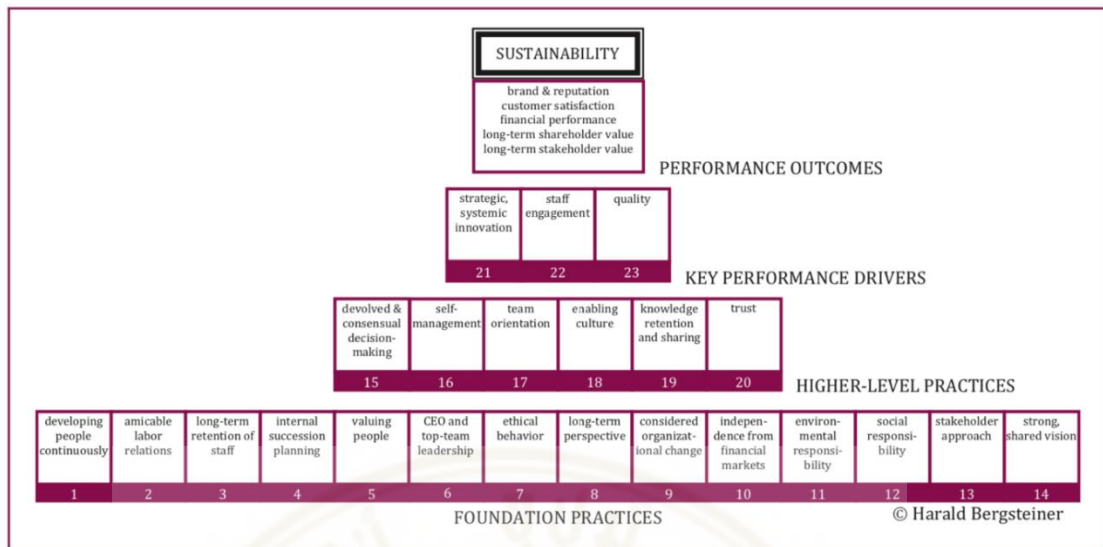
Figure 2.6 The sustainable leadership pyramid

Source: Avery & Bergsteiner (2011)

Teamwork culture is defined as "a cooperative process that allows ordinary people to achieve extraordinary results" (Scarnati, 2001). Teamwork culture should be encouraged instead of independent environment in the sustainable organizational culture. Organization climate refers to "the shared perceptions of and the meaning attached to the policies, practices, and procedures employees experience and the behaviors they observe getting rewarded and that are supported and expected" (Schneider et al., 2013). Positive organizational climate can create a culture of happiness, leading to the strategic goal for innovation performance (Ehrhart et al., 2013). In addition, this culture helps forming attractive work environment, which lead to an increase in employees' engagement and retention rate, as well as an improvement in organizational efficiency and innovative environment (Srisathan et al., 2020). Employee empowerment is when a firm uses the innovative approaches to promote self-practices in an organization (Thomas & Velthouse, 1990). There are a few papers which mentioned that teamwork is a crucial component for an organization to achieve better sustainability level and CSR performance (Freitas et al., 2020; Gangwani & Alarifi, 2021).

Such sustainable organizational culture incorporates various sustainable practices mentioned earlier, such as CSR activities, green marketing, and

SEP practice. With appropriate integration of sustainability components, together with careful incorporation of various business functions, the true sustainable corporate culture and practice will be effectively created.

    According to the first level of a sustainable brand creation mentioned above, the author developed the initial framework of the first level as follows (see Figure 2.7). The discussion above implies that for both of these concepts, the full three-pillar sustainability should be the foundation, rather than the usually more limited versions of 'sustainability' based on only one, or sometimes two pillars.
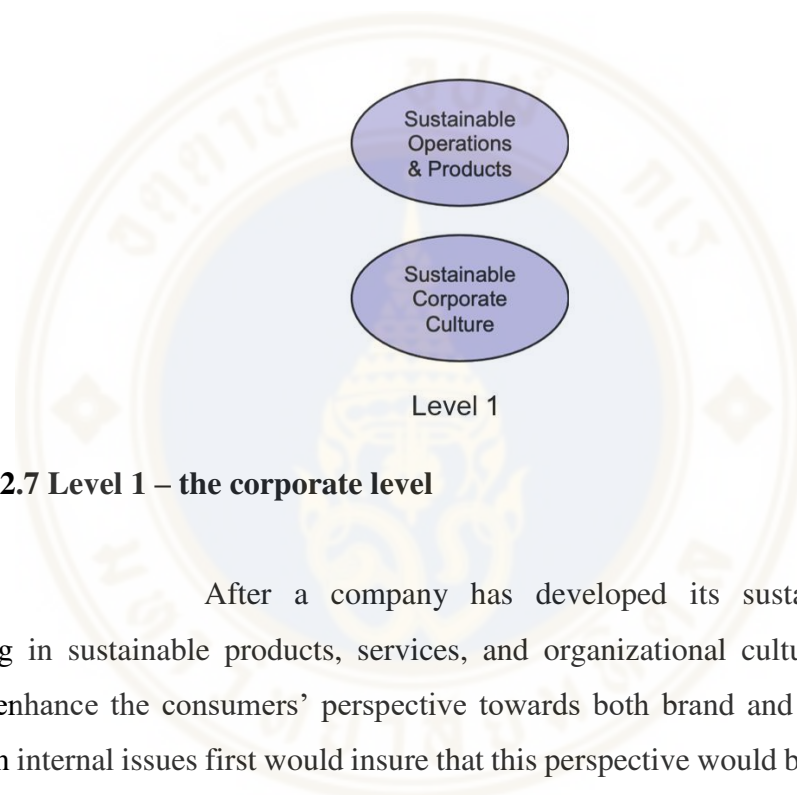
Figure 2.7 Level 1 – the corporate level

    After a company has developed its sustainable practice, resulting in sustainable products, services, and organizational culture, the outcome would enhance the consumers' perspective towards both brand and company. The focus on internal issues first would insure that this perspective would be based on actual company practice, rather than some version of "sustainability-washing" noted above. In the long run, sustainability-aware consumers pay attention to these issues, and are likely to recognize claims which are not very accurate. The next step is to find the process of forming stainable brands from the consumers' perspective.

2.9.2 Level 2 – The Consumers' Perspective

    Sustainable brand image and corporate image are created from the consumers' perceptions of sustainability towards the brand and companies. These perspectives are the results of a customer's experience with a brand and a company's sustainable attributes. These two constructs are also the key components of creating

emotional attachment to the brand with solid sustainability value. In other words, the better integration of sustainability in level 1, the stronger the sustainable attributes of brand image and corporate image. This, of course, is subject to consumers knowing something about internal sustainability implementations. Often they do know something nowadays, because they tend to follow favorite brands on social media to some extent (e.g., Bright & Logan, 2018; Dimitriu & Guesalaga, 2017). However, while probably easier and somewhat more common in the social media age, this was also the case earlier (e.g., Bhattacharya & Sen, 2003; D'Angelo et al., 2023; Pomering & Dolnicar, 2009). Explicit marketing communications can also help raise awareness of what the company is doing about sustainability, and social media has made engagement with the brand quite extensive (Pongpaew et al., 2017; Rotchanakitumnuai & Speece, 2023).

The past studies revealed a contribution of sustainable products and services to brand image and corporate image (Pongpaew et al., 2017; Rotchanakitumnuai & Speece, 2023). There was also much evidence on a contribution of sustainable corporate culture and practice to brand image and corporate image (Claver et al., 2007; Hillestad et al., 2010; Su et al., 2015). Although brand image and corporate image created from sustainability practice can attract only the customers who value sustainability, this market segment is rapidly expanding. Any company who wishes to enter this market thereby needs to shift their strategies towards sustainability in order to be aligned with the market trend.

2.9.2.1 Brand Image

The term brand image has long been in the marketing field. It is consumers' perception and personal belief of a brand. This perspective is built through brand associations which are held on consumers' memory (Keller, 2013). Better brand image is one of the most common reasons a company attempts to be sustainable. Accordingly, sustainable brand image is built by integrating the element of sustainability into brand attributes and as well product innovation and production process. One brand quality which is extensively used is the environmental friendliness or "green" (Rubio et al., 2020; Zandi et al., 2020). According to Chen et al. (2020), green brand image can be defined as "a set of perceptions of a brand in a consumer's mind that is linked to environmental commitments and environmental concerns". This

green brand image influences green consumers' purchase intention and financial performance (Bhatti & Sulaiman, 2020; Chen, 2010; Chen et al., 2020a). Likewise, CSR and social marketing creates social brand image attracts people who value socially responsible behavior. There was also a study indicating that brand image is a mediator of CSR and financial value in the emerging markets, which is somewhat different from the developed markets (Flores-Hernández et al., 2020).

Park et al. (1986) indicated that brand image covers functional, symbolic, and experiential benefits for consumers. The sustainability attributes can thereby benefit to those consumers who value sustainability in functional, symbolic, and experiential ways. The past studies showed that consumers are willing to pay in premium when the products are associated with social image and CSR initiatives (Anselmsson et al., 2014; Fuller et al., 2022; Maaya et al., 2018). These benefits, however, could not be created without a proper integration of sustainability pillars incorporated into various business functions at the first place. Therefore, successful sustainable brand image shall contain the content of fully integrated three pillars, namely social, environment, and economic pillars.

2.9.2.2 Corporate Image

According to Mostafa et al. (2015), corporate image reveals customers' perception of a particular enterprise, resulting from one's experience and impression with a company. This perception contributes toward ''a total picture of the organization'' (Andreassen, 2001). Generally, socially responsible corporate image often results from CSR activities which the firms have conducted (Chang & Yeh, 2017; Parguel et al., 2011; Zhao et al., 2012). For green corporate image, consumers tend to build their perception from both green marketing and tangible evidence such as a certification assuring that the firm is environmentally cautious (Ann et al., 2006; Mukonza & Swarts, 2020).

A good corporate reputation and image creates a unique quality for a company. A highly-regarded company possesses an intangible characteristic, which makes it competitive and difficult to replicate by the competitors (Lai et al., 2010). There is evidence on the link between corporate image and brand image (Foroudi et al., 2022). People have increased their preference on socially responsible companies and tend to be associated with companies with good reputation and good sustainability

image. The companies thereby adopt CSR activities to strengthen their organizational reputation and image (Hur et al., 2014). The image created from CSR activities needs to be effectively communicated to the consumers. Performing such social activities without coupling with appropriate marketing communication is proved to be inefficient (Lai et al., 2010 Plungpongpan et al., 2016a, 2016b).

Superior organizational reputation may result in pricing concessions, better morale, lessened risk, increased strategic flexibility, and enhanced profitability (Miles & Covin, 2000; Van Riel & Fombrun, 1996). One great benefit of good reputation is to increase the opportunity to target quality sensitive segments with less marketing cost. Corporate reputation is not solely built by a company, but rather all stakeholders the companies associate with (Miles & Covin, 2000). Therefore, a firm needs to be cautious when selecting to associate with any stakeholder.

Similar to the studies on sustainability and customer satisfaction, the past research on corporate image of sustainability were limited to those which focus on merely one pillar, which are mostly either the social or environmental element. In the industry, the most common practice to achieve the image of sustainability is apparently CSR activities, as can be seen from the number of studies of the contribution of CSR to corporate image. The economic pillar and comprehensive sustainability are usually absent once again in the studies.

According to the literature review on consumers' perception towards sustainability, level 2 has been added to the previous model as follows (see Figure 2.8). Neither the brand image nor the corporate image concepts in the second level is new, and sometimes they include some sustainability components. However, as the corporate level (Level 1) should incorporate the comprehensive 3 pillars, brand image and corporate image are as well is assumed to house all three pillars of sustainability.
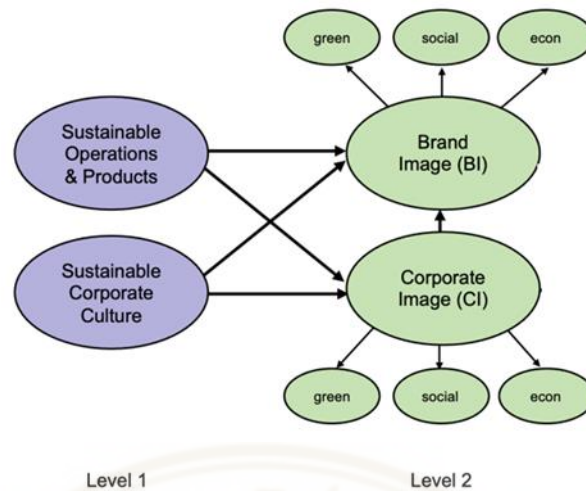
Figure 2.8 Level 1 – the corporate level and Level 2 – the consumers' perspective

2.9.3 Level 3 – Emotional Attachment and Brand Loyalty
2.9.3.1 Emotional Attachment

"Increasingly, companies are searching for ways to create strong emotional brand connections with consumers. This is motivated by the finding that such connections lead to higher levels of consumer loyalty" (Malär et al., 2011, p. 35). Thomson et al. (2005) described emotional attachment to organizations as an emotional bond between an organization and an individual. This attachment can be determined by a deep feeling of affection, passion, and connection. The concept can also be applied to brands. In general, strong emotional attachment is evidence by the resistance to consider new brands and products, as well as the resistance to consider whether the competitor's offer might have superiority. More importantly, customers who are emotionally attached to a brand tend to be loyal to the brand as well (A. Barreda et al., 2013; Loureiro et al., 2012; Mostafa & Kasamani, 2021). "In affective brand commitment, deep emotional attachment drives persistent devoted repurchase" (Grisaffe & Nguyen, 2011 p. 1053). Thompson (2005) show that EA is strongly correlated with loyalty, as well as willingness to pay a price premium. Largely, they talk about high involvement.

Theng et al. (2013) claimed that customer emotional attachment is a critical construct in the marketing literature because it shows the strength of the connection consumers have with the brand. This connection affects their behavior, which leads to firm's profitability and customer lifetime value (Thomson et al., 2005).

Although people's emotional attachment to a brand may not be as strong as an attachment built between humans, the behavioral effects of emotional attachment are quite similar (Theng et al., 2013).

Emotional attachment and satisfaction are not synonymous. Although a customer who is emotionally attached to the brand tends to be satisfied with it, the level of attachment may differ. Two customers who are equally satisfied with the brand may not attach to the brand equally. In addition, satisfaction tends to appear immediately right after the consumptions, emotional attachment tends to develop over a period of time after multiple interactions with the brand. For this reason, satisfaction is rather often a one-time evaluative judgement, while emotional attachment is a construct that has been build from consumer's experience over time (Thomson et al., 2005).

Interpersonal styles affect emotional attachment to the brand. Some people use a brand as a signaling device that helps them in their relationship with the others. Customers with high interpersonal anxiety tend to use brands to increase self-worth. These consumers are likely to connect with the brands that offer the attributes contributing to their ideal self-concepts, rather than attach to the brands that are compatible with their lifestyle and bring them comfort and security (Alvarez & Fournier, 2016).

Emotional attachment is an emotional bond between an individual and a specific item (Thomson et al., 2005). The past research from Barreda et al. (2013) indicates that brand image leads to brand emotional attachment. Among those studies on sustainability and emotional attachment, the green pillar is the most common subject. Wu et al. (2021) proposed that green emotional attachment is the bond that links a customer to the specific environmental quality by involving affection, passion, and connection. This green emotional attachment may lead to the willingness to pay in premium. However, there is no study on emotional attachment in the sense of comprehensive 3 pillars of sustainability.

The past studies from Barreda et al. (2013) and Loureiro et al. (2017) show that brand image and corporate reputation is the precedent of brand emotional attachment. For some products, including fashion products (Theng et al., 2013), corporate image can play a role also (i.e., not just brand image). Thomson et al.

(2005), who conducted multiple studies to develop an EA scale, even say corporate image may sometimes have a stronger connection to EA than does brand image, because it is more comprehensive.

2.9.3.2 Emotional Attachment and Brand Loyalty

Emotional attachment is a substantial contribution of brand loyalty (Sohail, 2022). Customers who have strong emotional attachment to the brand can be illustrated by resistance to the temptation of considering alternative products. They also tend to demonstrate brand loyalty behaviors, even in unusual market conditions (A. Barreda et al., 2013; Fernandes & Moreira, 2019; Loureiro et al., 2012; Mostafa & Kasamani, 2021). Therefore, studying emotional attachment in the context of comprehensive sustainability is essential, in order to develop a sustainable branding model.

Brand loyalty occurs when a customer repeatedly purchases the same brand and prefers a particular brand over the others available in the market (Y.-S. Chen, Huang, et al., 2020; Oliver, 1999). Loyalty may result from a buyer expressing an interest in a brand and having a favorable disposition towards such brand (Rizomyliotis et al., 2021). Loyalty can also be used to measure a customer's commitment for a brand and his or her repeated purchases (Y.S. Chen, Huang, et al., 2020). Chen (2013) has proposed a definition of green brand loyalty as "the level of repurchase intentions prompted by a strong environmental attitude and sustainable commitment towards a brand". The study also suggested that a firm may incorporate the green quality into its products, in order to raise the customer's green brand loyalty, which ultimately leads to an increase in sales.

The concept of brand loyalty and the relationship of emotional attachment to brand loyalty have been well studied for several decades. There are numerous studies evidencing that emotional attachment is antecedent to brand loyalty, several of which have been noted just above (e.g., (A. Barreda et al., 2013; Fernandes & Moreira, 2019; Loureiro et al., 2012; Mostafa & Kasamani, 2021; Shahid et al., 2022; So et al., 2013; Thompson, 2005). Such discussion, of course, follows work which argues that there is a relationship between various attitudes (such as emotional attachment) and behaviors (such as brand loyalty). Some studies have found that sustainability-oriented attitudes (usually the green pillar in older research) do not always

translate into behavior, and explore reasons for this (e.g., Wright & Klÿn (1998) are even somewhat more extreme in arguing that there is often hardly any attitude-behavior correspondence at all. Even older work, however, rarely claimed either "always" or "never"; the relationship is statistical, a tendency, not deterministic. More recent

It is necessary to note that there is some debate on whether emotional attachment is actually an attitude. Rossiter (2014)includes emotional and motivational aspects as components of brand attitude. Park and MacInnis (2006, p. 17), however, say that emotional attachment "entails evaluative properties like attitudes, but it also includes hot affect, reflecting the motivational and emotional properties associated with a relationship bond". In other words, they separate motivational and emotional aspects from attitude. For the purposes in this research, whether emotional attachment is attitude or "attitude-like" is somewhat irrelevant, given that, just as brand attitude, it contributes to brand loyalty, as discussed above. In fact, Park et al. (2010, p. 2), while saying that the attachment and attitude concepts share much, found that attachment can make a stronger contribution. "Brand attachment more accurately predicts intentions to perform behaviors that use significant consumer resources (time, money, reputation). It is also a stronger predictor of actual consumer behaviors than brand attitude strength".

The gap between attitude (or "attitude-like") and behavior in older research can come from several conceptual models. Often, as, for example, in the widely used Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM) and their derivatives, the sequence is attitude → intention → behavior, which follows common discussion of the consumer decision process. There are two places (attitude → intention; intention → behavior) where the relationship can break down, if indeed it actually does. Cheng (2018), as well as a hybrid combining them. Intention → behavior was confirmed in all cases, but attitude → intention only sometimes. Generally, there is not much disagreement about the intention → behavior link (Sheeran, 2002; Sheeran & Webb, 2016). Neither is there really substantial disagreement that attitude → intention usually works. In both of these decision-process stages, however, it is clear that these are not deterministic links; they may be weak or, occasionally, absent. Research now focuses more on when the links hold and why they might break

down (e.g., Elhaffar et al., 2020; Michaelidou & Hassan, 2014), rather than simply trying to demonstrate that they either do or do not exist.

Some of the problem in this attitude → behavior gap relates to the strength of attitudes. Weakly held attitudes usually do not translate into behaviors as well as strongly held ones. Van Doorn et al (2007), for example, discuss a zone of indifference (Fig. 1, p. 78). People with low attitude strength do not care very much, so there is not much relationship between attitude and behavior. Strongly held attitudes, both positive and negative, do translate into behavior. Their example for demonstrating the positive side of this was organic products:

"We expected only high degrees of environmental concern to be strongly positively related to the purchase of organic products. For respondents with less extreme attitudes, the benefits of organic products would presumably not outweigh the costs, such as higher prices or higher transaction costs for travelling to a specialized store. … This should result in a zero or weak attitude-behaviour relationship in the range of low to moderate attitudes. The relationship thus resembles the upwards-shaped curve in Fig. 1" (Van Doorn et al., 2007, p. 79).

This is illustrated in Figure 2.9 just below, and it is exactly what they found. (Loyalty cards similarly demonstrated the negative attitude side.) Van Doorn et al. (2007) propose that this can be modeled as a curvilinear relationship; the zone of indifference part of the data has a very shallow slope, but after the threshold, the slope is steep. This curvilinear pattern (weak or no relationship for weak attitudes vs. strong relationship for stronger attitudes) is not explicitly modeled very often, but Bechler et al. (2021), examining a wide range of situations, confirm that it is actually common. Clearly, research using simple linear methods (such as simple correlation or basic regression) may not find much relationship if the weak attitude people where there is no relationship are a substantial proportion of the sample. A more targeted sample aiming for strong attitude respondents is more likely to accurately assess the nature of relationships between attitudes and behavior.
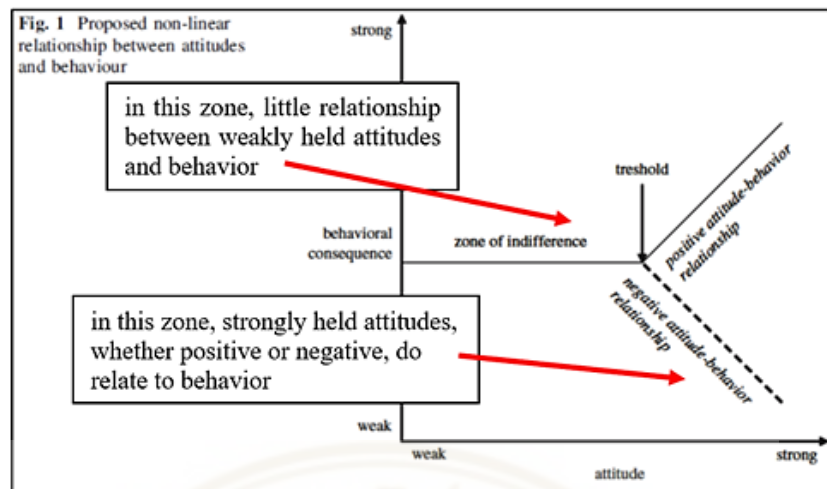
Figure 2.9 Weak vs. strong attitudes and behavior

Source: Van Doorn et al., 2007, Fig. 1, p. 78; commentary about zones added)

Another somewhat related issue is involvement level. Hansen (2005), for example, discussed some time ago that how attitude works in the decision process can depend on involvement level. Their experiments used food products, not usually considered very high involvement, but they demonstrated the attitude → intention link nevertheless. Often, however, even somewhat strongly held attitudes may not come to top-of-mind for consideration when people just do not think about the product much, as Aljamal et al. (2020, 2022) discuss for water. Mindfulness can work toward reducing attitude → behavior gaps (Amel et al., 2009; Fischer et al., 2017), and marketing can help in fostering recall of consumers' sustainability-oriented attitudes. This may be why Hansen (2005), just above, found an attitude → intention link for his organic food products. Organic is related to health issues in consumers' minds, and this can increase

From the literature mentioned above, the third level of the model—emotional attachment—was created (see Figure 2.10). This emotional attachment is the precedence of brand loyalty, which is the ultimate goal of building a brand for many companies.
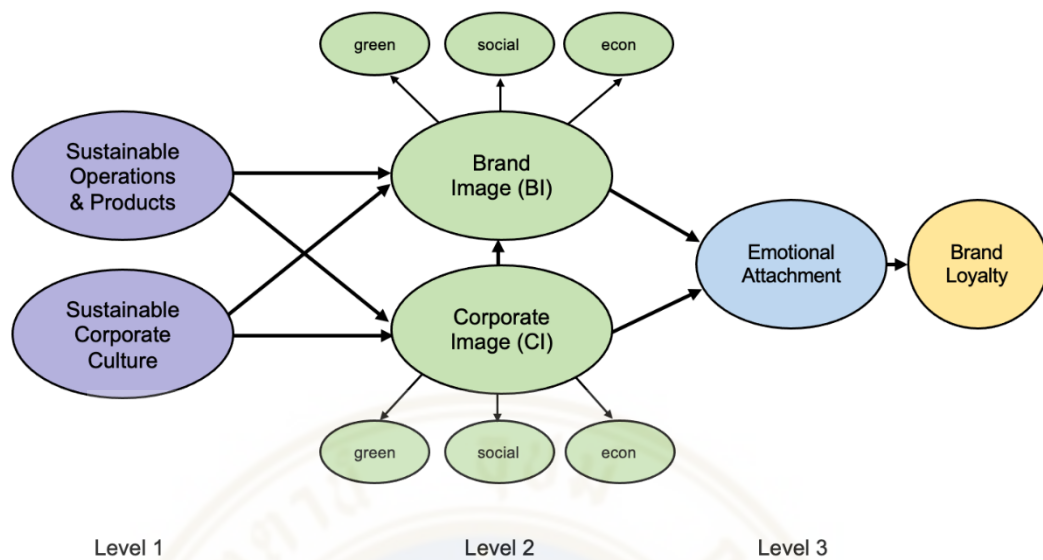
Figure 2.10 The proposed model, including 3 levels. Level 1 – the corporate level, Level 2 – the consumers' perspective, Level 3 – emotional attachment, and the output—brand loyalty

2.10 Research Framework

The following section reveals the research framework employed in this study. The content discusses theoretical framework as well as research approaches. This study focuses on the components and structure of sustainable branding. Ultimately, a sustainable brand is the one that has effectively integrated social, environmental, and economic components (Sharma & Joshi, 2019a), all three elements should be integrated in every business function. The proposed structural model (Figure 2.11) was created according to the related literature and was divided into three levels, following by brand loyalty which is the ultimate goal of building the brands for most companies.
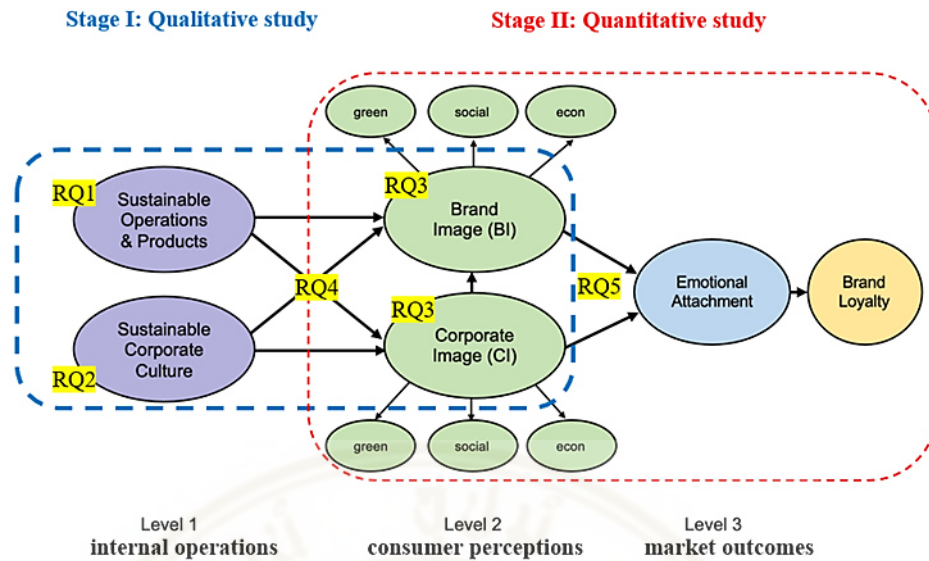
Figure 2.11 The proposed sustainable branding model showing the stage of qualitative and quantitative studies

As mentioned earlier, the first level refers to an integration of three sustainability pillars into business functions and culture. The first level and its linkage to consumers' brand image and corporate image was examined through the qualitative approach. The output of the integration in the first level leads to the second level, which is how consumers respond to what a company has done earlier. Brand image and corporate image will be created in customers' minds. As a result, these consistent feelings and perceptions contribute to customers' emotional attachment in level 3. The relationship of the variables in level 2 and 3 were numerically identified through a quantitative approach.

CHAPTER III
THE QUALITATIVE STUDY OF THE MIXED METHODS

3.1 Introduction

This chapter explains the qualitative part of the study. The goal of this study is to profoundly understand the constructs in the structural model, and to explore the sub-dimensions related to such constructs. As discussed earlier, there is little research on the internal corporate level integrated with the comprehensive concept of sustainability. What is stated in the literature is not very well-developed and sometimes inconsistent. Although the constructs in level 2 of the model (BI and CI) are much more developed with a number of papers, many of them are related to only one or two sustainability pillars — usually green and/or social elements. The study on such concepts, which are integrated with all three sustainability pillars is extremely rare. However, it must be noted that the objective of this internal examination is simply to find out what companies do, particularly if they address all of the pillars. The research does not aim to assess (for example) efficient sustainable operations management systems, or the most effective management model for sustainability. We need to know what the companies do in order to see if it is related to how consumers perceive them.

Since the study on sustainable branding, specifically in a fully integrated 3-pillar sense, is rather new, it is good practice to approach the study with qualitative methodology in the beginning. Therefore, the mixed methods research is preferred to ensure the benefits from both qualitative and quantitative approaches. The mixed methods of qualitative and quantitative studies is used to address many research questions and combination questions, as well as bridging the gap between quantitative and qualitative research (Johnson & Onwuegbuzie, 2004).

In this study, the researcher chose the time-sequential decision to perform such mixed methods (Creswell, 2014; Johnson & Onwuegbuzie, 2004). In the first stage, the small-sample qualitative in-depth interview was employed to develop a better understanding of the concepts and to assess whether literature items available for the

measurement of each construct are consistent with managers' and consumers' thinking. The result from this qualitative study, together with the findings from the literature, was used to develop the quantitative questionnaires and to identify the construct measurement (Creswell & Plano Clark, 2018). The qualitative approach aims for an in-depth understanding of the concept, rather than a generalization for a greater population (Dworkin, 2012). The result will be analyzed and interpreted to a conclusion and implications, which will be used to assess whether the proposed conceptualization is plausible within the context (Chaisrakeo & Speece, 2004; Srijumpa et al., 2004).

Because there is fairly little understanding of how the concepts tested in this study fit together into a coherent whole, an exploratory approach was adopted. The researcher needed specific data, rather than very general material, to help exploring such concepts in detail. Therefore, particular individuals who specialize in the topics or work in the field are needed to participate in the in-depth interview (Kristensen & Ravn, 2015; Patton, 2002). Snowball sampling is adopted to select the participants when the populations are difficult to reach (Goodman, 2011). The initial respondents—the seeds—were selected through the researcher's personal networks to ensure that they are knowledgeable and are able to give required information (Browne, 2005). In addition, accessing though personal networks is useful in Asian countries where there are strong traditions of business secrecy. Therefore, working through personal networks and references is frequently the most efficient way to access the information in Asian organizations (Kainzbauer & Hunt, 2021; Srijumpa et al., 2004).

The brands selected for both qualitative and quantitative studies are all Thai local brands in the household durables industry. Household durables are high-involvement products where consumers have some interest and personal relevance in a brand, and thereby tend to plan their purchase with some degree of information processing (Harrigan et al., 2018; Juster, 1966; Wang et al., 2017). In addition, the researcher selected the brands under the large-scale companies, both listed and not listed in the Stock Exchange of Thailand.

Large companies tend to provide more comprehensive, transparent, and up-to-date information, compared to small and medium-sized firms. Because the information from large-sized companies is easier to access and the organizations are also more systematic in their practices and production, large-scale corporations are

thereby suitable for the study, where we aim to understand how these issues work. Once the conceptualization is established, it is possible, however, for future research to study if the same conceptualization can apply to different firm sizes, including small and medium-sized companies.

The study was conducted in Bangkok, Thailand, where a local version of sustainability called Sufficiency Economy Philosophy (SEP) has long existed and developed to fit with the local context. As mentioned in Chapter 2, SEP is a Thai version of sustainability, which is a form of Buddhist economy (Kantabutra, 2019; Song, 2020). The concept was created from Buddhist philosophy of middle path, in which the essence of such concept is moderation, reasonableness, and self-consciousness (Piboolsravut, 2004). Because SEP focuses on stakeholders' interest and incorporates highly ethical practices, it naturally aligns with sustainability goals. Although the SEP concept was generated for macro-level application, these practices may be as well applied in individual organizations (Kantabutra, 2019b). Therefore, Thailand is a suitable place to examine the sustainability model integrated within the local context.

3.2 The Internal Corporate Level

3.2.1 Methodology

Given the limited understandings of the concepts in the internal corporate level in the sense of sustainability, the exploratory qualitative approach is effective in addressing the two main issues (Chaisrakeo & Speece, 2004). Firstly, to help us understand the complexity of the concepts in the internal level, which eventually helps to define such conceptualization. Secondly, the qualitative study helps to assess whether the model is plausible and whether it fits within the actual context (Srijumpa et al., 2004). It also helps to identify careful measures of the concept (Creswell, 2014; Doz, 2011; Eriksson & Kovalainen, 2008b). The quantitative will then later be used to generalize the concept as the small samples in the qualitative study might not be generalizable.

3.2.1.1 Brands and Companies Selection.

As mentioned earlier, the researcher needed to search for the Thai local brands in household durables industry, which aim for sustainability. The following five screening criteria were applied. One, they must be local Thai organizations, so that their policies are determined locally, not set by corporate headquarters somewhere outside Thailand.   Two, they are large-size companies registered with Thailand Department of Business Development. According to the Revenue Department, Ministry of Finance, the large-scale companies are the ones with annual revenue of at least 500 million Baht (The Revenue Department, 2021). Most such companies have a corporate website with information that can be assessed.   Large companies' products are visible in the market, and there is a larger base of consumers familiar with the brands.

Three, the firms produce and sell household durables, such as home furnishings, homebuilding, household appliances, and housewares. Household durables are high-involvement products in which consumers tend to plan their purchases in advance with effortful information processing. Therefore, consumers tend to build their preference and purchase intention of these high-involvement products by assessing the active information, which affects or produces existing predispositions (Day et al., 1991; Harrigan et al., 2018; Holmes & Crocker, 1987; Juster, 1966; Wang et al., 2017). High-involvement products like household durables, therefore, are suitable for this study since the researcher wants to test how sustainability affects consumers' perspectives.

Four, such companies must integrate sustainability into their business policies and have been consistently executing such policies. The implementation may refer to continuously having CSR activities and offering green or social products. They did not need to be leaders in this. Different companies conduct different levels of sustainability practices, which gives variation in sustainability level among the selected companies, and thus opportunity for assessing how well consumers notice these differences. However, we did not feel it useful to assess companies that are not doing anything about sustainability at all. Five, the companies shall operate B2C (business to customers) business, with products that consumers actually buy. This way,

the researcher is able to ensure that consumers use their own reasoning and experience to form the perspective and attitude towards particular brands and companies.

3.2.1.2 Sustainability Assessment and Scoring.

The initial online search was performed by using the keywords referring to household durables and sustainability issues in both English and Thai languages. Eventually, 9 local Thai companies fell into the criteria stated above. Five of them are the public companies listed in the Stock Exchange of Thailand (SET). The chosen corporates were then scored according to their level of sustainability integration and execution. The scoring criteria were adopted from a sustainability assessment for Dow Jones Sustainability Index (DJSI). Despite many sustainability indexes available, DJSI was the only one that incorporates all comprehensive three pillars of sustainability, including economic, environmental, and social dimensions. Each industry in the DJSI has its own industry criteria (S&P Global, 2021). The scoring criteria for household durables can be seen in Table 1 below.

Table 3.1 DJSI scoring criteria for household durables industry (S&P Global, 2021)

Sustainability Pillar	No.	Item	Weight
Governance & Economic Dimension (50%)	1	Corporate Governance	7
	2	Materiality	3
	3	Risk & Crisis Management	5
	4	Codes of Business Conduct	5
	5	Customer Relationship Management	6
	6	Policy Influence	2
	7	Supply Chain Management	6
	8	Brand Management	4
	9	Tax Strategy	2
	10	Information Security / Cybersecurity & System Availability	2
	11	Innovation Management	4
	12	Privacy Protection	2
	13	Product Quality & Recall Management	2
Environmental Dimension (22%)	14	Environmental Reporting	3
	15	Environmental Policy/Management System	5
	16	Operational Eco-Efficiency	6
	17	Product Stewardship	5
	18	Climate Strategy	3

Table 3.1 DJSI scoring criteria for household durables industry (S&P Global, 2021) (cont.)

Sustainability Pillar	No.	Item	Weight
Social Dimension (28%)	19	Social Reporting	4
	20	Labor Practice Indicators	3
	21	Human Rights	3
	22	Human Capital Development	6
	23	Talent Attraction & Retention	6
	24	Corporate Citizenship and Philanthropy	3
	25	Occupational Health and Safety	3

The information of the companies was retrieved from the website, company reports, and PR news, independent news organizations, and third-party organization such as consulting firms. However, the assessment relied primarily on the official reports such as annual report and sustainability report. Each company was scored according to the DJSI criterion and weights mentioned above. The score for each item ranges from 0 to 3, where;

0 means no topic is mentioned

1 means the topic is mentioned but there is no evidence of implementation

2 means the topic is mentioned and there is evidence of implementation

3 means the topic is mentioned, there is evidence of implementation, which led to a successful result

The scores were weighted according to the DJSI guideline and were distributed by sustainability pillars, which are economic, environmental, and social dimensions. The result shown in Table 2 reveals that the total sustainability scores for all 9 selected companies range from 46.3 to 95 out of 100. The score range for economic, environmental, and social pillars are 46.7-100, 31.8-95.5, and 32.1-100 respectively (see Table 2). However, to check whether weighting had an impact on score and/or ranks, the scores were computed using equal weights for three pillars. The scores changed very little, and the ranks did not change at all.

Table 3.2 Sustainability scores assessed according to DJSI criteria and weights

No.	Company Code	Listed Company or Subsidiary Company	Economic Score / out of 100 (weighted out of 46%)	Environmental Score / out of 100 (weighted out of 25%)	Social Score / out of 100 (weighted out of 29%)	Total Score / out of 100
1	C1	Y	100 (50)	95.5 (21)	85.7 (24)	95.0
2	C2	N	46.7 (23.3)	54.5 (12)	39.3 (11)	46.3
3	C3	Y	76 (38)	81.8 (18)	92.9 (26)	82.0
4	C4	Y	64 (32)	31.8 (7)	50 (14)	53.0
5	C5	N	52 (26)	45.5 (10)	65.5 (18.3)	54.3
6	C6	Y	58 (29)	95.5 (21)	71.4 (20)	70.0
7	C7	N	58.7 (29.3)	90.9 (20)	81 (22.7)	72.0
8	C8	Y	84 (42)	95.5 (21)	100 (28)	91.0
9	C9	N	54 (27)	47 (10.3)	32.1 (9)	46.3

As can be seen from Table 3, the scores of each pillar for all 9 firms were ranked in each sustainability pillar. The companies can be seen to have different levels of sustainability.

Table 3.3 Companies ranked by sustainability score by sustainability dimension

Scale	Economic Dimension	Environment Dimension	Social Dimension	Total Sustainability Score
100.0	C1=100.0		C8=100.0	
97.5				
95.0		C1, C6, C8=95.5		C1=95.0
92.5			C3=92.9	C8=92.0
90.0		C7=90.9		
87.5				
85.0	C8=84.0		C1=85.7	
82.5				C3=82.0
80.0		C3=81.8	C7=81.0	
77.5				

Table 3.3 Companies ranked by sustainability score by sustainability dimension (cont.)

Scale	Economic Dimension	Environment Dimension	Social Dimension	Total Sustainability Score
75.0	C3=76.0			
72.5				C7=73.0
70.0			C6=71.4	C6=70.0
67.5				
65.0	C4=64.0		C5=65.5	
62.5				
60.0	C7=58.7			
57.5	C6=58.0			
55.0	C9=54.0	C2=54.5		C5=54.3
52.5	C5=52.0			C4=53.0
50.0			C4=50.0	
47.5	C2=46.7	C9=47.0		
45.0		C5=45.5		C2, C9=46.3
42.5				
40.0			C2=39.3	
37.5				
35.0				
32.5		C4=31.8	C9=32.1	
30.0				

It is worth to note that the scores assessed from public information are slightly different from the scores calculated after conducting the in-depth interviews. Table 4 show this comparison for the three companies in which in-depth interviews were conducted. Such difference is mainly a slight increase in scores because some executions or details found during the interviews have never been published. However, both scores are very similar, and did not change the ranking, implying that public information can mostly be used to reflect actual practices in organizations.

Table 3.4 Sustainability scores assessed according to DJSI criteria assessed before and after the in-depth interviews.

No.	Company Code	Economic Score out of 100 Before / After	Environmental Score out of 100 Before / After	Social Score out of 100 Before / After	Total Score out of 100 Before / After
1	C1	91.3 / 100	95.5 / 95.5	89.3 / 85.7	91.7 / 95.0
2	C5	52 / 52	45.5 / 45.5	65.5 / 65.5	54.3 / 54.3
3	C7	59.3 / 58.7	90.0 / 90.9	73.8 / 81	70.3 / 72.0

3.2.1.3 In-depth Interview

As noted above, the three companies for in-depth interviews were selected based on personal connections for access, with attention to making sure three levels of sustainability implementation (high, medium, low) were represented. One company is public, on the SET, and two are private. Connections are essential to most research in Thailand's relationship-oriented culture (e.g., Kainzbauer & Hunt, 2021). "With its strong traditions of business secrecy . . . working through connections and introductions is frequently the only way to gain good access at any level of companies in Asia" (Srijumpa et al., 2004, p. 69).

After the eligible companies were identified, the researcher then selected participants for the qualitative study. The initial contact in each company was asked to direct us to managers who have substantial authority in the key functions most involved in sustainability issues in the company; we wanted managers who have decision-making authority on implementing important aspects of sustainability. Three managers were chosen in each company at high, medium, and low level of sustainability, nine managers overall, as noted in Table 6. It should be noted that the sampling discussed here (as well as for the consumer qualitative interviews) might be somewhat rare in management research, at least judging by how often they came up in the management literature when looking at qualitative research. However, they are fairly standard in other social science research, and prominent especially in qualitative research on health issues (again, judging by how often this field comes up in literature about qualitative methods). Crouch & McKenzie (2006) and MacDougall & Fudge (2001), for example, give useful overviews.

Table 3.5 List of respondents categorized by job function and company level.

Respondent	Company's Sustainability Level	Job Function
M1	High	Product development
M2	High	General management
M3	High	Sustainability unit
M4	Medium	Product development
M5	Medium	Business development
M6	Medium	Environmental unit
M7	Low	Sales and marketing
M8	Low	Product development
M9	Low	Customer relations

Although there is no concrete rule of how to determine the sample size for a qualitative study, Creswell (2014) suggested a proper sample size of 3-10 respondents for the phenomenological study. Too large sample size is not usually any more useful, as saturation may lead to the point where no new themes and information can be uncovered. The excessive interviews are therefore unnecessary (Francis et al., 2010).

The semi-structured in-depth interview technique was adopted. A semi-structured interview usually follows a list of issues retrieved from the literature. The questions were open-ended and were conducted by using the keywords "how" and "what". Probing questions were employed to encourage respondents to elaborate their answers. The respondents were encouraged to explain in their own words and expand the answers as much as they wish (Creswell, 2014; Doz, 2011; Eriksson & Kovalainen, 2008b). All respondents who participated were interviewed using the same topics list, but of course, not necessarily in the same order. The interview flow adapts to ensure uninterrupted conversation flow, so themes are explored as respondents bring them up, rather than rigidly following the list. Notes were taken, as well as digital record, during the interview to ensure accuracy. The interview lasted approximately 40-60 minutes.

Table 1 in Appendix A shows the questions prepared for the in-depth interview. The interview began with the screening question about sustainability in their organizations to ensure that each respondent is able to provide useful information for the study. After the respondents explained their point of view for each

main question, the researcher used probing questions to ensure that the respondents cover all three sustainability pillars, if they can. At the end, the respondents were also asked to rate and briefly explain their companies' practices on 19 items according to DJSI scoring criteria (Table 1). It is worth to note that managers in different functions, even within the same company, may have different priorities. They, however, tend to be consistent in reporting what the organization performs because actions are not subjective (Suwannaporn & Speece, 2010).

3.2.2 Results and Analysis

The notes retrieved from the interviews were later converted into themes and sub-themes. Repeated themes were extracted into codes. Only descriptive codes complying with the research question remained (Creswell, 2009; Punjaisri & Harness, 2016).

By analyzing the notes taken during the interview, the researcher categorized responses into themes and sub-themes. These themes were useful in identifying the constructs in the respondents' interview as well as understanding the relationship among them. The result reveals four main themes, namely environmental pillar, social pillar, economic pillar, and comprehensive sustainability pillars (see Appendix A-Table 2).

3.2.3 Defining the Concepts

Two main topics need to be addressed. Firstly, respondents expressed their perspective and how they define sustainable operations and products. Also, they were requested to explain how their organizations implement such concepts. Second, respondents explained their views on sustainable corporate culture and how their corporates integrate and execute the concept.

