SOCIETAL ACTIVITY OF CORPORATE SOCIAL RESPONSIBILITY AS A MODERATING FACTOR OF BRAND LOYALTY IN THE CERAMIC INDUSTRY

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ABSTRACT

The objective of this research study was to investigate the moderating effects of Societal Activity (SA) of Corporate Social Responsibility (CSR) on the relations between brand loyalty and its antecedents. The study mainly focused on the ceramic industry in the Lampang province of Northern Thailand. Questionnaires were distributed among 285 consumers of 11 ceramic factories which have already implemented CSR. The SEM by PLS-Graph revealed that SA of CSR exhibited a significant moderating role in connecting perceived corporate reputation to product attitude and brand loyalty, but exhibited a moderate connection to customer satisfaction. Overall, the research results showed that implementing societal activity of corporate social responsibility allowed consumers to have a strong positive attitude toward the product, slight increase in the brand loyalty and consumer satisfaction.

Keywords: *CSR, Firm Reputation, Brand Loyalty, Product Attitude, PLS*

INTRODUCTION

For decades, the Thai ceramic industry has been vital to the community as it provides a main source of work for people living in those industrial regions. The factories often are located within the communities and are built close to the source of raw materials; hence, they provide a great source of work for those communities. The large scale production of the ceramic industry in Thailand generates a substantial foreign fund inflow which fueled the Thai economy. As reported by the Ceramic Industries Development Center, Department of Industrial Promotion, in the year 2010, the ceramic industry generated approximately 800 million USD (Ceramic Industries Development Center, Department of Industrial Promotion, 2010).

Ceramic products could be classified into 5 categories, including: (1) floor tiles, wall tiles and mosaics which had 12 factories that focused on high technology with approximately 60% of production for export markets (2) sanitary wares had 8 factories that focused on high technology with approximately 60% of production for export markets (3) dining wares had 68 mainly small factories located near raw material sources in the northern Thailand provinces of Lampang, Lamphun, and Chiangmai and focused on labor intensive orientation with approximately 80% of production for export markets (4) souvenir and decorative items had 123 factories scattered around the Lampang, Lamphun and Chiengmai provinces and also were labor intensive with approximately 80% of production for the export market (5) insulators had 10 factories located in Bangkok, Nakorn Pratom in central Thailand and the Rayong province in eastern Thailand which focused on high technology with approximately 90% of production for the domestic market. (Ceramic Industries Development Center, Department of Industrial Promotion, 2010)

The Lampang province had approximately 202 ceramic factories that are mainly small- to medium-sized enterprises (Office of Lampang Province) scattered among several sub-provinces but mostly located in various districts in the Muang sub-province, the Koh Ka sub-province, the Hang Chat sub-province, the Sob Prab sub-province, the Mae Tha sub-province, and the Wang Nua sub-province. Most of the ceramic industry in the Lampang province is labor focused and located in the local communities. The majority of the firms producing dining wares and souvenir items have been established since 1957 when the Chinese immigrants discovered sources of clay in the local areas aforementioned.

In addition to ceramic industries, the Lampang province also had an extensive mining industry, including the Mae Moa lignite mine, and other industries which inevitably impacted the air quality in the regions. The indicator of air pollution used by the Pollution Control Department is called the Air Quality Index (AQI) which is tabulated to cover 5 toxic substances, including: Ozone (O_3), Nitrogen dioxide (NO_2), Carbon monoxide (CO), Sulphur dioxide (SO_2), and Particulate matter (PM_{10}). The PM_{10} was non-harmful only if the size of the particulate matter is between 2.5-10 microns and not bigger than 100 microns. The environment with the particulate matter of which the size 101-200 microns is considered harmful to the human body. Particulate matter of which the size 201-300 microns is considered severely harmful to human healthy, and over 300 microns would be considered the highest level of severity and the most harmful to human health. The statistical data of AQI during year 2005-2010 at the station revealed the highest AQI values as followed: 63, 106, 100, 100, 92, 104 and 135 chronologically, subsequently which were skewed to the caution zone. (The Pollution Control Department) Even though, ceramic factories could not be identified as the main cause of concern, they should be key contributors due to the high number of factories in operation.

Other than focusing on social responsibility such as pollution control as aforementioned, to promote their industry, Thai ceramic businesses also need to concentrate on product branding. For years, Thai ceramic businesses have been the original equipment manufacturers (OEM) for export; hence, they have foregone various benefits of possessing brand ownership. (Ceramic Industries Development Center, Department of Industrial Promotion, 2010) In addition, the ceramic businesses should also focus on promoting the brand loyalty as it could potentially create tremendous value added to their businesses. The linkage between CSR and the brand loyalty questioned whether the brand development can occur at the early stage of CSR activities if the firms initially implement CSR in the local communities where those firms are located. Specifically, we expect that the consumers' perception on the firms regarding the corporate social responsibility initiatives would allow the firms to promote the brand loyalty and ultimately allow them to become more competitive.

