The Impact of Digital Social Responsibility on Customer Trust and Brand Equity: An Evidence from Social Commerce in Thailand

Submitted 08/03/19, 1st revision 02/04/19, accepted 09/04/19

W. Puwirat¹, S. Tripopsakul²

Abstract:

Purpose: The purpose of this study is to investigate the impact of digital social responsibility (DSR) on customer trust and brand equity in the context of social commerce. A total of 324 respondents who have experienced in shopping through social commerce participated in this study through an online survey.

Design/Methodology/Approach: Structural equation modeling (SEM) was used to test the empirical data derived from surveys with the proposed hypotheses.

Findings: The results showed that digital social responsibility (DSR) initiatives have significantly and positively effects on customer trust (CT) and brand equity (BE). DSR also has an indirect and positive influence on BE via CT as mediating in social commerce context.

Practical Implications: The research is one of first attempts to provide valuable insight for studying the relationship between DSR, CT and BE in the context of social commerce. Companies should be aware that implementing DSR helps them to gain benefits in enhancing customer trust and brand equity.

Originality/Value: The study provides a better understanding of the role of digital social responsibility in customers’ attitudes and brand equity in a social commerce platform.

Keywords: Digital Social Responsibility, Social Commerce, Customer Trust, Brand Equity, Thailand.

JEL code: O13, Q20, Q28.

Paper type: Research article.

¹Assist. Prof., DPhil.(Oxon), Chulalongkorn Business School, Chulalongkorn University, Thailand
²Assist. Prof., Ph.D., School of Entrepreneurship and Management, Bangkok University, Thailand, suchart.t@bu.ac.th
1. Introduction

The concept of corporate social responsibility (CSR) has received attention from both researchers and practitioners over past a few decades. Engaging in CSR behaviors is widespread across a variety of types of businesses in several countries (Singh & Del Bosque, 2008 cited in Tingchi Liu, Anthony Wong, Shi, Chu & Brock 2014). According to Tingchi Liu et al. (2014), CSR have been realized as the factors influencing brand building. From a marketing point of view, brand equity (BE) can be defined as the value of a brand. Previous researches have showed that brand equity can be enhanced by positive brand associations, perceived quality and brand loyalty (Yoo, Donthu & Lee, 2000). According to Kreitner (2001) cited in Famiyeh (2017), there has been the evidence that CSR is able to lead in increasing customer trust, customer loyalty and corporate reputations (Maignan, Ferrell & Ferrell, 2005). Consequently, CSR programs become one of key elements of business strategy. CSR represents as a competitive advantage that enhances firm performance and supporting society. In the era of technology disruption as nowadays, digital technology has played a critical part in shaping new business practices and changing of consumer behavior. Online platform business can provide widely access to a broader market, helps customers saving their time by communicating online and expands knowledge through the mass of information available online.

Social commerce has played a more important role in business practices. Social commerce can be defined as online sales using group buying on a social network service (SNS). Social commerce is a subset of electronic commerce involving social media, online media that supports social interaction and user contributions to assist online buying and selling of products and services (Maia, Lunardi, Longaray & Munhoz, 2018). Social commerce promotes transactions with the support of a large network of online peers sharing electronic shopping experiences related to products and services information. Social media combine different content generated by users through many social network resources to create, initiate and spread information within online networks. Social commerce uses social media to perform business transactions and commercial activities driven mainly by social interactions and users’ contributions (Wang & Zhang, 2012).

E-commerce in Thailand is growing rapidly. The data from Eshopworld (2015) shows that there are presently 12.1 million e-commerce users in Thailand, with an additional 1.8 million users shopping online by 2021 and representing 24.5% of the total population. The average Thai user spends USD 243 online, and is forecasted to grow up to USD 382 by 2021. One of the most important features of e-commerce in Thailand is the popularity of social commerce. The use of social media is likely to grow in future as the result of increasing smart phone penetration and prevalence of 4G internet network. One third of total e-commerce gross merchandise value is taking place on social media in Thailand. According to the Electronics Transaction Development Agency (ETDA) citied in Pornwasin (2018), Thailand is one of the largest social commerce markets in the world today. Thai people spend an average
3.5 hours per day on social media. The top three social media platforms are YouTube, Facebook, and Line. It is expected that by 2020 about 84 per cent of Thai population will have access to the Internet. Thai people are among the highest users of mobile Internet, averaging 4.3 hours per day. Social commerce is the largest segment of B2C (business to consumer) e-commerce in Thailand, accounting for 40 per cent of the overall B2C market.

For e-commerce and social commerce, taking on corporate social responsibility (CSR) can also be a major advantage. In a recent survey by Nielsen (2013), 56 percent of international online shoppers said they are willing to pay more for a product or service from businesses making a positive social or environmental impact. The study of Conecomme (2015) shows that 90 percent of surveyed participants expect companies to do more than just make a profit. 84 percent of respondents advised they seek out responsible products when they can, and 80 percent take a company’s corporate social responsibility into consideration when making their purchasing decisions. That is to say, as a result of an advance of a digital technology like an e-commerce and a social media, not only business transactions have transformed from offline to online, but also social responsibility initiatives and practices from traditional to digital ways. This phenomenon can be defined as digital social responsibility (DSR).