3.2.3.1 Sustainable Operations and Products.

Kleindorfer et al. (2005) described operations management (OM) as "the set of skills and leverages that allow a company to structure its business processes to achieve sustainable performance". The literature reveals that sustainable products are items that provide social, environmental, and economic benefits concurrently (Rocha et al., 2019; Sonetti & Lombardi, 2020). Sustainable operations

and products are inseparable. Similar to the literature review stated in the previous section (Rocha et al., 2019; Sonetti & Lombardi, 2020), all respondents implied that sustainable products cannot be created without sustainable operations. In other words, sustainable product is naturally a product of the operations that successfully integrated the sustainability concept. One respondent very clearly represented this view: '*sustainable products are the products of sustainable operations*' (M2).

       Definitions and Attributes. Because there is no literature that defines the term "sustainable operations" in the comprehensive three-pillar sense, the term can be understood in more details through respondents' explanation. To employees from the company with high sustainability score, sustainable operations may refer to an operation or production process that is harmless to the planet, society, and economy. One respondent from the company with high sustainability score stated that *'To me, sustainable operations is to produce zero waste from the operations. This waste needs to contribute to other parties and is harmless to local communities.'* (M3). This finding indicates that she naturally integrates all three pillars into her thoughts on sustainability. In contrast, the managers from a company with low sustainability level mentioned that *'Most of sustainability integration is used for product development such as eco-friendly materials. We have various products that incorporate sustainability'* (M7). Such response implies that she used the word "sustainability" to represent the environmental pillar. And most of the sustainability concept in this view is integrated in the product development, rather than fully incorporated with the whole operations.

       When discussing about sustainable operations, almost all respondents first emphasized mainly on environmental pillar, which aims for the least footprint to the planet. This finding implies that the green module is somewhat the most top-of-mind when people think of sustainable operations, although frequently interconnected with aspects of another pillar. In high and medium scored companies, respondents tended to explain in more details and focused primarily about waste management. For example, respondent M2 from a high-scored company explained that sustainable operations are '*the operations that cause the least waste*'. M3, from the same company elaborated that '*The main concept is that we need to transform the waste as much as possible.*' And *'The first implementation called waste to value, where we modify our waste and donate it to whom who can make use of it. The second*

implementation is called waste to CSR, where we give and teach local community how to create value from this waste.' (M3). For those who are in lower scored company, however, the answers were rather vague and focused on the standard they know the company follows. M8 stated that *'in our factory we have comply several green standards such as ISO and E1'.* These green issues were seldom connected more widely to other pillars in the low score company.

For sustainable product, respondents described sustainable product as a product that can be reborn and can extend its life cycle by passing its value to the next owner. The examples of the responses from the companies with high and medium sustainability levels are *'To me, sustainable product is the one which can be reborn (recycle, reuse). This product shall carry it value to the next owner, although the value can be decreased'* (M1) and *'I think sustainable products are the ones that can rebirth. They can continuously be used and circulated. In other words, they are immortal.'* (M4). Although there are several past studies on sustainable products, they mentioned about neither expanding its life cycle nor conveying its value to the next owner. Respondents from a company with low sustainability level, on the other hand, defined sustainable product based on merely an environmental pillar. M7 suggested that *'sustainable products are the ones that are harmless to the environment and users'.*

Respondents also have different opinions on attributes that sustainable product should possess. They suggested that sustainable product should be immortal, marketable, profitable, harmless to the planet, and able to satisfy users. For example, a respondent implied that *'Sustainable product should not only satisfy the designer and end users, but also the environment and society'* (M5). Again, respondents from a company with low sustainability level tend to focus merely on the green module, like M7 said *'We have sustainable products made from green materials.'* Respondents from a company with high sustainability score, on the other hand, tend to think in a more comprehensive way when they talked about sustainable products. This thinking about recycling and reuse can also be seen from M1's quote stated above.

Sustainable products may be referred from different perspective among different companies. In the company where the understanding of sustainability is limited, the term sustainable products can be used incorrectly. According to a respondent from a low scored company, one of their sustainable products are furniture

made from stone and wood substitution. According to her, using these substituted materials is good for the environment because they *'do not need to harm rock mountain and natural resources'* (M7). Respondents from the companies concerned more about sustainability tended to think in a more sophisticated way when talking about this issue. M3 from a high scored organization mention *'we have green product but not totally sustainable. We integrate the concept in the design and use recycle/reused material. But we have not yet made them be able to pass the value to the others.'* And *'Because we have not yet successfully offered the comprehensive sustainable products, we focus a lot on our after-sale service because we want our customers to rectify the broken products instead of buying the new ones.'* (M3).

The findings stated above somehow support the study from Frank-Martin & Peattie (2009), which indicated that sustainable products possess six attributes. The six attributes include 1) customer satisfaction, 2) dual focus of social and environmental benefits, 3) aim for zero-waste, 4) contribution in significant improvement of socio-ecological problems on a global level, 5) continuous improvement in knowledge and, and 6) competitive market positioning. At least one out of six characteristics was mentioned by every respondent while they were talking about sustainable products.

According to the findings revealed earlier, it is interesting to note that respondents from a company with low sustainability score focused on merely one pillar when they talked about the definition of sustainable operations and products. In this case, they focused mainly on the environment. This is because they have been communicated merely about one angle of sustainability.

Corporate Policies and Policy Initiation. The literature reveals that top managers' leadership is a crucial component in initiating and executing sustainability in an organization (Avery & Bergsteiner, 2011). All respondents agreed that the most effective way to initiate the policies is to derive them from CEOs and management's vision. When a CEO or top managers initiate the policy and act seriously, everything will be effortlessly executed. For instead, *'Most policies came from our CEO, who focuses mainly on sustainability and environment'* (M6) and *'Yes, because it is a top-down policy, everyone needs to follow. In my opinion, this is the most effective*

way to implement the concept of sustainability in an organization and integrate it in the operations.' (M1).

One respondent from a high scored company explained that the policies given to her from the top managers were very concise and easy to understand. Two examples are *'1) Waste to value and 2) waste to CSR'* (M3). The "waste to value" policy is when a company aims to transform its waste to a raw material for new products either for themselves or other companies. Effective communication from top management like this is essential to convey the message throughout the organization. A few respondents believed that the executions can be done effectively when incorporating the sustainability concept into KPIs. It was found that such KPI policies were found in high and medium scored companies, but not the low scored one. M5 from a company with medium sustainability level stated, *'This also implements seriously through KPIs for every department'.* Policy initiation and communication in low scored company is a little bit different. In the low score company, respondent M8 mentioned that *'Our top managers have joined and mentioned about sustainability in the meeting and training, mostly about the products, so that we can explain our customers'* It can clearly be seen that sustainability has not been regularly communicated in the organization.

Bottom-up policy initiation is also possible in a company with higher sustainability score, where most employees have mutual understanding of sustainability and its goal. An example of this bottom-up policy was stated by respondent M3 who said, *'the Environmental Unit propose the ideas for managements' consideration'.* In a company with low score, however, top-down policy initiation is more common, as M8 said *'All policies are top-down, which is effective'*

Also, there are specific departments or committees who are responsible for such matter in the companies with higher sustainability scores. For example, *'The parent company has formed a sustainability development board, which recruits its members from multiple business units'* (M2). There is an environmental unit who mainly focuses on environmental matter in the company with medium level. In the company with low sustainability concern, however, there is no particular unit working solely on sustainability, like M7 said *'No, we don't have one'.*

Another possible way to initiate sustainable operations is to integrate it into the business model. This way, daily business routine will automatically

turn to sustainable operations and naturally communicate to employees without any effort. One respondent whose company integrated the sustainability concept into its business model said that *'the business model itself is very social concerned. The goal of the organization is to create a job for the locals, as well as to educate and train them to be skilled workers. Therefore, the policies about social attribute are not only a top-down policy, but also an integration to our daily business routine'* (M4). This concept is, however, not common for normal for-profit business model because it requires large resource and effort. Factors contribute to successful sustainable operations include CEO or top management's genuine attention, effective communication, process improvement, knowledge enhancement, and partnership with knowledgeable partners.

                Practices and Execution. When categorizing by each sustainability pillar, there are various sustainable practices the organizations adopted. For the green attribute, the operations refer to waste management, production process management, resource management, pollution management, and alternative energy selection. Respondent M1 from a company with high sustainability score stated that *'sustainable operations here involve waste management, resource management, and pollution management'.* Respondent M4 from a medium scored company explained that stock management crucial to achieve sustainability. Inefficient stock management will definitely lead to excessive waste as she said 't*he stock management is very important. We need to calculate how much we exactly need. Insufficient materials order may lead to another set of stock order, which requires minimum order from suppliers'.* Another respondent mentioned from the same company about the alternative energy, in which the factory *'renewed the energy from burning macadamia peels and use it in the ceramic factory instead of choosing LPG'* (M5). For a company with low sustainability score, a respondent mentioned vaguely about actual execution by saying that '*comply several green standards such as ISO and E1*', (M8). This implies that these respondents have little understanding on how sustainable operations are executed, and have not known whether they have been actually executed.

                The result shows that the respondents focused on two factors for green products, which are material and product performance. They suggested that green product should made of eco-friendly or recycle material, which leaves the least footprint to the environment, like M3 said *'We use recycle/reused material for our products'.*

However, the term eco-friendly material might be misinterpreted in the low scored company, where the substitutions of natural material—such as faux leather—are considered green material. According to M7, these substitutions are *'good for the environment'*. In addition, a factory may recycle its waste to use as a raw material for other products, like M4 said *'the waste itself needs to be able to be reused or recycle. For example, the thread left from textile production will be transformed to other products'*.

Apart from the environmental concern, respondents from the company with higher sustainability score also mentioned about social and economic concern. Manager M1 has defined sustainable operations as *'The operations that involve waste management, resource management, pollution management, social concern especially the locals. For example, we need to concern about the pollution occurred during the production and its effect to the local community'*. M3 who is also from the same company stated that *'Every practice is created based on the concept of circular economy, where we can pass the value of our products to the others'*.

Social and economic operations and products are a little less straightforward than the green one. Respondents have different opinions on the issue. Some respondents believe that social operations need to support local community and economy by purchasing local products and material. Some suggested that an organization should hire local people as its employees, in order to stimulate local economy and increase their quality of life. For example, *'We hired locals and taught them various skills'* (M5). One respondent believe that social operations should also promote human rights and safety in workplace.

According to the respondents, the operations that integrate economic pillar may refer to transparency brand management, supply chain management, and tax management. Some respondents believe in using a material and invent products that support circular economy. These topics are parts of the criteria used to compute Dow Jones Sustainability Index (DJSI) (S&P Global, 2021). One respondent from a company with high sustainability level said, *'The latest policy theme is circular economy. They have this committee communicating everything about circular economy and try to execute them through various activities'*, (M3). However, circular economy is the concept that only a few respondents from the companies with medium and high

sustainability scores understand. None of respondent from a low scored company mentioned about this concept. In fact, the concern on social and economic pillars, which is related to operations and products, was nearly absent in the company with low sustainability score.

It is important to note that the companies with high levels of sustainability tend to practice and integrate comprehensive three pillars, while the company with lower sustainability score may incorporate merely one module into its practice. Respondent M8 from the company with lower level of sustainability indicated that *'Our company integrated sustainability into the operations by developing several products made of green material'.* In contrast, respondent M1 from the company with high sustainability level suggested that sustainable practices include *'waste management', 'pollution management', 'social concern', 'genuine and long-term CSR initiatives', and 'supporting circular economy'.*

3.2.3.2 Sustainable Corporate Culture.

Definitions and Attributes. Ravasi & Schultz (2006) and Schein (2010) defined organizational culture as collective shared assumptions and behaviors in organizations, which are conveyed to new organizational members. The literature, however, reveals no clear definition of sustainable corporate culture, especially with an integration the three pillars of sustainability. The result from the qualitative interview shows that managers agreed that sustainable corporate culture is a mutual understanding of sustainability and shared behaviors that contribute to sustainability.

Although the understanding of sustainability concept varies among companies, all of them described sustainable corporate culture as a mutual understanding of sustainability and shared behaviors that contribute to sustainability. Respondent M2 from a high scored company stated that he defined sustainable corporate culture as *"the culture that people in an organization have the same vision of sustainability and practice with such goal in mind".* A manager from the lower scored company that mainly focuses on green pillar believes that sustainable culture occurs when everyone *'focus on the impact of our product to the environment'*, (M7). It can clearly be seen that integrating comprehensive 3 pillars into corporate culture is absent in the company with lower sustainability level, but they still talk to some extent about shared thinking.

CSR Initiatives. Page & Fearn (2005) suggested that the best way to communicate the message of sustainability to the public is to integrate sustainability concept into organizational culture and business practices. Most companies select CSR as a tool for such external message communication. However, the result from this study shows that CSR can also be effective for internal communication. Most respondents claim that CSR is an effective tool to create sustainable corporate culture and can as well be used as a communication tool. CSR activities range from things like a simple donation and forest planting to a more sophisticated way like helping local people to develop their own products and integrating such products to the corporate business.

A company with higher sustainability score tends to create more sophisticated CSR activities that focus on long-term goal. They even integrate such concept into KPIs and business routine. One respondent stated that the genuine CSR should not just benefit the company and cannot be a one-time thing, but rather benefit mainly to the society. She said *"real CSR activities refer to the ones which also contribute to the society, not only for our company's sake. We are responsible for helping them to achieve the long-term goal. To me, donating money cannot considered a real CSR*, (M3). One of the activities she has done is to educate local people to transform the waste from her factory to a raw material. These products can be sold back to the company. This way, mutual benefit between the community and company was created.

In a company with lower score, however, CSR may refer to doing good to the community, including renovating a school in rural area, planting trees, and various forms of donation. These activities are mostly the optional one-time activity. M9 explained that *'Our company has several CSR activities which we can choose whether to participate, such as forest planting and donation activities'.* In this case, some CSR activities are used as public relations. As noted in the literature review, however, correspondence between claims and actions is the key issue in determining whether this would be considered green-washing (Dangelico & Vocalelli, 2017; Leonidou et al., 2011). Given that the company actually does implement green operations, engaging in green PR activities could not be considered problematic.

Teamwork, Partnership, and Innovation. The findings from the interview supports the literature claiming that open innovation culture—a culture that promotes inflows and outflows of knowledge—is a crucial component of sustainable organizational culture, which leads to customer satisfaction and economic performance (Chesbrough et al., 2006; Globocnik et al., 2020; Njoroge et al., 2019; Obal et al., 2020; Srisathan et al., 2020). It was found during the interview that open innovation is promoted in the companies with higher sustainability scores, no matter the respondents recognize the term "open innovation" or not. This open innovation culture may be promoted through the form of partnerships and collaborations, where the companies exchange knowledge with other organizations. For instance, *'We also value partnership and we exchange knowhow and skills with our partners'* and *'We developed the product with our partner by combining our and their expertise'* (M4). Some of collaborated products generated high demand because there are demands from both brands' users.

One way to achieve the open innovation culture is to encourage teamwork culture (Ehrhart et al., 2013). Teamwork helps forming attractive work environment, which lead an improvement in organizational efficiency and innovative environment (Srisathan et al., 2020). Organizations encourage teamwork in workplace through both culture and organizational structure. In organizations with high sustainability level, the encouragement of teamwork culture is built through a daily routine. The goal cannot be done without an efficient co-operation and resource sharing among departments. For instance, M2 said *'Teamwork is encouraged and mandatory. We routinely work with colleagues from other units and even other companies (within the same parent company) all the time. It's like each of us is the player in the same field. We share resources.'* The company with lower score also supports working in team by simply assigning a team project and goal. This is also an efficient way to develop teamwork culture, although it is limited within a small team rather than an entire organization. This can be seen from what M7 said, *'Our culture encourages teamwork by assigning team jobs. The nature of our work is to help each other in the same team'.*

The findings mentioned above are in line with the literature stated in the previous chapter, where teamwork culture should be encouraged to achieve

better CSR performance and sustainability in organizations (Freitas et al., 2020; Gangwani & Alarifi, 2021).

Sustainable Leadership. The literature suggests that sustainable leadership is a key component in initiating and executing sustainability in an organization (Avery & Bergsteiner, 2011). Sustainable leadership may refer to a leadership that aims to meet the needs of current society, without depriving the future generations' prosperity (Hargreaves & Fink, 2004). Sustainable leadership's features cover emphasizing on leadership rather than merely one leader, long-term vision, goals that link organizations to society, ethical behavior, focusing on social responsibilities, innovation capacity, systemic change, stakeholder engagement, and capacity building of stakeholders (Hallinger & Suriyankietkaew, 2018).

Most respondents accepted that they have shared vision and perception of sustainability with their seniors and top managers. M2—a manager in the high-scored company—asserted *'It feels very natural to me and became my routine thinking about sustainability. Seniors do it first and be an example for juniors. They also talked about it a lot'.* In the low scored company, top managers are less influenced to their employees regarding sustainability vision and execution. According to M8, staffs occasionally receive the message about sustainability through *'trainings and meetings.'* And most of the message focuses on the green products and how to promote such products to customers.

Communications. It is obvious that any corporate culture cannot be created without effective internal communication. According to the result found from the qualitative interview, communications can be created through various channels, including emails, billboards, boards in different places, and TV screens. *'They are everywhere'* stated by respondent M2. The communication can also be indirectly conveyed through meetings and personal communications. The most important success factor is consistent communication, like M2 said *'They talk about this issue everyday through various channels, so you automatically absorb the information'.* For this reason, irregular communication in the company with limited understanding of sustainability like *'trainings and meetings'*, (M8) is not nearly as effective.

Motivation. Corporate culture cannot be created without motivations. The respondents indicated that motivations for sustainable corporate

culture include mutual benefit for employees, peer pressure, having role models, and attitude building. All three respondents from the company with high level of sustainability agreed that the best way to create sustainability awareness and culture in an organization is to create mutual benefit for everyone. For example, *'The key is to create mutual benefit'*, (M3) and *'For some people, it is almost impossible to practice sustainable without mutual benefit'* (M1). Creating mutual benefit is easy to initiate any sustainable practice and form a sustainable culture. However, there was little motivation to create sustainable culture appearing in the company with low sustainability concern.

Employees also tend to form corporate culture by following their colleagues, seniors, and role models in their organization, like M2 implied, *'seniors do it first and be a good example for juniors'.* However, there is no such culture imitation in the low scored company. This is partly because seniors themselves are not quite clear about sustainable culture, and therefore are not able to convey it to the others. Attitude building can be created though allowing staffs to think of their workplace as their homes. As a result, they will treat the workplace with care like their homes. For example, *'The most important thing is to make staffs think of a workplace as a home. When you do something good, it returns back to you'* (M1).

It is obvious that respondents from the companies with higher sustainability scores tend to think and explain various issues from different angles of sustainability pillars—environmental, social, and economic modules. This is because managers in such firms truly understand the concept of sustainability and have been communicated consistently. In addition, a specific department working on sustainability, even a few staffs in the unit, helps an organization executing and conducting the plan effectively.

3.3 The External Consumer Level

3.3.1 Methodology

For a better understanding of the concepts of the constructs in the external customer level, the consumer sample needed respondents who were customers of the companies interviewed. It is not difficult to find consumer durables customers in

general, but finding knowledgeable customers who buy from a specific company is slightly more difficult in industries with multiple competitors, none of which has a dominant position. The customer side included nine customer respondents, three who mainly bought products from each of the interviewed companies. These respondents were categorized by their levels of sustainability they see in their main brand choice, which would be a rough proxy for how much concern they have for sustainability (see Table 7). (Recall that consumers who are not very concerned with sustainability at all are not in this sample.)

Table 3.6 List of respondents, their brand, and perceived sustainability level of the brand.

Respondent	sustainability level of brand purchased (researcher's score)	Sustainability of brand (assessed by respondents)
C1	High	Medium
C2	High	Medium
C3	High	High
C4	Medium	High
C5	Medium	High
C6	Medium	High
C7	Low	Medium
C8	Low	Low
C9	Low	Low

Snowball sampling was used, which works well for reaching participants who are somewhat hard to find (Atkinson & Flint, 2001; Goodman, 2011). The initial respondents—the seeds—were selected through the researchers' personal networks to ensure that they were knowledgeable, able to give required information, and willing to participate (Browne, 2005; Heckathorn, 2011; Noy, 2008). In general, snowball is often useful for adapting sampling to specific cultural conditions (Sadler et al., 2010). In particular, as with the manager interviews, this accommodates Thailand's relationship-oriented culture (Kainzbauer & Hunt, 2021).

Similar as the interview in the internal corporate level, semi-structured in-depth interview technique was adopted. The questions are open-ended and were

conducted by using the keywords "how" and "what". Probing questions were used when needed. Notes were taken, as well as digital record. The interview lasted approximately 30 minutes.

Three main topics were addressed. First, how respondents think about the brand image related to sustainability. Second, how respondents think of corporate image that relates to sustainability. Third, how respondents explain the contribution of sustainability elements to customer emotional satisfaction. The interview was divided into two parts. The first part is when the respondents were encouraged to explain in their own definition of branding related to sustainability, while the latter part was the response after a brief introduction explaining a comprehensive 3-pillar sustainable branding. In practice, especially for customers who are highly concerned about sustainability, much of the discussion of sustainability was already oriented toward a more comprehensive three-pillar view.

Table 3 in Appendix A shows the questions covered in the in-depth interview. The interview began with the screening question to see whether the respondent values sustainability in any level. The questions covered all three constructs in the external consumer level, including brand image, customer satisfaction with focus on the emotional response, and corporate image, in the context of comprehensive sustainability. Probing questions were frequently adopted to ensure that the respondents cover all three sustainability pillars as much as they can, but the three pillar framework was not stressed in the early stages of the interview. We wanted to see how much the respondents would bring it up themselves.

3.3.2 Result and Analysis

Similar to what has been done with the managers' interview, notes taken during the interview with the customers were analyzed. Responses were categorized into themes and sub-themes, in order to analyze the constructs found the interview, as well as to understand their linkages. The result reveals four main themes, namely sustainable brand, brand image, customer emotional satisfaction, and corporate reputation (see Appendix A-Table 4).

3.3.3 Defining the Concepts

Four main topics, which are brand image, corporate image, emotional attachment, and purchase decision, were addressed. Respondents were requested to explain how they build brand and corporate images in their mind, and how those images impact there emotional satisfaction and purchase decision.

3.3.1.1 Brand Image.

Building Brand Image. There are several literatures claiming CSR activities directly contribute to sustainable brand image (Chang & Yeh, 2017; Lai et al., 2010). The results from this study, however, reveals that there are several more factors consumers used to build brand image in their mind, including the product, consumer's direct and indirect experiences with the brand, and their own reasoning.

Building sustainable brand image in customer's mind can be done through various channels. For the green attribute, most customers agreed that they had built the green brand image through the product attributes. For example, the products are made from recycled materials or the products consume less natural resource compared to competitors. One respondent said, *'I think of them as a green brand because their products consume much less water compared to other options available'* (C3). Another example is respondent C7, who purchased several products from the brand with low sustainability score, said *'I wouldn't say they are green brand. But yes, they do have a bit of green image to me.'* And '*I think I built that green brand image through their products. I spent a lot of time in their showroom, and I found many of their products are made of eco-friendly materials'.*

Building green brand image can also be done through experience, both one's own experience and others' experience. Respondent C6 said *'I have seen them helping the local community and the environment so I assumed that their brand is green'* and *'I think when I contacted their after-sale service or communicated with the salesperson, I can feel that they are quite ethical and care about customer'* (C8). One respondent implied that she partly built the brand image by listening to her father, *'My Dad told me that they concern about the environment'* (C4).

For social pillar, customers also build their social image around products, as well as the brand story and CSR initiatives. It is interesting to note that social brand image occurs to only customers who purchase the brands with high and

medium sustainability score. Some customers may build social brand image when they know their money will go to help local community, such as *'The product itself is made by local tribes with local materials'*, C2. Respondent C6 mentioned about the brand story by saying *'of course, it has been communicated the story that it is the social brand since the beginning'.* In addition, respondent A2 mentioned about CSR *'I saw they have done a lot of CSR activities, so it comes natural to me that their brand is related to social image'.*

It is interesting to note that most economic brand image is not built by having the economic attribute attached to the brand, but rather built from customers' reasoning linked to other pillars. For example, one might think that the brand has economic image because the products are made by local people, so they naturally help stimulate local economy. Like *'It is very obvious that they are local brand that stimulate economy in many ways'* (C3). For the brand with low sustainability score, both social and economic brand image were not mentioned.

When considering all three pillars together, the result straightforwardly showed that a customer who has built comprehensive sustainable brand image, has created such image from their experience with all angles of sustainability pillars through various ways mentioned earlier. They might also add their own reasoning to build such image. Respondent C4 said *'I have known this brand since I was a kid, and I saw them on TV doing a lot of activities that are good for local society, implying that they also help stimulating local economy. I also bought their green products. So I consider this brand sustainable'.*

Advantages of Brand Image. Building sustainable brand image is advantageous for both brand and customers. The result from this in-depth interview supports the literature that sustainable attributes can benefit to those consumers who value sustainability in functional, symbolic, and experiential ways. Such consumers are willing to pay in premium when the products associated with sustainability (Anselmsson et al., 2014). All respondents are willing to pay in premium if the brand is associated with sustainability. Respondents who value highly of sustainability are willing to pay up to 50% more, compared to unsustainable brands. Customer C6 who value highly in sustainability mentioned *'When I purchase such product, I consider 30% for product and 70% for a brand. I can actually go up to 50% for sustainable brands if I can afford'.*

Customer C9 who has low sustainability concern is still willing to pay up to 10% from normal price.

Another interesting issue to point out is that some customers tend to link sustainability to product quality. They feel that sustainable brand is likely to offer good quality products because the brand and company' intention is good. A respondent who highly values sustainability and purchased a brand with high sustainability score said that *'Because they concern about sustainability, it implies that the product quality should be good. They care to invest in sustainability, so they are likely to invest in the product development as well',* C3. However, a customer who value less in sustainability and bought a product from low scored brand believed that sustainability is not related to product quality. '*I think sustainability has nothing to do with product quality'*, stated C8.

3.3.1.2 Corporate Image.

CSR Initiatives. When CSR is implemented proactively and genuinely, it clearly has positive impact on environmental and social outcomes, which finally contribute to corporate image and reputation (Becker-Olsen et al., 2006; Nguyen et al., 2020; Nirino et al., 2019; Saeidi et al., 2015). Customers build corporate image mostly from CSR activities the company has done in the past (C.-C. Chen et al., 2021). They have been communicated through PR news, social media, and the brand's official website. For a company with high sustainability concern, customers tend to remember their sustainable image through CSR initiatives. According to respondent C2 who purchased a brand from the company with high sustainability level, *'I have seen them (CSR activities) from social media and TV, but mostly social media.'* Customers tend to perceive the companies who have CSR initiatives are ethical, sympathetic, and not quite profit oriented. Like C3 said *'Doing CSR is not cheap, so at least they are not super profit oriented'.* Customers who purchased a brand which is from a low scored sustainability score, on the other hand, mentioned nothing about CSR.

Customers' Expectation. Although most customers believe sustainability is a required practice, they agreed that only one or two pillars of sustainability is enough. Eight out of nine respondents implied that integrating all 3 pillars are preferable but not a mandatory. For example, C8 said *'Not necessary three things. Only one makes me feel good and considered sustainable.'* Customer C3 who

has high consciousness on sustainability suggested that a company can choose to have a pillar at a time, and they will naturally combine into a 3-pillar sustainability in macro scale. He stated *'Not really, I think only one is enough. Of course, it is good to incorporate three, but it is much more possible if each company is responsible for one pillar. Eventually, they will combine into 3 pillars in the larger scale anyway.'* However, there was one respondent with high sustainability awareness saying that it is important for a brand to have 3 pillars to be considered sustainable brand. He said *'To me, I think a brand needs to have 3 pillars to be a sustainable brand. I think there is nothing wrong about unsustainable brand. Of course, it is good to have'*, C6.

3.3.3.3 Customer Satisfaction and Emotional Attachment.

Thomson et al. (2005) described emotional attachment to organizations as an emotional bond between an organization and an individual. While Mai & Ness (1999) have identified customer satisfaction as a level of overall pleasure perceived by a customer. In this study, customers' emotion and satisfaction can be divided into two categories—product related and non-product related factors. The findings support the literature in which integrating sustainability into the brand can contribute to satisfaction among sustainability-oriented customers (Becker-Olsen et al., 2006; Chang, 2011; Kushwaha & Sharma, 2016).

Product Related Factor. According to Frank-Martin & Peattie (2009), sustainable products can create positive emotion, contributing to customer satisfaction. In this study, respondents refer their pleasure to product quality, functionality, design, and material. For example, *'I am happy with the (product) design'*, (C1), *'Water saving, design, and basic functions',* (C2), and *'Recycle material'*, (C5).

Non-product Related Factor. For non-product related satisfaction, respondents referred to moral and emotional fulfillment. Purchasing products from sustainable brands made them feel either they are good people or they somehow contribute to the society, even for customers with lower concern on sustainability. This finding confirms the past study from Njoroge et al. (2019) that sustainability contributes to consumers' emotional, if not only physical, needs. The result of this study supports this literature by showing that buying sustainable brands fulfill their emotional needs in one way or another, regardless of their level of sustainability concern.

For example, respondent C7 who is less conscious about sustainability said that purchasing products from sustainable brands made him feel good to contribute to the world sustainability and being a good person, *'I feel like I can contribute to world sustainability by buying such brand'*. And *'It makes me feel like I am a good person'*. For emotional needs, purchasing a product from sustainable brand made they feel good, proud, and less guilty for spending money. Like C9 said, *'I feel less guilty when spending a lot of money to consume things'* and *'I feel good to help the planet'*. Respondent C6 who values highly in sustainability mentioned that sustainable brand image is important to him when the product is not a basic need, he stated *'depends on products. If it is special, not basic needs, it (sustainable brand image) is necessary because we buy satisfaction, and sustainability is one of my satisfactions'*.

Thus, for customers, sustainable brand and corporate image helps fulfilling their emotional, if not only functional needs (Njoroge et al., 2019). In other words, it has value to customers, and this, is something worth paying a little more for. Respondent C5 mentioned *'If the product is not cheap, I would consider it a splurge, so fulfilling my emotional needs is necessary'*. This sustainable brand image may also lead to customer's purchase intention, for those who value sustainability in medium and high levels. Respondent C2 stated, *'It helps me make purchase decision and I can pay even more to buy those brands.'* For customers who value less about sustainability such as C8, this is still relevant, but only green image matters because she primarily focuses on the green pillar. She said, *'green image of the brand might lead to purchase decision, the others are optional.'*

3.3.3.4 Purchase Decision.

When it comes to finalizing purchase decision, customers definitely also consider various factors other than sustainable attribute. Despite their positive feeling towards sustainability, and incorporation of sustainability into their purchase criteria, obviously, being a sustainable brand alone does not secure purchase decision. Research indicates that sustainability is among the relevant purchase criteria for many consumers, although not always the most important (Nilssen et al., 2019). The factors involved in making purchase decision include the product itself, price, and the brand. For the product, customers value its quality, functionality, design, and material. Some of such attributes are related to sustainability, such as recycle material and green

performance. For example, *'design, functionality, and water consumption rate'*, (C1) and *'recycle and local material'*, (C5).

Some literature suggests that consumers do not want to pay more for sustainability, and that attitude towards sustainability may not always translate into behavior or willingness to pay (M. Wright & Klÿn, 1998). Much research, however, demonstrates that consumer segments which value one or more of the sustainability pillars will pay more (e.g., Fuller et al., 2022; Hinnen et al., 2017; Maaya et al., 2018; Trivedi et al., 2015). The willingness to pay more was common in these interviews. This is consistent with other brand image research demonstrating that sustainability-oriented consumers are willing to pay more for products with a strong sustainability image, provided they are also perceived as high quality (Anselmsson et al., 2014). Although there are many concerns while purchasing a product, all respondents are willing to pay in 10%-50% premium for sustainable brands. Unquestionably, customers with higher concern about sustainability tend to be willing to pay more for sustainable brand. Respondent C6 with high sustainability concern stressed, *'I can go up to 50% for sustainable brand',* while respondent C9 with low sustainability consciousness mentioned, '*I will choose sustainable brands over other brands if the price is no more than 10% higher.'* This finding implied that consumers in sustainable sector are willing to purchase sustainable brands even when their products are coupled with price premium.

Of course, small-sample qualitative studies may not be fully generalizable. This qualitative research, however, does illustrate that the assertions in the first four research questions hold in this context. Despite different levels of implementation, companies are already engaged in three-pillar sustainability. Consumers use sustainability in constructing brand and corporate images, and the market is moving toward a full three-pillar understanding of sustainability. In Siggeldow's terminology (Siggelkow, 2007), this qualitative research demonstrates that these four RQ are 'plausible'. Therefore, the research indicates paths that need to be explored as orientation toward sustainability continues to grow among businesses and in markets. Chapter 4 examines the implications of this sustainable brand image on emotional response and brand loyalty among sustainability-oriented consumers.

CHAPTER IV
THE QUANTITATIVE STUDY OF THE MIXED METHODS

4.1 Introduction

This chapter demonstrates the quantitative part of the study, which surveyed consumers to examine whether Brand Image and Corporate Image based on the three pillars impact Emotional Attachment and ultimately Brand Loyalty. A set of questionnaires was developed from the literature and adapted to the results found in the qualitative research. A small set of experts were asked to assess the questionnaire. Index of Item Objective Congruence (IOC) method (Hasson et al., 2000; Thorn & Deitz, 1989) was adopted to seek for a consensus on the experts' opinions. The questionnaire was then distributed to 27 respondents for the pilot test. Exploratory Factor Analysis (EFA) was used to gain a preliminary assessment of convergent and discriminant validity, and reliability. The final questionnaires were then distributed to 315 respondents who value sustainability. At the end, 308 respondents were eligible for the study.

After collecting the data, the overview of the basic summary statistics for the questionnaire items was performed. The researcher then examined the reliabilities of the sub-dimensions and sustainability pillars. Composite variables representing the concepts in the model were created from factor scores. Structural equation modeling (SEM) was chosen in this study because it aims to explain the relationships among multiple variables. SEM also examines the structure of interrelationships shown in the equations, which is similar to a series of multiple regressions. Such equations describe every relationship among variables and constructs (Hair et al., 2019). There are 4 hypotheses tested in the study. The result of SEM supports all 4 hypotheses.

4.2 Questionnaire Development

Potential questionnaire items in the initial instrument were mostly retrieved from the literature. For brand image, the study from Lin et al. (2021) suggested items

to determine each sub-dimension—functional, affective, and reputational modules. The study used a five-point scale, with 1 is "strongly disagree" and 5 is "strongly agree". For Corporate image, the items were initially retrieved from Ali et al. (2020), Bayol et al. (2000), and Loock & Phillips (2020). There are three sub-dimensions including credibility, trust and reliability, and responsibility. Ali et al. (2020) suggested a 8-item scale, while Ali et al. (2020), Bayol et al. (2000), and Loock & Phillips (2020) proposed a 10 and 7 items scale respectively.

The items for emotional attachment was mainly adopted from the Thomson et al. (2005) and Barreda et al. (2020)' studies. The sub-dimensions are passion, and connection. In Thomson et al. (2005)'s study, respondents used a 7-point rating scale, ranging from 1 (not at all) to 7 (very well). In Barreda et al. (2020) suggested a 6-point likert scale, where 1 refers to "strongly disagree" and 6 refers to "strongly agree". The measurement of brand loyalty in this study was adopted from Sohail (2022) and Yoo & Donthu (2002), where there is no sub-dimension. A five-point Likert scales, ranging from 1 "strongly disagree" to 5 "strongly agree" was proposed.

Such items retrieved from the literature were also modified according to the results found from the qualitative study.

From the qualitative study, the researcher has gained a thorough understanding of thinking about the concepts from both internal corporate level and external consumer level. Such items retrieved from the literature were modified according to the results found from the qualitative study and to the industry context. A few items found from the qualitative study were added. The scale was developed in a 5-point Likert scale, from strongly disagree (1) to strongly agree (5). The questions were initially conducted in English and translated into Thai, because the respondents are mostly native Thai.

It should be kept in mind that the respondents qualified for this study are not random customers, but rather customers who value sustainability to some extent, though with some range of thinking about this. The objective here is to demonstrate that sustainability practices in the company translate into positive perceptions among customers. As with any product / company attributes, of course, segments which see no value in the attributes will see little benefit to products / companies which provide them.

4.2.1 Questionnaire items on Brand Image

Because the focus of this research is mainly on comprehensive three-pillar sustainability, brand image in this study shall refer to a set of perceptions of a brand in a consumer's mind that is linked to sustainability, including social, environmental, and economic concerns. The dimensions used to measure the brand image were initially adopted from Lin et al. (2021), Hameed et al. (2021), and Chen (2010), refined based on the results from the qualitative. These 3 studies cover, however, merely 2 pillars of sustainability, which are green and social pillars. The measurement for the economic pillar was modified from the other pillars, because the result from the qualitative interview suggested that the three pillars are interconnected, consistent with literature discussion (Purvis et al., 2019). And consumers often build their own economic brand image by linking to the other pillars.

In short, brand image consisted of functional, affective, and reputation sub-dimensions. The items were initially developed from the study from Lin et al. (2021). In the study, there are 2, 3, and 2 items for functional, affective, and reputational sub-dimensions respectively. However, because 4 items were needed for each dimension to demonstrate thorough representation of the 3 sub-dimensions, and statistical consideration in case the sub-dimensions are modeled as distinct. The rest of the questions were modified from the studies from Chen (2010) and Hameed et al. (2021).

Lin et al. (2021) suggested that the functional sub-dimension includes consumer's perspective about whether the brand offers high quality products and unique characteristics, while Chen (2010) and Hameed et al. (2021) proposed that customers consider whether the brand is excellent about environmental features. Such green features include whether the brand has incorporated sustainable operations and offers sustainable green products (Chen, 2008). The results from the qualitative study point in the same direction that customers tend to link sustainable brand image with high product quality.

The affective dimension includes whether the customers feel that the brand is nice, the brand has unique personality in sustainability, and the brand will not disappoint them. The result of the qualitative study supports the literature in which consumers tend to have good feeling towards sustainable brands. For the reputation dimension, the literature proposed three items. One, the brand is one of the best brands

in its sector. Two, the brand is professional about sustainability. Three, the brand is trustworthy about sustainability premises (Chen, 2010; Hameed et al., 2021; Lin et al., 2021). It was found in the qualitative study that consumers tend to trust sustainable brands because they believe that if a brand cares to invest in sustainability, it is likely that such brand cares enough to invest in product quality.

Although the measurement was initially retrieved from the literature, it is important to integrate all three sustainability pillars into the items, to ensure that the constructs will be created with an incorporation of comprehensive three-pillar sustainability. Green and social pillar are well stated in the literature, while the economic pillar is not. The qualitative study, however, pointed out that the three pillars are well interconnected and consumers often build their own economic brand image from their own reasoning by linking it to the other pillars. Therefore, the researcher developed most items for the economic pillar by modifying the items from the other two pillars.

The initial draft questionnaire on brand image can be seen in Appendix B-Table 1, and Table 4.1 below summarizes the number of items categorized by pillars and measurement dimensions. Because the concepts are complex components, the researcher needs to ensure that each dimension of brand image covered all three sustainability pillars. As a result, there were 36 questions in total, as well as a single overall summary question to help check that the individual items correlate with it well.

Table 4.1 Numbers of items used in the questionnaire on brand image, categorized by sustainability pillars and measurement dimensions.

Dimensions	Green pillar	Social pillar	Economic pillar	A single overall summary question
Functional	4	4	4	
Affective	4	4	4	
Reputation	4	4	4	
A single overall summary question				1

4.2.2 Questionnaire items on Corporate Image

Corporate image refers to "a collective representation of a firm's past actions and results that describes the firm's ability to deliver valued outcomes to multiple stakeholders" (Gardberg & Fombrun, 2002). For customers, such image is created from cumulative judgment and perception of a particular enterprise, resulting from one's experience and impression with a company (T. J. Brown et al., 2006; Bruno et al., 2020; Mostafa et al., 2015). Past studies suggested that corporate reputation should possess four functions, which are credibility, trustworthiness, reliability, and responsibility (Bruno et al., 2020; Van Riel & Fombrun, 1996). Although the measurement of corporate image is fairly well established in some applications, very few studies have scales which incorporate the comprehensive sustainability into the items.

The measurement in this study was developed and adapted from the studies from (Ali et al. (2020), Bayol et al. (2000), and Loock & Phillips (2020), where corporate image was mentioned in a sustainability context. The findings from the qualitative phase were also used to fill the gap where the literature did not cover. The result reveals that customers build corporate image in their mind mostly through CSR activities. The items were categorized into credibility dimension, trust and reliability dimension, and responsibility dimension. Although trust and reliability are sometimes believed to be separated functions (S. Wright, 2010), they are often used interchangeably (Berens & van Riel, 2004). Respondents in the in-depth interview mentioned about reliability and trust in the same sense, so attempts to measure two separate dimensions would be somewhat artificial in this context and they were combined.

Reputation for credibility may be measured by customer's perspective on whether this company offers quality sustainable products, whether a company actively involved in sustainability development, and whether a company have regular genuine CSR activities. For trust and reliability dimension, the measure covers whether the customers believe the company genuinely cares about sustainability, whether they have good feeling about the company, whether the customers think it is possible for such company to sacrifice its profitability for a purpose of sustainability, an whether the company is reliable.

And for responsibility dimension, the items include if the customer thinks the company obey laws and is transparent, the company has responsibility on sustainability concern, and the company appears to support good causes. The items were modified from the studies from Bruno et al. (2020) and Van Riel & Fombrun (1996). Table 2 in Appendix B shows the items for pilot questionnaire on corporate image, and Table 4.2 shows the summary of numbers of items categorized by pillars and measurement dimensions.

Table 4.2 Numbers of items used in the questionnaire on corporate image, categorized by sustainability pillars and measurement dimensions.

Dimensions	Green pillar	Social pillar	Economic pillar	A single overall summary question
Credibility	4	4	4	
Trust and reliability	4	4	4	
Responsibility	4	4	4	
A single overall summary Q				1

4.2.3 Questionnaire items on Emotional Attachment

As mentioned in the previous chapter, emotional attachment is an emotional bond between an organization and/or brand and an individual. This attachment can be determined by a deep feeling of affection, passion, and connection.

In the qualitative interview conducted in the earlier stage, the respondents claimed that purchasing products from sustainable brands made them feel either they are good people or they somehow contribute to the society, which somehow leads to higher self-esteem. This finding confirms the past studies that integrating sustainability into the product is likely to evoke consumers' emotional attachment, which eventually leads to their self-esteem (Han et al., 2020; Lee & DeLong, 2017).

The measurement of emotional attachment was mainly adopted from the Thomson et al. (2005) and Barreda et al. (2020)' studies. The construct consists of affection, passion, and connection dimensions. According to Thomson et al. (2005), affection dimension includes affectionate, loved, friendly, and peaceful items. Such

items show the warm feelings that customers have towards a brand. Passion dimension includes passionate, delighted, and captivated items. They demonstrate intense and aroused feelings that are positive towards a brand. The last dimension is connection, which includes connected, bonded, and attached items. These items are able to describe consumer's feelings of being linked to the brand.

The items were categorized into the three dimensions found above (Appendix B-Table 3). Unlike brand image and corporate image, the questions were not categorized into the three sustainable pillars. This was because the emotional attachment is attached to the whole brand, rather than one particular element in the brand. Table 4.3 shows the summary of numbers of items categorized by dimensions.

Table 4.3 Numbers of items used in the questionnaire on emotional attachment, categorized by measurement dimensions.

Dimensions	Number of Questions
Affection	4
Passion	4
Connection	4
A single overall summary Q	1

4.2.4 Questionnaire items on Brand Loyalty

Brand loyalty has long been perceived as a behavioral construct, which represents consumer's favorable attitude towards a brand as well as an intention of repurchase (Nam et al., 2011; Sohail, 2022). The measurement of brand loyalty in this study was adopted from Sohail (2022) and Yoo & Donthu (2002). Unlike the other constructs, the literature proposed no sub-dimension for brand loyalty. Brand loyalty is not the main focus in this study, and it is well known that favorable attitudes (as well as emotional attachment, if one follows the literature which calls it a separate concept) lead to brand loyalty. Therefore, a general measurement with no sub-dimension is sufficient for this study (Appendix A-Table 4). Table 4.4 shows the numbers of items used in the questionnaire on brand loyalty.

Table 4.4 Numbers of items used in the questionnaire on brand loyalty

Dimensions	Number of Questions
Brand loyalty	5

4.3 Expert Opinion

    Although the items were modified according to the literature and results from the qualitative interview, the opinions from experts are as well important. After the questionnaire was developed, the questionnaire items were tested for content validity through expert opinion and the Index of Item Objective Congruence (IOC) method (Hasson et al., 2000; Thorn & Deitz, 1989) to seek for a consensus on the opinions. The concept of IOC is to show both academic and business experts a brief definition of the concepts and their sub-dimensions, and request them to rate how well the question represents the sub-dimensions. In total, 4 experts were chosen from academic and business fields, including 1) a marketing manager who studies a PhD in sustainability, 2) a manager specializing in sustainable products, 3) a PhD university professor specializing in sustainability, small business, and entrepreneurship, and 4) a PhD business professor in management. The wording used was:

    Please identify whether the questions well represent the following dimensions.