RESEARCH OBJECTIVES
1. To study the level of importance of the perceived firm reputation, the corporate societal responsibility, the product attitude, the customer satisfaction with the quality of service, and the brand loyalty of ceramic products.
2. To study the mediating effect of the societal activities of CSR between firm reputation and brand loyalty of ceramic products.

RESEARCH SCOPE
This research was conducted via surveys to determine the effects of firm reputation, societal CSR, consumer attitude towards the product, and customer satisfaction of the service quality toward the brand loyalty. The data was collected during January 2010 and January 2011. The research sample was the customers who purchased ceramic products from the firms with CSR implementation which are located in the vicinity of the Lampang province in northern Thailand.

LITERATURE REVIEW
The review literature of relevant variable factors was conducted with the briefing of PLS-PM and the comprehensive review of literature in accordance with the variables sequence.

1. PLS-PM THEORY

The structural equation modeling (SEM) consisted of 2 sets of models, including the structure and the measurement model. In the models, ξ was defined as latent variable, β was defined as path coefficient, and ζ was defined as the residual term. The total blocks of indicators of Q blocks were $X_1, X_2, \ldots, X_q, \ldots, X_Q$ in which each block had indicators of "P" indicator as X_{pq}; p = 1,2,3,…,P; q = 1,2,3,…,Q where X_{pq} indicated number p that was directly affected by its latent variable q. Each indicator had data at "N" value.

The structural equation was $\xi_j = \beta_{oj} + \sum\limits_{q:\xi_q \to \xi_j} \beta_{qj} \xi_q + \zeta_j$ where E $(\zeta_j|\xi_j) = 0$ when ξ_j was endogenous variable ξ_q was exogenous variable. Two types of measurement model can be chosen as appropriated:

    1) Reflective measurement model

$$x_{pq} = \lambda_{po} + \lambda_{pq}\xi_q + \varepsilon_{pq} \quad \text{where } E(x_{pq}|\xi_q) = \lambda_{po} + \lambda_{pq}\xi_q$$

and λ_{pq} was the path coefficient link from latent variable ξ_q to indicator x_p.

    2) Formative measurement model

$$\xi_q = \sum_{p=1}^{P_q} \omega_{pq} x_{pq} + \delta_q \quad \text{where } E(\delta_q|x_{pq}) = \sum_{p=1}^{P_q} \omega_{pq} x_{pq}.$$

The quality assessment of the structural equation modeling (SEM) could be conducted separately as follows: (Henseler, Ringle and Sinkovics, 2009).

1. Reflective Measurement Model Case	
Criteria	**Description**
1) CR (Dillon-Goldstein's ρ)	$CR = \dfrac{(\sum \lambda pq)^2}{(\sum \lambda_{pq})^2 + (1 - \lambda_{pq}^2)} \geq 0.6$ measure internal consistency or block homogeneity where λ_{pq} was loading of ith manifest in j^{th} block.
2) Indicator reliability	$\|loading\| \geq 0.707$ and statistical significance.
3) AVE	$AVE_j = \dfrac{\sum \lambda_{ipq}^2}{\sum \lambda_{ipq}^2 - (1 - \lambda_{ipq}^2)} = \dfrac{1}{p}\sum\limits_{i}^{p} \lambda^2 pq \geq 0.50$
4) Fornell-Larcker Criterion	$AVE_i >$ Correlation (LV_i, LV_j); $i \neq j$ indicated item/manifest in block i share variance of block i over other blocks.
5) Cross loading	Factor weight must be with high value within own block and with lower value on other blocks.
2. Formative Measurement Model Case	
Criteria	**Description**
1) Nomologic Validity	Formative indices of any LV must significantly relate to such LV at high R^2.
2) Multicollinearity	Formative indices must not constitute multicollinearity problem.

The quality index was exhibited as follows (Vinzi, Trinchera and Amato, 2010)

    1. Communality indicates that LV was able to explain its MVs by the average value of

$$Commun_q = \frac{1}{P_q} \sum_{p=1}^{P_q} corr^2(x_{pq}, \hat{\xi}_q); \forall_q : P_q > 1 = \frac{1}{P_q} \sum_{p=1}^{P_q} \lambda_{pq}^2; \forall_q : P_q > 1$$

and each LV in the structural equation model explained its MVs by average value of

$$\overline{Commun} = \frac{1}{\sum\limits_{q:P_q>1} P_q} \sum_{P_q>1} \sum_{p=1}^{P_q} corr^2(x_{pq}, \hat{\xi}_q).$$

    2. Redundancy indicates how strong the antecedents affect the indicators of it endogenous variable in the path structure.

$$Redun_j = Commun_j * R^2(\hat{\xi}_j, \hat{\xi}_q : \hat{\xi}_q \rightarrow \hat{\xi}_j)$$

and average effect to each indicator of endogenous variable is $\overline{Redun} = \frac{1}{J}\sum\limits_{j}^{J} Redun_j$ where J is the number of

endogenous variables.