Social commerce and digital social responsibility (DSR) have been perceived as one of the future of business transformation. Even though social commerce and DSR seem to be vital strategic movement for businesses, not surprisingly there are very limited of researches concerning with digital social responsibility especially in Thailand - one of the largest social commerce markets in the world today. Our study is one of the first attempts to advance knowledge in social commerce and DSR. Therefore, the main purpose of this study is to investigate the impact of digital social responsibility on customer trust and brand equity. The rest of this paper is organized as follows; second section is the review of relevant literature concerning with digital social responsibility, social commerce, customer trust, and brand equity. Third section describes the research method used to collect data from 324 samples. Fourth section is the discussion of the main findings resulting from the analysis. Finally, in the fifth section discussion and conclusions are drawn together with limitations and future research directions in sixth section.

2. Literature Review

2.1 Digital Social Responsibility

Social Responsibility has gained attention in multiple disciplines including marketing, management, strategy, and business ethics. Social responsibility, as it applies to business, is known as corporate social responsibility (CSR). Previous scholars have defined the definition of CSR. Moir (2001) defines CSR as “the continuing commitment by business to behave ethically and contribute to economic
development while improving the quality of life of the workforce and their families as well as of the local community and society at large”. Watts (2000) defines CSR as the commitment of business to contribute to an economic and sustainable development, working with employees, their families, the local community and society to improve the quality of life.

Carroll (1991) identified four dimensions for CSR: 1) Economic responsibility: based on this dimension, organizations should be committed to earn profit as possible and it is essential to maintain a high level of operating efficiency and a good competitive position. This component is considered as the base of other components. 2) Legal responsibility: based on this dimension, organizations should be law-abiding and comply with different local, state, and federal regulations and it is important to provide goods and services to fulfill legal obligations. 3) Ethical responsibility: based on this dimension, organizations need to do what is expected ethically or morally and acknowledge and respect evolving new ethical/moral norms and it is important to recognize that corporate ethical behavior and integrity go beyond regulations and laws. 4) Philanthropic responsibility: this responsibility is placed at the top of the pyramid. Business enterprises should be good corporate citizens by showing their goodwill to the society. Terrero-De La Rosa, Santiago-Ortega, Medina-Rivera & Berrios-Lugo (2017) states that corporate responsibility includes three basic responsibilities namely:

1. Economic responsibility (achieving business profitability, seeking to benefit and achieve the highest possible shareholder value, but not as the sole purpose of the company).
2. Social responsibility (contribution to social benefit, i.e., take into account the impact and social interactions of all groups with which the company interacts with throughout its operations).
3. Environmental responsibility (meeting today’s needs without compromising future generations).

The literature provides various definitions of CSR, however this study have emphasized on the implementation of social responsibility through social media and in the context of social commerce. That is to say, we believed that as a result of paradigm shift from only brick and mortar to brick and click business model. It is inevitable to transform the traditional way of CSR activities to digital way- digital social responsibility (DSR).

2.2 Social Commerce

According to Kim and Park (2013) cited in Seo and Moon (2016), social commerce is a new area of e-commerce as a result of the popularity of Social Network Sites such as Facebook and Instagram. Social Network Sites are exploited for social interaction and user contributions to facilitate online buying and selling of products and services and allow customers to exchange product or service feedback and
provide information from their own experience influencing other consumers’ decision making. In Thailand, the advance of internet technology has grown the number of internet users remarkably. The mobile internet also has changed consumer’s perception and behaviors (Thalassinos and Thalassinos, 2011). This occurrence can be referred as social shopping. A trend in social commerce is the increasing use of social media by traditional offline firms to manage customer relationships, brand communication, product promotions and social shopping (Liang, Ho, Li & Turban, 2011 cited in Seo and Moon, 2016).

Liang and Turban (2011) cited in Maia et al. (2018) stated that social commerce websites have three major attributes namely; the presence of social media technologies, community interactions and commercial activities. It makes possible the information exchange about products before the actual purchase. Social commerce can be classified into two forms. The first one is characterized by sites of social networks that offer space for advertisement and transactions such as buying and selling products and services, opening its interfaces to facilitate this process such as Facebook, and YouTube. The second form is characterized by traditional e-commerce websites that use social networking capabilities to take advantage of its power of reach and trust such as Amazon.com.

2.3 Customer Trust

Previous researches concerning with the link between adoption of CSR practices and enhanced customer trust are Jalilvand, Nasrolahi Vosta, Kazemi Mahyari & Khazaei Pool, 2017. However, there are very limited numbers of researches in the context of social commerce and DSR practices. According to Mombeuil & Fotiadis (2017), trust is fundamentally imperative in establishing a long-term relationship within any stakeholders. Esen (2012) cited in Mombeuil & Fotiadis (2017) stated that trust improves interactions between individuals and firms reducing uncertainty in negotiations and improving cooperation among partners. Choi, Eldomiaty & Kim (2007) also stated that consumer trust allows firms to take risks that are essential to new business innovations, productivity and successful relationship.