    -1 = not appropriate, 0 = not sure, and 1 = appropriate

    Items with the average score lower than 0.5 were eliminated, and the rest of the items remained. The expert opinion results are shown in Table 5-8 in Appendix B-1. There were merely two items with the score of lower than 0.5. They were eliminated. A few questions were also commented to have minor issues such as incomplete translation from English to Thai and choice of words. Those questions were modified accordingly. In total, 2 questions were eliminated and the slight wording revision was made for 10 questions (see Table 4.5). The final draft versions of the questionnaires used in the pilot study are shown in Table 9-12 in Appendix B.

Table 4.5 Summary of the questions revised according to IOC

Construct	Number of Wording Revisions	Number of Item Eliminations
Brand image	2	1
Corporate image	7	1
Emotional attachment	1	0
Brand loyalty	0	0

Before conducting the main quantitative survey, the researcher needed to ensure that the measures work properly. The initial list of measures and questions were refined according to the expert opinions, and were tested through a pilot survey. The pilot survey is necessary to check whether the items are applicable to typical respondents.

4.4 Pilot Study

The research then distributed questionnaires for a pre-test. The draft questionnaire was distributed to respondents who are concerned about sustainability. These respondents must be the customers of one of the 9 brands stated in Chapter 3 Table 3.2. Snowball sampling, which was also be used in the main study, was adopted. As mentioned earlier in the qualitative study, personal connections are often important for information access in Asian culture. Therefore, personal connections were used to find the snowball seeds. There is evidence showing that snowball sampling technique is useful when the populations are specific and difficult to find (e.g., Atkinson & Flint, 2001). Van Meter (1990) suggested that when implementing carefully, snowball sampling can be fairly representative.

In total, 27 respondents were identified in the pilot study. All of them rated themselves at 3 or above for their concern on sustainability. Six respondents are the customers of the brands with high sustainability level, 11 respondents are consumers of the brand with medium sustainability level, and the rest are from the brands with low sustainability score. Summary statistics, including assessment of normality, mean, standard deviation, skewness, and kurtosis, were initially examined for each question

(Appendix B-2 Table 13-14). No major issues were found and all items in the questionnaire were distributed normally according to the common Shapiro-Wilks statistical test (Hair et al., 2019).

Exploratory factor analysis (EFA) was as well adopted to examine the pilot data. Generally, researchers would not conduct factor analysis of a sample of fewer than 50 observations (Hair et al., 2019), but this is not always the case. When the dimensions and sub-dimensions are carefully developed from the literature and adapted to the context, resulting in high factor loadings, small samples are applicable (de Winter et al., 2009; Jung, 2013). In exploratory research where factor loadings are usually small, however, large samples are needed. "For loadings higher than .8 and one factor, even sample sizes smaller than 10 were sufficient for factor recovery" (de Winter et al., 2009).

The analysis initially examined the variables separately, including brand image, corporate image, emotional attachment, and brand loyalty. The factors were executed based on Eigenvalues to confirm whether the factors retrieved from the pilot data are consistent with the theories from the literature. The researcher then explored the factor analyses with alternative solutions in which one more or one less factor was forced, in order to identify the best structure (Hair et al., 2019). The factor loadings and communalities were also carefully investigated to see whether the items were problematic and should be eliminated.

For brand image, as can be seen in Appendix B-Table 15, it was initially found that the factors were roughly categorized into 3 sustainability pillars, but not into sub-dimensions—functional, affective, and reputation dimensions—found in the literature. After forcing 3 factors to specifically examine the pillars, the economic pillar was clearly shown while the other two pillars were somewhat mixed together. The researcher then forced one-by-one more factors to examine the structure. Forcing four factors show distinctly three sustainability pillars. Among four factors extracted, two are green, one is social, and one is economic pillar. It can be seen that the green pillar has split into two sub-structures, while the other two pillars showed no sub-structure. There was cross-loading problem in a few items. The researcher then explored the three pillars one-by-one to examine the problematic items. After considering the statistical results as well as the theories suggested in the literature, a few problematic questions, including cross-loading, communalities, and reliability issues, were deleted.

Similar to brand image, the factor solution for corporate image began by using Eigenvalues to determine the number of factors (Appendix B-Table 16). Roughly, there were 3 factors according to the 3 sustainability pillars, but not into sub-dimensions—credibility, trust and reliability, and responsibility dimensions. Unlike brand image, the three factors did not clearly show up when forcing 3 factors. The pillars showed up fairly distinctly when forcing 6 factors, in which each pillar showed its own substructure (i.e., 2 green, 2 social, 2 econ factors). There were several problematic items, especially with cross-loading issues. After the problematic items were deleted, the three pillars were revealed much more clearly.

Factor solution for the emotional attachment was also initially performed based on Eigenvalues. After forcing 3 factors, the 3 sub-dimensions—affection, passion, and connection—were shown clearly without serious problem. Similarly, the factor analysis for the brand loyalty shows no major problem. Therefore, no item questions for emotional attachment and brand loyalty were deleted.

Table 4.6 summarizes the EFA on the three pillars and overall dimensions in the pilot test.

Table 4.6 Summary of EFA in the pilot study

	EFA of each single pillar	EFA of the construct	additive overall dimension
Brand Image	A few weak and cross-loadings items in green and social pillars were deleted.	several cross-loading and weak items, but coherence on overall dimension	$\alpha = 0.973$
Corporate Image	A few weak and cross-loadings items in social and economic pillars were deleted.	several cross-loading and weak items, but coherence on overall dimension	$\alpha = 0.982$
Emotional Attachment	no serious problems were shown	several cross-loading items, but coherence on overall dimension	$\alpha = 0.910$
Brand Loyalty	N/A	One weak item and a few cross-loading items, but coherence on overall dimension	$\alpha = 0.909$

4.5 Final Questionnaire Version and Sampling Methodology

After eliminating a few problematic items according to the pilot study, the final questionnaire version was finalized. In total, there are 84 items, including 34 questions for brand image, 33 questions for corporate image, 12 questions for emotional attachment, and 5 questions for brand loyalty (Table 4.7).

Table 4.7 Numbers of items used in the final questionnaire, categorized by pillars and sub-dimensions

Constructs and sub-dimensions	Green pillar	Social pillar	Economic pillar	No specific pillar	A single overall summary question
Brand image (BI)					
Functional	2	3	4		
Affective	4	4	4		
Reputation	4	4	4		
A single overall summary question for BI					1
Corporate image (CI)					
Credibility	4	3	4		
Trust and reliability	4	4	4		
Responsibility	4	3	2		
A single overall summary question for CI					1
Emotional attachment (EA)					
Affection				4	
Passion				4	
Connection				4	
Brand loyalty (BL)				5	

The survey samplings started with the seeds from two sources. The seeds of this study came partly from the researcher's personal connections. As noted in the qualitative phase earlier, personal connection is often needed for access in international business research (Eriksson & Kovalainen, 2008), especially in Asia (Srijumpa et al.,

2004). These group of respondents were known to be clients of the selected brands and are concerned about sustainability. The second source of the seeds was people who interact with fan page and e-commerce channels of the brands. Snowball sampling was adopted after the initial seeds. As stated earlier, snowball sampling technique is useful when the populations are difficult to reach, as well as helps adapting the sampling to the specific cultural context (Atkinson & Flint, 2001; Sadler et al., 2010). The study from Van Meter (1990) suggested that carefully implemented snowball sampling can be representative. These initially selected respondents were requested to recommend people with similar characteristics and fell into the criterion to participate in this study. The questionnaire was conducted online through Google form, so they were self-administered and thereby were able to take all the time they needed.

Initially, 315 respondents were collected, 7 of them were found to be ineligible because they had only one answer throughout the whole set of questions. These 7 questionnaires were then eliminated. In total, there were 308 eligible cases ready for the quantitative analysis.

4.6 The Model and the Hypotheses

The model and hypotheses of this quantitative study are shown again in Figure 4.1 for easy reference. It is worth to note again that all hypotheses tested here are not in general context, but rather in the context of sustainability, i.e. this data cannot assess whether sustainable brand and corporate images impact emotional attachment among people who have no interest in sustainability.
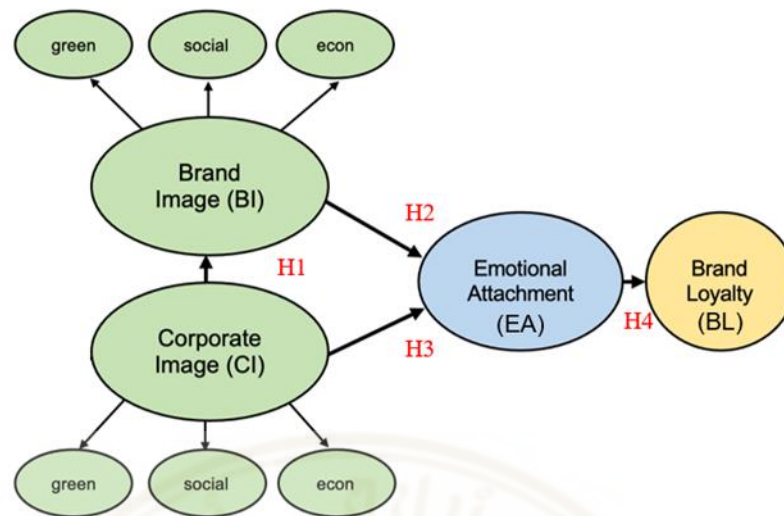
Figure 4.1 The structural model and hypotheses for the quantitative study

Hypothesis 1: Corporate image (CI) contributes to brand image (BI)

Hypothesis 2: Brand image (BI) has a positive impact on emotional attachment (EA)

Hypothesis 3: Corporate image (CI) has a positive impact on emotional attachment (EA)

Hypothesis 4: Emotional attachment (EA) contributes to brand loyalty (BL)

4.7 Descriptive Statistics for the Concepts, Sub-dimensions, and Pillars

Every item of the data was initially screened to ensure that all data had been entered correctly and that no impossible values had been inputted. No problems were uncovered with data entry. The researcher then performed the summary statistical analysis for each questionnaire item. The normality test, however, was not necessary because the sample size is large so occasional violation of the normality assumption should not lead to any issue (Ghasemi & Zahediasl, 2012). At any rate, the small pilot sample did not show any normality problems, as noted above.

4.7.1 Brand Image

It can be seen from Table 4.8 that the respondents agree about all of the brand image items with the mean of around 4, on a 1 to 5 scale with 5 = strongly agree. The means for all 5 subdimensions/pillars range from 3.899 to 4.093. There is no substantially stronger or weaker agreement on any particular subdimension and pillar, but rather somewhat similar. The standard deviation ranges from 0.692 to 0.778. These results indicate that the respondents do recognize the sustainability efforts of the companies, at least in terms of brand image.

Table 4.8 Descriptive statistics for brand image

Item	N	Mean	Std. Deviation
BI1.1	308	4.15	0.729
BI1.2	308	4.04	0.741
Subdimension: Functional			
Pillar: Green	(α=0.642)	4.093	
BI1.5	308	4.01	0.729
BI1.6	308	3.94	0.763
BI1.7	308	3.96	0.758
Subdimension: Functional			
Pillar: Social	(α=0.725)	3.972	
BI1.8	308	3.98	0.728
BI1.9	308	3.95	0.692
BI1.10	308	3.94	0.732
BI1.11	308	3.91	0.759
Subdimension: Functional			
Pillar: Economic	(α=0.716)	3.945	
BI2.1	308	4.01	0.715
BI2.2	308	4.04	0.743
BI2.3	308	3.95	0.745
BI2.4	308	4.01	0.715
Subdimension: Affective			
Pillar: Green	(α=0.740)	4.002	
BI2.5	308	3.94	0.774
BI2.6	308	3.97	0.754

Table 4.8 Descriptive statistics for brand image (cont.)

Item	N	Mean	Std. Deviation
BI2.7	308	3.98	0.703
BI2.8	308	3.93	0.765
Subdimension: Affective			
Pillar: Social	(α=0.713)	3.957	
BI2.9	308	3.93	0.820
BI2.10	308	3.87	0.774
BI2.11	308	3.94	0.778
BI2.12	308	3.86	0.765
Subdimension: Affective			
Pillar: Economic	(α=0.771)	3.899	
BI3.1	308	3.94	0.724
BI3.2	308	3.97	0.773
BI3.3	308	3.98	0.719
BI3.4	308	3.98	0.703
Subdimension: Reputation			
Pillar: Green	(α=0.770)	3.968	
BI3.5	308	3.97	0.721
BI3.6	308	4.01	0.735
BI3.7	308	4.01	0.689
BI3.8	308	4.00	0.715
Subdimension: Reputation			
Pillar: Social	(α=0.771)	3.999	
BI3.9	308	3.96	0.728
BI3.10	308	3.96	0.721
BI3.11	308	3.99	0.717
BI3.12	308	3.94	0.727
Subdimension: Reputation			
Pillar: Economic	(α=0.772)	3.966	

4.7.2 Corporate Image

Similar to brand image, the respondents also agree about all of the corporate image items with the mean of around 4 (Table 4.9). The means for all 5 subdimensions/pillars range from 3.984 to 4.089. There is no substantially stronger or

weaker agreement on any particular subdimension and pillar. The standard deviation ranges from 0.661 to 0.779. As with brand image, corporate image results indicate that consumers recognize the companies' sustainability efforts.

Table 4.9 Descriptive statistics for corporate image

Item	N	Mean	Std. Deviation
CI1.1	308	4.18	0.779
CI1.2	308	4.04	0.727
CI1.3	308	4.06	0.719
CI1.4	308	4.07	0.716
Subdimension: Credibility			
Pillar: Green	(α=0.752)	4.089	
CI1.5	308	4.01	0.735
CI1.6	308	3.99	0.699
CI1.7	308	3.97	0.748
Subdimension: Credibility			
Pillar: Social	(α=0.665)	3.991	
CI1.8	308	3.97	0.677
CI1.9	308	3.95	0.76
CI1.10	308	4.03	0.757
CI1.11	308	4.02	0.793
Subdimension: Credibility			
Pillar: Economic	(α=0.778)	3.992	
CI2.1	308	4.00	0.768
CI2.2	308	4.04	0.669
CI2.3	308	4.01	0.720
CI2.4	308	3.97	0.726
Subdimension: Trust and Reliability			
Pillar: Green	(α=0.763)	4.006	
CI2.5	308	3.94	0.699
CI2.6	308	4.00	0.708
CI2.7	308	4.00	0.742
CI2.8	308	4.00	0.715
Subdimension: Trust and Reliability			
Pillar: Social	(α=0.724)	3.988	

Table 4.9 Descriptive statistics for corporate image (cont.)

Item	N	Mean	Std. Deviation
CI2.9	308	3.96	0.732
CI2.10	308	4.00	0.711
CI2.11	308	4.00	0.742
CI2.12	308	3.96	0.745
Subdimension: Trust and Reliability			
Pillar: Economic	(α=0.784)	3.984	
CI3.1	308	3.98	0.706
CI3.2	308	4.06	0.706
CI3.3	308	4.05	0.716
CI3.4	308	4.01	0.735
Subdimension: Responsibility			
Pillar: Green	(α=0.745)	4.022	
CI3.6	308	4.02	0.724
CI3.7	308	4.01	0.670
CI3.8	308	4.09	0.661
Subdimension: Responsibility			
Pillar: Social	(α=0.662)	4.043	
CI3.10	308	4.00	0.701
CI3.12	308	4.04	0.684
Subdimension: Responsibility			
Pillar: Economic	(α=0.572)	4.018	

4.7.3 Emotional Attachment

The respondents also agree about all of the emotional attachment items with the means range from 4.026 to 4.072 for the three subdimensions (Table 4.10). The standard deviation ranges from 0.630 to 0.746. The relatively high level of emotional attachment is consistent with the strong recognition of the companies' sustainability efforts among our respondents, who are concerned about sustainability.

Table 4.10 Descriptive statistics for emotional attachment

Item	N	Mean	Std. Deviation
EA1.1	308	4.14	0.698
EA1.2	308	4.03	0.728
EA1.3	308	4.02	0.663
EA1.4	308	4.10	0.670
Subdimension: Affection	(α=0.701)	4.072	
EA2.1	308	4.01	0.713
EA2.2	308	4.00	0.746
EA2.3	308	4.02	0.706
EA2.4	308	4.08	0.694
Subdimension: Passion	(α=0.726)	4.026	
EA3.1	308	4.06	0.726
EA3.2	308	4.02	0.701
EA3.3	308	4.08	0.630
EA3.4	308	4.06	0.641
Subdimension: Connection	(α=0.691)	4.056	

4.7.4 Brand Loyalty

The average agreement on the brand loyalty is 4.014. The mean of each item ranges from 3.53 to 4.20 (Table 4.10). The means in all items are above 4.00 except item BL 3, where the mean is 3.53. The standard deviation ranges from 0.674 to 1.009.

Table 4.11 Descriptive statistics for brand loyalty

	N	Mean	Std. Deviation
BL1	308	4.15	0.688
BL2	308	4.08	0.721
BL3	308	3.53	1.009
BL4	308	4.10	0.686
BL5	308	4.20	0.674
	(α=0.664)	4.014	

4.8 Scale Purification

As seen above, Cronbach alpha was computed for each individual sub-dimension. The Cronbach alpha scores are reported in the respective summary statistics tables. Every sub-dimension had an α > 0.6 except the responsibility dimension in corporate image which has a Cronbach a bit below 0.6 at 0.572. This indicates that the items are acceptable in representing each sub-dimension. Although the normality test is not necessary for the study with large sample size, the researcher conducted a normal test in order to see the nature of the data. The Shapiro-Wilk test cannot reject normality for all subscales of the test at 5% significant level (see Appendix B-Table 17). The careful assessment of items in the expert opinion and pilot stages apparently eliminated most of the potential problems. The decision of item deletion was not solely based on the statistical outcome, but also a consideration of the theories found in the literature and results from the qualitative study.

4.8.1 Factor Solution

To analyze the factor structure, the researcher used Principal Components Analysis in SPSS. Eigenvalue criterion was initially used to determine the number of factors to be extracted, and to confirm whether the factors retrieving here are consistent with the theories and the pilot test. Brand loyalty (BL) was found to have one factor as predicted. For brand image (BI), corporate image (CI), and emotional attachment (EA), the researcher explored the factor analyses with alternative solutions in which one more or one less factor was forced (Hair et al., 2019).

Exploratory factor analysis (EFA) was used to verify whether the conceptualization from the literature using in the questionnaire is valid. EFA was also used to give guidance of item deletion. The researcher used EFA as a preliminary assessment of convergent and discriminant validity, and reliability. However, the results from EFA were not the only aspect taken into consideration. SEM results were also taken into account. The problems shown in SEM include standardized residual covariance, AVE, and Heywood cases.

BI and CI clearly showed a pattern of 3 pillars—green, social, and economic attributes—but further differentiation of their sub-dimensions as found in the literature was not distinct. This pattern is similar to what was found in the pilot test. Therefore,

the researcher reconducted factor solutions for BI and CI by separating them into individual pillars, which are BI green, BI social, BI economic, CI green, CI social, and CI economic. After conducting factor analysis for each individual pillar, each BI pillar exhibited functional, affective, and reputation sub-dimensions as suggested by the literature. And each CI pillar also showed credibility, trust and reliability, and responsibility modules as proposed in the literature. Clearly, all the sub-dimensions on each pillar only show up distinctly on an individual pillar basis. This sub-structure is not strong compared to distinctions among the pillars themselves, so they tended to confuse the result when trying to distinguish them with the three pillars all at once. This result was an initial indication to use pillars in the SEM, not sub-dimensions, in order not to ensure that the model was not too complex.

When forcing 3 factors, EA clearly showed 3 factors according to the literature, including affection, passion, and connection modules. While BL appeared to have merely one factor as expected. No serious problems were found for either of these constructs.

4.9 Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) was chosen to test the relationship among multiple variables. The model was performed in AMOS. SEM can examine a series of dependence relationships simultaneously, which is similar to a series of multiple regressions. Therefore, it is useful in testing theories that can be represented by multiple equations involving independence relationships (Hair et al., 2019). In this case, the research aims to examine the structure of interrelationships of the constructs.

4.9.1 Initial SEMs

Initial SEMs were run to detect problematic items. Because summated scales were to be used in the SEM model, the researcher needed to identify potential issues that could mix up the result. There were more items than actually needed, so it was possible to eliminate some problematic items to avoid minor statistical problems. However, the researcher needed to ensure that deleting the items would not change the

integrity of the content of the constructs. Hair et al. (2019) suggested that eliminating the items is possible but it should not change the results.

To decide which items to be deleted, the researcher considered the results from the following models.

1) Results from the EFA (See Appendix B-3)

2) Results from a full SEM structural model with sub-dimensions (See Appendix B-4)

3) Results from a full SEM structural model with no sub-dimensions, and with all indicators for each pillar (See Appendix B-5)

4) Results from an SEM with summated scales using all items in the scales (See Appendix B-6)

The results from four models appeared to be the same with all paths significant at 5%. Four following issues were identified. First, whether there is any multicollinearity problem by checking Measure of Sampling Adequacy (MSA). Second, whether there are any closely correlated items by checking the communalities. Third, whether there is any item with insignificant factor loading. Fourth, whether there is any item with cross-loadings. AVE and Heywood cases were also taken into consideration.

After identifying the problematic items, the researcher reconfirmed whether these items were able to be eliminated without affecting the conceptualizations. The theories retrieving from the literature, as well as the result from the in-depth interview and the questionnaires were taken into account. After careful consideration, 5 items for BI, 4 items for CI, 1 item for EA, and 2 items for BL were deleted. Each factor with the remaining items can explain at least 60% of total variance. The remaining items were used in the measurement and structural models.

4.9.2 Measurement Model

The confirmatory factor analysis (CFA) model was created as a measurement model (See Figure 4.2). The 3 sub-dimensions of each pillar are constructed as means of items before running the SEM. These composite variables are the indicators used to estimate the latent variables, which are BI green, BI social, BI econ, CI green, CI social, and CI econ. For BL, however, the remaining three

questionnaire items were directly used as indicators. Table 4.12 shows the items used for each latent construct, with a report on CFA loadings, and CR

Table 4.12 Items used for each latent construct, CFA loadings, and CR

Construct	Latent Variable	Items Used	Loading	CR
BI	BI green (composite)	BI 1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 3.2, 3.4	0.993	0.801
	BI social (composite)	BI 1.6, 1.7, 2.5, 2.6, 2.7, 3.5, 3.6, 3.7, 3.8	0.997	0.795
	BI econ (composite)	BI 1.8, 1.9, 1.11, 2.9, 2.10, 2.11, 3.9, 3.10, 3.11	0.970	0.846
CI	CI green (composite)	CI 1.1, 1.2, 1.3, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4	0.996	0.833
	CI social (composite)	CI 1.6, 1.7, 2.5, 2.6, 2.8, 3.6, 3.7	0.981	0.824
	CI econ (composite)	CI 1.8, 1.9, 1.10, 2.9, 2.10, 3.10, 3.12	0.959	0.849
EA	EA1 (composite)	EA 1.1, 1.3, 1.4	0.797	0.794
	EA2 (composite)	EA 2.1, 2.3, 2.4	0.732	
	EA3 (composite)	EA 3.2, 3.3, 3.4	0.719	
BL	-	BL1, 4, 5	0.869	0.718

Note: question wording for each item is in appendix B Table 12-15

In this measurement model, correlational relationships were assigned among the constructs (Hair et al., 2019). The researcher then assessed the goodness of fit of the measurement model with the following indices. The chi-square of the model is 424.1 with the degrees of freedom of 240. The P-value associated with this result is 0.000, which is significant using a type I error at 5%. As can be seen in Table 4.13, all fit indexes are considered good, indicating the model fits well.

The next step is to diagnose the potential problems of the measurement model. It was found that all loadings are significant at 5%, indicating no problem. The standardized regression weight shows a few cases which are slightly more than 1.0, which is 1.004 and 1.008, indicating Heywood cases. Because they are very slightly more than 1.0, the researcher decided not to modify the model and kept it as is. Later, however, as discussed below, various deletions of individual items in the composite variables, and several alternative error-term correlations, were examined to eliminate Heywood cases in the structural model. All standardized residuals are less than 2.5, indicating no problem. No unusual coefficient value was found and no variance was

negative. All factor loadings are more than 0.4. The construct reliability (CR) are all more than 0.7, and average percentage of variance extracted (AVE) are all more than 0.5 except BL, which has an AVE a bit less than 0.5 at 0.459. A discriminant validity check was computed. The correlations between two particular factors all appear to be less than the square root of the AVE values.
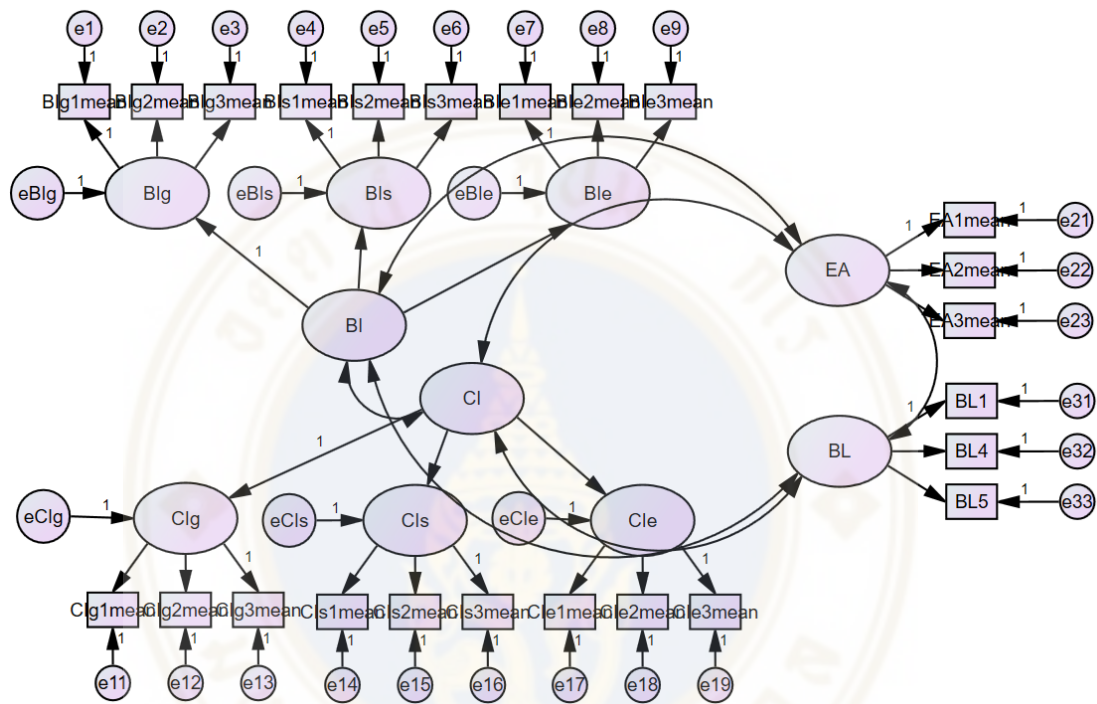
Figure 4.2 CFA measurement model

4.9.3 Structural Model

The structural model was created according to the conceptual model with the relationships retrieved from the literature and the results from the qualitative study (See Figure 4.3). Summated scales or the means of each factor for BI, CI, and EA were created and tested. The summated scale is the method of combining several items that measure the same concept into a single variable in an attempt to increase the reliability of the measurement (Hair et al., 2019). After testing various scenarios of the models, including with and without the summated scales used in the measurement model (Figure 4.2) and correlating error terms (modifications), the model using summated scales with correlating error terms (Figure 4.3) was selected to get rid of Heywood cases.
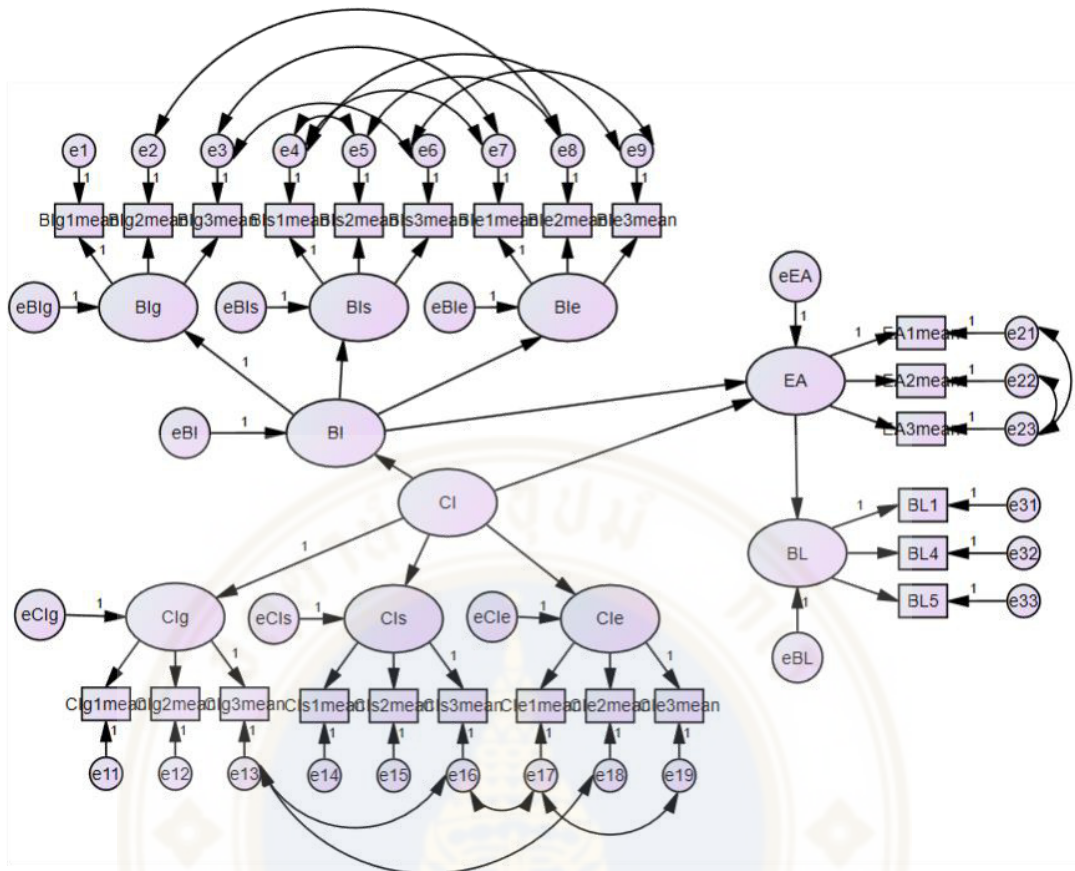
Figure 4.3 The structural model

Some scholars suggested that within-construct errors should be considered when conducting SEMs (Bocell, 2015), while Hair et al. (2014) argued that correlating error terms across constructs may compromise the conceptual integrity. Hair et al. (2014), however, deemed this acceptable, but recommend to compare the results of pre and post modifications for both measurement and structural models. No significant standardized parameter should differ by more than a few percent, and the small change shall not make them non-significant (at p=0.05). Likewise, no non-significant parameter shall come near significance (at p=0.05). This way, the researcher can ensure that the model and the integrity of the concept did not change. In this case, adding correlating error terms, results showed no significant change in standardized parameters and final results (see Table 4.14). The modifications, therefore, were considered acceptable.

As stated earlier, the process initially started with the measurement model, following by a series of SEM models with different scenarios. The fit indices in all scenarios appeared to be acceptable given the size and complexity of the model. But the summated scales for sub-dimensions, with error correlations, give stronger results. The summary of fit indices for several selected scenarios representing a range of approaches is shown in Table 4.13. The scenarios include the original measurement model, the measurement model with modifications (correlating errors), the structural model with and without summated scale, and with and without modifications. Table 4.14 demonstrates the parameters in all versions. It was found that the parameters in all versions are significant and slightly different by only a few percent. All fit indices are considered good. All versions reveal one to four Heywood cases, except the selected model—cut items in composite sub-dimensions with cross-pillar modifications.

The models shown in the tables are only a representative of various models conducted during the study. There are several other scenarios which are not shown in the table, but appeared to have the same results. The fit indices in all models are considered good. Heywood cases were shown in every option except the ones with summated scale and modifications.

Table 4.13 Summary of various model scenarios

Index/Issue	CFA - with summated scale	CFA - with summated scales and *with* modifications	Structural model - *without* summated scale and *with* modifications	Structural model - *with* summated scale and *without* modifications	Structural model - *with* summated scale and *with* modifications (selected)	Good fit (Hair et al., 2019)
Chi-square	424.1	321.998	4,422.599	424.7	**322.887**	
Degree of freedom	240	226	3,087	242	**228**	
CMIN/DF	1.767	1.425	1.433	1.755	**1.416**	CMIN/DF<3
GFI	0.899	0.921	0.753	0.899	**0.920**	GFI>0.90
CFI	0.962	0.980	0.882	0.962	**0.980**	CFI>0.92
RMSEA	0.050	0.037	0.038	0.050	**0.037**	0.03<RMSEA<0.08
PGFI	0.719	0.694	0.700	0.725	**0.700**	PGFI>0.5
SRMR	0.037	0.034	0.045	0.074	**0.034**	SRMR<0.08
Heywood Cases	2 Heywood cases	None	1 Heywood cases	2 Heywood cases	**None**	
Results	All paths significant at 5%	All paths significant at 5%	All paths significant at 5%	All paths significant at 5%	All paths significant at 5%	

Table 4.14 Parameter estimates in various versions of constructing the model

Items	CI → BI	CI → EA	BI → EA	EA → BL	CMIN/DF	CFI	RMSEA	Heywood Cases
Sub-dimensions and pillars, all items	0.843	0.641	0.261	0.841	1.475	0.870	0.039	Yes
Sub-dimensions and pillars, cut some items	0.840	0.632	0.269	0.836	1.457	0.897	0.039	Yes
Sub-dimensions and pillars, different cuts	0.830	0.657	0.231	0.849	1.424	0.897	0.037	Yes
No sub-dimensions, all items	0.839	0.650	0.251	0.842	1.433	0.882	0.038	Yes
All items in composite sub-dimensions, mods	0.832	0.658	0.232	0.850	1.599	0.966	0.044	Yes
Cut items in composite sub-dimensions, within pillar modifications	0.832	0.658	0.231	0.857	1.619	0.967	0.045	Yes
Different cuts, composite sub-dimensions, within pillar mods	0.842	0.647	0.250	0.870	1.657	0.968	0.046	Yes
Cut items in composite sub-dimensions, include cross-pillar modifications (selected)	**0.851**	**0.644**	**0.251**	**0.869**	**1.416**	**0.980**	**0.037**	**No**

The chi-square of the selected model, which is the one with summated scale and modifications, is 322.887 with the degree of freedom of 228. The P-value associated with this result is 0.000, which is significant using a type I error at 5%. CMIN/DF = 1.416, showing an acceptable fit. CFI = 0.98, indicating a good fit. RMSEA = 0.037, which is less than the maximum value 0.08 indicating a good fit. PGFI = 0.700, which is more than 0.5 indicating a good fit. PCFI = 0.81, which is more than 0.5 indicating a good fit.

All loadings are significant at 5%, indicating no problem. The standardized regression weight shows no sign of Heywood case. All standardized residuals are less than 2.5, indicating no problem. No unusual coefficient value was found and no variance was negative. All factor loadings are more than 0.4. The construct reliability (CR) are all more than 0.7, and average percentage of variance extracted (AVE) are all more than 0.5 except BL, which has an AVE a bit less than 0.5 at 0.459.

4.10 Findings

The result from SEM is shown below in Figure 4.4.
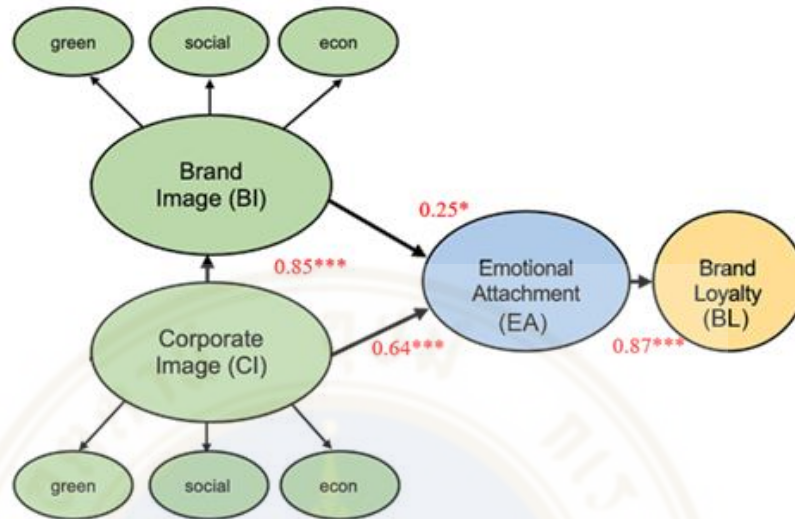
Figure 4.4 SEM analysis results (***p<0.001 and *p<0.05).

As can be seen from Table 4.15, all paths are all significant at 5% level. All hypotheses are supported.

Table 4.15 SEM analysis results

Hypotheses	Coefficient (standardized)	SE	CR	P value	Results
H1: CI → BI	0.851	0.072	10.805	<0.001	supported
H2: BI → EA	0.251	0.097	2.646	0.008	supported
H3: CI → EA	0.644	0.094	6.403	<0.001	supported
H4: EA → BL	0.869	0.093	10.481	<0.001	supported

The hypotheses can be explained as follows.

Hypothesis 1: Corporate image (CI) contributes to brand image (BI)

As can be seen from the SEM shown above, corporate image contributes to brand image in the context of 3-pillar sustainability, with a P value of less than 0.001.

Hypothesis 2: Brand image (BI) has a positive impact on emotional attachment (EA)

As can be seen from the SEM model above, brand image has a positive impact on emotional attachment in the context of 3-pillar sustainability, with a P value of 0.008 which is significant at 5% level.

Hypothesis 3: Corporate image (CI) has a positive impact on emotional attachment (EA)

As can be seen from the SEM model above, corporate image has a positive impact on emotional attachment in the context of 3-pillar sustainability, with a P value of less than 0.001.

Hypothesis 4: Emotional attachment (EA) contributes to brand loyalty (BL)

As can be seen from the SEM model above, emotional attachment contributes to brand loyalty in the context of 3-pillar sustainability, with a P value of less than 0.001.

All five research questions have been addressed in Chapter 3 and Chapter 4 (see Figure 4.5), from both qualitative and quantitative approaches. The qualitative study has addressed the RQs in level 1 and level 2, and connecting these two levels, while the quantitative study has addressed the RQs in level 2 and level 3 and connecting these two levels. Chapter 5 will illustrate the conclusion, discussion, managerial implications, academic implications, as well as the limitations of this study.
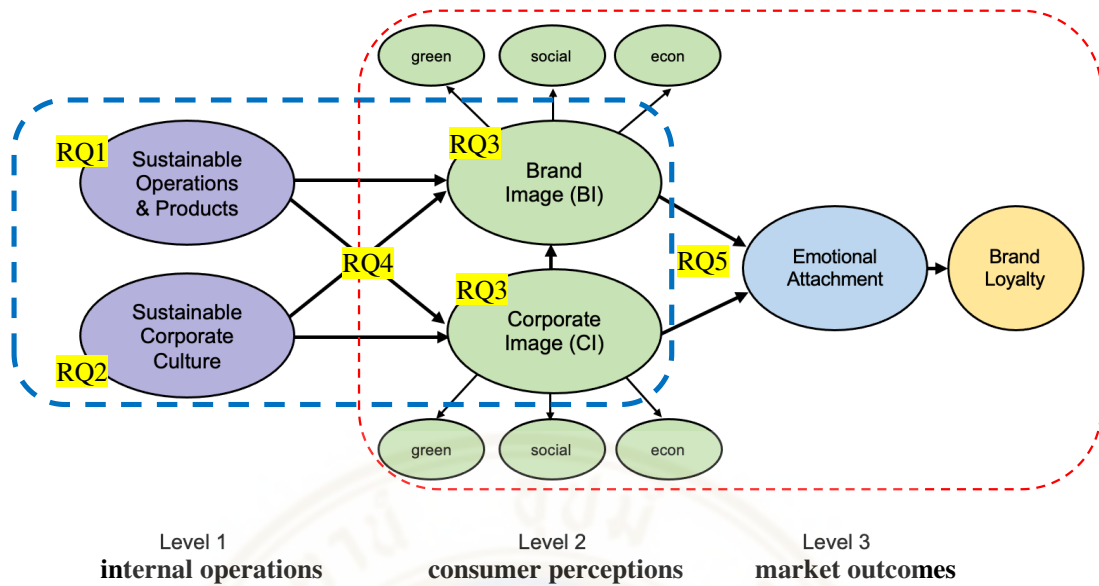
Figure 4.5 The conceptual model showing research questions and the stage of qualitative and quantitative studies

CHAPTER V
DISCUSSION AND CONCLUSION

As can be seen from the findings of this study, companies with higher sustainability scores have been attempting to incorporate all three sustainability pillars into their business practices and policies. This attempt was perceived by customers through their products and CSR initiatives they communicated publically. Implementing sustainable operations and products, as well as creating sustainable corporate culture, were found to be the crucial tools when a company attempts to integrate such sustainability concept into its organizational practice. Consumers tend to build sustainable brand image from their experience with the products and PR activities seen in various types of media. The findings of this study confirm all paths in the structural model initially proposed to examine RQ5, most notably that all three pillars are elements of both brand image and corporate image.

In this chapter, the researcher will discuss the key findings from both qualitative and quantitative studies, following by interpretations, implications, limitations, and recommendations for further studies.

5.1 Discussion

The key findings from the studies will be shown and elaborated to address each research question. In general, the result from the study indicates that managers' perception of sustainability varies among companies with different level of sustainability. Therefore, their implementations are also in different degrees.

The first research question is to address what managers' understanding of sustainable operations and products is, and how companies implement sustainability in their internal operations. It aims to identify whether they address the full set of three-pillar issues and if it is possible to identify different degrees of sustainability implementation. It was found that the understanding of the term sustainable in general

varies depending on the company's level of sustainability. In the firms with higher score, sustainability was defined by involving the comprehensive three pillars, including economic, environmental, and social sustainability. For the low-scored company, however, sustainability was defined by mentioning merely one pillar, particularly a green pillar.

When discussing about sustainable operations, the first issue usually mentioned was green operations, which often aim to create the least footprint to the planet. This finding implies that the green module is somewhat the most top-of-mind issue when people think of sustainable operations. Such operations include waste management and material selection. Compared to the other two pillars, the green pillar was mentioned somewhat more often. This is because the concept of green has been existing for quite some time and was well understood by most managers. Therefore, implementing green practice is much more possible and practical for them.

In the high-scored firm, sustainable operations were defined as an operation or production process that is harmless to the planet, society, and economy. These pillars are incorporated in both policies and KPIs. The respondents, however, accept that the implementation is not flawless, and they have not yet achieved their ultimate goal, but the company is willing to put effort to reach such target. This finding indicates that the concept of comprehensive three pillars of sustainability is quite well adopted in organizational practices, at least in some companies. Although the sustainable practice may not be fully executed in some companies, it is definitely in the developing process.

In contrast, the managers from a company with low sustainability level usually thinks mainly of one pillar at a time, focused on green. Green pillar is the most common attribute coming up when discussing about sustainable operations. To some of them, the word "sustainability" is used to represent merely the environmental pillar. And most of the sustainability concept in this view is integrated in the product development and production, rather than fully incorporated with the whole range of how what the company does has impacts.

Similar to what was found in the literature, most respondents also defined sustainable products as items that provide social, environmental, and economic benefits (Rocha et al., 2019; Sonetti & Lombardi, 2020). The managers from high-scored companies described sustainable product as a product that can be reborn and can extend

its life cycle by passing its value to the next owner. This definition is still somewhat rare in the academic literature, mainly discussed in terms of circular economy. Respondents from a company with low sustainability level, on the other hand, defined sustainable product based on merely environmental pillar. They simply explained that sustainable products are the ones that are harmless to the environment.

Respondents have different opinions on attributes that sustainable product should possess. They suggested that sustainable product should be immortal, marketable, profitable, harmless to the planet, and able to satisfy users. These findings support the study from Frank-Martin & Peattie (2009), which indicated that sustainable products possess six attributes including customer satisfaction, dual focus of social and environmental benefits, aim for zero-waste, contribution in significant improvement of socio-ecological problems on a global level, continuous improvement in knowledge and, and competitive market positioning. During the in-depth interview, at least one out of six characteristics was mentioned by every respondent while they were talking about sustainable products. Most respondents from high-score company talked about many of these six attributes.

Therefore, it is obvious that different companies with different level of sustainability address and implement different degrees of sustainability. The respondents from a company with low sustainability score focused on merely one pillar while those who are from high-scored company tend to integrate the full comprehensive pillars into the concept.

The second research question of this study is to identify what managers' understanding of sustainable corporate culture is, and how it works inside companies. This included exploring whether it integrates issues across the three pillars, as well as what the differences in the culture among the companies with different level of sustainability are. The results from the qualitative interviews show that managers suggested that sustainable corporate culture is a mutual understanding of sustainability and shared behaviors that contribute to sustainability. This finding supports the concept from Ravasi & Schultz (2006) and Schein (2010) who described organizational culture as collective shared assumptions and behaviors in organizations, which are conveyed to new organizational members. The result, however, strongly indicates that the integration

of the comprehensive 3 pillars into corporate culture is absent in the company with lower sustainability score.