3. Goodness of Fit (GoF) used to measure the overall quality of model on both the structural model and the measurement model altogether i.e.

$$GoF = \sqrt{\overline{Commun}*\overline{R^2}} \quad where \quad \overline{R^2} = \frac{1}{J}\sum\limits_{j}^{J}R^2(\hat{\xi}_j, \hat{\xi}_q : \hat{\xi}_q \rightarrow \hat{\xi}_j).$$

Estimation algorithm of Partial Least Square Path Model (PLS-PM) was exhibited as follows

Step1. To estimate the LV value iteratively as (1) find the estimated value of outer weight (2) find the estimated value of LV (3) estimate the value of inner weight and (4) find the estimated value of LV

Step2. To estimate the value of weight/loading and path coefficient

Step3. To estimate a value of the location parameter.

2. THEORY OF BRAND LOYALTY

Brand loyalty was the internal attitude that tended to be positive or favor of oneself (Sheth and Park, 1974) as (1) brand selection because of emotive tendency, e.g. love, fear, respect or personal choice of selecting one brand over other brands which customers might learn from direct experience or from indirect experience (2) brand selection because evaluative tendency which the evaluative measure might be skewed toward one side which happened from direct experience, from indirect experience or from customer available communication media, e.g. durable, taste, identity, satisfaction and (3) brand selection because of behavioral tendency, for instance the customer behavior in purchasing activity which might be initiated during shopping for products, picking up items from the shelf, payment and usage to generate purchasing experience which accumulated till having positive tend.

According to theory of brand loyalty, brand loyalty was impacted from the positive attitude on products / services including the various frames, for example on quality frames, product attribute frames and corporate governance frames. The brand loyalty was often measured by the frequency of purchasing or accessing services (behavioral frequency) or repurchase pattern as the result of satisfaction, involvement and the deliberation (Bloemer and Kasper, 1995) as the relative attitude with the repeat patronage. (Dick and Basu, 1994)

3. CORPORATE SOCIAL RESPONSIBILITY (CSR)

The corporate social responsibility was one of the key factors to indicate business growth of the corporate firm for long term sustainability toward organizational excellence (Gartner and Bellamy, 2010) and the stakeholders, e.g. shareholders, customers, creditors and social citizens could enjoy the full benefits (Lepoutre and Heene, 2006). The concept was based from religious virtue (Baker, 2003) in integrating the organizational internal or external resources for the casual harmony of people in the society.

CSR meant the combining of public benefits with the business decision in order to generate the mutual benefits for 3 main bottom line (TBL) groups, i.e. people, planet and profit. The organizational activities was previously developed to maximize profits and gradually reduce the profit factor and to divert attention toward the benefits to the society as per the social expectation and needs. The goal of the organization was still to profit, but to do so while achieving societal benefits.

The benefits toward the society consisted of following factors (Yuan and Ning, 2002):

1. The responsibility toward staff as any benefits to the staff would have an effect on the organization.

2. The responsibility toward customers as the living standard of customers impacted the type, character and prices of the products. If any products or services resulted in defects or generated customer damages and customers had disclosed the situation to others this would cause inevitable damage to the organization.

3. The responsibility toward creditors who granted credit to the organization and set the obligation to the organization as the debtors must comply. The organization must be responsible to the creditors for a solid relationship in the long run.

4. The consciousness toward environmental protection as the environment had to be passed on to the next generation. Humans must have sustainability development in mind for the younger generation.

5. The responsibility toward the development of social and economic community where the organization was located as the organization consumed the resources of the community. If the organization created issues or danger to the community, e.g. pollution or harvesting resources owned by a public utility it would be difficult for the organization to have a smooth operation as it might be protested and damages could result from such protests. On the contrary, if the organization conserved the environment, supported the community, strengthened the community through participation in the quality of life development for the community, the organization would then be protected by the community.

6. Their is responsibility toward society in general on the following activities, donation to hospitals, donation for poor patients, donation for the mentally and/or physically challenged, donation for home building for the elderly, providing scholarship funds, anti-drug abuse funding, anti-crime funding, etc. all of which would earn a good corporate image.

The benefits from CSR could be described as follows: (1) building trust with the customers, it was revealed that company had increased their business assets from 17% in 1980 to 70% in 1990 and had increased their sales volume by 4 fold, and increased job employment by 8 fold when compared with the companies without CSR (Right Way Management Co., Ltd.). This was due to trust created among stakeholders as a result of CSR which were strongly linked to the outcome of the operation. (2) Through the implementation of CSR many parties benefited, including: its own employees, the local community, the environment, and society as a whole. The outcome of this study in combination with corporate governance would help to reduce potential risks facing the company. It could be seen that CSR should play a central role in risk management. (3) The implementation of CSR enables the organization to attract high caliber personnel as confident on the taking care of personnel. (4) The determination in implementing CSR on the environment, for instance 3R (reduce, reuse, recycle) helped to reduce energy consumption, reduce costs and increased the quality of environment, i.e. decrease carbon dioxide which in turn reduces global warming. (5) The implementing of CSR helped build customer trust toward the organization and linked positive impression toward commitment to the organization's brand. The outcome also pressed the implementing of CSR activities among stakeholders throughout the supply chain. (6) CSR generated public admiration toward the organization and in turn resulted in support which allowed the license of operation in the community. (7) CSR was the sustainable activity in building the customer base, i.e. on the top end market with high revenue consumers and high competition. Those organization moved to the lower end market with low income consumers and implementing CSR to generated revenue, developed a better quality of life and gradually moved this group of consumers to have a higher revenue, better quality of life and in the same have loyalty toward the organization and its brand who created the benefits and willingness to be the sustainable customers. In general, we could divide CSR into 3 levels which was philanthropic level, e.g. forest plantation, beach cleaning, donation of gifts according to the situation; ethic level, e.g. professionalism or business integrity and legal level which was operated in accordance with laws and regulation, e.g. not infringe on environmental and natural resource law, historical sites, customers, business partners, society, community and cultures.