According to Choi & La (2013), trust highly related to perceptions of firms’ are integrity, honesty, confidentiality, and ethicality. When firms engage in socially responsible practices with stakeholders, they tend to address customer rights, meet customer expectations and generate a positive image and reputation, which can lead to receiving customer trust. Jalilvand et al. (2017) stated that social responsibility can help firms improve their reputation and brand awareness and enhance customer trust whereas Lamberti & Lettieri (2009) mentioned that customers presently become aware of the socially responsible practices by firms, and they cultivate trust regarding the quality and standards of the goods and services provided by those firms, which is important to sustain or improve their reputation.

2.4 Brand Equity and DSR
The meaning of brand equity has been the topic of a discussion from the part of numerous researchers. According to Christodoulides & De Chernatony (2010), the brand equity construct has been viewed from two major perspectives in the literature namely; the financial perspective and customer based perspective. The first perspective discusses the financial value brand equity creates to businesses and it can be referred to as firm based brand equity (FBBE). The second perspective is considered the driving force of increased market share and profitability of the brand and it is based on the market’s perceptions - consumer based brand equity (CBBE).

One of the most widely used definitions of brand equity is from Aaker (1991). Aaker (1991) define brand equity as “a set of assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm and/or that firm’s customers”.

Aaker (1991) cited in Pappu, Quester & Cooksey (2005) classifies consumer-based brand equity into four dimensions namely: brand awareness, brand associations, perceived quality and brand loyalty. Brand awareness refers to the strength of a brand’s presence in consumers’ minds. Brand awareness is an important component of brand equity. According to Keller (1993), brand recall refers to consumers’ ability to retrieve the brand from memory, for example, when the product category or the needs fulfilled by the category are mentioned. Brand recognition may be more important to the extent that product decisions are made in the store. Brand associations refer to anything linked in memory to a brand. Aaker (1991) argued that a brand association has a level of strength, and that the link to a brand from the association will be stronger when it is based on many experiences or exposures to communications, and when a network of other links supports it.

Additionally, Aaker (1991) suggested that brand associations could provide value to the consumer by providing a reason for consumers to buy the brand, and by creating positive attitudes or feelings among consumers. Perceived quality is defined as “the consumer’s judgment about a product’s overall excellence or superiority” (Zeithaml, 1988). According to Zeithaml (1988) cited in Schivinski & Dabrowski (2014), the consumer’s perception of quality has four main characteristics:

(a) it is different from the objective or actual quality of the product;
(b) it is an abstract conception, rather than a specific attribute of the product;
(c) it is a global assessment that resembles attitude;
(d) it is a judgment made within a consumer’s evoked set.

As in the second dimension, perceived quality also delivers value by differentiating a brand from its competitors and providing the consumer with reasons to purchase it. Brand loyalty refers to the attachment that a customer has to a brand. Oliver (2014) defined brand loyalty as “a deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having potential to cause switching behavior”.

The Impact of Digital Social Responsibility on Customer Trust and Brand Equity: An Evidence from Social Commerce in Thailand
2.5 Research Framework and Hypotheses Development

The research framework to study the impact of DSR on customer trust and brand equity of Thai social commerce was constructed based on previous relevant literature reviews. The proposed model for the research framework is displayed in Figure 1.

**Figure 1. Proposed Research Framework**

In order to investigate the impact of DSR on customer trust and brand equity, the following hypotheses have been developed:

*Hypothesis 1 (H1): DSR has a direct positive effect on BE.*

*Hypothesis 2 (H2): DSR has an indirect and positive effect on BE through CT.*

*Hypothesis 3 (H3): DSR has a direct positive effect on CT.*

*Hypothesis 4 (H4): CT has a direct positive effect on BE.*

3. Research Methodology

3.1 Research Design

The quantitative method was used to examine the proposed research hypotheses included the development of a survey questionnaire to measure perceived DSR, customer trust and brand equity. Structural equation modeling (SEM) using AMOS 21.0 was used to test and analyze the data, verify the proposed hypotheses, and evaluate the significance of the theories and the positive correlation of variables (Byrne, 2016).
3.2 Data Collection

To collect data, we used a standardized online survey on the social media - Facebook. The link to the survey was posted several times on Facebook inviting respondents to take part in the study. The invitation to the survey informed about the topic of the study and also asked respondents to share the post with their Facebook friends. For the questionnaire answering procedure, we firstly asked respondents to select one of their favorite brand Official Fanpages. Then, respondents read and answered through all survey questions. A total of 350 respondents were obtained during the surveys and 26 subjects were screened out based on the completion of data. Overall, 324 responses were usable for the data analysis for a completion rate of 92.5 per cent.

3.3 Questionnaire Development

The questionnaires consisted of two sections: (1) general information concerning demographic and behavioral aspects of respondents and (2) the rating of 22 questions, employing 5-point Likert type scales from “strongly disagree (=1)” to “strongly agree (=5)”. The items for the rating scales were adapted from reviewing the relevant variables of existing theories and empirical research findings (Table 1). For the perceived DSR measurement in this study consisted of 5 items, authors adopted and modified measurement items of Lopez (2015), and Butt (2016). To measure customer trust and brand equity, the scales developed by Jalilvand et al. (2017), Gürlek, Düzgün and Meydan Uygur (2017), and Kang and Namkung (2018) were utilized. In total, the measurement scales in this study are composed of 22 items.