Because CSR is one common way to communicate the message of sustainability and is the crucial part of creating sustainable corporate culture (Page & Fearn, 2005), this study explores how managers understand and execute CSR in their organizations. A company with higher sustainability score tends to create more sophisticated CSR initiatives focusing on longer-term goal. They also includes CSR into KPIs and business routine. They suggested that the best way to create an effective CSR is to create mutual benefit. The example includes educating people in the local community to recycle the factory waste to be a commercial product. This way, the mutual benefit between the firm and local community is created. In a company with lower score, however, CSR usually refers to one-time activities, such as renovating schools in rural areas, planting forest trees, and various forms of donation.

The findings from the qualitative interviews support the literature, which claims that open innovation culture is an essential component of sustainable organizational culture, and eventually leads to customer satisfaction and economic performance (Chesbrough et al., 2006; Globocnik et al., 2020; Njoroge et al., 2019; Obal et al., 2020; Srisathan et al., 2020). Open innovation usually occurs when a firm uses the knowledge inflows and outflows to encourage internal innovation, and to expand the markets for external use of innovation (Chesbrough, 2006). Unsurprisingly, open innovation is encouraged in the companies with higher sustainability scores, no matter whether the term "open innovation" is officially used or not. This open innovation culture may be promoted through the form of partnerships and collaborations, where the companies exchange knowledge within the firm and with other organizations. Ultimately, the new product was created by using know-hows from both companies, which are also benefited from the larger target market.

One way to achieve an open innovation culture is to encourage teamwork culture (Ehrhart et al., 2013). It was found that organizations may encourage teamwork in workplace through both culture and organizational structure. In organizations with high sustainability level, the encouragement of teamwork culture is routinely built through daily tasks. Collaborations among departments are essential in completing such tasks. The company with lower score also supports working in team by simply assigning

team projects and mutual goals. This is also an efficient and simple way to develop teamwork culture, although it is limited within small teams rather than an entire organization. The finding implies that teamwork can be executed easily with not much effort and not much understanding of the sustainability concept, while crating open innovation culture requires more knowledge and effort.

Similar to what the literature suggested, the study suggested that top managers' leadership is a crucial component in initiating and executing sustainability in an organization (Avery & Bergsteiner, 2011). The result indicates that sustainability will be effortlessly executed when CEOs or top managers initiate the policy and act seriously. Bottom-up policy initiation is also possible in a company with higher sustainability score, where most employees have mutual understanding of sustainability and its goal. Executions can be done effectively when incorporating the sustainability concept into KPIs. It was found that such KPI policies were found in high and medium scored companies, but not the low scored one. This way, the concept of sustainability was automatically communicated throughout the organization.

In the high-scored firms, most employees accepted that they have shared vision and perception of sustainability with their seniors and top managers because they are integrated in the routine activities. In a low scored company, however, top managers are less influenced to their employees regarding sustainability vision and execution because the message is sent through occasional meetings and trainings. For this reason, it is obvious that any corporate culture cannot be created without effective internal communication. The communications can be created through various channels, including emails, billboards, boards, trainings, meetings, and role models. Employees also tend to form corporate culture by following their colleagues, seniors, and role models in their organization.

These first two research questions are about whether companies in the household durables industry implement sustainability in their operations, and sustainability is a part of corporate culture. Yes on both of these research questions, but to different degrees. Companies that achieve high scores in the DJSI are fairly comprehensive in implementing full three-pillar sustainability. Low scores may focus on one pillar – in this research, green.

The third and fourth research questions are about whether consumers use the three-pillars in constructing their views of brands and companies, and whether it actually corresponds to what companies do internally. The third research question is how consumers use sustainability issues to build their perceptions of brand image and corporate image, and to what extent do they use full three-pillar sustainability vs. focus on only one or two pillars.

Apart from CSR activities that directly contribute to sustainable brand image (Chang & Yeh, 2017; Lai et al., 2010), there are several more factors consumers used to build sustainable brand image in their mind. These factors include product attributes, consumer's direct and indirect experiences with the brand, and their own reasoning. When talking about the term sustainability in general, very few customers mentioned an economic pillar initially, although it came up sometimes as the conversation progressed. Most of them, unsurprisingly, think of environmental and social attributes. This finding is compatible with the literature, where the sustainable branding was found to be studied mostly from merely one or two angles, especially environmental or social attributes.

For green and social brand images, most customers agreed that they had built brand image through their experience with product attributes. For example, a product made of recycled material or which consumes less energy tends to have green brand image. Likewise, consumers build social brand image when they know that the products are made from craftsmen in local communities, or they know their money will go to help local communities or the poor. Economic brand image, however, is not built by having economic attribute attached to the products, but rather created from customers' own reasoning which may be linked to other pillars. For example, one might think that the brand has economic image because the products are made by local people, so they naturally help stimulate local economy.

Ultimately, sustainable brand image may also lead to customer's purchase intention, for those who value sustainability in medium and high levels. It is interesting to note that purchasing products from sustainable brands made them feel either they are good people or they somehow contribute to the society. Even customers of the low scored company said this, although they refer specifically to green image and the environment, not broader sustainability issues. This finding is consistent with the study

from Njoroge et al. (2019) that sustainability also contributes to consumers' emotional, if not only physical, needs.

One way that customers build corporate image is from the CSR activities a company has done in the past (Chen et al., 2021). There are many studies suggesting that CSR initiatives contribute to corporate image and reputation, when they are implemented proactively and genuinely (Becker-Olsen et al., 2006; Nguyen et al., 2020; Nirino et al., 2019; Saeidi et al., 2015). It was found during the in-depth interview that consumers tend to hear about and remember companies' CSR initiatives through PR news, social medias, and official websites.

Respondents who value environmental sustainability are attracted by green brand image, consistent with the statement from Chen et al. (2020). Similarly, consumers who value social development are attracted by social brand image, which is compatible with the study from Kumar et al. (2021). Consumers in our interviews are mostly aware of three-pillar concepts. Although most customers believe sustainability is a required practice, only a few feel that three pillars are currently necessary for sustainability. Most of them, however, agreed that only one or two pillars of sustainability in one brand is sufficient. Many, however, tend to view one or two pillars now as an intermediate stage in moving toward more sustainability. One respondent suggested that one pillar at a time will naturally progress toward three-pillar sustainability in the macro scale. One other respondent is already at the stage where they expect three-pillars for a truly sustainable company.

In other words, most of the market is not yet demanding full three-pillar sustainability, but it is clearly moving there. Many organizations are already integrating the three pillars into their policies and business. When they communicate the message more effectively, customers will see them as a genuine sustainable brand and no longer need to accept the brands which do not deliver all three pillars. Some recent research has already discussed how the comprehensive three pillars are important for product design (Rocha et al., 2019). And some suggested that effective communication about sustainability issues is important (Du et al., 2010; Kim, 2019; Lim & Greenwood, 2017; Wang & Li, 2022).

The fourth research question of this study is to examine how well the company's internal efforts at sustainability (operations & corporate culture) translate

into consumer perceptions of brand image and corporate image. In Chapter 2, it was pointed out that some companies do engage in green-washing or CSR-washing (the economic pillar does not seem to be noted in the literature), false or incomplete claims about the extent of their implementation addressing environmental or social pillars (Dangelico & Vocalelli, 2017; Devin, 2016; Pope & Waeraas, 2016). In this research, the sampling explicitly excluded companies which do not seem to do much about sustainability, and the consumers were specifically chosen not be customers of companies in the sample. Thus, it was not expected that there would be much "sustainability-washing". In fact, findings indicated that what managers talked about was consistent with what was promoted on their websites. What consumers talked about was also consistent with the company of their brand, which the slight modification that the middle-scored company sometimes had a little better sustainability perception than the top-scored company.

In general, companies implementing sustainability more strongly have a stronger sustainability brand image. While not exactly a perfect mapping, customers somewhat perceive sustainable brands consistent with the company's internal practices. The slight difference between DJSI scores and consumer perceptions can be explained by how well corporate communications are able to convey knowledge of sustainability practices to consumers. The middle-scored company was somewhat more active in communicating its CSR activities – not in any sense of sustainability-washing through false or incomplete information, but rather, in bringing actual activities to awareness. Other work in Bangkok has shown that consumers may be unaware of many CSR activities if they are not very prominently communicated (Plungpongpan et al., 2016b), and that stronger communications about CSR improves the impact of CSR on brand image (Plungpongpan et al., 2016a).

Thus, consumers perceive sustainability efforts through two main sources: the companies' products, and CSR initiatives which are communicated publicly. They tend to build sustainable brand image from their own experience with the products, and from marketing and PR activities they see in various types of media that tell them something about the company beyond just what they can observe from using the products.

The last research question is to examine whether the sustainable brand image and sustainable corporate image impact emotional attachment, leading to brand loyalty. The quantitative study, which adopted SEM model, confirms all paths in the structural model. All relationships among the constructs were statistically significant, with the same directions suggested in the hypothesis development. The structural model with the magnitudes is shown in Figure 5.1 below.
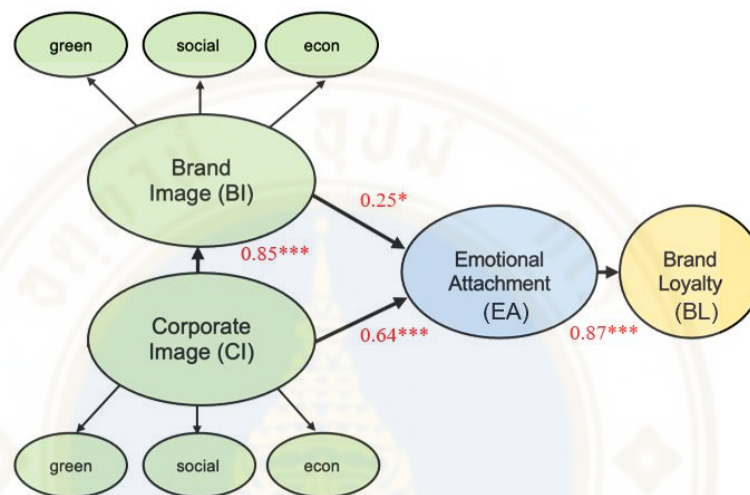
Figure 5.1 SEM analysis results (***p<0.001 and *p<0.05).

As can be seen from the model, all paths proposed in the conceptual model are significant. Brand image and corporate image comprises of the green, social, and economic attributes. These three factors confirm the concept of three-pillar sustainability from (Purvis et al., 2019). It is clear that the comprehensive sustainability in the view of sustainability-oriented consumers consists of all three of these pillars, for both BI and CI. The finding also supports the statement from UNESCAP (2018) that sustainability should provide "social and economic benefits within planetary boundaries".

The relationship among the constructs confirms what was hypothesized. Although most of the past studies of the relationship among brand image, corporate image, and emotional attachment are not the in context of the comprehensive sustainability, the findings from this study follow the same structure. Corporate image leads to brand image (Foroudi et al., 2022). And both brand image and corporate images

contribute significantly to emotional attachment (Ali, 2018; A. A. Barreda et al., 2020; Nyagadza et al., 2020; Xu et al., 2021), which is the determining factor of brand loyalty (Kalakumari & Sekar, 2013). As Thompson et al (2005) speculate may be the case sometimes, CI here has a stronger impact on EA than does BI (as indicated by the standardize coefficients), although both are significant.

5.2 Implications

This study provides both conceptual and managerial implications. Most empirical research on branding related to sustainability has largely focused on a single pillar, usually the environmental or social one. And most of them approached branding merely from the marketing perspective, rather than integrating the organizational operations and culture into the study. This research thereby addresses this gap. The study also suggests managerial implications, in which sustainability is a strong component of favorable brand to consumers. And a company shall not focuses only on integrating sustainability into marketing communications, but also through its practices and organizational culture.

5.2.1 Conceptual implications

The first observation is that many companies, especially the high-scored ones, seem well aware of the need for three-pillar sustainability, and are executing it. Most studies on sustainability as related to branding have mainly focused on a single pillar, usually the environmental or social one. In addition, the marketing literature often approaches branding as more of a marketing communications issue, but the key is connecting the external brand image (and corporate image) to the internal operations. This is critical for moving to credible sustainability in consumers' minds, and avoiding potential perceptions of sustainability-washing. This research demonstrates that consumer perceptions of BI and CI are related to internal operations. Industry, then, is somewhat ahead of academic research in sustainability thinking and implementation. Conceptual discussions are available in the marketing literature, but there is a shortage of empirical work to build understanding of the more comprehensive view of three-pillar

sustainability. Although many factors contribute to brand loyalty, sustainability should be one of the major components in segments which value sustainability.

The second observation is that managers' understanding and implementation varies according to their firms' level of sustainability. The firms with higher sustainability score, seem well aware of the need for three-pillar sustainability, and have been executing it although some of them may have not yet achieved the ultimate goal. Their understanding of the concept and implementation has been tested and developed over time. The lower-scored ones, however, tend to use the green concept as indicating sustainability, rather than the full three-pillar concept. In the academic world, there are very few of empirical studies about marketing and brand image on the comprehensive view of sustainability beyond one or two pillars.

The third major observation is that some consumers are aware of three-pillar sustainability in different degree. Many do not yet factor all three pillars into their perceptions of brand building or product choice, while some of them already do. As stated in many studies, there are customers with specific pillar segments, such as people who are environmental or social concerned. However, most respondents already recognize the interconnections among the three pillars. And some of them already believe the full three pillars is the long-term trend.

Lastly, this research confirms the results from the previous studies in which corporate image leads to brand image (Foroudi et al., 2022), and brand image and corporate images contribute to customer's emotional attachment (Ali, 2018; A. A. Barreda et al., 2020; Nyagadza et al., 2020; Xu et al., 2021). This impact on emotional attachment is a key reason why companies need to worry about the development of three pillar consciousness among consumers. It will ultimately have a growing impact on brand loyalty. The sustainable brand image and corporate image needed to foster EA will increasingly need to incorporate all three pillars.

5.2.2 Managerial implications

Sustainability is a strong component of favorable brand to many consumers. In order to create strong sustainable brand and corporate images, a company shall not approach through merely marketing tools, but also through genuine sustainable practices and corporate culture. Such practices and culture eventually transform to sustainable

images, leading to customer emotional attachment, which is a major contributor of brand loyalty.

Initially, sustainability-oriented customers for sustainable brands have primarily focused on merely one pillar, frequently either environmental or social. That is, sustainability market segments were small and fragmented. They are now not only growing, but the different pillar segments are merging. It is thereby predictable that a brand will not be able to claim that it is sustainable by either being green, supporting social development, or helping the local economy alone. This is because the customers will eventually demand for more comprehensive three pillars. Consequently, any company who wishes to attract customers in the sustainable segment needs to incorporate the comprehensive three pillars into its brand.

Figure 5.2 shows the current market situation. The three pillars started as small fragmented market niches. Companies could focus on one pillar and claimed they are sustainable. Many companies, however, are now aware that the segments are constantly growing, and they are also merging. Therefore, a comprehensive sustainability segment will eventually become the mainstream segment.
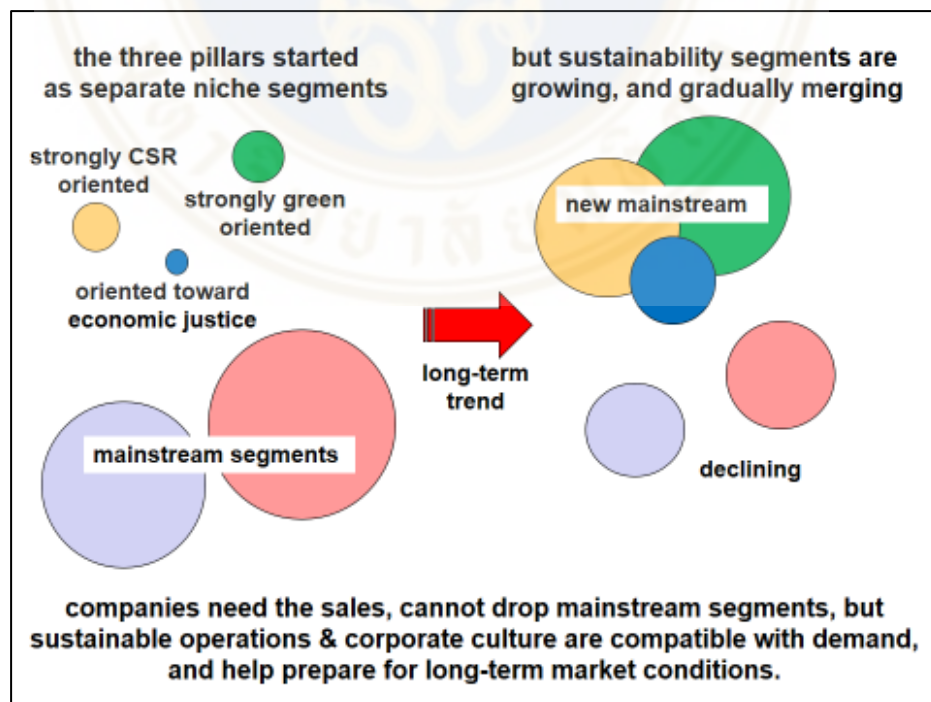
Figure 5.2 Evolution of sustainability segments

Source: Chavalittumrong & Speece (2022)

In the past, the mainstream segments were not necessarily concerned with sustainability. Some studies state that these particular customers are not always willing to pay in premium for green or social attributes (Sharma & Joshi, 2019b). Most respondents in this research, however, are willing to pay more for sustainability. The reason is because they value sustainable product characteristics and sustainable company operations. Some segments of the market remain not sustainability-oriented, but there is rather little conflict except in the lower-end customers who are typically highly price-oriented. Customers tend to perceive that companies known for sustainability offer high quality products. Although consumers who value quality may not care about sustainable attributes such as greenness or social inclusiveness, but they may be willing to pay in premium for the quality. Therefore, sustainability does not harm the brand, even if it may not help building a brand in the mainstream segment.

To prepare for these evolving market conditions, companies can make sure that quality considerations are incorporated into sustainable brand image. In other words, the brand message would not be simply "this brand is fully sustainable" (according to the criteria in the UN SDG), but "this brand is excellent quality and fully sustainable". This second message will certainly continue to appeal to sustainability-oriented consumers, but it also appeals to quality-oriented consumers who may not be strongly sustainability-oriented. The weight of one or the other component in the message may shift by segment, but there is not need to simply ignore either the (current) mainstream or the sustainability segments. It is relatively simple to target both with just slight adjustments in message emphasis.

5.3 Limitations and Recommendations for Further Studies

An obvious limitation of this research is that the study was conducted among large Thai companies in the household durables industry. Therefore, some results may not be applicable with smaller firms and the ones in other counties and industries. Larger organizations usually provide informative and up-to-date websites which are well established online, which the smaller firms may not be capable of. Retrieving company information from online resources, therefore, might not be appropriate in the study with SMEs. Further, in smaller companies, limited workforce may not allow implementation

of comprehensive sustainability and SMEs may thereby automatically feel that they are forced to focus on individual pillars. This, of course, can be researched to work out how SMEs can tap into full three-pillar sustainability given much more limited resources. Necessarily, such work will need to start with looking at how SME internal operations can be fully sustainable; some may already be there. But starting on the marketing side with little reference to internal operations runs the risk of simply examining sustainability-washing.

Marketing communications will need to be investigated more closely. The result shows that marketing communications have some impact on how aware consumers are about internal sustainability efforts, such as CSR activities. For this reason, larger firms with more marketing budget may be perceived as more sustainable, compared to smaller companies with much less budget. However, this issue was not a main focus in this research project, it simply was noticed in the course of developing understanding of the three-pillar issues examined here. Therefore, future research needs to examine how marketing communications support the comprehensive concept of sustainability, as well as to examine how small companies can use such communications if they wish to promote their sustainable practice. There is probably a role for social media in this; skillful use of social media in theory can give SMEs wide access to the market (e.g., (Kraus et al., 2019; Odoom & Mensah, 2019).

Another limitation is that this study was tested in the household durables industry, so some findings may not be applicable to other industries well. Consumer durables are somewhat high involvement goods, where consumers think carefully before making purchases. In other words, high level of conscious evaluation of product features is rarely shown for low-involvement products (Bauer et al., 2006; Thøgersen et al., 2012). Therefore, the result may appear differently for low-involvement products where consumers tend to make a purchase with less conscious thinking. Possible future research should address the sustainable branding issue in such low-involvement cases.

The final point is not exactly a limitation, but it should be kept in mind that these results reflect how sustainability-oriented consumers view things. Just as with any particular product attribute, consumers who do not value the attribute are not likely to behave exactly the same way toward the product as those who do value it. Simply doing research on weak-attitude segments, i.e., the ones who do not care much about

sustainability, is not likely to demonstrate very useful results on how BI and CI affect EA. But research would be useful on how to shift attitudes (SHIFT in the terminology of White et al., 2019) toward sustainability, so that BI and CI do become important considerations. It is possible that new converts to sustainability could have somewhat different perspectives than those who have already been considering sustainability for a long time.

REFERENCES

Adnan, A., Ahmad, A., & Khan, M. N. (2017). Examining the role of consumer lifestyles on ecological behavior among young Indian consumers. *Young Consumers*, *18*(4), 348–377.

Ali, I. (2018). The nexus between CSR, corporate image, company identification, emotional attachment and small equity investors behavior. In *Corporate Social Responsibility: Concepts, Methodologies, Tools, and Applications* (pp. 549–563). https://doi.org/10.4018/978-1-5225-6192-7.ch029

Ali, I., Ali, M., Grigore, G., Molesworth, M., & Jin, Z. (2020). The moderating role of corporate reputation and employee-company identification on the work-related outcomes of job insecurity resulting from workforce localization policies. *Journal of Business Research*, *117*, 825–838. https://doi.org/10.1016/j.jbusres.2019.02.060

Aljamal, A., Speece, M., & Bagnied, M. (2020). Sustainable policy for water pricing in Kuwait. *Sustainability (Switzerland)*, *12*(8). https://doi.org/10.3390/SU12083257

Aljamal, A., Speece, M., & Bagnied, M. (2022). Understanding resistance to reductions in water subsidies in Kuwait. *Local Environment*, *27*(1), 97–111.

Alvarez, C., & Fournier, S. (2016). Consumers' relationships with brands. *Current Opinion in Psychology*, *10*, 129–135. https://doi.org/10.1016/j.copsyc.2015.12.017

Amel, E. L., Manning, C. M., & Scott, B. A. (2009). Mindfulness and sustainable behavior: Pondering attention and awareness as means for increasing green behavior. *Ecopsychology*, *1*(1), 14–25.

Andreassen, T. W. (2001). From disgust to delight: Do customers hold a grudge? *Journal of Service Research*, *4*(1), 39–49.

Ann, G. E., Zailani, S., & Wahid, N. A. (2006). A study on the impact of environmental management system (EMS) certification towards firms'

performance in Malaysia. *Management of Environmental Quality: An International Journal*, *17*(1), 73–93. https://doi.org/10.1108/14777830610639459

Anselmsson, J., Bondesson, N. V., & Johansson, U. (2014). Brand image and customers' willingness to pay a price premium for food brands. *Journal of Product and Brand Management*, *23*(2), 90–102. https://doi.org/10.1108/JPBM-10-2013-0414

Armstrong, C. M., Niinimäki, K., Kujala, S., Karell, E., & Lang, C. (2015). Sustainable product-service systems for clothing: Exploring consumer perceptions of consumption alternatives in Finland. *Journal of Cleaner Production*, *97*, 30–39.

Arndt, H. W. (1989). *Economic development: The history of an idea*. University of Chicago Press.

Atkinson, R., & Flint, J. (2001). Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social Research Update*, *33*(1), 1–4.

Avery, G. C., & Bergsteiner, H. (2011). Sustainable leadership practices for enhancing business resilience and performance. *Strategy & Leadership*, *39*(3), 5–15.

Barreda, A. A., Nusair, K., Wang, Y., Okumus, F., & Bilgihan, A. (2020). The impact of social media activities on brand image and emotional attachment: A case in the travel context. *Journal of Hospitality and Tourism Technology*, *11*(1), 109–135. https://doi.org/10.1108/JHTT-02-2018-0016

Barreda, A., Nusair, K., Okumus, F., & Bilgihan, A. (2013). Developing a brand structure pyramid model for travel-related online social networks. *Tourism Review*, *68*(4), 49–70. https://doi.org/10.1108/TR-09-2013-0055

Bauer, H. H., Sauer, N. E., & Becker, C. (2006). Investigating the relationship between product involvement and consumer decision-making styles. *Journal of Consumer Behaviour*, *5*(4), 342–354.

Bayol, M.-P., de la Foye, A., Tenenhaus, M., & Tellier, C. (2000). Use of PLS path modelling to estimate the European Consumer Satisfaction Index (ECSI) model. *Statistica Applicata-Italian Journal of Applied Statistics, 12*(3), 361-375.

Bechler, C. J., Tormala, Z. L., & Rucker, D. D. (2021). The attitude–behavior
relationship revisited. *Psychological Science*, *32*(8), 1285–1297.

Becker-Olsen, K. L., Cudmore, B. A., & Hill, R. P. (2006). The impact of perceived
corporate social responsibility on consumer behavior. *Journal of Business
Research*, *59*(1), 46–53. https://doi.org/10.1016/j.jbusres.2005.01.001

Berens, G., & van Riel, C. B. M. (2004). Corporate Associations in the Academic
Literature: Three Main Streams of Thought in the Reputation
Measurement Literature. *Corporate Reputation Review*, *7*(2), 161–178.
https://doi.org/10.1057/palgrave.crr.1540218

Bhattacharya, C. B., & Sen, S. (2003). Consumer–company identification: A
framework for understanding consumers' relationships with companies.
Journal of Marketing, *67*(2), 76–88.

Bhatti, U., & Sulaiman, N. (2020). Impact of sustainability practices on share
performance with mediation of green innovation: A conceptual paper.
International Journal of Psychosocial Rehabilitation, *24*(2), 1826–1836.
https://doi.org/10.37200/IJPR/V24I2/PR200484

Bocell, F. (2015). *The impact of unmodeled error covariance on measurement models
in structural equation modeling* [PhD Thesis].

Bright, L. F., & Logan, K. (2018). Is my fear of missing out (FOMO) causing fatigue?
Advertising, social media fatigue, and the implications for consumers and
brands. *Internet Research*, *28*(5), 1213–1227.

Brown, B. J., Hanson, M. E., Liverman, D. M., & Merideth, R. W. (1987). Global
sustainability: Toward definition. *Environmental Management*, *11*(6),
713–719.

Brown, T. J., Dacin, P. A., Pratt, M. G., & Whetten, D. A. (2006). Identity, intended
image, construed image, and reputation: An interdisciplinary framework
and suggested terminology. *Journal of the Academy of Marketing Science*,
34(2), 99–106.

Browne, K. (2005). Snowball sampling: Using social networks to research non-
heterosexual women. *International Journal of Social Research
Methodology: Theory and Practice*, *8*(1), 47–60.
https://doi.org/10.1080/1364557032000081663

Brundtland, G. H. (1987). *Our common future*. United Nations.

Brunk, K. H., & de Boer, C. (2020). How do Consumers Reconcile Positive and
     Negative CSR-Related Information to Form an Ethical Brand Perception?
     A Mixed Method Inquiry. *Journal of Business Ethics*, *161*(2), 443–458.
     https://doi.org/10.1007/s10551-018-3973-4

Bruno, J. M., Sarabia-Sanchez, F. J., & Bianchi, E. C. (2020). CSR practices,
     identification and corporate reputation. *Academia Revista
     Latinoamericana de Administracion*, *33*(3–4), 361–379.
     https://doi.org/10.1108/ARLA-11-2018-0265

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the
     moral management of organizational stakeholders. *Business Horizons*,
     34(4), 39–48. https://doi.org/10.1016/0007-6813(91)90005-G

Casey, E. J. (1992). A Plan for Environmental Packaging. *Journal of Business
     Strategy*, *13*(4), 18–20. https://doi.org/10.1108/eb039501

Chaisrakeo, S., & Speece, M. (2004). Culture, intercultural communication
     competence, and sales negotiation: A qualitative research approach.
     Journal of Business & Industrial Marketing, 19(4), 267-282.

Chang, C.-H. (2011). The influence of corporate environmental ethics on competitive
     advantage: The mediation role of green innovation. *Journal of Business
     Ethics*, *104*(3), 361–370.

Chang, Y.-H., & Yeh, C.-H. (2017). Corporate social responsibility and customer
     loyalty in intercity bus services. *Transport Policy*, *59*, 38–45.
     https://doi.org/10.1016/j.tranpol.2017.07.001

Chaudhuri, A., & Jayaram, J. (2019). A socio-technical view of performance impact of
     integrated quality and sustainability strategies. *International Journal of
     Production Research*, *57*(5), 1478–1496.

Chavalittumrong, P., & Speece, M. (2022). Three-Pillar Sustainability and Brand
     Image: A Qualitative Investigation in Thailand's Household Durables
     Industry. *Sustainability*, *14*(18), 11699.

Chen, C.-C., Khan, A., Hongsuchon, T., Ruangkanjanases, A., Chen, Y.-T., Sivarak,
     O., & Chen, S.-C. (2021). The role of corporate social responsibility and
     corporate image in times of crisis: The mediating role of customer trust.

International Journal of Environmental Research and Public Health, *18*(16). https://doi.org/10.3390/ijerph18168275

Chen, C.-W. (2018). Guidance on the conceptual design of sustainable product-service systems. *Sustainability (Switzerland)*, *10*(7). https://doi.org/10.3390/su10072452

Chen, Y.-S. (2008). The driver of green innovation and green image–green core competence. *Journal of Business Ethics*, *81*(3), 531–543.

Chen, Y.-S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*, *93*(2), 307–319. https://doi.org/10.1007/s10551-009-0223-9

Chen, Y.-S. (2013). Towards green loyalty: Driving from green perceived value, green satisfaction, and green trust. *Sustainable Development*, *21*(5), 294–308. https://doi.org/10.1002/sd.500

Chen, Y.-S., & Chang, C.-H. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, *50*(3), 502–520. https://doi.org/10.1108/00251741211216250

Chen, Y.-S., Huang, A.-F., Wang, T.-Y., & Chen, Y.-R. (2020). Greenwash and green purchase behaviour: The mediation of green brand image and green brand loyalty. *Total Quality Management and Business Excellence*, *31*(1–2), 194–209. https://doi.org/10.1080/14783363.2018.1426450

Chen, Y.-S., Lin, S.-H., Lin, C.-Y., Hung, S.-T., Chang, C.-W., & Huang, C.-W. (2020). Improving green product development performance from green vision and organizational culture perspectives. *Corporate Social Responsibility and Environmental Management*, *27*(1), 222–231. https://doi.org/10.1002/csr.1794

Cheng, E. W. L. (2018). Choosing between the theory of planned behavior (TPB) and the technology acceptance model (TAM). *Educational Technology Research and Development*, *67*. https://doi.org/10.1007/s11423-018-9598-6

Chesbrough, H. (2006). Open innovation: A new paradigm for understanding industrial innovation. In *Open Innovation: Researching a New Paradigm* (pp. 1–19). Oxford University Press.

Chesbrough, H., Vanhaverbeke, W., & West, J. (2006). *Open innovation: Researching a new paradigm*. Oxford University Press on Demand.

Claver, E., López, M. D., Molina, J. F., & Tarí, J. J. (2007). Environmental management and firm performance: A case study. *Journal of Environmental Management*, *84*(4), 606–619. https://doi.org/10.1016/j.jenvman.2006.09.012

Creswell, J. W. (2009). *Research design: Qualitative and mixed methods approaches*. Sage Publication.

Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research*. SAGE publications.

Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social Science Information*, *45*(4), 483–499.

Dangelico, R. M., & Vocalelli, D. (2017). "Green Marketing": An analysis of definitions, strategy steps, and tools through a systematic review of the literature. *Journal of Cleaner Production*, *165*, 1263–1279. https://doi.org/10.1016/j.jclepro.2017.07.184

D'Angelo, V., Cappa, F., & Peruffo, E. (2023). Green manufacturing for sustainable development: The positive effects of green activities, green investments, and non-green products on economic performance. *Business Strategy and the Environment*, *32*(4), 1900–1913.

Day, D., Gan, B., Gendall, P., & Esslemont, D. (1991). Predicting purchase behaviour. *Marketing Bulletin*, *2*(5), 18–30.

de Oliveira Santos, H., Alves, J. L. S., de Melo, F. J. C., & de Medeiros, D. D. (2020). An approach to implement cleaner production in services: Integrating quality management process. *Journal of Cleaner Production*, *246*, Article 118985. https://doi.org/10.1016/j.jclepro.2019.118985

de Winter, J. C., Dodou, D., & Wieringa, P. A. (2009). Exploratory factor analysis with small sample sizes. *Multivariate Behavioral Research*, *44*(2), 147–181.

Devin, B. (2016). Half-truths and dirty secrets: Omissions in CSR communication. *Public Relations Review*, *42*(1), 226–228.

Dimitriu, R., & Guesalaga, R. (2017). Consumers' social media brand behaviors: Uncovering underlying motivators and deriving meaningful consumer segments. *Psychology & Marketing*, *34*(5), 580–592.

Doz, Y. (2011). Qualitative research for international business. *Journal of International Business Studies*, *42*(5), 582–590.

Du Pisani, J. A. (2006). Sustainable development–historical roots of the concept. *Environmental Sciences*, *3*(2), 83–96.

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. https://doi.org/10.1111/j.1468-2370.2009.00276.x

Dworkin, S. L. (2012). Sample Size Policy for Qualitative Studies Using In-Depth Interviews. *Archives of Sexual Behavior*, *41*(6), 1319–1320. https://doi.org/10.1007/s10508-012-0016-6

Ehrhart, M. G., Schneider, B., & Macey, W. H. (2013). *Organizational climate and culture: An introduction to theory, research, and practice*. Routledge.

El Zein, S. A., Consolacion-Segura, C., & Huertas-Garcia, R. (2020a). The role of sustainability in brand equity value in the financial sector. *Sustainability (Switzerland)*, *12*(1), Article 254. https://doi.org/10.3390/su12010254

El Zein, S. A., Consolacion-Segura, C., & Huertas-Garcia, R. (2020b). The role of sustainability in brand equity value in the financial sector. *Sustainability (Switzerland)*, *12*(1). https://doi.org/10.3390/su12010254

Elhaffar, G., Durif, F., & Dubé, L. (2020). Towards closing the attitude-intention-behavior gap in green consumption: A narrative review of the literature and an overview of future research directions. *Journal of Cleaner Production*, *275*, 122556. https://doi.org/10.1016/j.jclepro.2020.122556

Elkington, J. (1997). *Cannibals with forks: The triple bottom line of twenty-first century business*. New Society Publishers.

Eriksson, P., & Kovalainen, A. (2008a). *Qualitative Methods in Business Research*. SAGE Publications Ltd. https://doi.org/10.4135/9780857028044

Eriksson, P., & Kovalainen, A. (2008b). Research philosophy. *Qualitative Methods in Business Research*, 11–25.

Fan, Y. (2005). Ethical branding and corporate reputation. *Corporate Communications*, *10*(4), 341–350. https://doi.org/10.1108/13563280510630133

Fargnoli, M., Costantino, F., Di Gravio, G., & Tronci, M. (2018). Product service-systems implementation: A customized framework to enhance sustainability and customer satisfaction. *Journal of Cleaner Production*, *188*, 387–401.

Fernandes, T., & Moreira, M. (2019). Consumer brand engagement, satisfaction and brand loyalty: A comparative study between functional and emotional brand relationships. *Journal of Product & Brand Management*, *28*(2), 274–286.

Fischer, D., Stanszus, L., Geiger, S., Grossman, P., & Schrader, U. (2017). Mindfulness and sustainable consumption: A systematic literature review of research approaches and findings. *Journal of Cleaner Production*, *162*, 544–558.

Flamholtz, E. (2001). Corporate culture and the bottom line. *European Management Journal*, *19*(3), 268–275.

Flamholtz, E., & Randle, Y. (2011). *Corporate culture: The ultimate strategic asset*. Stanford University Press.

Flores-Hernández, J. A., Cambra-Fierro, J. J., & Vázquez-Carrasco, R. (2020). Sustainability, brand image, reputation and financial value: Manager perceptions in an emerging economy context. *Sustainable Development*. https://doi.org/10.1002/sd.2047

Fontaine, M. (2013). Corporate social responsibility and sustainability: The new bottom line? *International Journal of Business and Social Science*, *4*(4), 110–119.

Foroudi, P., Foroudi, M. M., Palazzo, M., & Nguyen, B. (2022). Fly me to the moon: From corporate branding orientation to retailer preference and business performance. *International Journal of Contemporary Hospitality*

Management, *34*(1), 78–112. https://doi.org/10.1108/IJCHM-12-2020-1424

Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology and Health*, *25*(10), 1229–1245.

Frank-Martin, B., & Peattie, K. J. (2009). *Sustainability marketing: A global perspective*. Wiley.

Freeman, R. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.

Freitas, W. R. S., Caldeira-Oliveira, J. H., Teixeira, A. A., Stefanelli, N. O., & Teixeira, T. B. (2020). Green human resource management and corporate social responsibility: Evidence from Brazilian firms. *Benchmarking*, *27*(4), 1551–1569. https://doi.org/10.1108/BIJ-12-2019-0543

Fuller, K., Grebitus, C., & Schmitz, T. G. (2022). The effects of values and information on the willingness to pay for sustainability credence attributes for coffee. *Agricultural Economics*, *53*(5), 775–791.

Gangwani, S., & Alarifi, G. (2021). ORGANIZATIONAL CULTURE ASSESSMENT OF A SAUDI PUBLIC UNIVERSITY: EVIDENCE FROM PRINCESS NOURAH BINT ABDULRAHMAN UNIVERSITY. *Academy of Strategic Management Journal*, *20*(SpecialIssue 5), 1–15.

Gardberg, N. A., & Fombrun, C. J. (2002). The global reputation quotient project: First steps towards a cross-nationally valid measure of corporate reputation. *Corporate Reputation Review*, *4*(4), 303–307.

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, *10*(2), 486.

Gimenez, C., Sierra, V., & Rodon, J. (2012). Sustainable operations: Their impact on the triple bottom line. *International Journal of Production Economics*, *140*(1), 149–159. https://doi.org/10.1016/j.ijpe.2012.01.035

Globocnik, D., Rauter, R., & Baumgartner, R. J. (2020). Synergy or conflict? The relationships among organisational culture, sustainability-related innovation performance, and economic innovation performance.

International Journal of Innovation Management, *24*(01), Article 2050004.

Goodman, L. A. (2011). Comment: On respondent-driven sampling and snowball sampling in hard-to-reach populations and snowball sampling not in hard-to-reach populations. *Sociological Methodology*, *41*(1), 347–353.

Grisaffe, D. B., & Nguyen, H. P. (2011). Antecedents of emotional attachment to brands. *Journal of Business Research*, *64*(10), 1052–1059.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning, EMEA.

Hair, J. F., Gabriel, M., & Patel, V. (2014). AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool. *Brazilian Journal of Marketing*, *13*(2).

Hallinger, P., & Suriyankietkaew, S. (2018). Science Mapping of the Knowledge Base on Sustainable Leadership, 1990-2018. *Sustainability (Switzerland)*, *10*(12). https://doi.org/10.3390/su10124846

Hameed, I., Hyder, Z., Imran, M., & Shafiq, K. (2021). Greenwash and green purchase behavior: An environmentally sustainable perspective. *Environment, Development and Sustainability*, *23*(9), 13113–13134. https://doi.org/10.1007/s10668-020-01202-1

Han, H., Al-Ansi, A., Chi, X., Baek, H., & Lee, K.-S. (2020). Impact of Environmental CSR, Service Quality, Emotional Attachment, and Price Perception on Word-of-Mouth for Full-Service Airlines. *Sustainability*, *12*(10), Article 10. https://doi.org/10.3390/su12103974

Hansen, T. (2005). Perspectives on consumer decision making: An integrated approach. *Journal of Consumer Behaviour: An International Research Review*, *4*(6), 420–437.

Hargreaves, A., & Fink, D. (2004). The seven principles of sustainable leadership. *Educational Leadership*, *61*(7), 8–13.

Harrigan, P., Evers, U., Miles, M. P., & Daly, T. (2018). Customer engagement and the relationship between involvement, engagement, self-brand connection and brand usage intent. *Journal of Business Research*, *88*, 388–396. https://doi.org/10.1016/j.jbusres.2017.11.046

Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique: Delphi survey technique. *Journal of Advanced Nursing*, *32*(4), 1008–1015. https://doi.org/10.1046/j.1365-2648.2000.t01-1-01567.x

Heckathorn, D. D. (2011). Comment: Snowball versus respondent-driven sampling. *Sociological Methodology*, *41*(1), 355–366. https://doi.org/10.1111/j.1467-9531.2011.01244.x

Hillestad, T., Xie, C., & Haugland, S. A. (2010). Innovative corporate social responsibility: The founder's role in creating a trustworthy corporate brand through "green innovation." *Journal of Product and Brand Management*, *19*(6), 440–451. https://doi.org/10.1108/10610421011085758

Hinnen, G., Hille, S. L., & Wittmer, A. (2017). Willingness to pay for green products in air travel: Ready for take-off? *Business Strategy and the Environment*, *26*(2), 197–208.

Holmes, J. H., & Crocker, K. E. (1987). Predispositions and the comparative effectiveness of rational, emotional and discrepant appeals for both high involvement and low involvement products. *Journal of the Academy of Marketing Science*, *15*(1), 27–35.

Hunt, S. D., & Burnett, J. J. (1982). The macromarketing/micromarketing dichotomy: A taxonomical model. *Journal of Marketing*, *46*(3), 11–26.

Hur, W.-M., Kim, H., & Woo, J. (2014). How CSR Leads to Corporate Brand Equity: Mediating Mechanisms of Corporate Brand Credibility and Reputation. *Journal of Business Ethics*, *125*(1), 75–86. https://doi.org/10.1007/s10551-013-1910-0

Jain, S. K., & Kaur, G. (2004). Green Marketing: An Attitudinal and Behavioural Analysis of Indian Consumers. *Global Business Review*, *5*(2), 187–205. https://doi.org/10.1177/097215090400500203

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, *33*(7), 14–26. https://doi.org/10.3102/0013189X033007014

Jung, S. (2013). Exploratory factor analysis with small sample sizes: A comparison of three approaches. *Behavioural Processes*, *97*, 90–95.

Juster, F. T. (1966). Consumer buying intentions and purchase probability: An experiment in survey design. *Journal of the American Statistical Association*, *61*(315), 658–696.

Kainzbauer, A., & Hunt, B. (2021). Investigating the worldview of professionals: Reflections on the challenges of researching in the Thai culture. In *Field Guide to Intercultural Research* (pp. 330–340). Edward Elgar Publishing.

Kalafatis, S. P., Pollard, M., East, R., & Tsogas, M. H. (1999). Green marketing and Ajzen's theory of planned behaviour: A cross-market examination. *Journal of Consumer Marketing*, *16*(5), 441–460.

Kalakumari, T., & Sekar, M. (2013). A study on emotional brand loyalty towards consumer health drinks. *International Journal of Science and Research*, *2*(2), 213–217.

Kantabutra, S. (2007). Development of the sufficiency economy philosophy in the Thai business sector: Evidence, future research & policy implications. *Paper, Seminar on Sufficiency Economy, Crown Property Bureau, Bangkok, Thailand*, 29–35.

Kantabutra, S. (2019a). Achieving Corporate Sustainability: Toward a Practical Theory. *Sustainability*, *11*(15), 4155. https://doi.org/10.3390/su11154155

Kantabutra, S. (2019b). Achieving corporate sustainability: Toward a practical theory. *Sustainability (Switzerland)*, *11*(15). https://doi.org/10.3390/su11154155

Kantabutra, S., Ractham, V., Gerdsri, N., Nuttavuthisit, K., Kantamara, P., & Chiarakul, T. (2010). *Sufficiency economy leadership practices*. Thailand Research Fund.

Kara, S., Ibbotson, S., & Kayis, B. (2014). Sustainable product development in practice: An international survey. *Journal of Manufacturing Technology Management*, *25*(6), 848–872. https://doi.org/10.1108/JMTM-09-2012-0082

Keller, K. (2013). *Strategic brand management: Global edition*. Pearson.

Keller, K., Parameswaran, M. G., & Jacob, I. (2011). *Strategic brand management: Building, measuring, and managing brand equity*. Pearson Education India.

Ketprapakorn, N., & Kantabutra, S. (2019). Sustainable Social Enterprise Model:
    Relationships and Consequences. *Sustainability*, *11*(14), 3772.
    https://doi.org/10.3390/su11143772

Khan, I. S., Ahmad, M. O., & Majava, J. (2021). Industry 4.0 and sustainable
    development: A systematic mapping of triple bottom line, Circular
    Economy and Sustainable Business Models perspectives. *Journal of
    Cleaner Production*, *297*. https://doi.org/10.1016/j.jclepro.2021.126655

Kim, S. (2019). The process model of corporate social responsibility (CSR)
    communication: CSR communication and its relationship with consumers'
    CSR knowledge, trust, and corporate reputation perception. *Journal of
    Business Ethics*, *154*(4), 1143–1159.