The study of Aqueveque and Ravasi (2006) revealed that CSR had a highly positive affect from the firm's reputation and from the study of customer behavior in retail stores, it was revealed that the perception of CSR activities and the belief of CSR operations had a positive direct affect toward the loyalty of the organization and the likelihood of repeat purchases (Schramm-Klein and Zentes, 2008). All CSR activities had a directly positive affect toward the loyalty of customers (Onlaor and Rotchanakitumnuai, 2010). CSR had an indirect effect through the organization admiration and organization capacity toward the organization loyalty which were assessed by the repeat purchase, recommendation and the sustainable commitment (Zhang, 2009). CSR had a positive effect toward the product attitude of both direct effect and the interaction effect with the product suitability (both suitable features and suitable market) and had interaction effect with involvement (seek to know, to understand the need and benefits) toward the product attitude (Berens, Van Riel and Van Bruggen, 2005) and CSR also had direct effect toward the

brand performance (select over other brands, brand commitment) but was impacted from the firm reputation and brand equity which included the brand loyalty, perceived quality and brand satisfaction (Lai, Chiu, Yang and Pai, 2010) and had a direct effect toward the brand loyalty and valuation of service (Salmones, Crespo and Bosque, 2005). The literature review could be concluded to the research hypothesis as follows:

>   H1: Perceived CSR had affected toward the brand loyalty of customers.
>   H2: Perceived CSR had affected toward the customer satisfaction on service quality.

4. FIRM REPUTATION

Firm reputation was the perceived importance by consumers, business partners and business stakeholders. The building of reputation was complex and time consuming, in particular on the development of product and service quality, trustworthiness by the consumer, entrepreneurship with effective vision, or the low unit costs investment to sustain business existence (Eberl and Schwaiger, 2005).

Firm reputation was the organizational characteristics which were created from the administration and management of any of these factors, e.g. price, product quality, innovation, leadership and the management capacity which the organization could consistently operate from past until present, which linked to the expectation from the organization and to assess organization (Herbig and Milewicz, 1995). It also revealed that the firm reputation had affected financial performance (Camdi and Tisher, 2005) which affected customer intention to repeat purchase and the positive attitude toward the sales person (Yoon et al., 1993) and to compare the performance among organizations (Rao, 1990), to attract joint investment, to increase bargaining power and important factors in developing good personnel behavior (Dutton, 1994). From the study of Aqueveque and Ravasi (2006) it was revealed that the firm reputation had affected the organization's ability to implement CSR (e.g. taking care of personnel, environment and community), effected the development of product and service quality, and had affected the organizations level of trustworthiness. Lai, Chiu, Yang and Pai (2010) had in turn revealed that CSR had effected firm reputation and had impacted brand performance, i.e. purchasing a brand product which generated growth to the organization, increased market share, profit margin and other factors in general. The literature review could be concluded to the research hypothesis as follows:

>   H3: Perceived firm reputation of customers had affected the perceived CSR

5. CUSTOMER SATISFACTION

Customer satisfaction was the emotional response toward the product following usage in the definite condition. Satisfaction was the creation of a consumer trend by measuring the level of satisfaction from purchased products (Stan and Gilbert, 2006). Therefore, the customer satisfaction level was similar to the existing attitude relied on by available experience in decision making, and impacted higher sales and profits of the business.

The satisfaction level was the outcome of the assessment on the received products and services at the time when (1) claimed quality (2) actual quality (3) advertised quality and (4) experienced quality converge which requires quality management throughout the organization with the aim in increasing the productivity and service level to meet the customer requirement (Bitner, Hubbert and Valarie, 1997). Service quality could be described into 10 elements, i.e. tangibles, reliability, responsiveness, competence, courtesy, credibility, feeling of security, accessibility, communication, understanding which the researcher had concise into 5 groups or sometime 3 groups as per study context which would generally measure the satisfaction in overall picture (global evaluation) or the overall feeling (feeling state), so it would measured only 2-3 factors (Oliver, 1997).