3.4 Pre-test Analysis

The validation of the questionnaires was conducted to improve the quality of the data collection in two steps: (1) the content validity was reviewed by three researchers to determine the relevancy and validity of the questions, including latent variables. The Index of Item-Objective Congruence (IOC) of Rovinelli & Hambleton (1977) cited in Turner & Carlson (2003) showed IOC values ranging from 0.67-1.00 for questions which are acceptable. (2) The reliability was estimated using Cronbach’s alpha, resulting in values ranging from 0.7 or greater (Conbach, 1951 cited in Santos, 1999) for particular variables and from 0.769-0.902, confirming the reliability of the questionnaires.

Table 1. Questionnaire Constructs and Variables

| Constructs                      | Items | Observed Variables                                                                 |
|---------------------------------|-------|-------------------------------------------------------------------------------------|
| Digital social responsibility   | DSR1  | I feel that the Digital Social Responsibility (Post on Facebook explicitly references the firm’s donation or granting of money to a charitable cause, volunteer efforts, or involvement in the communities in which it operates) record of brand “NAME” is |
| DSR2 | Brand “NAME” is a Digital Social Responsibility (Continually post on Facebook explicitly references the firm’s donation or granting of money to a charitable cause, volunteer efforts, or involvement in the communities in which it operates). |
| DSR3 | In my opinion, regarding society, brand “NAME” is really trying to post on Facebook explicitly references the firm’s efforts to help to solve social problems. |
| DSR4 | In my opinion, regarding the environment, brand “NAME” is really trying to post on Facebook explicitly references the firm’s efforts to communicate to its customer about its environmental practices and protections. |
| DSR5 | In my opinion, regarding the economy, brand “NAME” is really trying to post on Facebook explicitly references the firm’s efforts to build solid relations with its customers to assure its long-term economic success. |
| CT1 | The products or services of this brand “NAME” make me feel a sense of security. |
| CT2 | I trust on the quality of this brand “NAME”. |
| CT3 | The products or services of this brand “NAME” are a quality assurance. |
| CT4 | This brand “NAME” is interested in its customers. |
| CT5 | This brand “NAME” is honest with its customers. |
| BA1 | I can recognize brand “NAME” among other competing brands. |
| BA2 | I am aware of brand “NAME”. |
| BA3 | When I am thinking about brands, brand “NAME” comes to mind immediately. |
| BS1 | Some characteristics of brand “NAME” come to my mind quickly. |
| BS2 | I can quickly recall the symbol or logo of brand “NAME”. |
| BS3 | I don’t have difficulty in imagining brand “NAME” in my mind. |
| PQ1 | Brand “NAME” offers very good quality products |
| PQ2 | Brand “NAME” offers products of consistent quality |
| PQ2 | Brand “NAME” offers very reliable products |
| BL1 | DSR initiatives of brand “NAME” (Post on Facebook explicitly references the brand’s efforts related to social responsibility issues) make me keep on purchasing this brand’s product in future. |
| BL2 | Even if the other brand offers attractive products and promotions, I will continue to buy this brand’s products because of their DSR initiatives. |
4. Results

4.1 Sample Characteristics

Demographically, the samples are predominantly females (53.5%). The largest group of the respondents (29.9%) is aged between 26 and 35 years, single status (53.65%), working in private company (46.54%), with undergraduate education level (56.8%) and spending more than 4 hours (38.6%) in social media daily. The detail demographic profiles are presented in Table 2.

| Table 2. Descriptive statistics |   |     |
|---------------------------------|---|-----|
| Item                            | Description                | Sample | (%) |
| Gender                          | Male                       | 151    | 46.5 |
|                                 | Female                     | 173    | 53.5 |
| Age                             | 18-25                      | 89     | 27.5 |
|                                 | 26-35                      | 97     | 29.9 |
|                                 | 36-45                      | 79     | 24.3 |
|                                 | 46-55                      | 41     | 12.5 |
|                                 | More than 55 years         | 19     | 5.8  |
| Education                       | Below undergraduate        | 18     | 10.5 |
|                                 | Undergraduate              | 184    | 56.8 |
|                                 | Postgraduate               | 122    | 32.7 |
| Status                          | Single                     | 174    | 53.65|
|                                 | Married                    | 124    | 38.20|
|                                 | Widowed                    | 8      | 2.51 |
|                                 | Divorced                   | 18     | 5.64 |
| Career                          | Private company employee   | 151    | 46.54|
|                                 | Government / Public employee | 102  | 31.35|
|                                 | Entrepreneur / Business owner | 49  | 15.12|
|                                 | Other                      | 23     | 6.99 |
| Income (Thai Baht per month)    | Less than 15,000           | 51     | 15.63|
|                                 | 15,001 - 30,000            | 124    | 38.23|
|                                 | 30,001 - 50,000            | 89     | 27.45|
|                                 | More than 50,000           | 61     | 18.69|
| Social media usage daily        | Less than 1 hour           | 19     | 5.8  |
|                                 | 1 hour - 2 hours           | 60     | 18.4 |
|                                 | 3 hours - 4 hours          | 121    | 37.2 |
|                                 | More than 4 hours          | 125    | 38.6 |