Kimita, K., Shimomura, Y., & Arai, T. (2009). A customer value model for
    sustainable service design. *CIRP Journal of Manufacturing Science and
    Technology*, *1*(4), 254–261. https://doi.org/10.1016/j.cirpj.2009.06.003

Kleindorfer, P. R., Singhal, K., & Wassenhove, L. N. V. (2005). Sustainable
    Operations Management. *Production and Operations Management*, *14*(4),
    482–492. https://doi.org/10.1111/j.1937-5956.2005.tb00235.x

Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why do people act
    environmentally and what are the barriers to pro-environmental behavior?
    Environmental Education Research, *8*(3), 239–260.
    https://doi.org/10.1080/13504620220145401

Kraus, S., Gast, J., Schleich, M., Jones, P., & Ritter, M. (2019). Content is king: How
    SMEs create content for social media marketing under limited resources.
    Journal of Macromarketing, *39*(4), 415–430.

Kristensen, G. K., & Ravn, M. N. (2015). The voices heard and the voices silenced:
    Recruitment processes in qualitative interview studies. *Qualitative
    Research*, *15*(6), 722–737. https://doi.org/10.1177/1468794114567496

Kumar, R., Ritu, Sindhwani, R., & Singh, P. L. (2021). Identifying the Factors Related
    to CSR Activities Contributed Toward Brand Management Through
    Extensive Literature Review. *Lecture Notes in Mechanical Engineering*,
    155–164. https://doi.org/10.1007/978-981-15-9956-9_16

Kushwaha, G. S., & Sharma, N. K. (2016). Green initiatives: A step towards sustainable development and firm's performance in the automobile industry. *Journal of Cleaner Production*, *121*, 116–129.

Lai, C. S., Chiu, C. J., Yang, C. F., & Pai, D. C. (2010). The effects of corporate social responsibility on brand performance: The mediating effect of industrial brand equity and corporate reputation. *Journal of Business Ethics*, *95*(3), 457–469. https://doi.org/10.1007/s10551-010-0433-1

Lee, Y. K., & DeLong, M. (2017). American and Korean Youths' Attachment to Handcraft Apparel and Its Relation to Sustainability. *Clothing and Textiles Research Journal*, *35*(2), 67–80. https://doi.org/10.1177/0887302X16679270

Leonidou, L. C., Leonidou, C. N., Palihawadana, D., & Hultman, M. (2011). Evaluating the green advertising practices of international firms: A trend analysis. *International Marketing Review*, *28*(1), 6–33.

Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates." *The Journal of Social Psychology*, *10*(2), 269–299.

Lim, J. S., & Greenwood, C. A. (2017). Communicating corporate social responsibility (CSR): Stakeholder responsiveness and engagement strategy to achieve CSR goals. *Public Relations Review*, *43*(4), 768–776.

Limanonda, B. (1995). Families in Thailand: Beliefs and realities. *Journal of Comparative Family Studies*, *26*(1), 67–82.

Lin, Y.-H., Lin, F.-J., & Wang, K.-H. (2021). The effect of social mission on service quality and brand image. *Journal of Business Research*, *132*, 744–752. https://doi.org/10.1016/j.jbusres.2020.10.054

Liu, J., Feng, Y., & Zhu, Q. (2020). The research trend and future directions on sustainable operations management. *Xitong Gongcheng Lilun yu Shijian/System Engineering Theory and Practice*, *40*(8), 1996–2007. https://doi.org/10.12011/1000-6788-2019-0510-12

Longoni, A., Golini, R., & Cagliano, R. (2014). The role of new forms of work organization in developing sustainability strategies in operations. *International Journal of Production Economics*, *147*, 147–160.

Loock, M., & Phillips, D. M. (2020). A firm's financial reputation vs. Sustainability reputation: Do consumers really care? *Sustainability (Switzerland)*, *12*(24), 1–17. https://doi.org/10.3390/su122410519

Loureiro, S. M. C., Ruediger, K. H., & Demetris, V. (2012). Brand emotional connection and loyalty. *Journal of Brand Management*, *20*, 13–27.

Loureiro, S. M. C., Sarmento, E. M., & Le Bellego, G. (2017). The effect of corporate brand reputation on brand attachment and brand loyalty: Automobile sector. *Cogent Business & Management*, *4*(1), 1360031. https://doi.org/10.1080/23311975.2017.1360031

Maaya, L., Meulders, M., Surmont, N., & Vandebroek, M. (2018). Effect of environmental and altruistic attitudes on willingness-to-pay for organic and fair trade coffee in Flanders. *Sustainability*, *10*(12), 4496.

MacDougall, C., & Fudge, E. (2001). Planning and recruiting the sample for focus groups and in-depth interviews. *Qualitative Health Research*, *11*(1), 117–126.

Madrigal, R., & Boush, D. M. (2008). Social responsibility as a unique dimension of brand personality and consumers' willingness to reward. *Psychology & Marketing*, *25*(6), 538–564.

Mai, L.-W., & Ness, M. R. (1999). Canonical correlation analysis of customer satisfaction and future purchase of mail-order speciality food. *British Food Journal*, *101*(11), 857–870. https://doi.org/10.1108/00070709910301373

Mainieri, T., Barnett, E. G., Valdero, T. R., Unipan, J. B., & Oskamp, S. (1997). Green buying: The influence of environmental concern on consumer behavior. *The Journal of Social Psychology*, *137*(2), 189–204.

Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional brand attachment and brand personality: The relative importance of the actual and the ideal self. *Journal of Marketing*, *75*(4), 35–52.

Meadows, D. H., Meadows, D. H., Randers, J., & Behrens III, W. W. (1972). The limits to growth: A report to the club of Rome (1972). *Google Scholar*, *91*, 2.

Meadows, D., & Randers, J. (2012). *The limits to growth: The 30-year update*. Routledge.

Michaelidou, N., & Hassan, L. (2014). New advances in attitude and behavioural decision-making models. *Journal of Marketing Management*, *30*. https://doi.org/10.1080/0267257X.2014.884368

Miles, M. P., & Covin, J. G. (2000). Environmental marketing: A source of reputational, competitive, and financial advantage. *Journal of Business Ethics*, *23*(3), 299–311. https://doi.org/10.1023/A:1006214509281

Moise, M. S., Gil-Saura, I., Šerić, M., & Ruiz Molina, M. E. (2019). Influence of environmental practices on brand equity, satisfaction and word of mouth. *Journal of Brand Management*, *26*(6), 646–657. https://doi.org/10.1057/s41262-019-00160-y

Montiel, I. (2008). Corporate social responsibility and corporate sustainability: Separate pasts, common futures. *Organization & Environment*, *21*(3), 245–269.

Morrish, S. C., Eggers, F., Covin, J. G., & Ali, A. (2019). Perspectives on Entrepreneurship and Macromarketing: Introduction to the Special Issue. *Journal of Macromarketing*, *39*(4), 353–357. https://doi.org/10.1177/0276146719884698

Mostafa, R. B., & Kasamani, T. (2021). Brand experience and brand loyalty: Is it a matter of emotions? *Asia Pacific Journal of Marketing and Logistics*, *33*(4), 1033–1051.

Mostafa, R. B., Lages, C. R., Shabbir, H. A., & Thwaites, D. (2015). Corporate Image: A Service Recovery Perspective. *Journal of Service Research*, *18*(4), 468–483. https://doi.org/10.1177/1094670515584146

Mukonza, C., & Swarts, I. (2020). The influence of green marketing strategies on business performance and corporate image in the retail sector. *Business Strategy and the Environment*, *29*(3), 838–845. https://doi.org/10.1002/bse.2401

Musavengane, R., Siakwah, P., & Leonard, L. (2020). The nexus between tourism and urban risk: Towards inclusive, safe, resilient and sustainable outdoor tourism in African cities. *Journal of Outdoor Recreation and Tourism*, *29*, Article 100254. https://doi.org/10.1016/j.jort.2019.100254

Nam, J., Ekinci, Y., & Whyatt, G. (2011). Brand equity, brand loyalty and consumer
    satisfaction. *Annals of Tourism Research*, *38*(3), 1009–1030.
    https://doi.org/10.1016/j.annals.2011.01.015

Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y.-P. (2008). Self-compassion and self-
    construal in the United States, Thailand, and Taiwan. *Journal of Cross-
    Cultural Psychology*, *39*(3), 267–285.
    https://doi.org/10.1177/0022022108314544

Nguyen, P.-A., Kecskés, A., & Nirino, S. (2020). Does corporate social responsibility
    create shareholder value? The importance of long-term investors. *Journal
    of Banking and Finance*, *112*, Article 105217.
    https://doi.org/10.1016/j.jbankfin.2017.09.013

Nilssen, R., Bick, G., & Abratt, R. (2019). Comparing the relative importance of
    sustainability as a consumer purchase criterion of food and clothing in the
    retail sector. *Journal of Brand Management*, *26*(1), 71–83.

Nirino, N., Miglietta, N., & Salvi, A. (2019). The impact of corporate social
    responsibility on firms' financial performance, evidence from the food and
    beverage industry. *British Food Journal*, *122*(1), 1–13.
    https://doi.org/10.1108/BFJ-07-2019-0503

Njoroge, M., Anderson, W., & Mbura, O. (2019). Innovation strategy and economic
    sustainability in the hospitality industry. *Bottom Line*, *32*(4), 253–268.
    https://doi.org/10.1108/BL-03-2019-0080

Norman, W., & MacDonald, C. (2004). Getting to the bottom of "triple bottom line."
    Business Ethics Quarterly, *14*(2), 243–262.

Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in
    qualitative research. *International Journal of Social Research
    Methodology*, *11*(4), 327–344.
    https://doi.org/10.1080/13645570701401305

Nunes, B., Batista, L., Masi, D., & Bennett, D. (2022). *Sustainable operations
    management: Key practices and cases* (p. 193). Taylor & Francis.
    https://doi.org/10.4324/9781003009375

Nyagadza, B., Kadembo, E. M., & Makasi, A. (2020). Exploring internal stakeholders'
    emotional attachment & corporate brand perceptions through corporate

storytelling for branding. *Cogent Business and Management*, *7*(1). https://doi.org/10.1080/23311975.2020.1816254

Obal, M., Morgan, T., & Joseph, G. (2020). Integrating sustainability into new product development: The role of organizational leadership and culture. *Journal of Small Business Strategy*, *30*(1), 43–57.

Odoom, R., & Mensah, P. (2019). Brand orientation and brand performance in SMEs: The moderating effects of social media and innovation capabilities. *Management Research Review*, *42*(1), 155–171.

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, *63*(4_suppl1), 33–44.

Page, G., & Fearn, H. (2005). Corporate reputation: What do consumers really care about? *Journal of Advertising Research*, *45*(3), 305–313.

Pan, J.-N., & Nguyen, H. T. N. (2015). Achieving customer satisfaction through product–service systems. *European Journal of Operational Research*, *247*(1), 179–190. https://doi.org/10.1016/j.ejor.2015.05.018

Panda, T. K., Kumar, A., Jakhar, S., Luthra, S., Garza-Reyes, J. A., Kazancoglu, I., & Nayak, S. S. (2020). Social and environmental sustainability model on consumers' altruism, green purchase intention, green brand loyalty and evangelism. *Journal of Cleaner Production*, *243*, Article 118575. https://doi.org/10.1016/j.jclepro.2019.118575

Papista, E., & Krystallis, A. (2013). Investigating the types of value and cost of green brands: Proposition of a conceptual framework. *Journal of Business Ethics*, *115*(1), 75–92.

Parguel, B., Benoît-Moreau, F., & Larceneux, F. (2011). How Sustainability Ratings Might Deter "Greenwashing": A Closer Look at Ethical Corporate Communication. *Journal of Business Ethics*, *102*(1), 15–28. https://doi.org/10.1007/s10551-011-0901-2

Park, C. W., Jaworski, B. J., & MacInnis, D. J. (1986). Strategic brand concept-image management. *Journal of Marketing*, *50*(4), 135–145.

Park, C. W., & MacInnis, D. J. (2006). What's in and what's out: Questions on the boundaries of the attitude construct. *Journal of Consumer Research*, *33*(1), 16–18.

Park, C. W., MacInnis, D. J., Priester, J. R., Eisingerich, A. B., & Iacobucci, D. (2010). *Brand Attachment and Brand Attitude Strength: Conceptual and Empirical Differentiation of Two Critical Brand Equity Drivers* (SSRN Scholarly Paper 1605782). https://papers.ssrn.com/abstract=1605782

Passingham, J., & Battinson, N. (1991). The Green consumer revelation: How the availability of environmentally friendly products has really affected household purchasing patterns. *Management Research News*, *14*(4/5), 17–19.

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative Social Work*, *1*(3), 261–283.

Peattie, K., & Ratnayaka, M. (1992). Responding to the green movement. *Industrial Marketing Management*, *21*(2), 103–110. https://doi.org/10.1016/0019-8501(92)90004-D

Peloza, J., Loock, M., Cerruti, J., & Muyot, M. (2012). Sustainability: How stakeholder perceptions differ from corporate reality. *California Management Review*, *55*(1), 74–97.

Piboolsravut, P. (2004). Sufficiency economy. *ASEAN Economic Bulletin*, *21*(1), 127–134.

Plungpongpan, J., Tiangsoongnern, L., & Speece, M. (2016a). University social responsibility and brand consideration for universities. *2016 Annual Conference of the Emerging Markets Conference Board, Chulalongkorn University, Bangkok, Thailand*, 6–8.

Plungpongpan, J., Tiangsoongnern, L., & Speece, M. (2016b). University social responsibility and brand image of private universities in Bangkok. *International Journal of Educational Management*, *30*(4).

Pomering, A., & Dolnicar, S. (2009). Assessing the prerequisite of successful CSR implementation: Are consumers aware of CSR initiatives? *Journal of Business Ethics*, *85*, 285–301.

Pongpaew, W., Speece, M., & Tiangsoongnern, L. (2017). Social presence and customer brand engagement on Facebook brand pages. *Journal of Product & Brand Management*, *26*(3), 262–281.

Pope, S., & Wæraas, A. (2016). CSR-washing is rare: A conceptual framework, literature review, and critique. *Journal of Business Ethics*, *137*, 173–193.

Prothero, A. (1990). Green consumerism and the societal marketing concept: Marketing strategies for the 1990's. *Journal of Marketing Management*, *6*(2), 87–103.

Punjaisri, K., & Harness, D. (2016). *Exploring how young consumers preocessing snack packaging cues from a phenomenological perspective*. The 2016 AMS 19th World Marketing Congress Paris, France.

Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: In search of conceptual origins. *Sustainability Science*, *14*(3), 681–695. https://doi.org/10.1007/s11625-018-0627-5

Ravasi, D., & Schultz, M. (2006). Responding to organizational identity threats: Exploring the role of organizational culture. *Academy of Management Journal*, *49*(3), 433–458.

Rizomyliotis, I., Poulis, A., Konstantoulaki, K., & Giovanis, A. (2021). Sustaining brand loyalty: The moderating role of green consumption values. *Business Strategy and the Environment*, *30*(7), 3025–3039. https://doi.org/10.1002/bse.2786

Rocha, C. S., Antunes, P., & Partidário, P. (2019). Design for sustainability models: A multiperspective review. *Journal of Cleaner Production*, *234*, 1428–1445.

Rome, A. (2003). "Give Earth a chance": The environmental movement and the Sixties. *The Journal of American History*, *90*(2), 525–554.

Rossiter, J. (2014). 'Branding' explained: Defining and measuring brand awareness and brand attitude. *The Journal of Brand Management*, *21*. https://doi.org/10.1057/bm.2014.33

Rotchanakitumnuai, S., & Speece, M. (2023). How Relationship Quality Drives Knowledge Sharing on Facebook Brand Pages. *Journal of International Consumer Marketing*, *35*(3), 276–295.

Roy, R. (2000). Sustainable product-service systems. *Futures*, *32*(3–4), 289–299. https://doi.org/10.1016/S0016-3287(99)00098-1

Rubio, F., Llopis-Albert, C., Valero, F., & Besa, A. J. (2020). Sustainability and optimization in the automotive sector for adaptation to government vehicle

pollutant emission regulations. *Journal of Business Research*, *112*, 561–566. https://doi.org/10.1016/j.jbusres.2019.10.050

Sachs, I. (1978). Environment and Development–Key Concepts for a New Approach to Education. *Prospects: Quarterly Review of Education*, *8*(4), 439–445.

Sadler, G. R., Lee, H.-C., Lim, R. S.-H., & Fullerton, J. (2010). Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing & Health Sciences*, *12*(3), 369–374.

Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saaeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, *68*(2), 341–350. https://doi.org/10.1016/j.jbusres.2014.06.024

Salzmann, O., Ionescu-Somers, A., & Steger, U. (2005). The business case for corporate sustainability: Literature review and research options. *European Management Journal*, *23*(1), 27–36.

Scarnati, J. T. (2001). On becoming a team player. *Team Performance Management: An International Journal*, *7*(1/2), 5–10.

Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2). John Wiley & Sons.

Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology*, *64*(1), 361–388.

Schultz, D. E., & Block, M. P. (2015). Beyond brand loyalty: Brand sustainability. *Journal of Marketing Communications*, *21*(5), 340–355. https://doi.org/10.1080/13527266.2013.821227

Seegebarth, B., Peyer, M., Balderjahn, I., & Wiedmann, K.-P. (2016). The sustainability roots of anticonsumption lifestyles and initial insights regarding their effects on consumers' well-being. *Journal of Consumer Affairs*, *50*(1), 68–99.

Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production*, *16*(15), 1699–1710.

Shahid, S., Paul, J., Gilal, F. G., & Ansari, S. (2022). The role of sensory marketing
    and brand experience in building emotional attachment and brand loyalty
    in luxury retail stores. *Psychology & Marketing*, *39*, 1398–1412.
    https://doi.org/10.1002/mar.21661

Sharma, M., & Joshi, S. (2019a). Brand sustainability among young consumers: An
    AHP-TOPSIS approach. *Young Consumers*, *20*(4), 314–337.
    https://doi.org/10.1108/YC-12-2018-0914

Sharma, M., & Joshi, S. (2019b). Brand sustainability among young consumers: An
    AHP-TOPSIS approach. *Young Consumers*, *20*(4), 314–337.
    https://doi.org/10.1108/YC-12-2018-0914

Sheehy, B. (2015). Defining CSR: Problems and Solutions. *Journal of Business
    Ethics*, *131*(3), 625–648. https://doi.org/10.1007/s10551-014-2281-x

Sheeran, P. (2002). Intention—Behavior Relations: A Conceptual and Empirical
    Review. *European Review of Social Psychology*, *12*, 1–36.
    https://doi.org/10.1080/14792772143000003

Sheeran, P., & Webb, T. (2016). The Intention–Behavior Gap. *Social and Personality
    Psychology Compass*, *10*, 503–518. https://doi.org/10.1111/spc3.12265

Sheth, J. N., & Parvatiyar, A. (2021). Sustainable marketing: Market-driving, not
    market-driven. *Journal of Macromarketing*, *41*(1), 150–165.

Shultz, C. J. (2017). Marketing: The Next 40,000 Years. *Journal of Macromarketing*,
    37(3), 328–330. https://doi.org/10.1177/0276146717712360

Shultz, C. J., & Peterson, M. (2019). A Macromarketing View of Sustainable
    Development in Vietnam. *Environmental Management*, *63*(4), 507–519.
    https://doi.org/10.1007/s00267-017-0971-8

Siggelkow, N. (2007). Persuasion with case studies. *Academy of Management Journal*,
    50(1), 20–24. https://doi.org/10.5465/amj.2007.24160882

Simpson, B. J. K., & Radford, S. K. (2012). Consumer Perceptions of Sustainability:
    A Free Elicitation Study. *Journal of Nonprofit and Public Sector
    Marketing*, *24*(4), 272–291.
    https://doi.org/10.1080/10495142.2012.733654

So, J. T., Parsons, A. G., & Yap, S.-F. (2013). Corporate branding, emotional
    attachment and brand loyalty: The case of luxury fashion branding.

Journal of Fashion Marketing and Management: An International Journal, *17(4)*, 403–423. https://doi.org/10.1002/mar.21661

Sohail, M. S. (2022). Understanding consumer engagement in online brand communities: An application of self-expansion theory. *Journal of Marketing Analytics*. https://doi.org/10.1057/s41270-021-00148-1

Sonetti, G., & Lombardi, P. (2020). *Values and Functions for Future Cities*.

Song, H.-C. (2020). Sufficiency economy philosophy: Buddhism-based sustainability framework in Thailand. *Business Strategy and the Environment*.

S&P Global. (2021). *Criteria Weightings per RobecoSAM GICS Industry*. https://portal.csa.spglobal.com/survey/documents/CSA_Weights.pdf

Speece, M. W. (2019). Sustainable development and Buddhist economics in Thailand. *International Journal of Social Economics*, *46*(5), 704–721.

Srijumpa, R., Larpsiri, R., & Speece, M. (2004). Qualitative exploratory research on customer acceptance of technology in financial services. *Research Methodology in Commerce and Management (RD Sharma & H. Chahal, Eds.). New Delhi: Anmol Publications*, 60–86.

Srisathan, W. A., Ketkaew, C., & Naruetharadhol, P. (2020). The intervention of organizational sustainability in the effect of organizational culture on open innovation performance: A case of thai and chinese SMEs. *Cogent Business and Management*, *7*(1), Article 1717408. https://doi.org/10.1080/23311975.2020.1717408

Stockholm Resilience Centre. (2017). *Stockholm Resilience Centre's (SRC) contribution to the 2016 Swedish 2030 Agenda HLPF report*. Stockholm Resilience Centre.

Su, L., Swanson, S. R., & Chen, X. (2015). Social responsibility and reputation influences on the intentions of Chinese Huitang Village tourists: Mediating effects of satisfaction with lodging providers. *International Journal of Contemporary Hospitality Management*, *27*(8), 1750–1771. https://doi.org/10.1108/IJCHM-06-2014-0305

Suwannaporn, P., & Speece, M. W. (2010). Assessing new product development success factors in the Thai food industry. *British Food Journal*.

Taecharungroj, V., Muthuta, M., & Boonchaiyapruek, P. (2019). Sustainability as a
place brand position: A resident-centric analysis of the ten towns in the
vicinity of Bangkok. *Place Branding and Public Diplomacy*, *15*(4),
210–228. https://doi.org/10.1057/s41254-019-00127-5

The Revenue Department. (2021). *The Revenue Department*. The Revenue
Department, Ministry of Finance, Thailand. https://www.rd.go.th/

Theng, S. J., Grant, P. A., & Yap, S. (2013). Corporate branding, emotional
attachment and brand loyalty: The case of luxury fashion branding.
*Journal of Fashion Marketing and Management: An International
Journal*, *17*(4), 403–423. https://doi.org/10.1108/JFMM-03-2013-0032

Thøgersen, J., Jørgensen, A.-K., & Sandager, S. (2012). Consumer decision making
regarding a "green" everyday product. *Psychology & Marketing*, *29*(4),
187–197.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An
"interpretive" model of intrinsic task motivation. *Academy of Management
Review*, *15*(4), 666–681.

Thompson, B. (2005). The loyalty connection: Secrets to customer retention and
increased profits. *RightNow Technologies & CRMguru*, *18*.

Thomson, M., MacInnis, D. J., & Whan Park, C. (2005). The Ties That Bind:
Measuring the Strength of Consumers' Emotional Attachments to Brands.
Journal of Consumer Psychology, *15*(1), 77–91.
https://doi.org/10.1207/s15327663jcp1501_10

Thorn, D. W., & Deitz, J. C. (1989). Examining Content Validity through the Use of
Content Experts. *The Occupational Therapy Journal of Research*, *9*(6),
334–346. https://doi.org/10.1177/153944928900900602

Trivedi, R. H., Patel, J. D., & Savalia, J. R. (2015). Pro-environmental behaviour,
locus of control and willingness to pay for environmental friendly
products. *Marketing Intelligence & Planning*.

Tulloch, L. (2013). On science, ecology and environmentalism. *Policy Futures in
Education*, *11*(1), 100–114.

Tulloch, L., & Neilson, D. (2014). The neoliberalisation of sustainability. *Citizenship,
Social and Economics Education*, *13*(1), 26–38.

UN. (2022). *Sustainable Development Goals: Why the SDGs matter*.
        https://www.un.org/sustainabledevelopment/why-the-sdgs-matter/

UNDP. (2022). *Sustainable Development Goals: The SDGs in Action*.
        https://www.undp.org/content/undp/en/home/sustainable-development-
        goals.html

UNESCAP. (2018). *Complementarities between the ASEAN Community Vision 2025
        and the United Nations 2030 Agenda for Sustainable Development: A
        Framework for Action*. www.unescap.org

Van Der Heijden, H.-A. (1999). Environmental movements, ecological modernisation
        and political opportunity structures. *Environmental Politics*, *8*(1),
        199–221.

Van Doorn, J., Risselada, H., & Verhoef, P. C. (2021). Does sustainability sell? The
        impact of sustainability claims on the success of national brands' new
        product introductions. *Journal of Business Research*, *137*, 182–193.
        https://doi.org/10.1016/j.jbusres.2021.08.032

Van Doorn, J., Verhoef, P. C., & Bijmolt, T. H. A. (2007). The importance of non-
        linear relationships between attitude and behaviour in policy research.
        Journal of Consumer Policy, *30*(2), 75–90.
        https://doi.org/10.1007/s10603-007-9028-3

Van Meter, K. M. (1990). Methodological and Design Issues: Techniques for
        Assessing the Representatives of Snowball Samples. National Institute on
        Drug Abuse Monograph. DHHS Pub. No. *ADM*, 90–1678.

Van Riel, C., & Fombrun, C. (1996). *Essentials of corporate communication:
        Implementing practices for effective reputation management*. London and
        New York: Routledge. Uimonen, R. & Ikävalko, E.

Villari, B. (2022). Designing Sustainable Services for Cities: Adopting a Systemic
        Perspective in Service Design Experiments. *Sustainability (Switzerland)*,
        14(20). https://doi.org/10.3390/su142013237

Walters, R. (2022). Varieties of gender wash: Towards a framework for critiquing
        corporate social responsibility in feminist IPE. *Review of International
        Political Economy*, *29*(5), 1577–1600.

Wang, J., Bao, J., Wang, C., & Wu, L. (2017). The impact of different emotional appeals on the purchase intention for green products: The moderating effects of green involvement and Confucian cultures. *Sustainable Cities and Society*, *34*, 32–42. https://doi.org/10.1016/j.scs.2017.06.001

Wang, J., & Li, A. (2022). The Impact of Green Advertising Information Quality Perception on Consumers' Response: An Empirical Analysis. *Sustainability (Switzerland)*, *14*(20). https://doi.org/10.3390/su142013248

Winit, W., & Kantabutra, S. (2017). Sustaining Thai SMEs through perceived benefits and happiness. *Management Research Review*, *40*(5), 556–577.

Wong, V., Turner, W., & Stoneman, P. (1996). Marketing strategies and market prospects for environmentally-friendly consumer products 1. *British Journal of Management*, *7*(3), 263–281.

Wright, M., & Klÿn, B. (1998). Environmental attitude behaviour correlations in 21 countries. *Journal of Empirical Generalisations in Marketing Science*, *3*(3).

Wright, S. (2010). Trust and Trustworthiness. *Philosophia*, *38*(3), 615–627. https://doi.org/10.1007/s11406-009-9218-0

Wu, H.-C., Cheng, C.-C., & Ai, C.-H. (2021). What drives green experiential loyalty towards green restaurants? *Tourism Review*, *76*(5), 1084–1103. https://doi.org/10.1108/TR-02-2019-0079

Wymer, W., & Polonsky, M. J. (2015). The limitations and potentialities of green marketing. *Journal of Nonprofit & Public Sector Marketing*, *27*(3), 239–262.

Xu, F., Zhan, C., Lu, L., Tan, J., Li, S., & Li, J. (2021). Is the destination brand loyalty mechanism invariable? A comparative study from China. *Journal of Destination Marketing and Management*, *22*. https://doi.org/10.1016/j.jdmm.2021.100658

Yazici, H. J. (2020). An exploratory analysis of the project management and corporate sustainability capabilities for organizational success. *International Journal of Managing Projects in Business*, *13*(4), 793–817. https://doi.org/10.1108/IJMPB-08-2019-0207

Yoo, B., & Donthu, N. (2002). Testing cross-cultural invariance of the brand equity creation process. *Journal of Product & Brand Management*.

Zandi, A., Ramezanian, R., & Monplaisir, L. (2020). Green parallel machines scheduling problem: A bi-objective model and a heuristic algorithm to obtain Pareto frontier. *Journal of the Operational Research Society*, *71*(6), 967–978. https://doi.org/10.1080/01605682.2019.1595190

Zhao, Z.-Y., Zhao, X.-J., Davidson, K., & Zuo, J. (2012). A corporate social responsibility indicator system for construction enterprises. *Journal of Cleaner Production*, *29–30*, 277–289. https://doi.org/10.1016/j.jclepro.2011.12.036

APPENDICES

Appendix A: Qualitative research

Table A1 Question outline used in the semi-structured interviews for the internal corporate level (industry managers and academic experts)

No.	Questions
Screening Question	What do you think about sustainability in the organization? Does your company value it? How?
Probing Questions	What are your opinions on the UN's SDGs? And how would you align each goal into 3 pillars? Some companies specifically try to follow the UN SDG, but some companies think this is not necessary alignment closely with the UN SDG. what do you think? is it company policy?
Q1	In general, how does your firm come up with sustainable policies and how they execute such policies?
Probing Questions	Does your company have policies & practice about environment? What and how is executed? Does your company have policies & practice about social service? What and how is executed? Does your company have policies & practice about the economic module eg. supply chain, risk, innovation, tax, and brand management? What and they are executed?
Q2	In your firm, is there any internal operations which integrates sustainability concept? Can you give a couple of examples? How do you define sustainable operations? What is your thought on this?
Probing Questions	Does your company have internal operations about environment? What and how is executed? Does your company have internal operations about social service? What and how is executed? Does your company have internal operations about the economic module eg. codes of conduct, compliance, bribery management? What and they are executed?
Q3	How do you define sustainable products? Does your firm provide any of these sustainable products? What is your thought on them?
Probing Questions	Does your company produce green products? What and how is executed? Does your company produce social products? What and how is executed? Does your company produce products that support local or sharing economy? What and they are executed?
Q4	How do you define sustainable corporate culture? Does your firm integrate any sustainability culture eg. open innovation, teamwork, etc.? What is your thought on this?
Probing Questions	Does your company's culture value environment? How? Does your company's culture value local society? How? Does your company's culture value economic sustainability? How?
Q5	Please rate your company's practice level on the 19 following topics (Table 1): "none", "low", "medium", "high", "N/A". And briefly say why you gave these ratings.
Q6	Among the topics shown below (in Table 1), please explain in detail about the items you are familiar with from dealing with these issues in your job to some extent. How does your firm create the direction / policy for such topics? And how do they execute the policies into actual practice. (At least 3 topics)

Table A2 Themes and sub-themes found from the interviews at the internal corporate level

Main themes	Sub-themes
1) Environmental pillar	1.1 Green operations

1.1 Green operations
- Practices
  - Waste management
    - 0 waste to landfill
  - Production process
  - Resource management
  - Pollution management
  - Alternative energy
- Policy initiation
  - Top-down
    - CEO's vision
  - Bottom-up
- Execution
  - Environmental department
  - Management's orders
  - KPIs
  - Corporate policy

1.2 Green products
- Material
  - Recycle material
  - Eco-friendly material
- Product performance
  - Water saving
  - Consume less energy

1.3 Green corporate culture
- Policies
  - Green office
- Daily life activities
  - Water saving
  - Energy saving
  - Garbage sorting
  - Reused papers
- Shared vision and behavior with seniors and top management

2) Social pillar

2.1 Social operations
- Practices
  - Support local community
  - Social concern
    - Least pollution to the community
  - Support local products
  - Hire local people
  - Internal organization
    - Human rights
    - Workers' safety
- Policy initiation
  - Top-down
  - Company's goal

Table A2 Themes and sub-themes found from the interviews at the internal corporate level (cont.)

Main themes	Sub-themes

	• Execution
	  o KPIs
	  o Role models
	  o Peer pressure
	2.2 Social products
	• Material
	  o Raw material from local community
	2.3 Social corporate culture
	• CSRs
	• Integration with business model
	  o Daily business routine
	• Shared vision and behavior with seniors and top management

3) Economic pillar	3.1 Economic operations
	• Practices
	  o Issues
	    ▪ Transparency Brand management
	    ▪ Supply chain management
	    ▪ Tax management
	  o Execution
	    ▪ Rules
	    ▪ Encouragement
	    ▪ Corporate culture
	• Circular economy
	  o Pass value to the others
	  o Our waste can be others' asset
	    ▪ Less waste for the company →mutual benefit
	3.2 Economic products
	• Material
	  o Encourage circular economy
	3.3 Economic corporate culture
	• Corporate governance
	• Compliance
	• Corruption and bribery management
	• Committee
	• Communication
	  o Test
	  o Seniors
	  o Rules
	• Shared vision and behavior with seniors and top management

4) Complete 3 pillars	4.1 Sustainable operations
	• Definition and attributes
	  o Leave the least footprint to the planet
	    ▪ Minimum waste
	  o Least waste from production

Table A2 Themes and sub-themes found from the interviews at the internal corporate level (cont.)

Main themes	Sub-themes
	o Harmless to the environment
	o Harmless to the society
	o Harmless to the economy
	• Policies
	o Waste to value
	o Waste to CSR
	o Stakeholder management
	• Policy initiation
	o Top-down
	▪ CEO's vision
	▪ Board of directors
	▪ Parent company
	• Practices
	o Efficient transportation
	o Efficient stock management
	o Efficient after-sale service and CRM
	• Execution
	o A business unit focuses only on sustainability
	o Management's orders
	o KPIs
	o Corporate policy
	• Innovation
	o Product innovation
	o Material innovation
	o Process innovation
	• Success factor
	o CEO's attention
	o Internal communication
	o Improvement
	o Knowledge
	o Partnership
	4.2 Sustainable products
	• Definition and attributes
	o Rebirth quality
	o Reused
	o Recycle
	o Pass value to the next owner
	o Immortal
	o Marketable
	o Profitable
	o Gives satisfaction to users
	o Usable now and in the future
	o It does not deprive our children's rights
	o Result from 4.1
	• Innovation – 4.1
	• Success factor
	o Knowledge

Table A2 Themes and sub-themes found from the interviews at the internal corporate level (cont.)

Main themes	Sub-themes
	o Users' satisfaction
	o Partnership
	o Innovation

4.3 Sustainable corporate culture
- Definition
  - o   Mutual understanding
  - o   Mutual benefit
  - o   Treat like family
  - o   Self awareness
  - o   Think less about ourselves
  - o   Think more about the others and the planet
- CSRs
  - o   Simple (1 time)
  - o   Sophisticated (continuing benefit)
- Teamwork
  - o   Through culture
  - o   Through organizational structure
- Partnership
- Innovation management
  - o   Open innovation
  - o   Kaizen concept
- Communication
  - o   Committee
  - o   Emails
  - o   Billboard
  - o   Announcement
    - ▪   Elevators
    - ▪   Boards
  - o   TV screen
  - o   Managers
  - o   Meetings
  - o   Personal communication
  - o   Activities
    - ▪   CSRs
    - ▪   Games
    - ▪   Events
      - •   Sunday market
  - o   Daily business routine
  - o   Consistency in communication
- Motivation
  - o   Mutual benefit
  - o   Peer pressure
  - o   Role models and seniors
  - o   Attitude building
    - ▪   Workplace as a home
    - ▪   Better environment, better life

Table A3 Question outline used in the semi-structured interviews for the external customer level

No.	Questions
SQ	What do you value in "XXX" brand? What do you think about sustainability for a brand? Do you think "XXX" integrate sustainability into its brand?
Assessment Question 1	Please rate how much you value the environmental concern (none, low, medium, high) when considering the brand Please elaborate.
Assessment Question 2	Please rate how much you value the social concern (none, low, medium, high) when considering the brand Please elaborate.
Assessment Question 3	Please rate how much you value the sustainable economy (none, low, medium, high) when considering the brand Please elaborate.
Q1	What is the product from brand "XXX" you purchased? Why di you choose this brand? How long have you planned before buying a product? And did you do a research for the information before buying? What did you consider when you decided to purchase the products?
Q2	Do you think brand "XXX" considered "sustainable"? And why? Please elaborate
Q3	Do you think this "XXX" have green, social, or economic brand image? If so, what cause this brand image? How did you build such image? And what does this brand image do to you? (eg. lead to purchase decision) Overall, do you think "XXX" have sustainable brand image?
Q4	To you, does the green, social, and economic brand image important? Why?
Q5	Can you think of what did the companies owning "XXX" brand do to make you perceive they concern about green, social, and economic issues? And does it build a green, social, or economic corporate image to you? How? *make sure to address brand image, customer satisfaction, corporate image.*
Q6	Is it important to you that a company should be responsible for the economy, society and environment altogether? Please elaborate

Table A4 Themes and sub-themes found from the interviews at the external customer level

Main themes	Sub-themes

1) Sustainable brand	1.1 Definitions
	• Green pillar
	    o Brand that provides green products
	        ▪ Green performance eg. water saving
	        ▪ Eco-friendly materials
	• Social pillar
	    o Brands that have done the activities contributed to the society
	    o Brands that were born with social purpose
	    o Ethical brands
	• Economic pillar
	    o Local brands that stimulate the local economy
	• Sustainable brand
	    o Brands that have at least 1 pillar
	    o Brands that have all 3 comprehensive pillars
	1.2 Believes
	• Sustainability leads to quality products
	• Sustainability and quality of products are not related
	• Intention
	    o They chose to be sustainable
	    o They need to be sustainable because it is marketable

2) Brand Image	2.1 Image building through the following channels
	• Environmental pillar
	    o Products
	        ▪ Recycle materials
	        ▪ Resource saving products
	            • Water saving
	            • Power saving
	    o Experience
	        ▪ Personal experience
	        ▪ Others' experiences
	• Social Pillar
	    o Products
	        ▪ Helps the society
	    o Brand story
	        ▪ The beginning and intention of the brand
	    o CSR initiatives
	• Economic Pillar
	    o Local brands
	    o Self-thought linked from other pillars
	2.2 Effect of the brand image on customers
	• Brand preference
	    o Willing to pay more for the brand
	• Brand image linked to product quality
	• Purchase intention
	• Customer satisfaction → customer satisfaction

Table A4 Themes and sub-themes found from the interviews at the external customer level (cont.)

Main themes	Sub-themes

3) Customer Satisfaction	3.1 Product related satisfaction → Purchase decision → factors
	• quality
	• function
	• design
	• material
	3.2 Non-product related satisfaction
	• Moral fulfillment
	  ○ I am a part contribute to world sustainability
	  ○ I help saving the environment
	  ○ I help local people
	• Emotional needs
	  ○ I feel good
	  ○ I am proud

4) Corporate Reputation	4.1 CSR initiatives
	• Communication channels
	  ○ PR news
	  ○ Social medias and websites
	• Customers' perception
	  ○ Ethical company
	  ○ Sympathy
	  ○ Give back to society
	4.2 Customers' expectations
	• All 3 comprehensive pillars
	• At least 1 pillar
	• Sustainability as an option, not a mandatory

5) Purchase decision	5.1 Factors
	• Product
	  ○ quality
	  ○ function
	  ○ design
	  ○ material
	    ▪ recycle material
	• Price
	  ○ Value for money
	  ○ Extra willing to pay for sustainable brand
	    ▪ 15%
	    ▪ 20%
	    ▪ 30%
	    ▪ 50%
	    ▪ No limit, as long as it is affordable for particular customer
	• Brand
	  ○ Green brand
	  ○ Sustainable brand
	  ○ Quality brand
	5.2 Time used to make decision
	• A few weeks

Table A4 Themes and sub-themes found from the interviews at the external customer level (cont.)

Main themes	Sub-themes
	- A few days - A few hours - Impulsive purchase
5.3 Research methods	- Internet browsing - Brand's official websites - Brand's official social medias - Online shopping platform - Third party websites - Third party social media platform - On-site visit

Appendix B: Quantitative research

Table B1 Pilot questionnaire on brand image

Dimensions	Strongly disagree				Strongly agree
1. Functional dimension					
1.1 The brand offers products that possess green qualities such as water savings or made from eco-friendly materials แบรนด์นี้มีผลิตภัณฑ์ที่เป็นมิตรต่อสิ่งแวดล้อม เช่น ประหยัดน้ำ ประหยัดพลังงาน หรือ ผลิตจากวัสดุที่เป็นมิตรต่อสิ่งแวดล้อม	1	2	3	4	5
1.2 The brand offers products that have better green characteristic than competitors แบรนด์นี้มีผลิตภัณฑ์ที่มีคุณลักษณะที่เป็นมิตรต่อสิ่งแวดล้อมมากกว่าคู่แข่ง	1	2	3	4	5
1.3 The brand offers products which are easy to recycle, reuse, or decompose แบรนด์นี้มีผลิตภัณฑ์ที่ส่งเสริมการรีไซเคิล รียูส (นำกลับไปใช้ใหม่) หรือ สามารถแยกชิ้นส่วนกลับไปใช้ใหม่ได้	1	2	3	4	5
1.4 The brand emphasizes on partnership with other brands/organizations, which aim to develop green products แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาผลิตภัณฑ์ที่เป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
1.5 The brand offers products that contribute social attributes such as being made by local people or community ผลิตภัณฑ์จากแบรนด์นี้ช่วยส่งเสริมสังคม เช่น ผลิตโดยชาวบ้านหรือคนในท้องที่ เป็นต้น	1	2	3	4	5
1.6 The brand offers products that have better social characteristic than competitors แบรนด์นี้มีผลิตภัณฑ์ที่มีคุณลักษณะในการส่งเสริมสังคมมากกว่าคู่แข่ง	1	2	3	4	5
1.7 The brand has operations that focus on human and labor rights แบรนด์นี้มีขั้นตอนการผลิตที่ให้ความสำคัญกับสิทธิมนุษยชนและแรงงาน	1	2	3	4	5
1.8 The brand emphasizes on partnership with other brands/organizations, which aim to develop the products that support the society แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาผลิตภัณฑ์ที่ช่วยเหลือสังคม	1	2	3	4	5

Table B1 Pilot questionnaire on brand image (cont.)

Dimensions	Strongly disagree				Strongly agree
1.9 The brand offers products that have characteristics to of supporting local economy ผลิตภัณฑ์จากแบรนด์นี้ช่วยส่งเสริมเศรษฐกิจในท้องที่	1	2	3	4	5
1.10 The brand offers products that made from local material and local suppliers แบรนด์นี้มีผลิตภัณฑ์ที่ทำจากวัสดุที่หาได้ในท้องที่และสนับสนุนผู้ผลิตและผู้ขาย (supplier) ท้องถิ่น	1	2	3	4	5
1.11 The brand offer products that have image on local agriculture or local business แบรนด์นี้มีผลิตภัณฑ์ที่มีภาพลักษณ์สนับสนุนการเกษตรกรรมหรือการพาณิชย์ท้องถิ่น	1	2	3	4	5
1.12 The brand emphasizes on partnership with local brands/organizations, which ultimately stimulating local economy แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาเศรษฐกิจท้องถิ่น	1	2	3	4	5
2. Affective dimension					
2.1 This brand is nice because they offer environmentally friendly products ฉันรู้สึกดีกับแบรนด์นี้เพราะสินค้าเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.2 The brand has green personality that distinguishes it from competitors แบรนด์นี้มีความเป็นมิตรกับสิ่งแวดล้อมมากกว่าแบรนด์อื่นๆ	1	2	3	4	5
2.3 The brand will not disappoint the customers in its green attribute แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องความเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.4 The brand is considered as the best benchmark of green development แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่เป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.5 This brand is nice because they offer products that support local people and community ฉันรู้สึกดีกับแบรนด์นี้เพราะผลิตภัณฑ์ของเขาช่วยเหลือชาวบ้านและคนในชุมชน	1	2	3	4	5
2.6 The brand has social personality, such as promoting human rights, that distinguishes it from competitors แบรนด์นี้ให้ความสำคัญกับสิทธิมนุษยชน ซึ่งทำให้ตัวแบรนด์แตกต่างจากแบรนด์อื่นๆ	1	2	3	4	5
2.7 The brand will not disappoint the customers in its social concern แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องความห่วงใยต่อสังคม	1	2	3	4	5

Table B1 Pilot questionnaire on brand image (cont.)

Dimensions	Strongly disagree				Strongly agree
2.8 The brand is considered as the best benchmark of human and labor rights แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่ส่งเสริมสิทธิมนุษยชนและแรงงาน	1	2	3	4	5
2.9 This brand is nice because they offer products that help stimulate local economy ฉันรู้สึกดีกับแบรนด์นี้เพราะผลิตภัณฑ์ของเขาช่วยกระตุ้นเศรษฐกิจในท้องที่	1	2	3	4	5
2.10 The brand cares about local economy, and that distinguishes it from competitors แบรนด์นี้ใส่ใจกับเศรษฐกิจท้องถิ่น ซึ่งทำให้แบรนด์นี้แตกต่างจากแบรนด์อื่นๆ	1	2	3	4	5
2.11 The brand will not disappoint the customers in its contribution to the local economy แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องการช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
2.12 The brand is considered as the best benchmark of local economic development แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่ช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3. Reputation dimension					
3.1 The brand is one of the best brands that offer environmentally friendly products แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าที่เป็นมิตรต่อสิ่งแวดล้อม	1	2	3	4	5
3.2 The brand is very consolidated in the market, compared to competitors who offer green brand image แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่มีภาพลักษณ์เป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
3.3 The brand's vision related to the environment is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับสิ่งแวดล้อมของแบรนด์เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.4 The brand has good reputation on its environmental image แบรนด์มีชื่อเสียงที่ดีในด้านความเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
3.5 The brand is one of the best brands that offer socially responsible products แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าที่รับผิดชอบต่อสังคม	1	2	3	4	5

Table B1 Pilot questionnaire on brand image (cont.)