The study of Zeithaml et al. (1996), Reich (2002) and Salmones, Crespo and Bosque (2005) revealed in line with each another that customer satisfaction with service quality had an effect on brand loyalty. The literature review could be concluded to the research hypothesis as follows:

>   H4: Service quality satisfaction had an effect on brand loyalty

6. PRODUCT ATTITUDE

Product attitude could be viewed as the commitment to a products brand and the intention to repeat purchase (Dorsch et al., 2000; Patterson et al., 1997) since attitude was the emotive matter or the feeling of like or dislike. This is

both the feeling exhibited and the responding trend, e.g. brand as previously learnt by consumers. Attitude was how the individual interacted with the brand image. It was difficult to be changed and hard to be correctively predicted. In particular if consumer had negative attitudes then it would be difficult for the marketer to change it. Therefore, the product attitude had strongly affected the success or failure of the marketing strategy of an organization.

Product attitude was the feeling toward the product often on the quality, attraction or the trustworthiness which might be toward a specific product or as compared with other relevant products on its beauty, useful features, ease of use, nice to buy and as buying intention or happy to own and use, including the feeling that the product or service were trustworthy and safe. The study revealed that the product attitude had a direct effect from CSR. It meant if the customer perceived the organizations performed well on CSR, it would result in a positive attitude toward the product (Berens, Van Riel and Van Bruggan, 2005). The literature review could be concluded to the research hypothesis as follows:

H5: Perceived CSR had an effect on product attitude of customers

7. BRAND LOYALTY

Product brand was the intangible asset that every organization values and drives to build, maintain, and communicates to the target group by focus on the identified behavior of regular customers (Ehrenberg and Goodhardt, 2000). In the midst of severe competition, a majority of successful brands were brands with clear identities. Most of these brands had a committed obligation to consumers to deliver products or services exceeding their expectations, having an organizational culture or value that demonstrated integrity and established corporate governance in their business operations. Investment in public advertisement to build awareness in a short period with the expectation of increased sales volume but with a lack of responsibility would not achieve target goals in the current society where news and internet technology had increased consumer awareness. The company viewed the importance of this factor and established the direction in building and managing product brand from the implementation to the awareness, trustworthy and commitment on product reference. The company avoided investing a large sum of budget in public advertisement in order to establish the awareness without solid fundamentals, it also developed organizational value to support and strengthen the managing of the product brand (Dick and Basu, 1994; Baldinger and Rubinson, 1996).

Throughout the operational period, the factor that supported sustainable corporate growth was the trustworthiness of the consumer toward the product brand. It covered the product value, and managed customer experience and the after sale service which were key elements in creating differentiation, a strength for the product brand to be recommended and accepted in a broad perspective. Successful brands often had a long brand history in the mind of consumers which developed from ongoing product opinions including the various media exposure related to various brands, e.g. in magazine, critique column in newspapers and casual peer discussions or conversations which were accumulated through time leading the brand to be recognized and destined to become branded in culture.

The study of Julander and Soderlund (2003) on the linkage among the obstacles of shifting brand, customer satisfaction and brand loyalty revealed that the satisfaction toward the organization and business partners had an effect on the brand loyalty. The study of Gerpott, Rams and Schindler (2000) on the brand loyalty of mobile phones revealed that customer satisfaction which was assessed on earned benefits, suitable quality, and customer service had impacted brand loyalty and yet continued to impact the ability to keep customers which also depended on the profiling of the competition. The product / service must be good with quality not as fake or poor quality (Roman, 2010) and the study of 4 type of brand loyalties (Olsen, 2002) revealed that the satisfaction had an effect on brand loyalty and the product quality attitude had an effect on brand loyalty. The literature review could to be concluded to the research hypothesis as follows:

H6: Product attitude had an effect on brand loyalty

RESEARCH METODOLOGY

The research was conducted to survey ceramic consumers at Lampang province in northern Thailand. The unit of analysis was 285 customers whom used to purchase ceramic from 11 societal CSR exercised factories.

The questionnaire was formulated with the Likert 5 levels scale and divided into 5 sections in accordance with the constructs in the conceptual framework, i.e. questions on the perceived firm reputation on CSR as modified from Aqueveque and Ravasil (2006), questions on the perceived CSR on societal factor covered the perception of consumers on the corporate societal responsibility as modified from King (2000). Product attitude was questioned consumers on their thoughts toward the purchase of products from factories on 3 dimensions (1) quality (2) attractiveness (3) trustworthiness as modified from Berrel, van Riel and van Bruggen (2005), the consumer satisfaction was measured from the satisfaction on service quality as modified from Reich (2002) and the brand loyalty was measured from 2 aspects (1) loyalty attitude and (2) loyalty behavior as modified from Reich (2002).

The data analysis was split into 2 sections, i.e. descriptive statistics to illustrated the profile of sampling groups and the level of perceived firm reputation, level of perceived CSR, level of product attitude, level of satisfaction on service quality and level of brand loyalty by applying decision criteria of average value equal to 1.00-1.50 as very poor, 1.51-2.50 as poor, 2.51-3.50 as medium, 3.51-4.50 as good and any over of 4.50 as very good (Best, 1986). The section 2 was the inferential statistics to analyze the casual relation-ship from structural equation model with PLS-Graph program (Chin, 2001) together with the analysis on the factorial validity.