4.2 Analysis of the Measurement Model
A confirmatory factorial analysis (CFA) was carried out using structural equation modeling with Analysis of Moment Structures (AMOS) to examine the general fit of the proposed model with data and to identify the overall relationships among these constructs. Based on the two-step approach recommended by Anderson and Gerbing (1988), first we analyzed the measurement model to test the reliability and convergent validity and discriminate validity of the instrument, and then we analyzed the structural model to test our research hypotheses. We conducted a CFA to examine the reliability and validity including convergent validity and discriminate validity. According to the proposed research framework, the brand equity construct is the second order factor that introduce as the cause of the four first order factors; namely, brand awareness, brand association, perceived quality, and brand loyalty.

The authors firstly construct the second-order model to test. As a result of the second order analysis, (Chi-square = 91.82; df = 48; CMIN/df = 1.913; GFI = 0.962; RMSEA = 0.0364; CFI = 0.941; NFI = 0.972). The fit indices were all better than the recommended value. This demonstrates a good fit between the model and the data. Standardized factor loading, are 0.732 (BA), 0.775 (BS), 0.498 (PQ), and 0.556 (BL) respectively. These indicate that BE were introduced as the cause of the four first-order (BA, BS, PQ, and BL), each measured by four reflective items. Another way to view four factors was element of BE. After that, in order to validate the measurement model, two types of validities were assessed: convergent validity and discriminate validity. Table 3 shows AMOS output results for the internal consistency of the measurement model which was assessed by composite reliability (CR). Table 3 indicates that CR values of all constructs meet the acceptable value of 0.70 (Bagozzi & Yi, 1988). This suggests that a high internal reliability of the data existed.

| Table 3. Confirm factor analysis for the survey instrument validity |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Factor          | Item            | Standardized loading | t-value | AVE  | CR  |
| DCR             | DCR1            | 0.774              | 19.231  | 0.633 | 0.860 |
|                 | DCR2            | 0.803              | 21.321  |       |      |
|                 | DCR3            | 0.747              | 18.136  |       |      |
|                 | DCR4            | 0.808              | 21.954  |       |      |
|                 | DCR5            | 0.753              | 18.741  |       |      |
| Customer Trust  | CT1             | 0.795              | 20.399  | 0.620 | 0.778 |
|                 | CT2             | 0.801              | 22.147  |       |      |
|                 | CT3             | 0.786              | 19.954  |       |      |
|                 | CT4             | 0.751              | 18.651  |       |      |
|                 | CT5             | 0.812              | 23.321  |       |      |
| Brand Equity    | BA1             | 0.771              | 19.562  | 0.569 | 0.783 |
|                 | BA2             | 0.763              | 18.698  |       |      |
|                 | BA3             | 0.812              | 20.657  |       |      |
|                 | B11             | 0.792              | 19.852  | 0.547 | 0.852 |
|                 | B12             | 0.788              | 19.231  |       |      |
Convergent validity shows whether each factor can be reflected by its own items (Hair, Black, Babin & Anderson, 2010) and average variance extracted (AVE) from the measurements. Firstly, according to Hair et al. (2010), an acceptable factor loading value is more than 0.5 and when it is equal to 0.7 and above it is considered good for one indicator. Secondly, AVE value should be greater than the generally recognized 0.50 cut-off (Fornell & Larcker, 1981), indicating that the majority of the variance is accounted for the construct. The AVE values range from 0.547 to 0.633, which are above the acceptable value. This testifies to the validity of the survey instrument for further analysis.

Discriminant validity indicates the extent to which a given concept is truly distinct from other constructs (Hair et al., 2010). One criterion for adequate discriminant validity is that the square root of the AVE for each construct should exceed the correlation shared between one construct and other constructs in the research model. All AVEs are greater than the correlations between one construct and any other construct in the model, demonstrating discriminant validity which can be observed in Table 4.

Table 4. Factor correlation coefficients and the squared root estimate of AVE

|       | DCR | CT  | BA  | BS  | PQ  | BL  |
|-------|-----|-----|-----|-----|-----|-----|
| DCR  | 0.796 |     |     |     |     |     |
| CT   | 0.562 | 0.787 |     |     |     |     |
| BA   | 0.466 | 0.546 | 0.754 |     |     |     |
| BS   | 0.521 | 0.651 | 0.650 | 0.740 |     |     |
| PQ   | 0.539 | 0.489 | 0.601 | 0.623 | 0.756 |     |
| BL   | 0.684 | 0.703 | 0.625 | 0.589 | 0.611 | 0.751 |

Note: The values in the diagonal represent the squared root estimate of AVE.