Dimensions	Strongly disagree				Strongly agree
3.6 The brand is very consolidated in the market, compared to competitors who focus on social responsibility แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่ใส่ใจเรื่องความรับผิดชอบต่อสังคม	1	2	3	4	5
3.7 The brand's vision on social responsibility is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับการส่งเสริมสังคมของแบรนด์เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.8 The brand has good reputation on social responsibility แบรนด์มีชื่อเสียงที่ดีในด้านความรับผิดชอบต่อสังคม	1	2	3	4	5
3.9 The brand is one of the best brands that offer products made from local materials and suppliers แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าด้วยวัตถุดิบในประเทศและสนับสนุนผู้ผลิต/ผู้ขาย (supplier) ในท้องที่	1	2	3	4	5
3.10 The brand is very consolidated in the market, compared to competitors who help stimulate local economy แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่ช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3.11 The brand's vision on supporting the local economy is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับการส่งเสริมเศรษฐกิจในท้องที่ของแบรนด์เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.12 The brand has good reputation on its support to local businesses แบรนด์มีชื่อเสียงที่ดีในด้านการส่งเสริมธุรกิจท้องถิ่น	1	2	3	4	5
4. Summary question					
4.1 Overall, the brand is very good on sustainability โดยรวมแล้ว แบรนด์นี้มีภาพลักษณ์ที่ดีมากในเรื่องความยั่งยืน (sustainability)	1	2	3	4	5

Table B2 Pilot questionnaire on corporate image

Dimensions	Strongly disagree				Strongly agree
1. Credibility dimension					
1.1 I believe this company tries to use only the necessary natural resources ฉันเชื่อว่าบริษัทนี้พยายามที่จะใช้พลังงานเท่าที่จำเป็น	1	2	3	4	5
1.2 I believe this company tries to sponsor pro-environmental programmes ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมสิ่งแวดล้อมต่างๆ	1	2	3	4	5
1.3 I believe this company used its best effort to manage and recycle its waste properly ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะบริหารจัดการขยะและของเสียอย่างเหมาะสม	1	2	3	4	5
1.4 This company tries to protect the environment บริษัทนี้พยายามที่จะอนุรักษ์สิ่งแวดล้อม	1	2	3	4	5
1.5 I believe this company tries to promote human and labor rights ฉันเชื่อว่าบริษัทนี้พยายามปฏิบัติตามแนวทางสิทธิมนุษยชนและแรงงาน	1	2	3	4	5
1.6 I believe this company tries to sponsor social development programmes ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมสังคมต่างๆ	1	2	3	4	5
1.7 I believe this company used its best effort to operate with the care of local community ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะบริหารจัดการ โดยคำนึงถึงชุมชนโดยรอบ	1	2	3	4	5
1.8 This company tries to protect local community บริษัทนี้พยายามที่จะปกป้องชุมชน	1	2	3	4	5
1.9 I believe this company tries to support local economy ฉันเชื่อว่าบริษัทนี้พยายามยามส่งเสริมและสนับสนุนเศรษฐกิจในท้องที่	1	2	3	4	5
1.10 I believe this company tries to sponsor the programmes that stimulate local economy ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมเศรษฐกิจในชุมชน	1	2	3	4	5
1.11 believe this company used its best effort to operate and select suppliers with the care of local economy ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะบริหารจัดการและเลือกคู่ค้าโดยคำนึงถึงเศรษฐกิจในท้องที่	1	2	3	4	5

Table B2 Pilot questionnaire on corporate image (cont.)

Dimensions	Strongly disagree				Strongly agree
1.12 This company tries to protect local economy บริษัทนี้พยายามปกป้องเศรษฐกิจท้องถิ่น	1	2	3	4	5
2. Trust and reliability dimension					
2.1 I trust that this company really cares about the environment ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยสิ่งแวดล้อมอย่างแท้จริง	1	2	3	4	5
2.2 I trust this company when they say they have done practices that concerns the environment such as selecting only the necessary natural resource, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือทำกิจกรรมที่เป็นประโยชน์ต่อสิ่งแวดล้อม เช่น การเลือกใช้พลังงานเท่าที่จำเป็น	1	2	3	4	5
2.3 I think it is possible for this company to sacrifice its profit to ensure clean environment ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อช่วยรักษาสิ่งแวดล้อม	1	2	3	4	5
2.4 This company has reliable plan on how to protect the environment บริษัทนี้มีแผนที่น่าเชื่อถือในการอนุรักษ์สิ่งแวดล้อม	1	2	3	4	5
2.5 I trust that this company really cares about the society ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยสังคมอย่างแท้จริง	1	2	3	4	5
2.6 I trust this company when they say they have done practices that concerns the society such as hiring local people and promote human rights, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือทำกิจกรรมที่เป็นประโยชน์ต่อสังคม เช่น การจ้างงานชาวบ้านในชุมชน หรือปฏิบัติงานโดยให้ความสำคัญกับสิทธิมนุษยชน	1	2	3	4	5
2.7 I think it is possible for this company to sacrifice its profit to ensure the well-being of the community ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อช่วยส่งเสริมความเป็นอยู่ที่ดีของคนในชุมชน	1	2	3	4	5
2.8 This company has reliable plan on how to protect the local community บริษัทนี้มีแผนที่น่าเชื่อถือในการส่งเสริมชุมชน	1	2	3	4	5
2.9 I trust that this company really cares about the local economy ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยเศรษฐกิจท้องถิ่นอย่างแท้จริง	1	2	3	4	5

Table B2 Pilot questionnaire on corporate image (cont.)

Dimensions	Strongly disagree				Strongly agree
2.10 I trust this company when they say they have done practices that concerns the local economy such as using local suppliers, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือทำกิจกรรมที่เป็นประโยชน์ต่อเศรษฐกิจของชุมชน เช่น การเลือกใช้ผู้ผลิตและผู้ขาย (supplier) ในท้องที่	1	2	3	4	5
2.11 I think it is possible for this company to sacrifice its profit to support local economy ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อช่วยสนับสนุนเศรษฐกิจของชุมชน	1	2	3	4	5
2.12 This company has reliable plan on how to support the local economy บริษัทนี้มีแผนที่น่าเชื่อถือในการส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3. Responsibility dimension					
3.1 This company carefully selects natural resource that causes the least harm to the environment บริษัทนี้ตั้งใจเลือกแหล่งพลังงานที่ก่อให้เกิดมลพิษต่อสิ่งแวดล้อมน้อยที่สุด	1	2	3	4	5
3.2 This company concerns about the environment when managing its waste บริษัทนี้คำนึงถึงการรักษาสิ่งแวดล้อมในการกำจัดขยะและของเสีย	1	2	3	4	5
3.3 This company obeys the environmental laws and regulations บริษัทนี้ปฏิบัติตามกฎเกณฑ์และกฎหมายสิ่งแวดล้อม	1	2	3	4	5
3.4 This company is environmentally responsible บริษัทนี้มีความรับผิดชอบต่อสิ่งแวดล้อม	1	2	3	4	5
3.5 This company invested its resources in developing local community บริษัทนี้มีการจัดสรรการลงทุนเพื่อช่วยพัฒนาชุมชน	1	2	3	4	5
3.6 This company concerns about local community when managing its waste บริษัทนี้คำนึงถึงชุมชนโดยรอบในการกำจัดขยะและของเสีย	1	2	3	4	5
3.7 This company promotes human and labor rights in the workplace บริษัทนี้ให้ความสำคัญกับเรื่องสิทธิมนุษยชนในที่ทำงาน	1	2	3	4	5
3.8 This company is responsible to the society บริษัทนี้มีความรับผิดชอบต่อสังคม	1	2	3	4	5
3.9 This company uses local suppliers บริษัทนี้สนับสนุนผู้ขาย/ผู้ผลิต (supplier) ท้องถิ่น	1	2	3	4	5

Table B2 Pilot questionnaire on corporate image (cont.)

Dimensions	Strongly disagree				Strongly agree
3.10 This company concerns about the local economy when it conducts the business such as selecting local suppliers บริษัทนี้ดำเนินธุรกิจโดยคำนึงถึงเศรษฐกิจในท้องที่ เช่น การสนับสนุนธุรกิจและผู้ผลิต/ผู้ขาย (supplier) ในท้องที่	1	2	3	4	5
3.11 This company obeys financial and tax laws and regulations บริษัทนี้ปฏิบัติตามกฎหมายการเงินและภาษี	1	2	3	4	5
3.12 This company is responsible to local economy บริษัทนี้มีความรับผิดชอบต่อเศรษฐกิจท้องถิ่น	1	2	3	4	5
4. Summary question					
4.1 Overall, this company has good reputation on sustainability โดยรวมแล้วบริษัทนี้มีชื่อเสียงที่ดีในเรื่องความยั่งยืน (sustainability)	1	2	3	4	5

Table B3 Pilot questionnaire on emotional attachment

Dimensions	Strongly disagree				Strongly agree
1. Affection					
1.1 I love this brand ฉันรักแบรนด์นี้	1	2	3	4	5
1.2 I feel affectionate towards the brand ฉันรู้สึกชื่นชอบแบรนด์นี้มาก	1	2	3	4	5
1.3 The brand looks friendly to me ฉันรู้สึกว่าแบรนด์นี้ดูเป็นมิตร	1	2	3	4	5
1.4 I feel comfortable using this brand ฉันรู้สึกสบายใจที่จะใช้แบรนด์นี้	1	2	3	4	5
2. Passion					
2.1 I really want to buy the products from this brand ฉันอยากจะซื้อผลิตภัณฑ์จากแบรนด์นี้มาก	1	2	3	4	5
2.2 I am passionate about this brand ฉันรู้สึกหลงใหลในแบรนด์นี้	1	2	3	4	5
2.3 I am delighted by this brand ฉันรู้สึกอิ่มใจกับแบรนด์นี้	1	2	3	4	5
2.4 This brand captivates me ฉันรู้สึกว่าแบรนด์นี้มีเสน่ห์	1	2	3	4	5
3. Connection					
3.1 I feel connected to the brand when I use it ฉันรู้สึกถึงความเกี่ยวพันของฉันกับตัวแบรนด์เมื่อฉันใช้ผลิตภัณฑ์ของแบรนด์นี้	1	2	3	4	5
3.2 My identification with this brand increases though the use of the brand ความผูกพันกับแบรนด์นี้เพิ่มขึ้นเมื่อฉันได้ใช้งานมันมากขึ้นเรื่อย ๆ	1	2	3	4	5
3.3 The use of this brand affects my association to the brand การใช้งานผลิตภัณฑ์จากแบรนด์นี้ส่งผลต่อความสัมพันธ์ของฉันกับแบรนด์	1	2	3	4	5
3.4 I feel bonded to this brand ฉันรู้สึกผูกพันกับแบรนด์นี้	1	2	3	4	5
4. Summary question					
4.1 Overall, I feel related to this brand โดยรวมแล้ว ฉันรู้สึกว่าฉันมีความเชื่อมโยงกับแบรนด์นี้	1	2	3	4	5

Table B4 Pilot questionnaire on brand loyalty

Questions	Strongly disagree				Strongly agree
1 I consider myself to be loyal to the brand ฉันเป็นลูกค้าประจำของแบรนด์นี้	1	2	3	4	5
2 This brand will be my first choice แบรนด์นี้จะเป็นตัวเลือกแรกของฉัน	1	2	3	4	5
3 I will not buy other brands if this brand is available หากฉันสามารถเลือกซื้อแบรนด์นี้ได้ฉันจะไม่เลือกแบรนด์อื่น	1	2	3	4	5
4 I have a favorable attitude towards this brand แบรนด์นี้เป็นแบรนด์โปรดของฉัน	1	2	3	4	5
5 I plan to repurchase this brand ฉันจะซื้อแบรนด์นี้อีก	1	2	3	4	5

Appendix B-1: Expert opinion for brand image questions

Item Objective Congruence (IOC) instructions:

As an expert on these issues, please indicate whether you think each question is relevant (+1) for the sub-dimension, or not relevant (-1). The scale is:

-1 = not relevant, 0 = not sure, and +1 = relevant

Table B5 IOC assessment for questions on brand image

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Comments
		1	2	3	4		
1. Functional dimension ฟังก์ชั่นการใช้งาน							
Brand image (functional dimension) – green attribute ภาพลักษณ์ของแบรนด์ (ด้านฟังก์ชั่นการใช้งาน) - ด้านสิ่งแวดล้อม	1.1 The brand offers products that possess green qualities such as water savings or made from eco-friendly materials แบรนด์นี้มีผลิตภัณฑ์ที่เป็นมิตรต่อสิ่งแวดล้อม เช่น ประหยัดน้ำ ประหยัดพลังงาน หรือ ผลิตจากวัสดุที่เป็นมิตรต่อสิ่งแวดล้อม	1	1	1	1	1.00	
Brand image (functional dimension) – green attribute ภาพลักษณ์ของแบรนด์ (ด้านฟังก์ชั่นการใช้งาน) - ด้านสิ่งแวดล้อม	1.2 The brand offers products that have better green characteristic than competitors แบรนด์นี้มีผลิตภัณฑ์ที่มีคุณลักษณะที่เป็นมิตรต่อสิ่งแวดล้อมมากกว่าคู่แข่ง	0	1	1	1	0.75	
Brand image (functional dimension) – green attribute ภาพลักษณ์ของแบรนด์ (ด้านฟังก์ชั่นการใช้งาน) - ด้านสิ่งแวดล้อม	1.3 The brand offers products which are easy to recycle, reuse, or decompose แบรนด์นี้มีผลิตภัณฑ์ที่ส่งเสริมการรีไซเคิล รียูส (นำกลับไปใช้ใหม่) หรือ สามารถแยกชิ้นส่วนกลับไปใช้ใหม่ได้	1	1	1	1	1.00	
Brand image – green attribute ภาพลักษณ์ของแบรนด์ (ด้านฟังก์ชั่นการใช้งาน) - ด้านสิ่งแวดล้อม	1.4 The brand emphasizes on partnership with other brands/organizations, which aim to develop green products แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาผลิตภัณฑ์ที่เป็นมิตรกับสิ่งแวดล้อม	1	1	1	1	1.00	

Table B5 IOC assessment for questions on brand image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Comments
		1	2	3	4		
Brand image (functional dimension) – social attribute	1.5 The brand offers products that contribute social attributes such as being made by local people or community	1	1	0	1	0.75	Adjust the language
ภาพลักษณ์ของแบรนด์ (ด้านฟังก์ชั่นการใช้งาน) - ด้านสังคม	ผลิตภัณฑ์จากแบรนด์นี้ช่วยส่งเสริมสังคม เช่น ผลิตโดยชาวบ้านหรือคนในท้องที่ เป็นต้น						
Brand image (functional dimension) – social attribute	1.6 The brand offers products that have better social characteristic than competitors	0	0	0	0	0.00	Confusion/ eliminate
ภาพลักษณ์ของแบรนด์ - ด้านสังคม	แบรนด์นี้มีผลิตภัณฑ์ที่มีคุณลักษณะในการ ส่งเสริมสังคมมากว่าคู่แข่ง						
Brand image (functional dimension) – social attribute	1.7 The brand has operations that focus on human and labor rights	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้านฟังก์ชั่นการใช้งาน) - ด้านสังคม	แบรนด์นี้มีขั้นตอนการผลิตที่ให้ความสำคัญกับ สิทธิมนุษยชนและแรงงาน						
Brand image (functional dimension) – social attribute	1.8 The brand emphasizes on partnership with other brands/organizations, which aim to develop the products that support the society	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้าน ฟังก์ชั่นการใช้งาน) - ด้าน สังคม	แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือ องค์กรอื่นๆเพื่อพัฒนาผลิตภัณฑ์ที่ช่วยเหลือ สังคม						
Brand image (functional dimension) – economic attribute	1.9 The brand offers products that have characteristics to of supporting local economy	1	0	1	1	0.75	
ภาพลักษณ์ของแบรนด์ (ด้าน ฟังก์ชั่นการใช้งาน) - ด้าน เศรษฐกิจ	ผลิตภัณฑ์จากแบรนด์นี้ช่วยส่งเสริมเศรษฐกิจใน ท้องที่						
Brand image (functional dimension) – economic attribute	1.10 The brand offers products that made from local material and local suppliers	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้าน ฟังก์ชั่นการใช้งาน) - ด้าน เศรษฐกิจ	แบรนด์นี้มีผลิตภัณฑ์ที่ทำจากวัสดุที่หาได้ใน ท้องที่และสนับสนุนผู้ผลิตและผู้ขาย (supplier) ท้องถิ่น						

Table B5 IOC assessment for questions on brand image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	1	2	3	4	IOC	Com ments
Brand image (functional dimension) – economic attribute ภาพลักษณ์ของแบรนด์ (ด้านฟังก์ชั่นการใช้งาน) - ด้านเศรษฐกิจ	1.11 The brand offer products that have image on local agriculture or local business แบรนด์นี้มีผลิตภัณฑ์ที่มีภาพลักษณ์สนับสนุนเกษตรกรรมหรือการพาณิชย์ท้องถิ่น	1	1	1	1	1.00	
Brand image (functional dimension) – economic attribute ภาพลักษณ์ของแบรนด์ (ด้านฟังก์ชั่นการใช้งาน) – ด้านเศรษฐกิจ	1.12 The brand emphasizes on partnership with local brands/organizations, which ultimately stimulating local economy แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาเศรษฐกิจท้องถิ่น	1	0	1	1	0.75	
2. Affective dimension							
Brand image (affective dimension) – green attribute ภาพลักษณ์ของแบรนด์ (ด้านความรู้สึก) - ด้านสิ่งแวดล้อม	2.1 This brand is nice because they offer environmentally friendly products ฉันรู้สึกดีกับแบรนด์นี้เพราะสินค้าเป็นมิตรกับสิ่งแวดล้อม	1	1	1	1	1.00	
Brand image (affective dimension) – green attribute ภาพลักษณ์ของแบรนด์ (ด้านความรู้สึก) - ด้านสิ่งแวดล้อม	2.2 The brand has green personality that distinguishes it from competitors แบรนด์นี้มีความเป็นมิตรกับสิ่งแวดล้อมมากกว่าแบรนด์อื่นๆ	0	1	1	1	0.75	
Brand image (affective dimension) – green attribute ภาพลักษณ์ของแบรนด์ (ด้านความรู้สึก) - ด้านสิ่งแวดล้อม	2.3 The brand will not disappoint the customers in its green attribute แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องความเป็นมิตรกับสิ่งแวดล้อม	1	1	1	1	1.00	
Brand image (affective dimension) – green attribute ภาพลักษณ์ของแบรนด์ (ด้านความรู้สึก) - ด้านสิ่งแวดล้อม	2.4 The brand is considered as the best benchmark of green development แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่เป็นมิตรกับสิ่งแวดล้อม	1	1	1	1	1.00	

Table B5 IOC assessment for questions on brand image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Com ments
		1	2	3	4		
Brand image (affective dimension) – social attribute ภาพลักษณ์ของแบรนด์ (ด้าน ความรู้สึก) — ด้านสังคม	2.5 This brand is nice because they offer products that support local people and community ฉันรู้สึกดีกับแบรนด์นี้เพราะผลิตภัณฑ์ของเขา ช่วยเหลือชาวบ้านและคนในชุมชน	0	1	1	1	0.75	
Brand image (affective dimension) – social attribute ภาพลักษณ์ของแบรนด์ (ด้าน ความรู้สึก) — ด้านสังคม	2.6 The brand has social personality, such as promoting human rights, that distinguishes it from competitors แบรนด์นี้ให้ความสำคัญกับสิทธิมนุษยชน ซึ่งทำ ให้ตัวแบรนด์แตกต่างจากแบรนด์อื่นๆ	1	0	1	1	0.75	
Brand image (affective dimension) – social attribute ภาพลักษณ์ของแบรนด์ (ด้าน ความรู้สึก) — ด้านสังคม	2.7 The brand will not disappoint the customers in its social concern แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องความ ห่วงใยต่อสังคม	1	1	1	1	1.00	
Brand image (affective dimension) – social attribute ภาพลักษณ์ของแบรนด์ (ด้าน ความรู้สึก) — ด้านสังคม	2.8 The brand is considered as the best benchmark of human and labor rights แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่ส่งเสริม สิทธิมนุษยชนและแรงงาน	1	0	1	1	0.75	
Brand image (affective dimension) – economic attribute ภาพลักษณ์ของแบรนด์ (ด้าน ความรู้สึก) — ด้านเศรษฐกิจ	2.9 This brand is nice because they offer products that help stimulate local economy ฉันรู้สึกดีกับแบรนด์นี้เพราะผลิตภัณฑ์ของเขา ช่วยกระตุ้นเศรษฐกิจในท้องที่	1	1	1	1	1.00	
Brand image (affective dimension) – economic attribute ภาพลักษณ์ของแบรนด์ (ด้าน ความรู้สึก) — ด้านเศรษฐกิจ	2.10 The brand cares about local economy, and that distinguishes it from competitors แบรนด์นี้ใส่ใจกับเศรษฐกิจท้องถิ่น ซึ่งทำให้แบ รนด์นี้แตกต่างจากแบรนด์อื่นๆ	1	1	1	1	1.00	
Brand image (affective dimension) – economic attribute ภาพลักษณ์ของแบรนด์ (ด้าน ความรู้สึก) — ด้านเศรษฐกิจ	2.11 The brand will not disappoint the customers in its contribution to the local economy แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องการช่วย ส่งเสริมเศรษฐกิจท้องถิ่น	1	1	1	1	1.00	
Brand image (affective dimension) – economic attribute ภาพลักษณ์ของแบรนด์ (ด้าน ความรู้สึก) — ด้านเศรษฐกิจ	2.12 The brand is considered as the best benchmark of local economic development แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่ช่วยส่งเสริม เศรษฐกิจท้องถิ่น	1	1	1	1	1.00	

Table B5 IOC assessment for questions on brand image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Comments
		1	2	3	4		
3. Reputation dimension							
Brand image (reputation dimension) – green attribute	3.1 The brand is one of the best brands that offer environmentally friendly products	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านสิ่งแวดล้อม	แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้า ที่เป็นมิตรต่อสิ่งแวดล้อม						
Brand image (reputation dimension) – green attribute	3.2 The brand is very consolidated in the market, compared to competitors who offer green brand image	1	0	1	1	0.75	Adjustment in Thai language
ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านสิ่งแวดล้อม	แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบ รนด์อื่นๆที่มีภาพลักษณ์เป็นมิตรกับสิ่งแวดล้อม						
Brand image (reputation dimension) – green attribute	3.3 The brand's vision related to the environment is trustworthy	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านสิ่งแวดล้อม	วิสัยทัศน์ที่เกี่ยวข้องกับสิ่งแวดล้อมของแบรนด์ เป็นที่น่าเชื่อถือ						
Brand image (reputation dimension) – green attribute	3.4 The brand has good reputation on its environmental image	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านสิ่งแวดล้อม	แบรนด์มีชื่อเสียงที่ดีในด้านความเป็นมิตรกับ สิ่งแวดล้อม						
Brand image (reputation dimension) – social attribute	3.5 The brand is one of the best brands that offer socially responsible products	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านสังคม	แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้า ที่รับผิดชอบต่อสังคม						
Brand image (reputation dimension) – social attribute	3.6 The brand is very consolidated in the market, compared to competitors who focus on social responsibility	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านสังคม	แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบ รนด์อื่นๆที่ใส่ใจเรื่องความรับผิดชอบต่อสังคม						
Brand image (reputation dimension) – social attribute	3.7 The brand's vision on social responsibility is trustworthy	1	1	1	1	1.00	
ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านสังคม	วิสัยทัศน์ที่เกี่ยวข้องกับการส่งเสริมสังคมของแบ รนด์เป็นที่น่าเชื่อถือ						

Table B5 IOC assessment for questions on brand image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Com ments
		1	2	3	4		
Brand image (reputation dimension) – social attribute ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านสังคม	3.8 The brand has good reputation on social responsibility แบรนด์มีชื่อเสียงที่ดีในด้านความรับผิดชอบต่อ สังคม	1	1	1	1	1.00	
Brand image (reputation dimension) –economic attribute ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านเศรษฐกิจ	3.9 The brand is one of the best brands that offer products made from local materials and suppliers แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้า ด้วยวัตถุดิบในประเทศและสนับสนุนผู้ผลิต/ ผู้ขาย (supplier) ในท้องที่	1	1	1	1	1.00	
Brand image (reputation dimension) –economic attribute ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านเศรษฐกิจ	3.10 The brand is very consolidated in the market, compared to competitors who help stimulate local economy แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบ รนด์อื่นๆที่ช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	1	1	1	1.00	
Brand image (reputation dimension) –economic attribute ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านเศรษฐกิจ	3.11 The brand's vision on supporting the local economy is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับการส่งเสริมเศรษฐกิจใน ท้องที่ของแบรนด์เป็นที่น่าเชื่อถือ	1	1	1	1	1.00	
Brand image (reputation dimension) –economic attribute ภาพลักษณ์ของแบรนด์ (ด้าน ชื่อเสียง) - ด้านเศรษฐกิจ	3.12 The brand has good reputation on its support to local businesses แบรนด์มีชื่อเสียงที่ดีในด้านการส่งเสริมธุรกิจ ท้องถิ่น	1	1	1	1	1.00	
4. Summary question							
Brand image - sustainability ภาพลักษณ์ของแบรนด์ด้าน ความยั่งยืน	4.1 Overall, the brand is very good on sustainability โดยรวมแล้ว แบรนด์นี้มีภาพลักษณ์ที่ดีมากใน เรื่องความยั่งยืน (sustainability)	1	1	1	1	1.00	

Table B6 IOC assessment for questions on corporate image

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Comments
		1	2	3	4		
1. Credibility dimension							
Corporate image (credibility dimension) – environment ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านสิ่งแวดล้อม	1.1 I believe this company tries to use only the necessary natural resources ฉันเชื่อว่าบริษัทนี้พยายามที่จะใช้พลังงานเท่าที่จำเป็น	1	1	1	1	1.00	
Corporate image (credibility dimension) – environment ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านสิ่งแวดล้อม	1.2 I believe this company tries to sponsor pro-environmental programmes ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมสิ่งแวดล้อมต่างๆ	1	1	1	1	1.00	
Corporate image (credibility dimension) – environment ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านสิ่งแวดล้อม	1.3 I believe this company used its best effort to manage and recycle its waste properly ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะบริหารจัดการขยะและของเสียอย่างเหมาะสม	1	1	1	1	1.00	
Corporate image (credibility dimension) – environment ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านสิ่งแวดล้อม	1.4 This company tries to protect the environment บริษัทนี้พยายามที่จะอนุรักษ์สิ่งแวดล้อม	1	1	1	1	1.00	Adjustment in Thai language
Corporate image (credibility dimension) – social ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านสังคม	1.5 I believe this company tries to promote human and labor rights ฉันเชื่อว่าบริษัทนี้พยายามปฏิบัติตามแนวทางสิทธิมนุษยชนและแรงงาน	1	0	0	0	0.25	Eliminate
Corporate image (credibility dimension) – social ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านสังคม	1.6 I believe this company tries to sponsor social development programmes ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมสังคมต่างๆ	1	1	1	0	0.75	
Corporate image (credibility dimension) – social ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านสังคม	1.7 I believe this company used its best effort to operate with the care of local community ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะบริหารจัดการโดยคำนึงถึงชุมชนโดยรอบ	1	1	1	1	1.00	Adjustment in Thai language
Corporate image (credibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านเศรษฐกิจ	1.8 This company tries to protect local community บริษัทนี้พยายามที่จะปกป้องชุมชน	1	1	1	1	1.00	

Table B6 IOC assessment for questions on corporate image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Com ments
		1	2	3	4		
Corporate image (credibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านเศรษฐกิจ	1.9 I believe this company tries to support local economy ฉันเชื่อว่าบริษัทนี้พยายามส่งเสริมและสนับสนุนเศรษฐกิจในท้องที่	1	0	1	1	0.75	
Corporate image (credibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านเศรษฐกิจ	1.10 I believe this company tries to sponsor the programmes that stimulate local economy ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมเศรษฐกิจในชุมชน	0	1	1	1	0.75	
Corporate image (credibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านเศรษฐกิจ	1.11 believe this company used its best effort to operate and select suppliers with the care of local economy ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะบริหารจัดการและเลือกคู่ค้าโดยคำนึงถึงเศรษฐกิจในท้องที่	1	1	1	1	1.00	Adjustment in Thai language
Corporate image (credibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความน่าเชื่อถือ) - ด้านเศรษฐกิจ	1.12 This company tries to protect local economy บริษัทนี้พยายามปกป้องเศรษฐกิจท้องถิ่น	1	0	1	1	0.75	
2. Trust and reliability dimension							
Corporate image (trust&reliability dimension) – environment ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านสิ่งแวดล้อม	2.1 I trust that this company really cares about the environment ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยสิ่งแวดล้อมอย่างแท้จริง	1	1	1	1	1.00	
Corporate image (trust&reliability dimension) – environment ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านสิ่งแวดล้อม	2.2 I trust this company when they say they have done practices that concerns the environment such as selecting only the necessary natural resource, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือทำกิจกรรมที่เป็นประโยชน์ต่อสิ่งแวดล้อม เช่น การเลือกใช้พลังงานเท่าที่จำเป็น	1	1	1	1	1.00	
Corporate image (trust&reliability dimension) – environment ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านสิ่งแวดล้อม	2.3 I think it is possible for this company to sacrifice its profit to ensure clean environment ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อช่วยรักษาสิ่งแวดล้อม	1	1	1	1	1.00	

Table B6 IOC assessment for questions on corporate image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Com ments
		1	2	3	4		
Corporate image (trust&reliability dimension) – environment ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านสิ่งแวดล้อม	2.4 This company has reliable plan on how to protect the environment บริษัทนี้มีแผนที่น่าเชื่อถือในการอนุรักษ์สิ่งแวดล้อม	1	1	1	1	1.00	
Corporate image (trust&reliability dimension) – social ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านสังคม	2.5 I trust that this company really cares about the society ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยสังคมอย่างแท้จริง	1	1	1	1	1.00	
Corporate image (trust&reliability dimension) – social ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านสังคม	2.6 I trust this company when they say they have done practices that concerns the society such as hiring local people and promote human rights, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือทำกิจกรรมที่เป็นประโยชน์ต่อสังคม เช่น การจ้างงานชาวบ้านในชุมชน หรือปฏิบัติงานโดยให้ความสำคัญกับสิทธิมนุษยชน	1	1	1	1	1.00	
Corporate image (trust&reliability dimension) – social ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านสังคม	2.7 I think it is possible for this company to sacrifice its profit to ensure the well-being of the community ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อช่วยส่งเสริมความเป็นอยู่ที่ดีของคนในชุมชน	1	1	1	1	1.00	
Corporate image (trust&reliability dimension) – social ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านสังคม	2.8 This company has reliable plan on how to protect the local community บริษัทนี้มีแผนที่น่าเชื่อถือในการส่งเสริมชุมชน	1	1	1	1	1.00	Adjustm ent in Thai languag e
Corporate image (trust&reliability dimension) – economic ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านเศรษฐกิจ	2.9 I trust that this company really cares about the local economy ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยเศรษฐกิจท้องถิ่นอย่างแท้จริง	1	1	1	1	1.00	
Corporate image (trust&reliability dimension) – economic ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านเศรษฐกิจ	2.10 I trust this company when they say they have done practices that concerns the local economy such as using local suppliers, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือทำกิจกรรมที่เป็นประโยชน์ต่อเศรษฐกิจของชุมชน เช่น การเลือกใช้ผู้ผลิตและผู้ขาย (supplier) ในท้องที่	1	1	1	1	1.00	

Table B6 IOC assessment for questions on corporate image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Com ments
		1	2	3	4		
Corporate image (trust&reliability dimension) – economic ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) - ด้านเศรษฐกิจ	2.11 I think it is possible for this company to sacrifice its profit to support local economy ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อช่วยสนับสนุนเศรษฐกิจของชุมชน	1	1	1	1	1.00	
Corporate image (trust&reliability dimension) – economic ภาพลักษณ์องค์กร (ด้านความเชื่อมั่น) – ด้านเศรษฐกิจ	2.12 This company has reliable plan on how to support the local economy บริษัทนี้มีแผนที่น่าเชื่อถือในการส่งเสริมเศรษฐกิจท้องถิ่น	1	1	1	1	1.00	
3. Responsibility dimension							
Corporate image (responsibility dimension) – environment ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านสิ่งแวดล้อม	3.1 This company carefully selects natural resource that causes the least harm to the environment บริษัทนี้ตั้งใจเลือกแหล่งพลังงานที่ก่อให้เกิดมลพิษต่อสิ่งแวดล้อมน้อยที่สุด	1	1	1	1	1.00	Adjustm ent in Thai languag e
Corporate image (responsibility dimension) – environment ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านสิ่งแวดล้อม	3.2 This company concerns about the environment when managing its waste บริษัทนี้คำนึงถึงการรักษาสิ่งแวดล้อมในการกำจัดขยะและของเสีย	1	1	1	1	1.00	
Corporate image (responsibility dimension) – environment ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านสิ่งแวดล้อม	3.3 This company obeys the environmental laws and regulations บริษัทนี้ปฏิบัติตามกฎเกณฑ์และกฎหมายสิ่งแวดล้อม	1	1	1	1	1.00	
Corporate image (responsibility dimension) – environment ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านสิ่งแวดล้อม	3.4 This company is environmentally responsible บริษัทนี้มีความรับผิดชอบต่อสิ่งแวดล้อม	1	1	1	1	1.00	
Corporate image (responsibility dimension) – social ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านสังคม	3.5 This company invested its resources in developing local community บริษัทนี้มีการจัดสรรการลงทุนเพื่อช่วยพัฒนาชุมชน	1	1	1	1	1.00	

Table B6 IOC assessment for questions on corporate image (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Comments
		1	2	3	4		
Corporate image (responsibility dimension) – social ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านสังคม	3.6 This company concerns about local community when managing its waste บริษัทนี้คำนึงถึงชุมชนโดยรอบในการกำจัดขยะและของเสีย	1	1	1	1	1.00	
Corporate image (responsibility dimension) – social ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านสังคม	3.7 This company promotes human and labor rights in the workplace บริษัทนี้ให้ความสำคัญกับเรื่องสิทธิมนุษยชนในที่ทำงาน	1	1	1	1	1.00	Adjustment in Thai language
Corporate image (responsibility dimension) – social ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านสังคม	3.8 This company is responsible to the society บริษัทนี้มีความรับผิดชอบต่อสังคม	1	1	1	1	1.00	
Corporate image (responsibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านเศรษฐกิจ	3.9 This company uses local suppliers บริษัทนี้ใช้ผู้ขาย/ผู้ผลิต (supplier) ท้องถิ่น	1	1	1	1	1.00	Adjustment in Thai language
Corporate image (responsibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านเศรษฐกิจ	3.10 This company concerns about the local economy when it conducts the business such as selecting local raw materials บริษัทนี้ดำเนินธุรกิจโดยคำนึงถึงเศรษฐกิจในท้องที่ เช่น การเลือกใช้วัตถุดิบในท้องที่	1	1	1	1	1.00	
Corporate image (responsibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านเศรษฐกิจ	3.11 This company obeys financial and tax laws and regulations บริษัทนี้ปฏิบัติตามกฎหมายการเงินและภาษี	1	1	1	1	1.00	
Corporate image (responsibility dimension) – economic ภาพลักษณ์องค์กร (ด้านความรับผิดชอบ) - ด้านเศรษฐกิจ	3.12 This company is responsible to local economy บริษัทนี้มีความรับผิดชอบต่อเศรษฐกิจท้องถิ่น	1	1	1	1	1.00	
4. Summary question							
Corporate image – sustainability ภาพลักษณ์องค์กรเรื่องความยั่งยืน (sustainability)	4.1 Overall, this company has good reputation on sustainability โดยรวมแล้ว บริษัทนี้มีชื่อเสียงที่ดีในเรื่องความยั่งยืน (sustainability)	1	1	1	1	1.00	

Table B7 IOC assessment for questions on emotional attachment

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Com ments
		1	2	3	4		
1. Affection							
Affection	1.1 I love this brand	1	1	1	1	1.00	Adjustme nt in Thai language
ความชอบ	I love this brand						
Affection	1.2 feel affectionate towards the brand	1	1	1	1	1.00	
ความชอบ	ฉันรู้สึกชื่นชอบแบรนด์นี้มาก						
Affection	1.3 The brand looks friendly to me	1	1	1	1	1.00	
ความชอบ	ฉันรู้สึกว่าแบรนด์นี้ดูเป็นมิตร						
Affection	1.4 I feel comfortable using this brand	1	1	1	1	1.00	
ความชอบ	ฉันรู้สึกสบายใจที่จะใช้แบรนด์นี้						
2. Passion							
Passion	2.1 I really want to buy the products from this brand	1	1	1	1	1.00	
ความหลงใหล	ฉันอยากจะซื้อผลิตภัณฑ์จากแบรนด์นี้มาก						
Passion	2.2 I I am passionate about this brand	1	1	1	1	1.00	
ความหลงใหล	ฉันรู้สึกหลงใหลในแบรนด์นี้						
Passion	2.3 I am delighted by this brand	1	1	1	1	1.00	
ความหลงใหล	ฉันรู้สึกอิ่มใจกับแบรนด์นี้						
Passion	2.4 This brand captivates me	1	1	1	1	1.00	
ความหลงใหล	ฉันรู้สึกว่าแบรนด์นี้มีเสน่ห์						
3. Connection							
Connection	2.1 I feel connected to the brand when I use it	1	1	1	1	1.00	
ความสัมพันธ์กับแบรนด์	ฉันรู้สึกถึงความเกี่ยวพันของฉันกับตัวแบรนด์เมื่อฉันใช้ผลิตภัณฑ์ของแบรนด์นี้						
Connection	2.1 My identification with this brand increases though the use of the brand	1	1	1	1	1.00	
ความสัมพันธ์กับแบรนด์	ความผูกพันกับแบรนด์นี้เพิ่มขึ้นเมื่อฉันได้ใช้งานมันมากขึ้นเรื่อย ๆ						
Connection	2.1 The use of this brand affects my association to the brand	1	1	1	1	1.00	
ความสัมพันธ์กับแบรนด์	การใช้งานผลิตภัณฑ์จากแบรนด์นี้ส่งผลต่อความสัมพันธ์ของฉันกับแบรนด์						
Connection	2.1 feel bonded to this brand	1	1	1	1	1.00	
ความสัมพันธ์กับแบรนด์	ฉันรู้สึกผูกพันกับแบรนด์นี้						

Table B7 IOC assessment for questions on emotional attachment (cont.)

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Comments
		1	2	3	4		
4. Summary Question							
Connection ความสัมพันธ์กับแบรนด์	2.1 Overall, I feel related to this brand โดยรวมแล้ว ฉันรู้สึกว่าฉันมีความเชื่อมโยงกับแบรนด์นี้	1	1	1	1	1.00	

Table B8 IOC assessment for questions on brand loyalty

Concept measured สิ่งที่ต้องการวัด	Questions คำถาม	Expert				IOC	Comments
		1	**2**	**3**	**4**		
Brand Loyalty							
Brand loyalty ความภักดีใน แบรนด์	1 I consider myself to be loyal to the brand ฉันเป็นลูกค้าประจำของแบรนด์นี้	1	1	1	1	1.00	
Brand loyalty ความภักดีใน แบรนด์	2 This brand will be my first choice แบรนด์นี้จะเป็นตัวเลือกแรกของฉัน	1	1	1	1	1.00	
Brand loyalty ความภักดีใน แบรนด์	3 I will not buy other brands if this brand is available หากฉันสามารถเลือกซื้อแบรนด์นี้ได้ ฉันจะไม่เลือกแบรนด์อื่น	1	1	1	1	1.00	
Brand loyalty ความภักดีใน แบรนด์	4 I have a favorable attitude towards this brand แบรนด์นี้เป็นแบรนด์โปรดของฉัน	1	1	1	1	1.00	
Brand loyalty ความภักดีใน แบรนด์	5 I plan to repurchase this brand ฉันจะซื้อแบรนด์นี้อีก	1	1	1	1	1.00	

Table B9 Pilot questionnaire on brand image AFTER IOC

Dimensions	Strongly disagree				Strongly agree
1. Functional dimension					
1.1 The brand offers products that possess green qualities such as water savings or made from eco-friendly materials แบรนด์นี้มีผลิตภัณฑ์ที่เป็นมิตรต่อสิ่งแวดล้อม เช่น ประหยัดน้ำ ประหยัดพลังงาน หรือ ผลิตจากวัสดุที่เป็นมิตรต่อสิ่งแวดล้อม	1	2	3	4	5
1.2 The brand offers products that have better green characteristic than competitors แบรนด์นี้มีผลิตภัณฑ์ที่มีคุณลักษณะที่เป็นมิตรต่อสิ่งแวดล้อมมากกว่าคู่แข่ง	1	2	3	4	5
1.3 The brand offers products which are easy to recycle, reuse, or decompose แบรนด์นี้มีผลิตภัณฑ์ที่ส่งเสริมการรีไซเคิล รียูส (นำกลับไปใช้ใหม่) หรือ สามารถแยกชิ้นส่วนกลับไปใช้ใหม่ได้	1	2	3	4	5
1.4 The brand emphasizes on partnership with other brands/organizations, which aim to develop green products แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาผลิตภัณฑ์ที่เป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
1.5 The brand offers products that contribute to the society such as being made by local people or community ผลิตภัณฑ์จากแบรนด์นี้ช่วยส่งเสริมสังคม เช่น ผลิตโดยชาวบ้าน หรือคนในท้องที่ เป็นต้น	1	2	3	4	5
1.6 The brand has operations that focus on human and labor rights แบรนด์นี้มีขั้นตอนการผลิตที่ให้ความสำคัญกับสิทธิมนุษยชนและแรงงาน	1	2	3	4	5
1.7 The brand emphasizes on partnership with other brands/organizations, which aim to develop the products that support the society แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาผลิตภัณฑ์ที่ช่วยเหลือสังคม	1	2	3	4	5
1.8 The brand offers products that have characteristics to of supporting local economy ผลิตภัณฑ์จากแบรนด์นี้ช่วยส่งเสริมเศรษฐกิจในท้องที่	1	2	3	4	5
1.9 The brand offers products that made from local material and local suppliers แบรนด์นี้มีผลิตภัณฑ์ที่ทำจากวัสดุที่หาได้ในท้องที่และสนับสนุนผู้ผลิตและผู้ขาย (supplier) ท้องถิ่น	1	2	3	4	5

Table B9 Pilot questionnaire on brand image AFTER IOC (cont.)

Dimensions	Strongly disagree				Strongly agree
1.10 The brand offer products that have image on local agriculture or local business แบรนด์นี้มีผลิตภัณฑ์ที่มีภาพลักษณ์สนับสนุนการเกษตรกรรมหรือการพาณิชย์ท้องถิ่น	1	2	3	4	5
1.11 The brand emphasizes on partnership with local brands/organizations, which ultimately stimulating local economy แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาเศรษฐกิจท้องถิ่น	1	2	3	4	5
2. Affective dimension					
2.1 This brand is nice because they offer environmentally friendly products ฉันรู้สึกดีกับแบรนด์นี้เพราะสินค้าเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.2 The brand has green personality that distinguishes it from competitors แบรนด์นี้มีความเป็นมิตรกับสิ่งแวดล้อมมากกว่าแบรนด์อื่นๆ	1	2	3	4	5
2.3 The brand will not disappoint the customers in its green attribute แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องความเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.4 The brand is considered as the best benchmark of green development แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่เป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.5 This brand is nice because they offer products that support local people and community ฉันรู้สึกดีกับแบรนด์นี้เพราะผลิตภัณฑ์ของเขาช่วยเหลือชาวบ้านและคนในชุมชน	1	2	3	4	5
2.6 The brand has social personality, such as promoting human rights, that distinguishes it from competitors แบรนด์นี้ให้ความสำคัญกับสิทธิมนุษยชน ซึ่งทำให้ตัวแบรนด์แตกต่างจากแบรนด์อื่นๆ	1	2	3	4	5
2.7 The brand will not disappoint the customers in its social concern แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องความห่วงใยต่อสังคม	1	2	3	4	5
2.8 The brand is considered as the best benchmark of human and labor rights แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่ส่งเสริมสิทธิมนุษยชนและแรงงาน	1	2	3	4	5
2.9 This brand is nice because they offer products that help stimulate local economy ฉันรู้สึกดีกับแบรนด์นี้เพราะผลิตภัณฑ์ของเขาช่วยกระตุ้นเศรษฐกิจในท้องที่	1	2	3	4	5

Table B9 Pilot questionnaire on brand image AFTER IOC (cont.)