DATA ANALYSIS

1. Population Characteristic: Table 1 revealed that there were slightly more female than male, majority were within 20-29 years age group, the older age group also had the similar portion of 25%, with married approximately half and the remaining was other marital status. For the purpose of purchase was for kitchen and dining ware or for mementos and souvenirs at the same proportion. For the purpose of purchase was for kitchen and dining ware or for mementos and souvenirs at the same proportion.

**Table 1** *General Characteristics of sampling group*

Population Characteristics of Consumer		Percentage
Gender	Male	42.96
	Female	57.04
Age	20-29 yrs.	46.83
	30-39 yrs.	28.17
	40-49 yrs.	25.00
Marital Status	Single	54.23
	Married	33.10
	Divorced/Widowed	12.68
Products	Dining Table Ware	47.62
	Mementos Souvenirs	52.38

2. Table 2 revealed that consumers perceived firm reputation on CSR at a medium level, perceived the CSR in society and community at rather high toward the medium, had good attitude toward products, had satisfaction toward the service quality at medium level and had brand loyalty at lower medium level. The perceived CSR operation at rather high level which could be described that the population paid attention to the commitment level at which the organization ought to perform. Since the organization utilized a lot of societal capital, environmental capital and community resources, the organization should return certain benefits back to the society, perhaps in capital investment, operational performance, providing convenience, supporting culture and arts, sports, professional training, environmental protection, education and provided other benefits to society and community where the organization is located. The other factors were all at medium level which could be

described that ceramics were local products, well known and consumed as routine in their life. Manufacturers often produced their products with similar design, price and quality were within the same range; hence, there was less brand loyalty as noticed in the low average value. It might be due to the fact that the ceramic business in Lampang province was the Original Equipment Manufacturer (OEM) business with less focus on branding. The satisfaction toward the service quality had a low average value as well. It was clearly indicated that manufacturers had no focus on their retail business as it was only the small portion of its main business or they believed retail sales was the task of retail shops which could be either traditional retail stores or open kiosk shops who had no interests in service quality. Additionally, it was revealed that consumers had rather good attitude toward the products, in particular on specific required features and in confidence of the quality. It might be due to the fact that the ceramics in Lampang province was the local product which consumers had been using for such a long time that they took a sense of ownership and pride as local product of the province, so they had developed confidence on the quality and satisfaction with the design variety.

Table 2 *Average S.D. and Statistical Validity*

Perceived Firm Reputation	Average	SD	loadings	CR
Had reputation in supporting social activities	3.42	0.52	0.991**	0.991
Had reputation in responsible to people / community organization located	3.43	0.55	0.990**	
Perceived Societal CSR	Average	SD	loadings	CR
Assisted to develop job working plan for community	3.56	1.36	0.813**	0.952
Provided service and continue follow up service to community	3.51	1.14	0.836**	
Donated office equipments and information to non-profit organization	3.26	0.84	0.719**	
Supporting education and public health in factory located area	3.31	0.70	0.815**	
Jointed non-profit state or association to support less opportunity person	3.76	0.82	0.843**	
Donated money to judicial foundations	3.23	0.67	0.739**	
Donated money to support community sports	3.65	1.04	0.909**	
Assisted to plan and develop community business	3.56	1.00	0.891**	
Donated money to support community arts and cultures	3.51	0.95	0.902**	
Provided money to support the community sport teams	3.45	0.85	0.860**	
Brand Loyalty	Average	SD	loadings	CR
I loyal toward the branded products from this factory	3.10	0.85	0.982 **	0.899
I intended to recommend branded products from this factory to friends	3.50	1.06	0.926**	
I would continue purchase branded products from factory even with higher	2.73	0.98	0.735**	
How often did you purchase products from here?	2.94	1.02	0.789**	
You would still purchase products from this factory in the future	3.58	0.73	0.819**	
Customer Satisfaction	Average	SD	loadings	CR
Responsiveness	3.36	0.65	0.972**	0.911
Hospitality	3.30	0.67	0.776**	
Reliability	3.26	0.63	0.963**	
Product Attitude	Average	SD	loadings	CR
How much you like product from here?	3.85	0.77	0.848**	0.951
Your opinion about the quality of product from here?	3.75	0.79	0.777**	
Your opinion on quality of this product compared to other similar one	3.67	0.65	0.916**	
What were benefits of product from here to customers?	3.47	0.53	0.847**	
Product from here attracted attention	3.84	0.73	0.837**	
Product from here created pleasure and proud	3.69	0.68	0.824**	
Product from here met my desire	3.92	0.75	0.852**	
Product from here could be trusted	3.77	0.93	0.906**	
Product from here would be saved (no harm)	3.57	0.73	0.810 **	
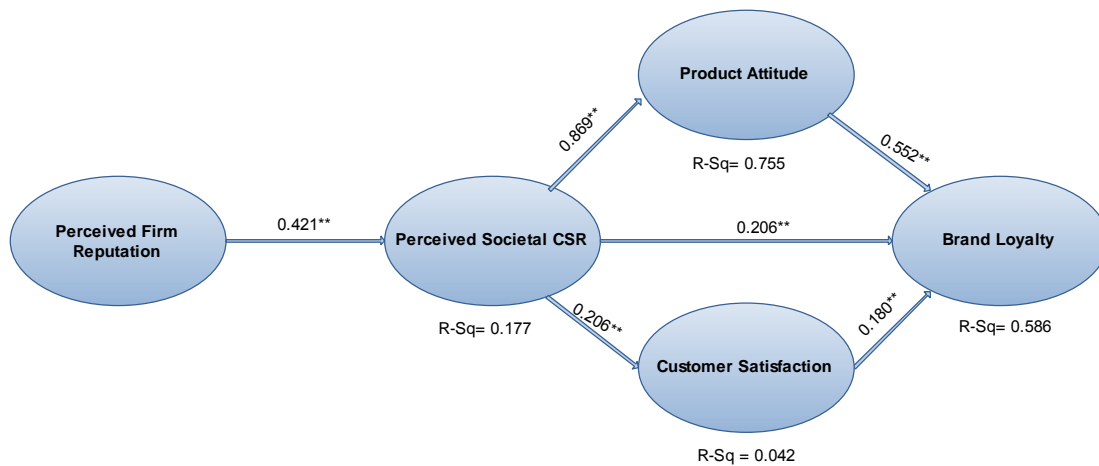
Picture1 Outcome of Structural equation Module Analysis