Therefore, the discriminant validity criterion was also met for CFA model, lending further confidence in the adequacy of the measurement scales. Each item had a higher loading on its corresponding factor than the cross-loading on other factors. Consequently, the derived CFA model was incorporated into the analysis of a structural equation model (SEM) with latent variables. Lastly, square multiple correlation ($R^2$) values among observed variable were not greater than 0.9, implying that there was no problem of multicollinearity.

4.3 Analysis of the Structural Path Model
We conducted the path coefficients of the structural models. AMOS was used to perform a path analysis and test model hypotheses. According to Kline (2015), a sample size where SEM is used is about 200 cases or at least 5 or 10 cases per parameters. The sample size of this study contained with 324 respondents which was large enough. The results are shown in Figure 2. The actual and recommended values of model fit indices are listed in Table 5. As shown in the table, goodness-of-fit indices for the research model were: Chi-square = 281.05; df = 127; CMIN/df = 2.213; GFI = 0.965; RMSEA = 0.0521; CFI = 0.943; NFI = 0.951. This demonstrated a good fit between the model and the data. Table 6 shows the hypotheses, path coefficients and t-values in the dependent constructs.

**Figure 2. Structural model results**

![Structural model results diagram]

**Notes:** *p < 0.05; **p < 0.01; ***p < 0.001; Fit indices: Chi-square = 281.05; df = 127; CMIN/df = 2.213; GFI = 0.965; RMSEA = 0.0521; CFI = 0.943; NFI = 0.951.

**Table 5. The recommended and actual valued of fit indices**

| Fit index | CMIN/df | GFI | RMSEA | CFI  | NFI  |
|-----------|---------|-----|-------|------|------|
| Recommended value | < 3 | > 0.90 | < 0.08 | >0.90 | >0.90 |
| Actual value | 2.213 | 0.965 | 0.0521 | 0.943 | 0.951 |

**Table 6. Hypotheses testing**

| Hypotheses | β     | t-value       | Results |
|------------|-------|---------------|---------|
| H1: DSR has a direct positive effect on BE. | 0.746 | 17.231***       | Supported|
| H2: DSR has an indirect positive effect on BE through CT. | 0.145 | 3.365**       | Supported|
| H3: DSR has a direct positive effect on CT. | 0.676 | 15.213***       | Supported|
| H4: CT has a direct positive effect on BE. | 0.215 | 4.721***       | Supported|

**Notes:** *p < 0.05; **p < 0.01; ***p < 0.001.

The squared multiple correlations which explained the variances of CT, and BE were 0.563, and 0.577 respectively. Support for each hypothesis can be determined by examining the statistical significance of the t-value. As indicated, the model has an
appropriate predictive power for most of the dependent variables. The research model as a whole explains 57.7% of the variance in BE.

According to the result of path analysis, both DSR and CT have significant positive relationship with BE (b = 0.746, t-value = 17.231 and b = 0.215, t-value = 4.721, sig < 0.001 for DSR to BE and CT to BE, respectively). Therefore, H1 and H4 are supported. These findings are consistent with previous research's findings (Jalilvand et al., 2017; Choi & La, 2013; Fatma, Rahman & Khan, 2015).

H3 hypothesized that DSR has a direct positive effect on CT has also been supported by the results (H3: b = 0.676, t-value = 15.213, sig < 0.001). This provides support for previous research's finding (Pivato, Misani & Tencati, 2008; Choi & La, 2013).

Furthermore, according to the result of direct, indirect and total effect testing in Table 7, DSR was shown to have an indirect and positive effect on readiness through CT (H2). Therefore, H2 is supported. The total effects on BE were 0.891 for DSR, and 0.215 for CT. The results showed that digital social responsibility (DSR) has an indirect and positive effect on BE through CT. Consequently, implementing digital social responsibility practices on social media is one of the key to enhance customer trust and overall brand equity in the social commerce context.

**Table 7. Direct Effect (DE), Indirect Effect (IE), and Total Effect (TE)**

| Dependent variables | Independent Variables | R² | DSR | CT |
|---------------------|-----------------------|----|-----|----|
| CT                  | DE                    | 0.563 | 0.676 | - |
|                     | IE                    |    |    | - |
|                     | TE                    |    | 0.676 | - |
| BE                  | DE                    | 0.577 | 0.746 | 0.215 |
|                     | IE                    |    | 0.145 | - |
|                     | TE                    |    | 0.891 | 0.215 |

5. Discussion and Conclusion

The purpose of this study is to investigate the relationship between a digital social responsibility, customer trust and brand equity in social commerce context in Thailand. Although prior research has studied the relationship between a corporate social responsibility and customer trust and brand equity, a more limited amount of research has looked at the impact of DSR in the context on e-commerce and digital business platform. This study is one of first attempts to extend the literature by examining the impact of social responsibility practices in not an offline but also online platform. The results prove the positive impact of the DSR activities on the customer trust and brand equity in the social commerce context. The findings are consistent with prior research in other industries (Jalilvand et al., 2017; Yang & Basile, 2019). Findings of this study also support the notion that online consumers are beginning to use DSR information to evaluate brands.
The implications of this finding are that social commerce businesses can use social media such as Facebook or Twitter as digital informational channel to disclose transparent content to customers. As a result of the popularity and a large percentage of people are present on social media platforms, firms need to start emphasizing on digital social responsibility strategic formulation and implementation through social commerce platform. As social media is a two-way engagement platform, DSR practices on social media may lead to more effective than traditional CSR.