Dimensions	Strongly disagree				Strongly agree
2.10 The brand cares about local economy, and that distinguishes it from competitors แบรนด์นี้ใส่ใจกับเศรษฐกิจท้องถิ่น ซึ่งทำให้แบรนด์นี้แตกต่างจากแบรนด์อื่นๆ	1	2	3	4	5
2.11 The brand will not disappoint the customers in its contribution to the local economy แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องการช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
2.12 The brand is considered as the best benchmark of local economic development แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่ช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3. Reputation dimension					
3.1 The brand is one of the best brands that offer environmentally friendly products แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าที่เป็นมิตรต่อสิ่งแวดล้อม	1	2	3	4	5
3.2 The brand is very consolidated in the market, compared to competitors who offer green brand image แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่มีภาพลักษณ์เป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
3.3 The brand's vision related to the environment is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับสิ่งแวดล้อมของแบรนด์เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.4 The brand has good reputation on its environmental image แบรนด์มีชื่อเสียงที่ดีในด้านความเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
3.5 The brand is one of the best brands that offer socially responsible products แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าที่รับผิดชอบต่อสังคม	1	2	3	4	5
3.6 The brand is very consolidated in the market, compared to competitors who focus on social responsibility แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่ใส่ใจเรื่องความรับผิดชอบต่อสังคม	1	2	3	4	5
3.7 The brand's vision on social responsibility is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับการส่งเสริมสังคมของแบรนด์เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.8 The brand has good reputation on social responsibility แบรนด์มีชื่อเสียงที่ดีในด้านความรับผิดชอบต่อสังคม	1	2	3	4	5

Table B9 Pilot questionnaire on brand image AFTER IOC (cont.)

Dimensions	Strongly disagree				Strongly agree
3.9 The brand is one of the best brands that offer products made from local materials and suppliers แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าด้วยวัตถุดิบในประเทศและสนับสนุนผู้ผลิต/ผู้ขาย (supplier) ในท้องที่	1	2	3	4	5
3.10 The brand is very consolidated in the market, compared to competitors who help stimulate local economy แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่ช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3.11 The brand's vision on supporting the local economy is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับการส่งเสริมเศรษฐกิจในท้องที่ของแบรนด์เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.12 The brand has good reputation on its support to local businesses แบรนด์มีชื่อเสียงที่ดีในด้านการส่งเสริมธุรกิจท้องถิ่น	1	2	3	4	5
4. Summary question					
4.1 Overall, the brand is very good on sustainability โดยรวมแล้ว แบรนด์นี้มีภาพลักษณ์ที่ดีมากในเรื่องความยั่งยืน (sustainability)	1	2	3	4	5

Table B10 Pilot questionnaire on corporate image AFTER IOC

Dimensions	Strongly disagree				Strongly agree
1. Credibility dimension					
1.1 I believe this company tries to use only the necessary natural resources ฉันเชื่อว่าบริษัทนี้พยายามที่จะใช้พลังงานเท่าที่จำเป็น	1	2	3	4	5
1.2 I believe this company tries to sponsor pro-environmental programmes ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมสิ่งแวดล้อมต่างๆ	1	2	3	4	5
1.3 I believe this company used its best effort to manage and recycle its waste properly ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะบริหารจัดการขยะและของเสียอย่างเหมาะสม	1	2	3	4	5
1.4 This company tries to protect the environment บริษัทนี้พยายามที่จะปกป้องสิ่งแวดล้อม	1	2	3	4	5

Table B10 Pilot questionnaire on corporate image AFTER IOC (cont.)

Dimensions	Strongly disagree				Strongly agree
1. Credibility dimension					
1.5 I believe this company tries to sponsor social development programmes ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมสังคมต่างๆ	1	2	3	4	5
1.6 I believe this company used its best effort to operate with the care of local community ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะทำธุรกิจโดยคำนึงถึงชุมชนโดยรอบ	1	2	3	4	5
1.7 This company tries to protect local community บริษัทนี้พยายามที่จะปกป้องชุมชน	1	2	3	4	5
1.8 I believe this company tries to support local economy ฉันเชื่อว่าบริษัทนี้พยายามยามส่งเสริมและสนับสนุนเศรษฐกิจในท้องที่	1	2	3	4	5
1.9 I believe this company tries to sponsor the programmes that stimulate local economy ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมเศรษฐกิจในชุมชน	1	2	3	4	5
1.10 believe this company used its best effort to operate and select suppliers with the care of local economy ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะทำธุรกิจและเลือกคู่ค้าโดยคำนึงถึงเศรษฐกิจในท้องที่	1	2	3	4	5
1.11 This company tries to protect local economy บริษัทนี้พยายามปกป้องเศรษฐกิจท้องถิ่น	1	2	3	4	5
2. Trust and reliability dimension					
2.1 I trust that this company really cares about the environment ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยสิ่งแวดล้อมอย่างแท้จริง	1	2	3	4	5
2.2 I trust this company when they say they have done practices that concerns the environment such as selecting only the necessary natural resource, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือทำกิจกรรมที่เป็นประโยชน์ต่อสิ่งแวดล้อม เช่น การเลือกใช้พลังงานเท่าที่จำเป็น	1	2	3	4	5
2.3 I think it is possible for this company to sacrifice its profit to ensure clean environment ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อช่วยรักษาสิ่งแวดล้อม	1	2	3	4	5
2.4 This company has reliable plan on how to protect the environment บริษัทนี้มีแผนที่น่าเชื่อถือในการอนุรักษ์สิ่งแวดล้อม	1	2	3	4	5

Table B10 Pilot questionnaire on corporate image AFTER IOC (cont.)

Dimensions	Strongly disagree				Strongly agree
2.5 I trust that this company really cares about the society ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยสังคมอย่างแท้จริง	1	2	3	4	5
2.6 I trust this company when they say they have done practices that concerns the society such as hiring local people and promote human rights, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือ ทำกิจกรรมที่เป็นประโยชน์ต่อสังคม เช่น การจ้างงานชาวบ้านใน ชุมชน หรือปฏิบัติงานโดยให้ความสำคัญกับสิทธิมนุษยชน	1	2	3	4	5
2.7 I think it is possible for this company to sacrifice its profit to ensure the well-being of the community ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อ ช่วยส่งเสริมความเป็นอยู่ที่ดีของคนในชุมชน	1	2	3	4	5
2.8 This company has reliable plan on how to protect the local community บริษัทนี้มีแผนที่น่าเชื่อถือในการปกป้องชุมชน	1	2	3	4	5
2.9 I trust that this company really cares about the local economy ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยเศรษฐกิจท้องถิ่นอย่างแท้จริง	1	2	3	4	5
2.10 I trust this company when they say they have done practices that concerns the local economy such as using local suppliers, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือ ทำกิจกรรมที่เป็นประโยชน์ต่อเศรษฐกิจของชุมชน เช่น การเลือกใช้ ผู้ผลิตและผู้ขาย (supplier) ในท้องที่	1	2	3	4	5
2.11 I think it is possible for this company to sacrifice its profit to support local economy ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อ ช่วยสนับสนุนเศรษฐกิจของชุมชน	1	2	3	4	5
2.12 This company has reliable plan on how to support the local economy บริษัทนี้มีแผนที่น่าเชื่อถือในการส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3. Responsibility dimension					
3.1 This company carefully selects natural resource that causes the least harm to the environment บริษัทนี้ตั้งใจเลือกใช้ทรัพยากรธรรมชาติที่ก่อให้เกิดมลพิษต่อ สิ่งแวดล้อมน้อยที่สุด	1	2	3	4	5
3.2 This company concerns about the environment when managing its waste บริษัทนี้คำนึงถึงการรักษาสิ่งแวดล้อมในการกำจัดขยะและของเสีย	1	2	3	4	5
3.3 This company obeys the environmental laws and regulations บริษัทนี้ปฏิบัติตามกฎเกณฑ์และกฎหมายสิ่งแวดล้อม	1	2	3	4	5

Table B10 Pilot questionnaire on corporate image AFTER IOC (cont.)

Dimensions	Strongly disagree				Strongly agree
3.4 This company is environmentally responsible บริษัทนี้มีความรับผิดชอบต่อสิ่งแวดล้อม	1	2	3	4	5
3.5 This company invested its resources in developing local community บริษัทนี้มีการจัดสรรการลงทุนเพื่อช่วยพัฒนาชุมชน	1	2	3	4	5
3.6 This company concerns about local community when managing its waste บริษัทนี้คำนึงถึงชุมชนโดยรอบในการกำจัดขยะและของเสีย	1	2	3	4	5
3.7 This company promotes human and labor rights in the workplace บริษัทนี้ส่งเสริมสิทธิมนุษยชนในที่ทำงาน	1	2	3	4	5
3.8 This company is responsible to the society บริษัทนี้มีความรับผิดชอบต่อสังคม	1	2	3	4	5
3.9 This company uses local suppliers บริษัทนี้เลือกใช้ผู้ขาย/ผู้ผลิต (supplier) ท้องถิ่น	1	2	3	4	5
3.10 This company concerns about the local economy when it conducts the business such as selecting local suppliers บริษัทนี้ดำเนินธุรกิจโดยคำนึงถึงเศรษฐกิจในท้องที่ เช่น การสนับสนุนธุรกิจและผู้ผลิต/ผู้ขาย (supplier) ในท้องที่	1	2	3	4	5
3.11 This company obeys financial and tax laws and regulations บริษัทนี้ปฏิบัติตามกฎหมายการเงินและภาษี	1	2	3	4	5
3.12 This company is responsible to local economy บริษัทนี้มีความรับผิดชอบต่อเศรษฐกิจท้องถิ่น	1	2	3	4	5
4. Summary question					
4.1 Overall, this company has good reputation on sustainability โดยรวมแล้ว บริษัทนี้มีชื่อเสียงที่ดีในเรื่องความยั่งยืน (sustainability)	1	2	3	4	5

Table B11 Pilot questionnaire on emotional attachment AFTER IOC

Dimensions	Strongly disagree				Strongly agree
1. Affection					
1.1 I love this brand ฉันรักแบรนด์นี้	1	2	3	4	5
1.2 I feel affectionate towards the brand ฉันรู้สึกชื่นชอบแบรนด์นี้มาก	1	2	3	4	5
1.3 The brand looks friendly to me ฉันรู้สึกว่าแบรนด์นี้ดูเป็นมิตร	1	2	3	4	5
1.4 I feel comfortable using this brand ฉันรู้สึกสบายใจที่จะใช้แบรนด์นี้	1	2	3	4	5
2. Passion					
2.1 I really want to buy the products from this brand ฉันอยากจะซื้อผลิตภัณฑ์จากแบรนด์นี้มาก	1	2	3	4	5
2.2 I am passionate about this brand ฉันรู้สึกหลงใหลในแบรนด์นี้	1	2	3	4	5
2.3 I am delighted by this brand ฉันรู้สึกอิ่มใจกับแบรนด์นี้	1	2	3	4	5
2.4 This brand captivates me ฉันรู้สึกว่าแบรนด์นี้มีเสน่ห์	1	2	3	4	5
3. Connection					
3.1 I feel connected to the brand when I use it ฉันรู้สึกถึงความเกี่ยวพันของฉันกับตัวแบรนด์เมื่อฉันใช้ผลิตภัณฑ์ ของแบรนด์นี้	1	2	3	4	5
3.2 My identification with this brand increases though the use of the brand ความผูกพันกับแบรนด์นี้เพิ่มขึ้นเมื่อฉันได้ใช้งานมันมากขึ้นเรื่อย ๆ	1	2	3	4	5
3.3 The use of this brand affects my association to the brand การใช้งานผลิตภัณฑ์จากแบรนด์นี้ส่งผลต่อความสัมพันธ์ของฉัน กับแบรนด์	1	2	3	4	5
3.4 I feel bonded to this brand ฉันรู้สึกผูกพันกับแบรนด์นี้	1	2	3	4	5
4. Summary question					
4.1 Overall, I feel related to this brand โดยรวมแล้ว ฉันรู้สึกว่าฉันมีความเชื่อมโยงกับแบรนด์นี้	1	2	3	4	5

Table B12 Pilot questionnaire on brand loyalty AFTER IOC

Questions	Strongly disagree				Strongly agree
1 I consider myself to be loyal to the brand ฉันเป็นลูกค้าประจำของแบรนด์นี้	1	2	3	4	5
2 This brand will be my first choice แบรนด์นี้จะเป็นตัวเลือกแรกของฉัน	1	2	3	4	5
3 I will not buy other brands if this brand is available หากฉันสามารถเลือกซื้อแบรนด์นี้ได้ฉันจะไม่เลือกแบรนด์อื่น	1	2	3	4	5
4 I have a favorable attitude towards this brand แบรนด์นี้เป็นแบรนด์โปรดของฉัน	1	2	3	4	5
5 I plan to repurchase this brand ฉันจะซื้อแบรนด์นี้อีก	1	2	3	4	5

Table B13 Final questionnaire on brand image

Dimensions	Strongly disagree				Strongly agree
1. Functional dimension					
1.1 The brand offers products that possess green qualities such as water savings or made from eco-friendly materials แบรนด์นี้มีผลิตภัณฑ์ที่เป็นมิตรต่อสิ่งแวดล้อม เช่น ประหยัดน้ำ ประหยัดพลังงาน หรือ ผลิตจากวัสดุที่เป็นมิตรต่อสิ่งแวดล้อม	1	2	3	4	5
1.2 The brand offers products that have better green characteristic than competitors แบรนด์นี้มีผลิตภัณฑ์ที่มีคุณลักษณะที่เป็นมิตรต่อสิ่งแวดล้อมมากกว่าคู่แข่ง	1	2	3	4	5
1.3 The brand offers products that contribute to the society such as being made by local people or community ผลิตภัณฑ์จากแบรนด์นี้ช่วยส่งเสริมสังคม เช่น ผลิตโดยชาวบ้านหรือคนในท้องที่ เป็นต้น	1	2	3	4	5
1.4 The brand has operations that focus on human and labor rights แบรนด์นี้มีขั้นตอนการผลิตที่ให้ความสำคัญกับสิทธิมนุษยชนและแรงงาน	1	2	3	4	5
1.5 The brand emphasizes on partnership with other brands/organizations, which aim to develop the products that support the society แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาผลิตภัณฑ์ที่ช่วยเหลือสังคม	1	2	3	4	5
1.6 The brand offers products that have characteristics to of supporting local economy ผลิตภัณฑ์จากแบรนด์นี้ช่วยส่งเสริมเศรษฐกิจในท้องที่	1	2	3	4	5

Table B13 Final questionnaire on brand image (cont.)

Dimensions	Strongly disagree				Strongly agree
1.8 The brand offer products that have image on local agriculture or local business แบรนด์นี้มีผลิตภัณฑ์ที่มีภาพลักษณ์สนับสนุนการเกษตรกรรมหรือการพาณิชย์ท้องถิ่น	1	2	3	4	5
1.9 The brand emphasizes on partnership with local brands/organizations, which ultimately stimulating local economy แบรนด์นี้มุ่งเน้นความร่วมมือกับแบรนด์หรือองค์กรอื่นๆเพื่อพัฒนาเศรษฐกิจท้องถิ่น	1	2	3	4	5
2. Affective dimension					
2.1 This brand is nice because they offer environmentally friendly products ฉันรู้สึกดีกับแบรนด์นี้เพราะสินค้าเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.2 The brand has green personality that distinguishes it from competitors แบรนด์นี้มีความเป็นมิตรกับสิ่งแวดล้อมมากกว่าแบรนด์อื่นๆ	1	2	3	4	5
2.3 The brand will not disappoint the customers in its green attribute แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องความเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.4 The brand is considered as the best benchmark of green development แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่เป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
2.5 This brand is nice because they offer products that support local people and community ฉันรู้สึกดีกับแบรนด์นี้เพราะผลิตภัณฑ์ของเขาช่วยเหลือชาวบ้านและคนในชุมชน	1	2	3	4	5
2.6 The brand has social personality, such as promoting human rights, that distinguishes it from competitors แบรนด์นี้ให้ความสำคัญกับสิทธิมนุษยชน ซึ่งทำให้ตัวแบรนด์แตกต่างจากแบรนด์อื่นๆ	1	2	3	4	5
2.7 The brand will not disappoint the customers in its social concern แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องความห่วงใยต่อสังคม	1	2	3	4	5
2.8 The brand is considered as the best benchmark of human and labor rights แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่ส่งเสริมสิทธิมนุษยชนและแรงงาน	1	2	3	4	5
2.9 This brand is nice because they offer products that help stimulate local economy ฉันรู้สึกดีกับแบรนด์นี้เพราะผลิตภัณฑ์ของเขาช่วยกระตุ้นเศรษฐกิจในท้องที่	1	2	3	4	5

Table B13 Final questionnaire on brand image (cont.)

Dimensions	Strongly disagree				Strongly agree
2.10 The brand cares about local economy, and that distinguishes it from competitors แบรนด์นี้ใส่ใจกับเศรษฐกิจท้องถิ่น ซึ่งทำให้แบรนด์นี้แตกต่างจากแบรนด์อื่นๆ	1	2	3	4	5
2.11 The brand will not disappoint the customers in its contribution to the local economy แบรนด์นี้จะไม่ทำให้ลูกค้าผิดหวังในเรื่องการช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
2.12 The brand is considered as the best benchmark of local economic development แบรนด์นี้เป็นแบบอย่างของแบรนด์ที่ช่วยส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3. Reputation dimension					
3.1 The brand is one of the best brands that offer environmentally friendly products แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าที่เป็นมิตรต่อสิ่งแวดล้อม	1	2	3	4	5
3.2 The brand is very consolidated in the market, compared to competitors who offer green brand image แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่มีภาพลักษณ์เป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
3.3 The brand's vision related to the environment is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับสิ่งแวดล้อมของแบรนด์เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.4 The brand has good reputation on its environmental image แบรนด์มีชื่อเสียงที่ดีในด้านความเป็นมิตรกับสิ่งแวดล้อม	1	2	3	4	5
3.5 The brand is one of the best brands that offer socially responsible products แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าที่รับผิดชอบต่อสังคม	1	2	3	4	5
3.6 The brand is very consolidated in the market, compared to competitors who focus on social responsibility แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่ใส่ใจเรื่องความรับผิดชอบต่อสังคม	1	2	3	4	5
3.7 The brand's vision on social responsibility is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับการส่งเสริมสังคมของแบรนด์เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.8 The brand has good reputation on social responsibility แบรนด์มีชื่อเสียงที่ดีในด้านความรับผิดชอบต่อสังคม	1	2	3	4	5

Table B13 Final questionnaire on brand image (cont.)

Dimensions	Strongly disagree				Strongly agree
3.9 The brand is one of the best brands that offer products made from local materials and suppliers แบรนด์นี้เป็นหนึ่งในแบรนด์ที่ดีที่สุดที่ผลิตสินค้าด้วยวัตถุดิบใน ประเทศและสนับสนุนผู้ผลิต/ผู้ขาย (supplier) ในท้องที่	1	2	3	4	5
3.10 The brand is very consolidated in the market, compared to competitors who help stimulate local economy แบรนด์นี้เป็นที่ยอมรับในตลาดเมื่อเทียบกับแบรนด์อื่นๆที่ช่วย ส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3.11 The brand's vision on supporting the local economy is trustworthy วิสัยทัศน์ที่เกี่ยวข้องกับการส่งเสริมเศรษฐกิจในท้องที่ของแบรนด์ เป็นที่น่าเชื่อถือ	1	2	3	4	5
3.12 The brand has good reputation on its support to local businesses แบรนด์มีชื่อเสียงที่ดีในด้านการส่งเสริมธุรกิจท้องถิ่น	1	2	3	4	5
4. Summary question					
4.1 Overall, the brand is very good on sustainability โดยรวมแล้ว แบรนด์นี้มีภาพลักษณ์ที่ดีมากในเรื่องความยั่งยืน (sustainability)	1	2	3	4	5

Table B14 Final questionnaire on corporate image

Dimensions	Strongly disagree				Strongly agree
1. Credibility dimension					
1.1 I believe this company tries to use only the necessary natural resources ฉันเชื่อว่าบริษัทนี้พยายามที่จะใช้พลังงานเท่าที่จำเป็น	1	2	3	4	5
1.2 I believe this company tries to sponsor pro-environmental programmes ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริม สิ่งแวดล้อมต่างๆ	1	2	3	4	5
1.3 I believe this company used its best effort to manage and recycle its waste properly ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะบริหารจัดการขยะและของ เสียอย่างเหมาะสม	1	2	3	4	5
1.4 This company tries to protect the environment บริษัทนี้พยายามที่จะปกป้องสิ่งแวดล้อม	1	2	3	4	5
1.5 I believe this company tries to sponsor social development programmes ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริม สังคมต่างๆ	1	2	3	4	5

Table B14 Final questionnaire on corporate image (cont.)

Dimensions	Strongly disagree				Strongly agree
1.6 I believe this company used its best effort to operate with the care of local community ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะทำธุรกิจโดยคำนึงถึงชุมชมโดยรอบ	1	2	3	4	5
1.7 This company tries to protect local community บริษัทนี้พยายามที่จะปกป้องชุมชน	1	2	3	4	5
1.8 I believe this company tries to support local economy ฉันเชื่อว่าบริษัทนี้พยายามยามส่งเสริมและสนับสนุนเศรษฐกิจในท้องที่	1	2	3	4	5
1.9 I believe this company tries to sponsor the programmes that stimulate local economy ฉันเชื่อว่าบริษัทนี้มีความพยายามที่จะสนับสนุนกิจกรรมส่งเสริมเศรษฐกิจในชุมชน	1	2	3	4	5
1.10 believe this company used its best effort to operate and select suppliers with the care of local economy ฉันเชื่อว่าบริษัทนี้พยายามอย่างที่สุดที่จะทำธุรกิจและเลือกคู่ค้าโดยคำนึงถึงเศรษฐกิจในท้องที่	1	2	3	4	5
1.11 This company tries to protect local economy บริษัทนี้พยายามปกป้องเศรษฐกิจท้องถิ่น	1	2	3	4	5
2. Trust and reliability dimension					
2.1 I trust that this company really cares about the environment ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยสิ่งแวดล้อมอย่างแท้จริง	1	2	3	4	5
2.2 I trust this company when they say they have done practices that concerns the environment such as selecting only the necessary natural resource, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือทำกิจกรรมที่เป็นประโยชน์ต่อสิ่งแวดล้อม เช่น การเลือกใช้พลังงานเท่าที่จำเป็น	1	2	3	4	5
2.3 I think it is possible for this company to sacrifice its profit to ensure clean environment ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อช่วยรักษาสิ่งแวดล้อม	1	2	3	4	5
2.4 This company has reliable plan on how to protect the environment บริษัทนี้มีแผนที่น่าเชื่อถือในการอนุรักษ์สิ่งแวดล้อม	1	2	3	4	5
2.5 I trust that this company really cares about the society ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยสังคมอย่างแท้จริง	1	2	3	4	5

Table B14 Final questionnaire on corporate image (cont.)

Dimensions	Strongly disagree				Strongly agree
2.6 I trust this company when they say they have done practices that concerns the society such as hiring local people and promote human rights, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือ ทำกิจกรรมที่เป็นประโยชน์ต่อสังคม เช่น การจ้างงานชาวบ้านใน ชุมชน หรือปฏิบัติงานโดยให้ความสำคัญกับสิทธิมนุษยชน	1	2	3	4	5
2.7 I think it is possible for this company to sacrifice its profit to ensure the well-being of the community ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อ ช่วยส่งเสริมความเป็นอยู่ที่ดีของคนในชุมชน	1	2	3	4	5
2.8 This company has reliable plan on how to protect the local community บริษัทนี้มีแผนที่น่าเชื่อถือในการปกป้องชุมชน	1	2	3	4	5
2.9 I trust that this company really cares about the local economy ฉันเชื่อมั่นว่าบริษัทนี้ห่วงใยเศรษฐกิจท้องถิ่นอย่างแท้จริง	1	2	3	4	5
2.10 I trust this company when they say they have done practices that concerns the local economy such as using local suppliers, etc. ฉันรู้สึกเชื่อมั่นในสิ่งที่บริษัทพูด เมื่อบริษัทบอกว่าได้ปฏิบัติงานหรือ ทำกิจกรรมที่เป็นประโยชน์ต่อเศรษฐกิจของชุมชน เช่น การเลือกใช้ ผู้ผลิตและผู้ขาย (supplier) ในท้องที่	1	2	3	4	5
2.11 I think it is possible for this company to sacrifice its profit to support local economy ฉันคิดว่ามันเป็นไปได้ที่บริษัทนี้จะยอมเสียสละกำไรบางส่วนเพื่อ ช่วยสนับสนุนเศรษฐกิจของชุมชน	1	2	3	4	5
2.12 This company has reliable plan on how to support the local economy บริษัทนี้มีแผนที่น่าเชื่อถือในการส่งเสริมเศรษฐกิจท้องถิ่น	1	2	3	4	5
3. Responsibility dimension					
3.1 This company carefully selects natural resource that causes the least harm to the environment บริษัทนี้ตั้งใจเลือกใช้ทรัพยากรธรรมชาติที่ก่อให้เกิดมลพิษต่อ สิ่งแวดล้อมน้อยที่สุด	1	2	3	4	5
3.2 This company concerns about the environment when managing its waste บริษัทนี้คำนึงถึงการรักษาสิ่งแวดล้อมในการกำจัดขยะและของเสีย	1	2	3	4	5
3.3 This company obeys the environmental laws and regulations บริษัทนี้ปฏิบัติตามกฎเกณฑ์และกฎหมายสิ่งแวดล้อม	1	2	3	4	5
3.4 This company is environmentally responsible บริษัทนี้มีความรับผิดชอบต่อสิ่งแวดล้อม	1	2	3	4	5

Table B14 Final questionnaire on corporate image (cont.)

Dimensions	Strongly disagree				Strongly agree
3.5 This company concerns about local community when managing its waste บริษัทนี้คำนึงถึงชุมชนโดยรอบในการกำจัดขยะและของเสีย	1	2	3	4	5
3.6 This company promotes human and labor rights in the workplace บริษัทนี้ส่งเสริมสิทธิมนุษยชนในที่ทำงาน	1	2	3	4	5
3.7 This company is responsible to the society บริษัทนี้มีความรับผิดชอบต่อสังคม	1	2	3	4	5
3.8 This company concerns about the local economy when it conducts the business such as selecting local material บริษัทนี้ดำเนินธุรกิจโดยคำนึงถึงเศรษฐกิจในท้องที่ เช่น การเลือกใช้วัตถุดิบท้องถิ่น	1	2	3	4	5
3.9 This company is responsible to local economy บริษัทนี้มีความรับผิดชอบต่อเศรษฐกิจท้องถิ่น	1	2	3	4	5
4. Summary question					
4.1 Overall, this company has good reputation on sustainability โดยรวมแล้ว บริษัทนี้มีชื่อเสียงที่ดีในเรื่องความยั่งยืน (sustainability)	1	2	3	4	5

Table B15 Final questionnaire on emotional attachment

Dimensions	Strongly disagree				Strongly agree
1. Affection					
1.1 I love this brand ฉันรักแบรนด์นี้	1	2	3	4	5
1.2 I feel affectionate towards the brand ฉันรู้สึกชื่นชอบแบรนด์นี้มาก	1	2	3	4	5
1.3 The brand looks friendly to me ฉันรู้สึกว่าแบรนด์นี้ดูเป็นมิตร	1	2	3	4	5
1.4 I feel comfortable using this brand ฉันรู้สึกสบายใจที่จะใช้แบรนด์นี้	1	2	3	4	5
2. Passion					
2.1 I really want to buy the products from this brand ฉันอยากจะซื้อผลิตภัณฑ์จากแบรนด์นี้มาก	1	2	3	4	5
2.2 I am passionate about this brand ฉันรู้สึกหลงใหลในแบรนด์นี้	1	2	3	4	5
2.3 I am delighted by this brand ฉันรู้สึกอิ่มใจกับแบรนด์นี้	1	2	3	4	5
2.4 This brand captivates me ฉันรู้สึกว่าแบรนด์นี้มีเสน่ห์	1	2	3	4	5

Table B15 Final questionnaire on emotional attachment (cont.)

Dimensions	Strongly disagree				Strongly agree
3. Connection					
3.1 I feel connected to the brand when I use it ฉันรู้สึกถึงความเกี่ยวพันของฉันกับตัวแบรนด์เมื่อฉันใช้ผลิตภัณฑ์ของแบรนด์นี้	1	2	3	4	5
3.2 My identification with this brand increases though the use of the brand ความผูกพันกับแบรนด์นี้เพิ่มขึ้นเมื่อฉันได้ใช้งานมันมากขึ้นเรื่อย ๆ	1	2	3	4	5
3.3 The use of this brand affects my association to the brand การใช้งานผลิตภัณฑ์จากแบรนด์นี้ส่งผลต่อความสัมพันธ์ของฉันกับแบรนด์	1	2	3	4	5
3.4 I feel bonded to this brand ฉันรู้สึกผูกพันกับแบรนด์นี้	1	2	3	4	5
4. Summary question					
4.1 Overall, I feel related to this brand โดยรวมแล้ว ฉันรู้สึกว่าฉันมีความเชื่อมโยงกับแบรนด์นี้	1	2	3	4	5

Table B16 Questionnaire on brand loyalty

Questions	Strongly disagree				Strongly agree
1 I consider myself to be loyal to the brand ฉันเป็นลูกค้าประจำของแบรนด์นี้	1	2	3	4	5
2 This brand will be my first choice แบรนด์นี้จะเป็นตัวเลือกแรกของฉัน	1	2	3	4	5
3 I will not buy other brands if this brand is available หากฉันสามารถเลือกซื้อแบรนด์นี้ได้ฉันจะไม่เลือกแบรนด์อื่น	1	2	3	4	5
4 I have a favorable attitude towards this brand แบรนด์นี้เป็นแบรนด์โปรดของฉัน	1	2	3	4	5
5 I plan to repurchase this brand ฉันจะซื้อแบรนด์นี้อีก	1	2	3	4	5

Appendix B-2: Results of the pilot study

Table B17 Summary statistics for brand image (n=27)

	Mean	Std. Deviation	Skewness Statistics	Kurtosis Statistics	Shapiro-Wilk Significance
BI1.1	3.890	0.847	-0.187	-0.710	0.002
BI1.2	3.560	0.892	-0.004	-0.594	0.006
BI1.3	3.110	0.934	0.072	0.235	0.014
BI1.4	3.070	0.874	0.223	-0.862	0.002
BI1.5	3.330	1.074	0.067	-0.395	0.010
BI1.6	3.630	0.839	-0.021	-0.445	0.004
BI1.7	3.330	0.877	0.000	-0.650	0.004
BI1.8	3.590	1.185	-0.313	-0.839	0.008
BI1.9	3.410	1.185	-0.136	-1.002	0.016
BI1.10	3.150	1.231	0.098	-0.929	0.023
BI1.11	3.000	1.144	0.000	-0.376	0.032
BI2.1	3.370	1.006	-0.841	0.711	0.002
BI2.2	3.150	1.064	-0.316	-0.367	0.027
BI2.3	3.440	0.847	0.187	-0.376	0.003
BI2.4	3.480	0.893	-0.115	-0.600	0.005
BI2.5	3.110	1.155	0.092	-0.575	0.033
BI2.6	3.110	1.013	-0.477	-0.325	0.009
BI2.7	3.440	0.847	0.187	-0.376	0.003
BI2.8	3.070	0.829	0.294	-0.479	0.002
BI2.9	3.190	1.111	-0.212	-0.465	0.042
BI2.10	3.110	0.892	0.122	0.804	0.003
BI2.11	3.300	1.103	-0.087	-0.745	0.031
BI2.12	3.300	0.993	0.361	-0.777	0.003
BI3.1	3.330	0.832	0.144	-0.347	0.003
BI3.2	3.560	0.934	-0.786	1.000	0.003
BI3.3	3.630	0.967	-0.535	0.741	0.004
BI3.4	3.480	1.014	-0.902	1.108	0.001
BI3.5	3.370	1.115	-0.638	-0.227	0.005
BI3.6	3.260	1.059	-0.565	-0.154	0.009
BI3.7	3.260	1.130	-0.210	-0.374	0.033
BI3.8	3.480	1.051	-0.484	-0.222	0.014
BI3.9	3.410	1.118	-0.551	-0.092	0.014
BI3.10	3.370	1.079	-0.430	0.184	0.010
BI3.11	3.330	1.074	0.067	-0.395	0.010
BI3.12	3.260	1.130	-0.210	-0.374	0.033
BI4.1	3.590	1.083	-0.649	-0.162	0.005

Table B18 Summary statistics for corporate image (n=27)

	Mean	Std. Deviation	Skewness Statistics	Kurtosis Statistics	Shapiro-Wilk Significance
CI1.1	3.700	0.869	-1.257	2.735	<.001
CI1.2	3.520	0.975	-0.190	-0.867	0.004
CI1.3	3.590	1.010	-0.757	0.406	0.003
CI1.4	3.440	0.934	-0.132	-0.785	0.004
CI1.5	3.670	1.000	-0.498	0.465	0.004
CI1.6	3.590	0.971	-0.145	-0.840	0.006
CI1.7	3.370	1.182	-0.345	-0.547	0.027
CI1.8	3.370	1.079	-0.232	-0.561	0.029
CI1.9	3.480	0.975	-0.078	-0.891	0.006
CI1.10	3.330	0.920	-0.427	0.456	0.009
CI1.11	3.190	0.834	0.056	-0.706	0.002
CI2.1	3.630	0.792	-0.713	0.254	<.001
CI2.2	3.780	0.847	-0.359	-0.209	0.003
CI2.3	3.670	0.832	-0.144	-0.347	0.003
CI2.4	3.560	1.050	-0.696	-0.013	0.003
CI2.5	3.410	1.118	-0.195	-0.698	0.027
CI2.6	3.560	1.013	-0.403	0.187	0.011
CI2.7	3.670	0.961	-0.094	-0.877	0.005
CI2.8	3.190	0.879	-0.387	0.321	0.007
CI2.9	3.300	0.953	-0.369	0.051	0.015
CI2.10	3.630	0.742	0.128	-0.240	<.001
CI2.11	3.520	0.849	-0.469	-0.380	<.001
CI2.12	3.300	0.823	-0.177	-0.711	0.001
CI3.1	3.520	0.849	-0.062	-0.422	0.004
CI3.2	3.560	0.892	-0.004	-0.594	0.006
CI3.3	3.780	0.751	0.399	-1.064	<.001
CI3.4	3.810	0.681	0.247	-0.711	<.001
CI3.5	3.260	0.859	0.236	-0.407	0.004
CI3.6	3.520	0.849	-0.469	-0.380	<.001
CI3.7	3.560	0.698	0.154	-0.078	<.001
CI3.8	3.810	0.834	-0.056	-0.706	0.002
CI3.9	3.440	0.698	0.579	0.194	<.001
CI3.10	3.520	0.802	0.176	-0.283	0.002
CI3.11	3.890	0.847	-0.187	-0.710	0.002
CI3.12	3.520	0.849	0.345	-0.463	0.001
CI4.1	3.810	1.039	-0.490	-0.828	0.001

Table B19 Factor solution for brand image

Rotated Component Matrix[a]

	Component					Communalities		
	1	2	3	4	5		Initial	Extraction
BI1.1				0.729		BI1.1	1	0.669
BI1.2				0.573		BI1.2	1	0.483
BI1.5			0.493	0.538		BI1.5	1	0.631
BI1.6			0.543	0.449		BI1.6	1	0.543
BI1.7			0.762			BI1.7	1	0.683
BI1.8			0.496			BI1.8	1	0.472
BI1.9			0.6			BI1.9	1	0.521
BI1.10					0.661	BI1.10	1	0.634
BI1.11					0.496	BI1.11	1	0.532
BI2.1					0.678	BI2.1	1	0.648
BI2.2		0.661				BI2.2	1	0.631
BI2.3		0.495				BI2.3	1	0.456
BI2.4		0.657				BI2.4	1	0.551
BI2.5		0.52				BI2.5	1	0.529
BI2.6			0.436			BI2.6	1	0.478
BI2.7						BI2.7	1	0.389
BI2.8	0.515					BI2.8	1	0.505
BI2.9	0.463					BI2.9	1	0.491
BI2.10	0.609					BI2.10	1	0.587
BI2.11	0.55					BI2.11	1	0.52
BI2.12	0.644					BI2.12	1	0.588
BI3.1	0.488					BI3.1	1	0.484
BI3.2	0.557					BI3.2	1	0.514
BI3.3	0.5	0.401				BI3.3	1	0.476
BI3.4	0.556					BI3.4	1	0.498
BI3.5	0.579					BI3.5	1	0.45
BI3.6	0.549					BI3.6	1	0.48
BI3.7	0.512					BI3.7	1	0.502
BI3.8	0.619					BI3.8	1	0.552
BI3.9	0.599					BI3.9	1	0.529
BI3.10	0.561					BI3.10	1	0.482
BI3.11	0.61					BI3.11	1	0.497
BI3.12	0.607					BI3.12	1	0.508

Extraction Method: Principal Component Analysis.　　　　Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Table B19 Factor solution for brand image (cont.)

forcing 6 facs

Rotated Component Matrix^a

	Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Communalities	Initial	Extraction
BI1.1						0.717	BI1.1	1	0.672
BI1.2						0.575	BI1.2	1	0.533
BI1.5				0.438		0.521	BI1.5	1	0.653
BI1.6				0.542		0.451	BI1.6	1	0.555
BI1.7				0.749			BI1.7	1	0.689
BI1.8				0.519			BI1.8	1	0.493
BI1.9				0.628			BI1.9	1	0.56
BI1.10						0.657	BI1.10	1	0.639
BI1.11						0.474	BI1.11	1	0.557
BI2.1						0.669	BI2.1	1	0.651
BI2.2					0.648		BI2.2	1	0.631
BI2.3					0.459		BI2.3	1	0.462
BI2.4					0.623		BI2.4	1	0.551
BI2.5					0.548		BI2.5	1	0.549
BI2.6							BI2.6	1	0.501
BI2.7			0.477				BI2.7	1	0.475
BI2.8	0.454						BI2.8	1	0.528
BI2.9							BI2.9	1	0.492
BI2.10			0.534				BI2.10	1	0.606
BI2.11			0.555				BI2.11	1	0.59
BI2.12			0.551				BI2.12	1	0.6
BI3.1		0.401					BI3.1	1	0.486
BI3.2		0.471					BI3.2	1	0.515
BI3.3		0.44					BI3.3	1	0.476
BI3.4		0.65					BI3.4	1	0.584
BI3.5		0.582					BI3.5	1	0.486
BI3.6		0.588					BI3.6	1	0.516
BI3.7		0.634					BI3.7	1	0.586
BI3.8		0.603					BI3.8	1	0.561
BI3.9		0.486					BI3.9	1	0.53
BI3.10			0.654				BI3.10	1	0.618
BI3.11		0.484					BI3.11	1	0.497
BI3.12			0.581				BI3.12	1	0.563

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

Extraction Method: Principal Componen

Table B19 Factor solution for brand image (cont.)

forcing 7 facs

Rotated Component Matrix[a]

	Component 1	2	3	4	5	6	7	Communalities	Initial	Extraction
BI1.1				0.704				BI1.1	1	0.692
BI1.2				0.581				BI1.2	1	0.543
BI1.5							0.584	BI1.5	1	0.669
BI1.6							0.748	BI1.6	1	0.713
BI1.7						0.646		BI1.7	1	0.691
BI1.8						0.428		BI1.8	1	0.501
BI1.9						0.721		BI1.9	1	0.643
BI1.10					0.658			BI1.10	1	0.644
BI1.11					0.46			BI1.11	1	0.56
BI2.1					0.691			BI2.1	1	0.653
BI2.2			0.631					BI2.2	1	0.636
BI2.3			0.483					BI2.3	1	0.491
BI2.4			0.643					BI2.4	1	0.554
BI2.5			0.508					BI2.5	1	0.573
BI2.6								BI2.6	1	0.508
BI2.7		0.478						BI2.7	1	0.517
BI2.8	0.446							BI2.8	1	0.528
BI2.9						0.434		BI2.9	1	0.553
BI2.10		0.51		0.436				BI2.10	1	0.643
BI2.11		0.535						BI2.11	1	0.591
BI2.12		0.523						BI2.12	1	0.601
BI3.1				0.443				BI3.1	1	0.633
BI3.2	0.465							BI3.2	1	0.516
BI3.3								BI3.3	1	0.488
BI3.4	0.611							BI3.4	1	0.585
BI3.5	0.631							BI3.5	1	0.543
BI3.6	0.566							BI3.6	1	0.516
BI3.7	0.609							BI3.7	1	0.586
BI3.8	0.611							BI3.8	1	0.571
BI3.9	0.551							BI3.9	1	0.594
BI3.10		0.641						BI3.10	1	0.661
BI3.11	0.529							BI3.11	1	0.519
BI3.12		0.564						BI3.12	1	0.563

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.

Extraction Method: Principal Compone

Table B20 Factor solution for Corporate Image

based on eigen value

Rotated Component Matrix[a]

	Component 1	2	3	4		Communalities Initial	Extraction
CI1.1				0.744	CI1.1	1	0.641
CI1.2				0.548	CI1.2	1	0.503
CI1.3				0.634	CI1.3	1	0.56
CI1.4	0.451			0.429	CI1.4	1	0.518
CI1.5		0.484			CI1.5	1	0.43
CI1.6	0.472				CI1.6	1	0.425
CI1.7		0.606			CI1.7	1	0.559
CI1.8		0.662			CI1.8	1	0.538
CI1.9		0.635			CI1.9	1	0.559
CI1.10		0.608			CI1.10	1	0.52
CI1.11		0.59			CI1.11	1	0.542
CI2.1			0.58		CI2.1	1	0.559
CI2.2			0.589		CI2.2	1	0.542
CI2.3			0.779		CI2.3	1	0.697
CI2.4	0.406		0.423		CI2.4	1	0.476
CI2.5					CI2.5	1	0.448
CI2.6					CI2.6	1	0.375
CI2.7	0.508				CI2.7	1	0.499
CI2.8	0.598				CI2.8	1	0.444
CI2.9	0.631				CI2.9	1	0.544
CI2.10	0.599				CI2.10	1	0.513
CI2.11	0.528				CI2.11	1	0.476
CI2.12	0.601		0.435		CI2.12	1	0.595
CI3.1	0.404	0.429			CI3.1	1	0.439
CI3.2	0.47				CI3.2	1	0.423
CI3.3	0.446				CI3.3	1	0.437
CI3.4	0.628				CI3.4	1	0.532
CI3.6	0.527			0.496	CI3.6	1	0.543
CI3.7	0.582				CI3.7	1	0.502
CI3.8			0.458	0.436	CI3.8	1	0.452
CI3.10	0.512				CI3.10	1	0.474
CI3.12			0.535		CI3.12	1	0.421

Table B20 Factor solution for Corporate Image (cont.)

Delete 2.6

Rotated Component Matrix[a]

	Component				Communalities		
	1	2	3	4		Initial	Extraction
CI1.1				0.746	CI1.1	1	0.646
CI1.2				0.546	CI1.2	1	0.503
CI1.3				0.641	CI1.3	1	0.569
CI1.4	0.456			0.426	CI1.4	1	0.521
CI1.5		0.486			CI1.5	1	0.435
CI1.6	0.472				CI1.6	1	0.425
CI1.7		0.603			CI1.7	1	0.555
CI1.8		0.654			CI1.8	1	0.529
CI1.9		0.636			CI1.9	1	0.56
CI1.10		0.609			CI1.10	1	0.519
CI1.11		0.596			CI1.11	1	0.551
CI2.1			0.583		CI2.1	1	0.562
CI2.2			0.596		CI2.2	1	0.56
CI2.3			0.778		CI2.3	1	0.696
CI2.4	0.413		0.417		CI2.4	1	0.471
CI2.5					CI2.5	1	0.433
CI2.7	0.518				CI2.7	1	0.5
CI2.8	0.608				CI2.8	1	0.448
CI2.9	0.632				CI2.9	1	0.544
CI2.10	0.591				CI2.10	1	0.51
CI2.11	0.531				CI2.11	1	0.477
CI2.12	0.591	0.445			CI2.12	1	0.593
CI3.1		0.436			CI3.1	1	0.444
CI3.2	0.458				CI3.2	1	0.421
CI3.3	0.443				CI3.3	1	0.437
CI3.4	0.622				CI3.4	1	0.529
CI3.6	0.543			0.484	CI3.6	1	0.546
CI3.7	0.58				CI3.7	1	0.504
CI3.8			0.453	0.435	CI3.8	1	0.448
CI3.10	0.511				CI3.10	1	0.476
CI3.12		0.538			CI3.12	1	0.424

Table B20 Factor solution for Corporate Image (cont.)