3. Picture 1 and Table 2 revealed that CSR had been rather strong and directly affected from the firm reputation both in CSR operation and in supporting society. Perceived firm reputation had effected indirectly toward the brand loyalty at level of 0.304, affected indirectly toward the product attitude at 0.366 and affected indirectly toward the customer satisfaction in service quality at 0.087. And as the antecedent variable, CSR had direct effect toward the product attitude, brand loyalty and customer satisfaction at level of 0.869, 0.623 and 0.206 respectively.

CSR had a noticeably high effect on the customer attitude toward brand (β = 0.869, p ≤ .01) which were highest in all paths which indicated the good attitude toward brand must rely on the good CSR and the outcome of this good attitude had strongly passed on to brand loyalty (β = 0.552 , p ≤ .01). It also revealed that CSR had a rather low effect on the satisfaction of service quality and brand loyalty (β = 0.206, p ≤ .01) which might be caused by the traditional retail stores or open kiosk shops who purchased products from the manufacturers and still had a traditional way of doing business with less awareness on service quality and customer satisfaction, therefore the service quality level was low which was contradict to the expectation. In addition, it also revealed that the brand loyalty had a direct effect from CSR (β =0.206, p ≤ .01) which was rather low as well. In addition, brand loyalty also had an indirect effect from CSR which passed through attitude toward the brand loyalty, it indicated that brand loyalty had been equally effected in total from the product attitude and CSR, and the only difference was that product attitude had a direct effect, whereas CSR had both a direct and indirect effect. The customer satisfaction had a significant effect but lower than other factors. These outcomes can be summarized in research hypothesis testing as illustrated in Table 3 which was shown all supported.

Table 3 Affect of Antecedent Variable toward Endogenous Variables

Endogenous Variable	R^2	Effect	Antecedent			
			Product Attitude	Customer Satisfaction	Perceived Societal CSR	Perceived Firm Reputation
1. Brand Loyalty	0.586	DE	0.552**	0.180**	0.206**	0.000
		IE	0.000	0.000	0.417	0.304
		TE	0.545	0.180	0.623	0.304
2. Product Attitude	0.755	DE	N/A	N/A	0.869**	0.000
		IE	N/A	N/A	0.000	0.366
		TE	N/A	N/A	0.869	0.366
3. Customer Satisfaction	0.042	DE	N/A	N/A	0.206**	0.000
		IE	N/A	N/A	0.000	0.087
		TE	N/A	N/A	0.260	0.087
4. Perceived Societal	0.177	DE	N/A	N/A	N/A	0.421**

| CSR | | IE | N/A | N/A | N/A | 0.000 |
| | | TE | N/A | N/A | N/A | 0.421 |

Table 4 Outcome of Hypothesis Test

Hypothesis	Path Coefficient	t-stat	Outcome
Perceived Firm Reputation → Perceived Societal CSR	0.421	10.509	Supported
Perceived Societal CSR → Product Attitude	0.869	63.347	Supported
Perceived Societal CSR → Customer Satisfaction	0.206	2.990	Supported
Perceived Societal CSR → Brand Loyalty	0.206	2.022	Supported
Product Attitude → Brand Loyalty	0.552	5.113	Supported
Customer Satisfaction→ Brand Loyalty	0.180	2.343	Supported