According to Coombs and Holladay (2015), influential messages help boost the credibility of the communication because third parties are involved and stakeholders are likely to perceive third parties to be unbiased advocates of the social responsibility issues. Therefore, DSR can be the more effective way with lower cost of implementation for firms. Focusing on DSR implementation, social media allow firms to set and present a DSR agenda without being modified by traditional gatekeepers. Firms can change the communication patterns from traditional one-to-one or one-to-many communication to any-to-any and many-to-many communication. Based on the results, it is recommended that businesses implementing DSR activities through interactive digital media. To sum up, as results showed, digital social responsibility has a strong direct effect on customer trust and brand equity. Consequently, for enhancing the customer trust and brand equity it is important to implement the DSR initiatives especially in the digital era. This study contributes to the literature on social responsibility to confirm some of the existing findings relating to CSR, CT and BE in social commerce context. It also provides new findings, especially, the relationship between DSR, CT, and BE, which has not been studied extensively, contributing to theory development.

6. Limitations and Future Research Directions

Despite its useful implications, few limitations of this study should be considered as opportunities for future research. Firstly, the data were collected in Thailand and all of respondents were Thai. Therefore, the findings should cautiously be generalized in other countries. Secondly, while a quantitative survey strategy was chosen for this research, an in-depth case study of digital social responsibility could provide additional insight. Thirdly, in an attempt to operationalize the DSR construct, the research developed one construct for DSR. Future researches in breaking down of this construct, into sub-categories of DSR will be interesting and could provide valuable knowledge to the understanding more in-depth view of DSR. Moreover, future research can aim to investigate the impact of DSR on other customers’ perceptions and factors such as corporate image, customer satisfaction, and so on. Lastly, since DSR can effect on customer trust and brand equity differently, potential researches could analyze how a firm’s DSR initiative can impact on customer trust and brand equity for the different cultural contexts of global markets.
The Impact of Digital Social Responsibility on Customer Trust and Brand Equity: An Evidence from Social Commerce in Thailand

References:

Aaker, D.A. 1991. Managing brand equity. New York: The Free Press.
Anderson, J.C. & Gerbing, D.W. 1988. Structural equation modeling in practice: A review and recommended two-step approach. Psychological bulletin, 103(3), 411.
Pornwasin, A. 2018. Social commerce rides social media boom. Retrieved from http://www.nationmultimedia.com/detail/Startup_and_IT/30350986.
Bagozzi, R.P. & Yi, Y. 1988. On the evaluation of structural equation models. Journal of the academy of marketing science, 16(1), 74-94.
Butt, I. 2016. Corporate social responsibility and consumer buying behavior in emerging market: A mixed method study. International Journal of Business and Management, 11(7), 211.
Byrne, B.M. 2016. Structural equation modeling with AMOS: Basic concepts, applications, and programming. Routledge.
Carroll, A.B. 1991. The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. Business horizons, 34(4), 39-48.
Choi, B. & La, S. 2013. The impact of corporate social responsibility (CSR) and customer trust on the restoration of loyalty after service failure and recovery. Journal of Services Marketing, 27(3), 223-233.
Choi, C.J., Eldomiaty, T.I. & Kim, S.W. 2007. Consumer trust, social marketing and ethics of welfare exchange. Journal of Business Ethics, 74(1), 17-23.
Christodoulides, G. & De Chernatony, L. 2010. Consumer-based brand equity conceptualization and measurement: A literature review. International journal of research in marketing, 52(1), 43-66.
Conecomme. 2015. Global Consumers Willing to Make Personal Sacrifices to Address Social and Environmental Issues. Retrieved from http://www.conecomme.com/news-blog/2015-cone-ebiquity-csr-study-press-release.
Coombs, T. & Holladay, S. 2015. CSR as crisis risk: expanding how we conceptualize the relationship. Corporate Communications: An International Journal, 20(2), 144-162.
Eshopworld. 2015. Insights into the growth of Thailand eCommerce with payment methods, target audiences, marketing, social media, economy and logistics all profiled. Retrieved from https://www.eshopworld.com/blog/thailand-ecommerce-insights/.
Famiyeh, S. 2017. Corporate social responsibility and firm’s performance: empirical evidence. Social Responsibility Journal, 13(2), 390-406.
Fatma, M., Rahman, Z. & Khan, I. 2015. Building company reputation and brand equity through CSR: the mediating role of trust. International Journal of Bank Marketing, 33(6), 840-856.
Fornell, C. & Larcker, D.F. 1981. Structural equation models with unobservable variables and measurement error: Algebra and statistics. Journal of marketing research, 382-388.
Gürlek, M., Düzgün, E. & Meydan Uygur, S. 2017. How does corporate social responsibility create customer loyalty? The role of corporate image. Social Responsibility Journal, 13(3), 409-427.
Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. 2010. Canonical correlation: A supplement to multivariate data analysis. Multivariate data analysis: a global perspective. 7th edn. Pearson Prentice Hall Publishing, Upper Saddle River.
Jalilvand, M.R., Nasrolahi-Vosta, L., Kazemi-Mahyari, H. & Khazaei-Pool, J. 2017. Social responsibility influence on customer trust in hotels: mediating effects of reputation and word-of-mouth. Tourism Review, 72(1), 1-14.
Kang, J.W. & Namkung, Y. 2018. The effect of corporate social responsibility on brand equity and the moderating role of ethical consumerism: The case of Starbucks. Journal of Hospitality & Tourism Research, 42(7), 1130-1151.