Forcing 5 facs

Rotated Component Matrix[a]

	Component 1	2	3	4	5	Communalities	Initial	Extraction
CI1.1			0.753			CI1.1	1	0.668
CI1.2			0.557			CI1.2	1	0.532
CI1.3			0.64			CI1.3	1	0.586
CI1.4	0.445		0.407			CI1.4	1	0.521
CI1.5		0.498				CI1.5	1	0.451
CI1.6	0.462					CI1.6	1	0.428
CI1.7		0.589				CI1.7	1	0.591
CI1.8		0.646				CI1.8	1	0.56
CI1.9		0.469			0.46	CI1.9	1	0.566
CI1.10					0.55	CI1.10	1	0.574
CI1.11					0.61	CI1.11	1	0.61
CI2.1				0.531		CI2.1	1	0.565
CI2.2				0.464	0.588	CI2.2	1	0.662
CI2.3				0.765		CI2.3	1	0.7
CI2.4	0.403					CI2.4	1	0.473
CI2.5		0.508		0.429		CI2.5	1	0.554
CI2.7	0.49	0.468				CI2.7	1	0.549
CI2.8	0.618					CI2.8	1	0.469
CI2.9	0.633					CI2.9	1	0.545
CI2.10	0.609					CI2.10	1	0.541
CI2.11	0.519					CI2.11	1	0.479
CI2.12	0.61					CI2.12	1	0.626
CI3.1						CI3.1	1	0.445
CI3.2	0.472					CI3.2	1	0.452
CI3.3	0.46					CI3.3	1	0.48
CI3.4	0.613					CI3.4	1	0.53
CI3.6	0.514		0.446			CI3.6	1	0.577
CI3.7	0.56					CI3.7	1	0.513
CI3.8				0.51		CI3.8	1	0.536
CI3.10	0.491					CI3.10	1	0.496
CI3.12		0.628				CI3.12	1	0.509

Extraction Method: Principal Component Analysis   Extraction Method: Principal Compon

Table B20 Factor solution for Corporate Image (cont.)

Forcing 6 facs

Rotated Component Matrix[a]

	Component							Communalities	
	1	2	3	4	5	6		Initial	Extraction
CI1.1					0.741		CI1.1	1	0.672
CI1.2					0.538		CI1.2	1	0.547
CI1.3					0.652		CI1.3	1	0.6
CI1.4							CI1.4	1	0.528
CI1.5	0.524	0.462					CI1.5	1	0.693
CI1.6	0.468						CI1.6	1	0.452
CI1.7		0.572					CI1.7	1	0.595
CI1.8		0.628					CI1.8	1	0.563
CI1.9		0.442		0.495			CI1.9	1	0.589
CI1.10				0.573			CI1.10	1	0.574
CI1.11				0.623			CI1.11	1	0.615
CI2.1						0.533	CI2.1	1	0.566
CI2.2				0.571		0.48	CI2.2	1	0.663
CI2.3						0.758	CI2.3	1	0.701
CI2.4						0.406	CI2.4	1	0.483
CI2.5		0.501				0.403	CI2.5	1	0.556
CI2.7		0.454	0.497				CI2.7	1	0.583
CI2.8			0.558				CI2.8	1	0.494
CI2.9			0.665				CI2.9	1	0.633
CI2.10	0.501						CI2.10	1	0.55
CI2.11			0.527				CI2.11	1	0.544
CI2.12	0.496						CI2.12	1	0.637
CI3.1							CI3.1	1	0.454
CI3.2	0.584						CI3.2	1	0.553
CI3.3							CI3.3	1	0.481
CI3.4	0.676						CI3.4	1	0.622
CI3.6	0.402				0.425		CI3.6	1	0.582
CI3.7	0.537						CI3.7	1	0.542
CI3.8						0.53	CI3.8	1	0.571
CI3.10	0.492						CI3.10	1	0.518
CI3.12		0.612					CI3.12	1	0.51

Table B21 Summary Statistics for Brand Image, Corporate Image, Emotional Attachment, and Brand Loyalty

BI			
Descriptive Statistics			
Item	N	Mean	Std. Deviation
BI1.1	308	4.15	0.729
BI1.2	308	4.04	0.741
(α=0.642)		4.093	
BI1.5	308	4.01	0.729
BI1.6	308	3.94	0.763
BI1.7	308	3.96	0.758
(α=0.725)		3.972	
BI1.8	308	3.98	0.728
BI1.9	308	3.95	0.692
BI1.10	308	3.94	0.732
BI1.11	308	3.91	0.759
(α=0.716)		3.945	
BI2.1	308	4.01	0.715
BI2.2	308	4.04	0.743
BI2.3	308	3.95	0.745
BI2.4	308	4.01	0.715
(α=0.740)		4.002	
BI2.5	308	3.94	0.774
BI2.6	308	3.97	0.754
BI2.7	308	3.98	0.703
BI2.8	308	3.93	0.765
(α=0.713)		3.957	
BI2.9	308	3.93	0.82
BI2.10	308	3.87	0.774
BI2.11	308	3.94	0.778
BI2.12	308	3.86	0.765
(α=0.771)		3.899	
BI3.1	308	3.94	0.724
BI3.2	308	3.97	0.773
BI3.3	308	3.98	0.719
BI3.4	308	3.98	0.703
(α=0.770)		3.968	
BI3.5	308	3.97	0.721
BI3.6	308	4.01	0.735
BI3.7	308	4.01	0.689
BI3.8	308	4	0.715
(α=0.771)		3.999	
BI3.9	308	3.96	0.728
BI3.10	308	3.96	0.721
BI3.11	308	3.99	0.717
BI3.12	308	3.94	0.727
(α=0.772)		3.966	
Valid N (listw	308		

CI			
Descriptive Statistics			
	N	Mean	Std. Deviation
CI1.1	308	4.18	0.779
CI1.2	308	4.04	0.727
CI1.3	308	4.06	0.719
CI1.4	308	4.07	0.716
(α=0.752)		4.089	
CI1.5	308	4.01	0.735
CI1.6	308	3.99	0.699
CI1.7	308	3.97	0.748
(α=0.665)		3.991	
CI1.8	308	3.97	0.677
CI1.9	308	3.95	0.76
CI1.10	308	4.03	0.757
CI1.11	308	4.02	0.793
(α=0.778)		3.992	
CI2.1	308	4	0.768
CI2.2	308	4.04	0.669
CI2.3	308	4.01	0.72
CI2.4	308	3.97	0.726
(α=0.763)		4.006	
CI2.5	308	3.94	0.699
CI2.6	308	4	0.708
CI2.7	308	4	0.742
CI2.8	308	4	0.715
(α=0.724)		3.988	
CI2.9	308	3.96	0.732
CI2.10	308	4	0.711
CI2.11	308	4	0.742
CI2.12	308	3.96	0.745
(α=0.784)		3.984	
CI3.1	308	3.98	0.706
CI3.2	308	4.06	0.706
CI3.3	308	4.05	0.716
CI3.4	308	4.01	0.735
(α=0.745)		4.022	
CI3.6	308	4.02	0.724
CI3.7	308	4.01	0.67
CI3.8	308	4.09	0.661
(α=0.662)		4.043	
CI3.10	308	4	0.701
CI3.12	308	4.04	0.684
(α=0.572)		4.018	
Valid N (listw	308		

Table B21 Summary Statistics for Brand Image, Corporate Image, Emotional Attachment, and Brand Loyalty (cont.)

EA			
Descriptive Statistics			
	N	Mean	Std. Deviation
EA1.1	308	4.14	0.698
EA1.2	308	4.03	0.728
EA1.3	308	4.02	0.663
EA1.4	308	4.1	0.67
	(α=0.701)	4.072	
EA2.1	308	4.01	0.713
EA2.2	308	4	0.746
EA2.3	308	4.02	0.706
EA2.4	308	4.08	0.694
	(α=0.726)	4.026	
EA3.1	308	4.06	0.726
EA3.2	308	4.02	0.701
EA3.3	308	4.08	0.63
EA3.4	308	4.06	0.641
	(α=0.691)	4.056	
Valid N (listw	308		

BL			
Descriptive Statistics			
	N	Mean	Std. Deviation
BL1	308	4.15	0.688
BL2	308	4.08	0.721
BL3	308	3.53	1.009
BL4	308	4.1	0.686
BL5	308	4.2	0.674
	(α=0.664)	4.014	
Valid N (listw	308		

Appendix B-3: Result from EFA

Final items for BI green

Delete BI2.4

Rotated Component Matrixa   λ3=.788   66.69%

	Component				Communalities				cronbach alpha
	1	2	3		Initial	Extraction			
BI1.1			0.788	BI1.1	1	0.721		BI1.1	0.642
BI1.2			0.816	BI1.2	1	0.745		BI1.2	
BI2.1		0.821		BI2.1	1	0.706		BI2.1	0.69
BI2.2		0.676		BI2.2	1	0.611		BI2.2	
BI2.3		0.685		BI2.3	1	0.578		BI2.3	
BI3.1	0.678			BI3.1	1	0.59		BI3.1	0.742
BI3.2	0.793			BI3.2	1	0.707		BI3.2	
BI3.4	0.781			BI3.4	1	0.678		BI3.4	

Extraction Method: Principal Component Analysis.   Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 5 iterations.

delete 2.8   Final items for BI social

Rotated Component Matrixa   λ3=.803   62.57%

	Component				Communalities				cronbach alpha
	1	2	3		Initial	Extraction			
BI1.6			0.795	BI1.6	1	0.712		BI1.6	0.623
BI1.7			0.782	BI1.7	1	0.715		BI1.7	
BI2.5		0.808		BI2.5	1	0.703		BI2.5	0.651
BI2.6		0.647		BI2.6	1	0.568		BI2.6	
BI2.7		0.634		BI2.7	1	0.51		BI2.7	
BI3.5	0.697			BI3.5	1	0.587		BI3.5	0.771
BI3.6	0.7			BI3.6	1	0.622		BI3.6	
BI3.7	0.716			BI3.7	1	0.562		BI3.7	
BI3.8	0.754			BI3.8	1	0.653		BI3.8	

Extraction Method: Principal Component Analysis.   Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 5 iterations.

forcing 6 facs

Rotated Component Matrixa   λ3=.603   76.62%

	Component							Communalities				cronbach alpha
	1	2	3	4	5	6		Initial	Extraction			
BI1.8				0.782			BI1.8	1	0.782		BI1.8	0.716
BI1.9					0.851		BI1.9	1	0.852		BI1.9	
BI1.10			0.799				BI1.10	1	0.82		BI1.10	
BI1.11					0.507	0.704	BI1.11	1	0.847		BI1.11	
BI2.9	0.44		0.594				BI2.9	1	0.64		BI2.9	0.771
BI2.10	0.783						BI2.10	1	0.751		BI2.10	
BI2.11						0.656	BI2.11	1	0.82		BI2.11	
BI2.12	0.73						BI2.12	1	0.81		BI2.12	
BI3.9		0.487					BI3.9	1	0.567		BI3.9	0.772
BI3.10		0.855					BI3.10	1	0.832		BI3.10	
BI3.11		0.553		0.582			BI3.11	1	0.71		BI3.11	
BI3.12	0.455	0.595					BI3.12	1	0.764		BI3.12	

Extraction Method: Principal Component Analysis.   Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 10 iterations.

	1	2	3	4	5
BI1.8				.826	.803
BI1.9			.828		.819
BI1.11			.734		.743
BI2.9	.697				.631
BI2.10	.745				.644
BI2.11	.680	.450			.674
BI3.9	.413	.558			.565
BI3.10		.846			.802
BI3.11		.641		.501	.706

still 2 cross loads, all major loadings are correct
follow up with this

Final items for BI econ

Delete CI 1.4   **Final items for CI green**

Rotated Component Matrixa   λ3=.737   61.32%

	Component 1	2	3	Communalities	Initial	Extraction			cronbach alpha
CI1.1			0.791	CI1.1	1	0.699		CI1.1	0.692
CI1.2			0.566	CI1.2	1	0.514		CI1.2	
CI1.3			0.786	CI1.3	1	0.669		CI1.3	
CI2.1		0.687		CI2.1	1	0.64		CI2.1	0.716
CI2.3		0.801		CI2.3	1	0.69		CI2.3	
CI2.4		0.668		CI2.4	1	0.607		CI2.4	
CI3.1	0.579			CI3.1	1	0.497		CI3.1	0.745
CI3.2	0.791			CI3.2	1	0.681		CI3.2	
CI3.3	0.632			CI3.3	1	0.551		CI3.3	
CI3.4	0.659			CI3.4	1	0.585		CI3.4	

Extraction Method: Principal Component Analysis.   Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 5 iterations.

Rotated Component Matrixa

	Component 1	2	3	4		Communalities	Initial	Extraction	Cronbach alpha
CI1.6	0.764				CI1.6		1	0.766	0.606
CI1.7	0.766	0.418			CI1.7		1	0.785	
CI2.5		0.829			CI2.5		1	0.854	0.662
CI2.6		0.673		0.551	CI2.6		1	0.833	
CI2.8				0.816	CI2.8		1	0.772	
CI3.6			0.633	0.47	CI3.6		1	0.695	0.625
CI3.7			0.816		CI3.7		1	0.81	

Extraction Method: Principal Component Analysis.   Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 8 iterations.

Final items for CI social

Rotated Component Matrix[a]

	Component				**Communalities**			
	1	2	3			Initial	Extraction	Cronbach alpha
CI1.8			0.837		CI1.8	1	0.776	0.712
CI1.9		0.537	0.585		CI1.9	1	0.644	
CI1.10		0.465	0.641		CI1.10	1	0.647	
CI2.9		0.608		0.441	CI2.9	1	0.611	0.603
CI2.10		0.817			CI2.10	1	0.716	
CI3.10		0.478		0.685	CI3.10	1	0.7	0.572
CI3.12				0.801	CI3.12	1	0.781	

Extraction Method: Principal Component Analys Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

Final items for CI econ

Delete EA3.1 **Final items for EA**

Rotated Component Matrix[a]

	Component				**Communalities**			
	1	2	3			Initial	Extraction	cronbach alpha
EA1.1	0.854				EA1.1	1	0.748	EA1.1	0.674
EA1.3	0.706				EA1.3	1	0.634	EA1.3	
EA1.4	0.511		0.476		EA1.4	1	0.502	EA1.4	
EA2.1	0.482			0.518	EA2.1	1	0.542	EA2.1	0.672
EA2.3				0.725	EA2.3	1	0.661	EA2.3	
EA2.4				0.76	EA2.4	1	0.725	EA2.4	
EA3.2			0.753		EA3.2	1	0.671	EA3.2	0.662
EA3.3			0.558		EA3.3	1	0.495	EA3.3	
EA3.4			0.772		EA3.4	1	0.659	EA3.4	

Extraction Method: Principal Component Analys Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Component Matrix[a]

	Componen	**Communalities**			
	1		Initial	Extraction	cronbach alpha
BL1	0.762	BL1	1	0.581	0.743
BL2	0.7	BL2	1	0.49	
BL4	0.772	BL4	1	0.596	
BL5	0.774	BL5	1	0.598	

Extraction Method: Prin Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Appendix B-4: SEM structural model with sub-dimensions
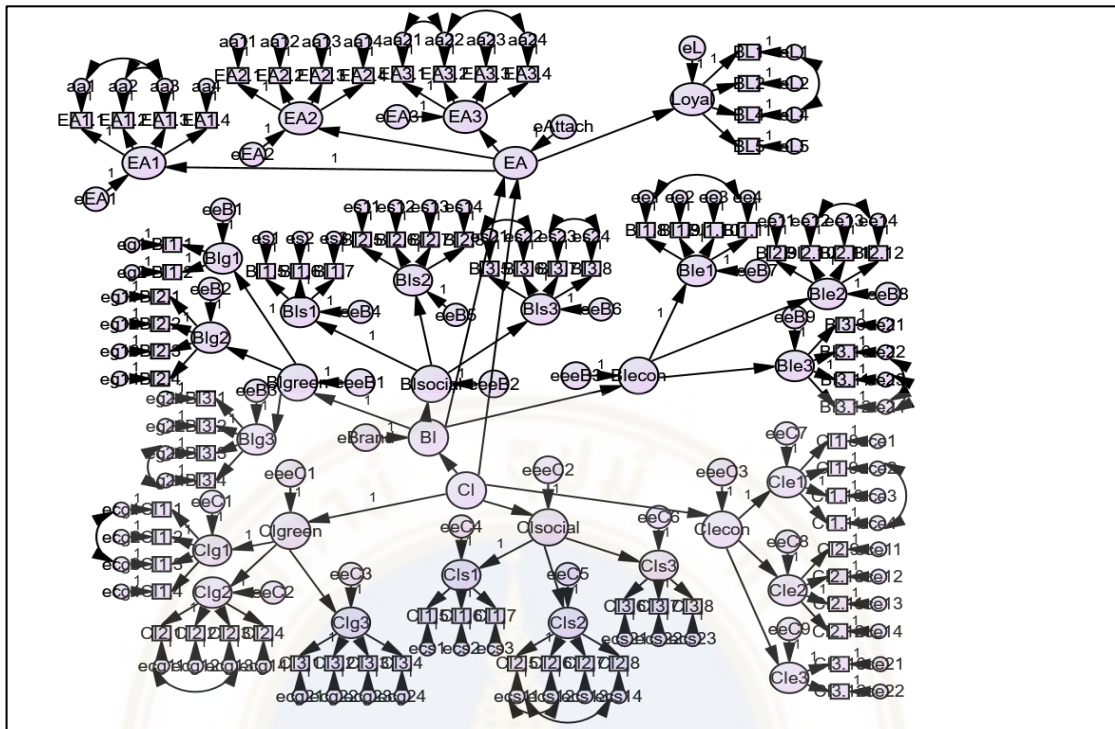
	model parameters												composites	
	CI --> BI	CI --> EA	BI --> EA	EA --> Loy		CMIN/DF	GFI	AGFI	TLI	CFI	SRMR	RMSEA	CR	AVE
01 full with image dimensions & pillars	0.843	0.641	0.261	0.841		1.475	0.746	0.729	0.864	0.870	0.0451	0.039	all > 0.9	all > 0.7
01b image dimensions & pillars some cuts	0.840	0.632	0.269	0.836		1.457	0.785	0.767	0.891	0.897	0.0439	0.039	all > 0.9	all > 0.7
01c image dimensions & pillars different cuts	0.830	0.657	0.231	0.849		1.424	0.785	0.768	0.892	0.897	0.0449	0.037	all > 0.9	all > 0.7
02a all items, no sub-dimensions	0.839	0.650	0.251	0.842		1.433	0.753	0.735	0.876	0.882	0.0449	0.038	all > 0.65	all < 0.5, most < 0.4
03 composit image dimensions mod	0.832	0.658	0.232	0.850		1.599	0.902	0.879	0.961	0.966	0.0374	0.044	all > 0.7	all > 0.5 except BL
03b composit image dimensions mod cut BL2	0.832	0.658	0.231	0.857		1.619	0.904	0.881	0.962	0.967	0.0371	0.045	all > 0.7	all > 0.5 except BL clos
03d composite image dimensions with deteted items as	0.842	0.647	0.250	0.870		1.657	0.907	0.883	0.962	0.968	0.0363	0.046	all > 0.7	all > 0.5 except BL
03e composite image dimensions as 03d add cross pillar	0.851	0.644	0.251	0.869		1.416	0.920	0.895	0.976	0.980	0.0340	0.037	all > 0.7	all > 0.5 except BL

	AGFI no problem. Hair doesn't specify a benchmark,									
	just says close to 1 but usually < GFI.									
CMIN	not a major indicator nowadays anyway					**RMR, GFI**				
							SRMR		0.0451	
Model	NPAR	CMIN	DF	P	CMIN/DF	**Model**	RMR	GFI	AGFI	PGFI
Default mc	210	4587.638	3111	0	1.475	Default mc	0.024	0.746	0.729	0.699
Saturated	3321	0	0			Saturated	0	1		
Independer	81	14571.77	3240	0	4.497	Independer	0.171	0.103	0.081	0.1
Baseline Comparisons						**RMSEA**				
Model	NFI	RFI	IFI	TLI	CFI	**Model**	RMSEA	LO 90	HI 90	PCLOSE
	Delta1	rho1	Delta2	rho2		Default mc	0.039	0.037	0.042	1
Default mc	0.685	0.672	0.871	0.864	0.870	Independer	0.107	0.105	0.108	0
Saturated	1		1		1					
Independer	0	0	0	0	0					

Appendix B-5: SEM structural model with no sub-dimensions, and with all indicators for each pillar
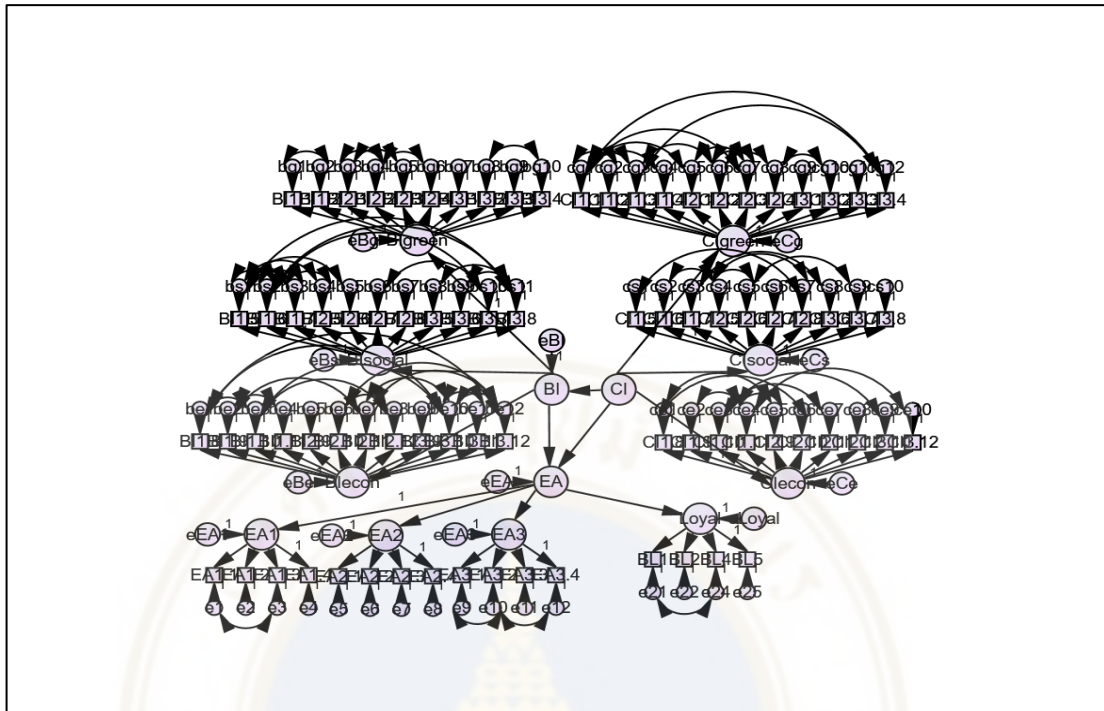
CMIN							RMR, GFI				
								SRMR	0.0449		
Model	NPAR	CMIN	DF	P	CMIN/DF		Model	RMR	GFI	AGFI	PGFI
Default mo	234	4422.599	3087	0	1.433		Default mo	0.023	0.753	0.735	0.7
Saturated r	3321	0	0				Saturated r	0	1		
Independer	81	14571.77	3240	0	4.497		Independer	0.171	0.103	0.081	0.1

Baseline Comparisons							RMSEA				
Model	NFI	RFI	IFI	TLI	CFI						
	Delta1	rho1	Delta2	rho2			Model	RMSEA	LO 90	HI 90	PCLOSE
Default mo	0.696	0.681	0.884	0.876	0.882		Default mo	0.038	0.035	0.04	1
Saturated r	1		1		1		Independer	0.107	0.105	0.108	0
Independer	0	0	0	0	0						

Appendix B-6: SEM structural model with no sub-dimensions, and with composite indicators for each pillar
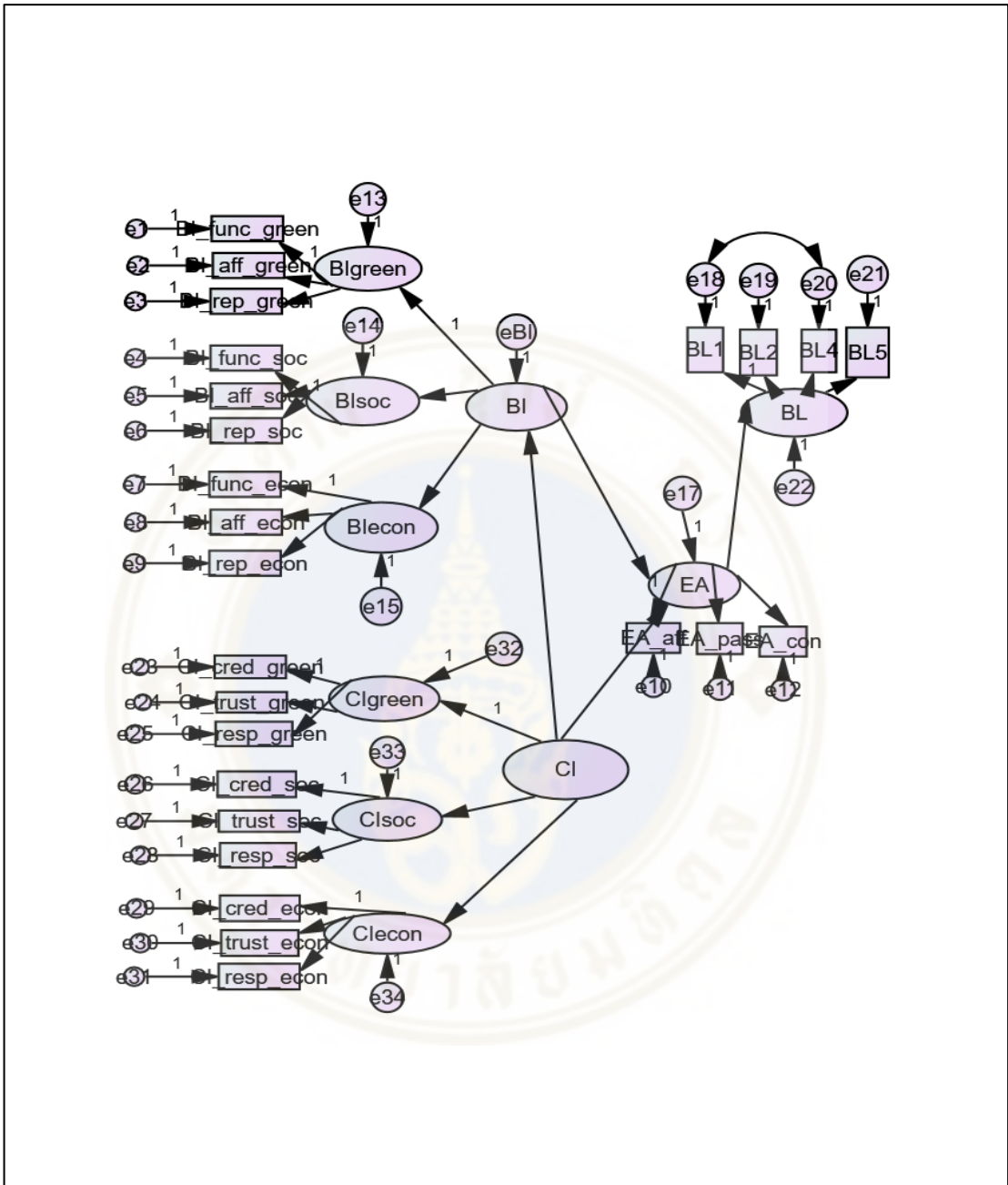
CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default mo	61	422.263	264	0	1.599
Saturated r	325	0	0		
Independer	25	4924.52	300	0	16.415

RMR, GFI

	SRMR	0.0374		
Model	RMR	GFI	AGFI	PGFI
Default mo	0.014	0.902	0.879	0.733
Saturated r	0	1		
Independer	0.156	0.156	0.086	0.144

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default mo	0.914	0.903	0.966	0.961	0.966
Saturated r	1		1		1
Independer	0	0	0	0	0

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default mo	0.044	0.036	0.052	0.89
Independer	0.224	0.219	0.23	0

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
BI	<---	CI	0.788	0.078	10.046	***	par_26
EA	<---	BI	0.235	0.09	2.613	0.009	par_14
EA	<---	CI	0.632	0.094	6.747	***	par_24
BIgreen	<---	BI	1				
BIsoc	<---	BI	1.016	0.104	9.767	***	par_9
BIecon	<---	BI	0.968	0.09	10.736	***	par_10
BL	<---	EA	1.029	0.095	10.848	***	par_15
CIgreen	<---	CI	1				
CIsoc	<---	CI	1.005	0.073	13.789	***	par_22
CIecon	<---	CI	1.132	0.085	13.359	***	par_23
BI_func_gr <	<---	BIgreen	1				
BI_aff_gree	<---	BIgreen	1.051	0.095	11.04	***	par_1
BI_rep_gre <	<---	BIgreen	1.197	0.101	11.895	***	par_2
BI_func_so <	<---	BIsoc	1				
BI_aff_soc	<---	BIsoc	1.058	0.095	11.11	***	par_3
BI_rep_soc	<---	BIsoc	1.083	0.093	11.622	***	par_4
BI_func_ec <	<---	BIecon	1				
BI_aff_ecor	<---	BIecon	1.267	0.092	13.707	***	par_5
BI_rep_eco	<---	BIecon	1.132	0.084	13.41	***	par_6
EA_aff	<---	EA	1				
EA_pass	<---	EA	1	0.075	13.252	***	par_7
EA_con	<---	EA	0.835	0.071	11.763	***	par_8
BL1	<---	BL	1				
BL2	<---	BL	0.801	0.094	8.485	***	par_11
BL4	<---	BL	0.987	0.099	9.967	***	par_12
BL5	<---	BL	0.914	0.091	10.075	***	par_13
CI_cred_gr <	<---	CIgreen	1				
CI_trust_gr	<---	CIgreen	1.055	0.08	13.113	***	par_16
CI_resp_gre	<---	CIgreen	1.064	0.073	14.515	***	par_17
CI_cred_so <	<---	CIsoc	1				
CI_trust_so	<---	CIsoc	0.979	0.061	16.045	***	par_18
CI_resp_so <	<---	CIsoc	1.024	0.067	15.352	***	par_19
CI_cred_ec <	<---	CIecon	1				
CI_trust_ec	<---	CIecon	0.997	0.064	15.576	***	par_20
CI_resp_ec <	<---	CIecon	0.818	0.063	12.973	***	par_21

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate	
BI	<---	CI	0.832	
EA	<---	BI	0.232	
EA	<---	CI	0.658	
BIgreen	<---	BI	1.012	Heywood
BIsoc	<---	BI	1.016	Heywood
BIecon	<---	BI	0.981	
BL	<---	EA	0.850	
CIgreen	<---	CI	1.018	Heywood
CIsoc	<---	CI	0.990	
CIecon	<---	CI	0.990	
BI_func_gr <	<---	BIgreen	0.634	
BI_aff_gree <	<---	BIgreen	0.729	
BI_rep_gre <	<---	BIgreen	0.803	
BI_func_so <	<---	BIsoc	0.624	
BI_aff_soc	<---	BIsoc	0.749	
BI_rep_soc	<---	BIsoc	0.796	
BI_func_ec <	<---	BIecon	0.721	
BI_aff_ecor <	<---	BIecon	0.805	
BI_rep_eco	<---	BIecon	0.787	
EA_aff	<---	EA	0.778	
EA_pass	<---	EA	0.749	
EA_con	<---	EA	0.673	
BL1	<---	BL	0.722	
BL2	<---	BL	0.551	
BL4	<---	BL	0.713	
BL5	<---	BL	0.673	
CI_cred_gr <	<---	CIgreen	0.718	
CI_trust_gr	<---	CIgreen	0.751	
CI_resp_gre	<---	CIgreen	0.829	
CI_cred_so <	<---	CIsoc	0.797	
CI_trust_so	<---	CIsoc	0.811	
CI_resp_so <	<---	CIsoc	0.784	
CI_cred_ec <	<---	CIecon	0.773	
CI_trust_ec <	<---	CIecon	0.820	
CI_resp_ec <	<---	CIecon	0.705	

Appendix B-7: CFA model
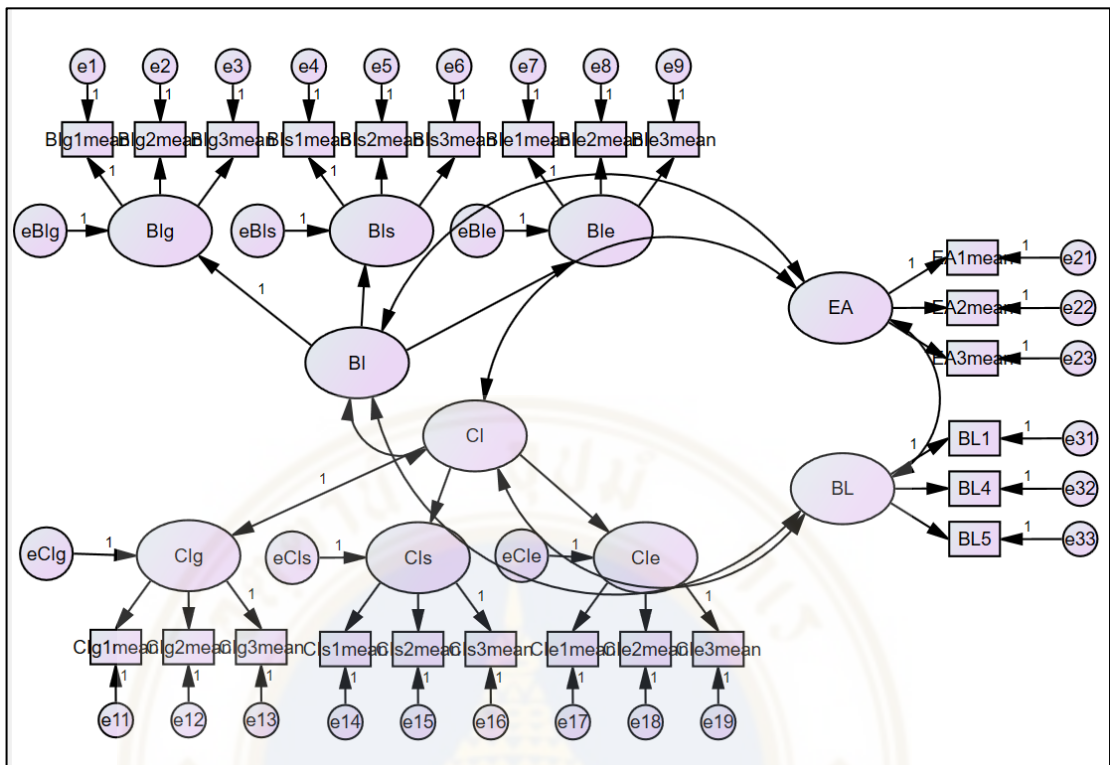
			Estimate
EA	<-->	BL	.869
EA	<-->	BI	.811
EA	<-->	CI	.864
BL	<-->	BI	.673
BL	<-->	CI	.739
BI	<-->	CI	.842

Appendix B-8: Structural model - with summated scale and with modifications (selected)
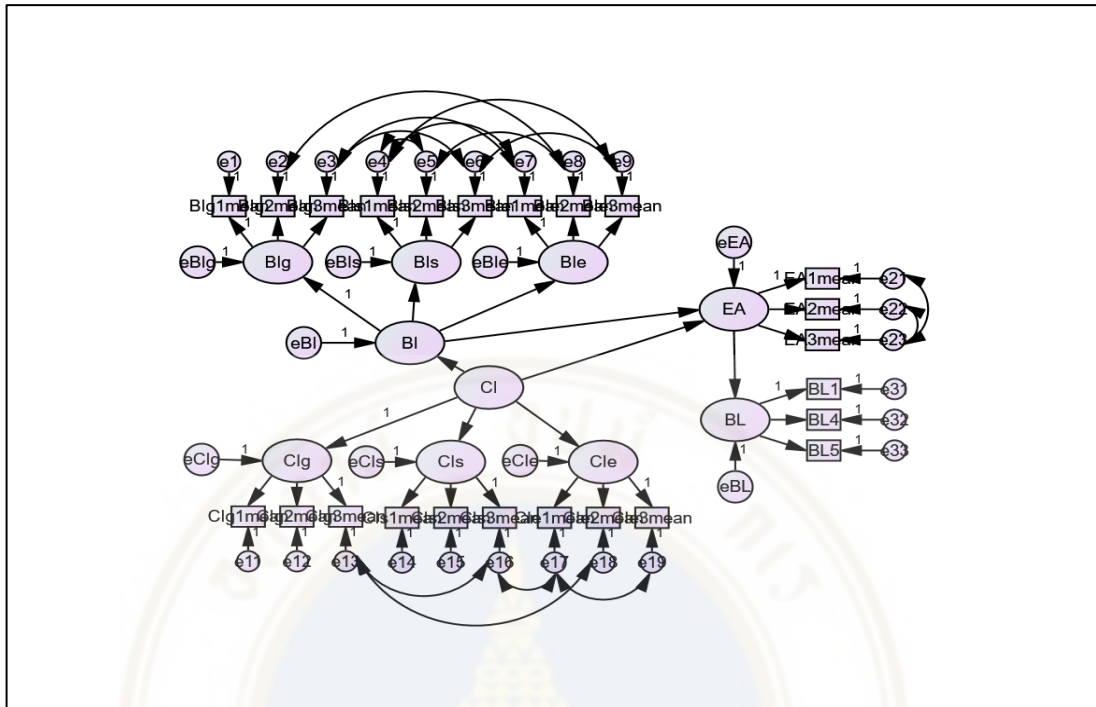
CMIN							RMR, GFI				
								SRMR	0.0340		
Model	NPAR	CMIN	DF	P	CMIN/DF		Model	RMR	GFI	AGFI	PGFI
Default mo	72	322.887	228	0	1.416		Default mo	0.012	0.920	0.895	0.7
Saturated r	300	0	0				Saturated r	0	1		
Independer	24	5105.661	276	0	18.499		Independer	0.164	0.147	0.073	0.135

Baseline Comparisons							RMSEA				
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI		Model	RMSEA	LO 90	HI 90	PCLOSE
Default mo	0.937	0.923	0.981	0.976	0.980		Default mo	0.037	0.027	0.046	0.994
Saturated r	1		1		1		Independer	0.239	0.233	0.244	0
Independer	0	0	0	0	0						

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
BI	<---	CI	0.779	0.072	10.805	***	par_21
EA	<---	BI	0.258	0.097	2.646	0.008	par_22
EA	<---	CI	0.605	0.094	6.403	***	par_23
BIg	<---	BI	1				
BIs	<---	BI	0.997	0.095	10.441	***	par_17
BIe	<---	BI	0.997	0.091	10.999	***	par_18
CIg	<---	CI	1				
CIs	<---	CI	0.962	0.066	14.477	***	par_19
CIe	<---	CI	0.945	0.069	13.752	***	par_20
BL	<---	EA	0.972	0.093	10.481	***	par_24
BIg1mean	<---	BIg	1				
BIg2mean	<---	BIg	1.064	0.092	11.544	***	par_1
BIg3mean	<---	BIg	1.166	0.091	12.784	***	par_2
BIs1mean	<---	BIs	1				
BIs2mean	<---	BIs	1.087	0.082	13.287	***	par_3
BIs3mean	<---	BIs	1.071	0.085	12.539	***	par_4
BIe1mean	<---	BIe	1				
BIe2mean	<---	BIe	1.253	0.085	14.764	***	par_5
BIe3mean	<---	BIe	1.123	0.077	14.506	***	par_6
CIg3mean	<---	CIg	1				
CIg2mean	<---	CIg	0.997	0.066	15.089	***	par_7
CIg1mean	<---	CIg	0.987	0.064	15.478	***	par_8
CIs3mean	<---	CIs	1				
CIs2mean	<---	CIs	1.022	0.073	13.913	***	par_9
CIs1mean	<---	CIs	1.039	0.073	14.185	***	par_10
CIe3mean	<---	CIe	1				
CIe2mean	<---	CIe	1.098	0.072	15.331	***	par_11
CIe1mean	<---	CIe	1.165	0.087	13.46	***	par_12
EA1mean	<---	EA	1				
EA2mean	<---	EA	0.953	0.073	12.973	***	par_13
EA3mean	<---	EA	0.893	0.077	11.627	***	par_14
BL1	<---	BL	1				
BL4	<---	BL	0.96	0.1	9.608	***	par_15
BL5	<---	BL	0.993	0.099	10.011	***	par_16

Standardized Regression Weights: (Group number 1 - De...

			Estimate
BI	<---	CI	0.851
EA	<---	BI	0.251
EA	<---	CI	0.644
BIg	<---	BI	0.993
BIs	<---	BI	0.997
BIe	<---	BI	0.970
CIg	<---	CI	0.996
CIs	<---	CI	0.981
CIe	<---	CI	0.959
BL	<---	EA	0.869
BIg1mean	<---	BIg	0.653
BIg2mean	<---	BIg	0.753
BIg3mean	<---	BIg	0.856
BIs1mean	<---	BIs	0.680
BIs2mean	<---	BIs	0.775
BIs3mean	<---	BIs	0.795
BIe1mean	<---	BIe	0.741
BIe2mean	<---	BIe	0.843
BIe3mean	<---	BIe	0.825
CIg3mean	<---	CIg	0.793
CIg2mean	<---	CIg	0.780
CIg1mean	<---	CIg	0.796
CIs3mean	<---	CIs	0.737
CIs2mean	<---	CIs	0.795
CIs1mean	<---	CIs	0.810
CIe3mean	<---	CIe	0.760
CIe2mean	<---	CIe	0.848
CIe1mean	<---	CIe	0.812
EA1mean	<---	EA	0.797
EA2mean	<---	EA	0.732
EA3mean	<---	EA	0.719
BL1	<---	BL	0.683
BL4	<---	BL	0.657
BL5	<---	BL	0.692

Standardized Residual Covariances (Group number 1 - Default model)

	BL5	BL4	BL1	EA3mean	EA2mean	EA1mean	Cle1mean	Cle2mean	Cle3mean	Cls1mean	Cls2mean	Cls3mean	Clg1mean	Clg2mean	Clg3mean	Ble3mean	Ble2mean	Ble1mean	Bls3mean	Bls2mean	Bls1mean	Blg3mean	Blg2mean	Blg1mean
BL5	0																							
BL4	0.559	0																						
BL1	0.051	-0.64	0																					
EA3mean	-0.473	-1.217	-0.575	0.014																				
EA2mean	-0.527	0.75	-0.487	0.039	0																			
EA1mean	0.39	0.676	0.908	-0.037	-0.174	0																		
Cle1mean	-0.765	-1.322	0.463	-0.318	-0.741	0.107	-0.016																	
Cle2mean	-0.142	-0.218	-0.321	0.221	-0.447	-0.574	-0.189	0.003																
Cle3mean	-1.26	-0.361	0.101	-0.006	-0.395	-1.037	0.068	0.209	0															
Cls1mean	-0.771	-0.532	0.044	0.522	0.139	-0.6	0.41	-0.232	0.54	-0.202														
Cls2mean	-0.217	0.527	0.388	0.441	-0.031	-0.332	0.105	0.128	0.388	-0.071	0													
Cls3mean	0.194	-0.128	0.121	0.621	0.815	0.399	0.127	0.318	-0.46	-0.338	0.278	-0.014												
Clg1mean	1.047	0.859	1.532	0.063	0.821	0.287	-0.123	-0.16	-0.649	0.027	0.027	0.131	-0.101											
Clg2mean	-0.398	-0.021	0.159	0.69	-0.006	-0.384	0.198	0.122	0.004	-0.035	-0.16	-0.612	-0.156	0.221										
Clg3mean	-0.649	0.002	-0.013	0.21	0.588	0.546	-0.042	0.043	0.098	0.213	0.582	0.049	0.558	0.742	0.008									
Ble3mean	-0.909	-0.05	-0.058	1.358	1.244	-0.024	0.876	1.166	0.35	0.493	-0.571	-0.624	0.062	-0.096	0.476	0.01								
Ble2mean	-0.652	0.303	-0.083	-0.461	0.149	-0.942	-0.281	0.172	-0.059	-0.011	-0.977	-0.61	-0.145	-0.425	-0.503	0.031	0.003							
Ble1mean	-0.675	-1.36	-0.595	-0.204	-0.853	-0.733	0.567	-0.091	-0.538	-0.202	-0.517	-0.806	0.928	0.085	-1.158	-0.095	0.172	0.014						
Bls3mean	-0.166	0.571	0.815	0.057	0.216	-0.466	0.571	0.379	0.069	-0.623	-0.289	0.086	-0.12	-0.35	-0.779	0.057	0.193	-0.068	0					
Bls2mean	-1.392	0.444	-0.18	0.592	0.341	-0.642	0.04	0.211	0.504	0.535	-1.059	-0.373	0.884	0.645	-1.408	-0.074	-0.005	0.5	0.115	0.005				
Bls1mean	-1.807	-0.484	-0.076	0.817	0.698	-1.278	-0.276	-0.514	-0.005	0.009	-0.092	-0.2	0.801	-0.509	-0.828	-0.045	0.209	0.139	-0.319	0.142	0.03			
Blg3mean	-1.016	-0.33	0.669	1.1	0.435	-0.228	0.006	0.115	-0.058	0.157	-0.555	-0.637	0.645	-0.35	0.188	-0.012	0.108	-0.034	-0.009	-0.271	-0.255	0.001		
Blg2mean	-0.636	-0.026	0.545	0.719	0.293	-0.424	-0.288	-0.013	0.353	0.268	0.119	0.263	0.163	-0.509	-0.661	-0.43	-0.003	0.337	0.218	0.209	0.197	-0.059	0.002	
Blg1mean	1.094	0.528	2.105	1.554	0.325	1.009	0.252	-0.092	-0.93	-0.277	-0.092	-0.6	1.848	0.66	-0.074	-0.492	-0.232	-0.074	-0.004	-0.139	0.875	-0.002	0.009	0.009

0 no potential problems, all < |2.5|