FACTORISAL VALIDITY

Table 2 revealed the loading of indicators of construct with value higher than 0.707, by the lowest loading with value equal to 0.745 and the highest loading with value equal to 0.991 and with the significant level on all indicators which confirmed the convergent validity. It also revealed the composite reliability value higher than 0.60 on all constructs by those latent variables had CR value in between 0.899-0.991 indicated the reliability of the tool and would achieved nearly similar result from a thousand surveys . It also revealed that Average Variance Extracted (AVE) with value higher than 0.50 by having values between 0.649-0.982 (Table 5), the AVE value could exhibit an average effect of construct on the indicators. If AVE closed to 1 indicated that a construct able to reflect all of its effect to manifest variables of that block. Table 5 revealed $\sqrt{AVE}$ (illustrated multiple correlation within ith block as shown in main diagonal of latent variable array) had higher value than the correlation between ith construct and other constructs which indicated that the measurement of ith construct able to measure only on its own block not able to cross measure on other blocks which could be concluded that the measurement of all construct had discriminant validity.

Table 5 Quality of structural model and measurement model

latent variables	Latent Variables					R^2	AVE	Average Communality	Average Redundancy
	1	2	3	4	5				
1. Perceived Reputation	0.991					0.000	0.982	0.982	0.000
2. Perceived Societal	0.421	0.819				0.177	0.670	0.670	0.119
3. Product Attitude	0.365	0.869	0.983			0.755	0.668	0.688	0.520
4. Customer Satisfaction	0.060	0.206	0.120	0.881		0.042	0.776	0.776	0.033
5. Brand Loyalty	0.171	0.649	0.753	0.203	0.806	0.586	0.649	0.649	0.380
Average						0.390		0.775	0.263
GoF = 0.549									

5. Picture 1 revealed 4 structural equations, i.e.

Perceived Societal CSR $= 0.421^{**}$ Perceived Firm Reputation; $R^2 = 0.177$ ... (1)
Product Attitude $= 0.869^{**}$ Perceived Societal CSR; $R^2 = 0.755$ ... (2)
Customer Satisfaction $= 0.206^{**}$ Perceived Societal CSR; $R^2 = 0.042$ … (3)
Brand Loyalty $= 0.552^{**}$ Product Altitude + 0.206^{**} Perceived Societal CSR
                          $+0.180^{**}$ Customer Satisfaction; $R^2 = 0.586$ ... (4)

The structural equation could be applied to explain the causal relationship at acceptable level to good level (R^2 over 0.20) with the exception of formula (3) shown subjectively low R^2 which indicated that CSR and Customer

Satisfaction on service quality had small relationship and interpretation of the linkage between them must be done with care since the firms in general not have their own retail division but letting traditional retailers or open kiosk shops performed the retail task instead.

Table 5 revealed that the structural equation model with GoF value = 0.549 which was rather high, it indicated that both the structural model and measurement model were suitable and in line with the empirical data (GoF assumes value between 0 and 1). The average communality equal to 0.775 indicated each construct reflected back to their measurement on the average of 71% per block. Hence, the quality of this structural equation model was satisfactory. The average redundancy equal to 0.263 indicated that the indicators of each inner construct had been affected from its antecedent along path diagram (also see equation (1) to (4) above) with the average of 26.3 % per value .This value show average prediction performance of the model which in general the value was not high.

DISCUSSION AND IMPLICATION

The study revealed that the total picture of customers of ceramic products manufactured in Lampang province in northern Thailand had perceived firm reputation, CSR on community, and service satisfaction at a medium level. Furthermore, customers were rather high on product attitude and rather low on brand loyalty as the ceramic products were the local product of the Lampang province for more than 50 years until becoming an image of pride in the community. As such, consumers had positive attitudes towards the products and in the case of brand loyalty with rather low average values it may be due to the ceramic industry still lacking an original brand manufacturer (OBM), but instead products were often manufactured in line with customer requirements (Original Equipment Manufacturer: OEM) or produced without any brand which led to all the products in the market without brand or off-brand specifications.

The study of casual relationship revealed that CSR had an effect on the brand loyalty which was synchronized to the study of Beren, van Riel and van Bruggen (2005); Lai, Chiu Yang and Pai (2005) and Salmones, Crespo and Bosque (2005), had been directly effected from the perceived firm reputation which was synchronized to the study of Aqueveqne and Ravasi (2006), that found an effect toward customer satisfaction which was synchronized to the study of Salmones, Crespo and Bosque (2005). In term of policy, the organization would need to build product brand first to motivate the customers to repeat purchase or to generate other organization commitment aspects, i.e. to focus on OBM not solely on OEM which was not difficult as the ceramic industry in Lampang province was created in 1957 and has continued to produce since then to now become the pride of customers, which could be observed from the rather high product attitude. This study revealed that CSR had the highest effect on the product attitude in the model which indicated that customers were willing to accept the products and the brand loyalty, but the organization should implement CSR activities on all aspects. The organization should focus on the marketing its own products with clear service quality and focused advertising, and should less allow the traditional retail store or the open kiosk shops to handle the sale where service quality is not as controllable.

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