Keller, K.L. 1993. Conceptualizing, measuring, and managing customer-based brand equity. Journal of marketing, 57(1), 1-22.

Kline, R.B. 2015. Principles and practice of structural equation modeling. Guilford publications.

Lamberti, L. & Lettieri, E. 2009. CSR practices and corporate strategy: Evidence from a longitudinal case study. Journal of Business Ethics, 87(2), 153-168.

Keller, K.L. 1993. Conceptualizing, measuring, and managing customer-based brand equity. Journal of Marketing, 57(1), 1-22.

Lopez, C.M. 2015. Communicating CSR and Brand Personality through Social Media (Doctoral dissertation, Virginia Tech). Retrieved from https://vtechworks.lib.vt.edu/handle/10919/52958

Maia, C., Lunardi, G., Longaray, A. & Munhoz, P. 2018. Factors and characteristics that influence consumers’ participation in social commerce. Revista de Gestão, 25(2), 194-211.

Maignan, I., Ferrell, O.C. & Ferrell, L. 2005. A stakeholder model for implementing social responsibility in marketing. European Journal of Marketing, 39(9/10), 956-977.

Moir, L. 2001. What do we mean by corporate social responsibility? Corporate Governance: The International Journal of Business in Society, 1(2), 16-22.

Mombeuil, C. & Fotiadis, A.K. 2017. Assessing the effect of customer perceptions of corporate social responsibility on customer trust within a low cultural trust context. Social Responsibility Journal, 13(4), 698-713.

Nielsen. 2013. Nielsen: 50% of Global Consumers Surveyed Willing to Pay More for Goods, Services From Socially Responsible Companies, Up From 2011. Retrieved from https://www.nielsen.com/us/en/press-room/2013/nielsen-50-percent-of-global-consumers-surveyed-willing-to-pay-more-fo.html

Oliver, R.L. 2014. Satisfaction: A behavioral perspective on the consumer: A behavioral perspective on the consumer. Routledge.

Pappu, R., Quester, P.G. & Cooksey, R.W. 2005. Consumer-based brand equity: improving the measurement—empirical evidence. Journal of Product & Brand Management, 14(3), 143-154.

Pivato, S., Misani, N. & Tencati, A. 2008. The impact of corporate social responsibility on consumer trust: the case of organic food. Business Ethics: A European Review, 17(1), 3-12.

Santos, J.R.A. 1999. Cronbach’s alpha: A tool for assessing the reliability of scales. Journal of Extension, 37(2), 1-5.

Schivinski, B. & Dabrowski, D. 2014. The consumer-based brand equity inventory: scale construct and validation (No. 4/2014 (22)). GUT FME Working Paper Series A.

Seo, S., & Moon, S. 2016. Decision-making styles of restaurant deal consumers who use social commerce. International Journal of Contemporary Hospitality Management, 28(11), 2493-2513.

Terrero-De La Rosa, A., Santiago-Ortega, R., Medina-Rivera, Z. & Berrios-Lugo, J. 2017. Corporate Social Responsibility Practices and Programs as a Key Strategic Element in Organizational Performance. In Corporate Social Responsibility and Corporate Governance: Concepts, Perspectives and Emerging Trends in Ibero-America, 223-247. Emerald Publishing Limited.

Thalassinos, I.E., Thalassinos, Y. 2018. Financial Crises and e-Commerce: How Are They Related. Available at SSRN: https://ssrn.com/abstract=3330169
Tingchi Liu, M., Anthony Wong, I., Shi, G., Chu, R. & Brock, L.J. 2014. The impact of corporate social responsibility (CSR) performance and perceived brand quality on customer-based brand preference. Journal of Services Marketing, 28(3), 181-194.

Turner, R.C. & Carlson, L. 2003. Indexes of item-objective congruence for multidimensional items. International journal of testing, 3(2), 163-171.

Wang, C. & Zhang, P. 2012. The evolution of social commerce: The people, management, technology, and information dimensions. CAIS, 31(5).

Watts, P. 2000. Corporate social responsibility: making good business sense. World Business Council for Sustainable Development.

Yang, J. & Basile, K. 2019. The impact of corporate social responsibility on brand equity. Marketing Intelligence & Planning, 37(1), 2-17.

Yoo, B., Donthu, N. & Lee, S. 2000. An examination of selected marketing mix elements and brand equity. Journal of the academy of marketing science, 28(2), 195-211.

Zeithaml, V.A. 1988. Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. Journal of marketing, 52(3), 2-22.