Social media use for CRM and business performance satisfaction: The moderating roles of social skills and social media sales intensity

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ABSTRACT

The present study explored the association between the intensity of social media use for customer relationship management (CRM) and the business performance satisfaction of Thai microenterprises. The survey data were collected from 217 owners of the small shops at major marketplaces in Thailand. The results from partial least square regression analysis showed that the entrepreneurs who used social media intensively for CRM tended to report higher satisfaction with their business performance. Furthermore, the results from the moderating effect analyses found that the positive relationship between social media use intensity for CRM and business performance satisfaction tended to be significantly higher for the entrepreneurs who exhibited lower levels of social competency in business, as well as for the companies that generated more sales from social media. The main findings of this research provide practical implications for microenterprise entrepreneurs. Given that communication in social media tends to involve less interpersonal interactions than face-to-face communication, using social media for CRM activities might be essential in enabling entrepreneurs with low social competency to interact with customers to improve customer satisfaction. Also, this finding implies that using social media for CRM tends to be more crucial for companies that primarily target customers who are social media users.

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1. Introduction

In business nowadays, companies inevitably face tremendous challenges, such as the high competitive rivalry among existing firms, the unpredictable changes in consumption trends, and more sophisticated customer demands (Porter, 2008). Unarguably, the ability of firms to generate and sustain customer satisfaction is the key indicator that can strongly determine the success of the business. In order to create and maintain competitiveness to outperform other competitors, it is necessary for the companies to strive to provide superior service to customers, to increase customer satisfaction. To achieve this task effectively, it is crucial for the companies to accurately understand and discover the needs and wants of the customers, and be able to tailor the products/services

to meet or exceed customers' expectations. In particular, the marketing practice known as customer relationship management (CRM) is often suggested to enable companies to achieve this objective. While the traditional CRM, implemented through computerized software and database systems, is commonly adopted by large corporations, there is evidence that social media such as Facebook and Instagram have also become an emerging trend in facilitating the implementation of CRM activities by small firms (Malthouse, Haenlein, Skiera, Wege, & Zhang, 2013; Trainor, Andzulis, Rapp, & Agnihotri, 2014; Woodcock, Green, & Starkey, 2011). Although the topic of social media use for CRM has already appeared in the literature, as yet the application of social media for CRM in microenterprises has not been adequately explored. Given that the characteristics of microenterprises are different from medium and large enterprises, their adoption of social media for CRM might follow patterns which differ from the models and theories put forward for large enterprises (Harrigan, Ramsey, & Ibbotson, 2009). Also, the issue of whether the adoption of social media for CRM can be linked to better company performance has not been previously explored. These are the main research questions that

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this research aims to address.

This research not only discusses how social media can be used as the CRM tool for microenterprises, but the authors also empirically investigate the association between the intensity of social media use for CRM and business performance satisfaction, using a sample from the microenterprises in Thailand. In particular, Thailand serves as a suitable research context for studying social media application in business, given that social media have been extensively used by many small firms as a key channel to advertise and sell their products (Quevedo, 2012). However, although the issue about the benefits of social media use in business has been previously investigated (Trainor, 2013; Trainor et al., 2014), existing studies have only focused on the contributions of social media use to the outcome variables, without considering the role of the entrepreneur and the firm's characteristics, which can moderate the benefits that companies can obtain from social media application. Considering this research gap, one additional question that the authors aim to address is as follows: while social media application in business has been proposed to benefit business performance, can it be possible that some firms will benefit from it more than others? Therefore, instead of focusing only on the direct effect of social media use for CRM on business performance satisfaction, the authors also explore whether its positive effect can be moderated by the degree of social competency of the entrepreneurs and the degree of social media sales intensity. While social media use for CRM may generally benefit firms' performance satisfaction, it is possible that the benefits could be more prominent for entrepreneurs who lack the social competency to interact face-to-face with customers in the bricks-and-mortar business environment, as well as for firms that rely more intensively on social media sales. The existing support for the moderating roles of entrepreneurs and firms' characteristics will be discussed in the following section.

This research is organized as follows. In the next selection, the authors will review literature on CRM, the characteristics of microenterprises, and discuss how social media can be used for CRM activities to enhance business performance. The hypotheses will also be formulated based on related literature supports. After that, the methodology used to test the hypotheses will be presented. After the results from the data analysis are reported, the authors will discuss the findings, provide some practical and research implications, and then conclude.

2. Literature review and hypotheses

2.1. Social media use for CRM by microenterprises

In a general sense, CRM can refer to the utilization of customer-related information or knowledge to deliver relevant products or services to consumers, in order to improve customer retention through the effective management of customer relationships (Bull, 2003; Levine, 2000). Ryals and Payne (2001) argued that although the term "CRM" has normally been used interchangeably with "relationship marketing", one particular point that distinguishes CRM from relationship marketing is that CRM involves the utilization of information technology (e.g., computer software, database systems) to facilitate the relationship marketing process. Because of this, Payne and Frow (2005, p. 167) suggested that "CRM is more commonly used in the context of technology solutions and has been described as information-enabled relationship marketing".

In the literature to date, the majority of research on CRM has explored the implementation of CRM by large and medium companies, but fewer studies have focused on microenterprises. In fact, some evidence shows that smaller and larger companies tend to emphasize social media applications in different areas. Verheyden and Goeman (2013) found that both small companies and large corporations have increasingly begun to apply social media to add value to their businesses. However, when comparing the applications of social media between small and large companies in the four areas of value creation (internal communication, external communication, knowledge sharing, and recruitment), it seems that small companies tended to utilize social media more for external communication, while large corporations tended to use them more extensively for internal communication (Verheyden & Goeman, 2013). However, research conducted by the SMB Group (2012) showed that most smaller companies did not have a proper strategy when applying social media for business or marketing purposes unlike larger corporations normally did.

As organizational theories and practices implemented by large organizations may not reflect the true structure and management principles of small organizations (Harrigan et al., 2009), it is important to explore the CRM practices of microenterprises that may be constrained by their unique characteristics. Generally, microenterprises are tiny businesses that employ fewer than ten employees. Sometimes they only have one employee, who is actually the business owner. Due to the size disadvantage, one particular constraint that they normally encounter is a lack of financial capital to support the operations (Kamal, Andre, & Augustyn, 2011). Moreover, instead of having a management team to perform various business functions such as marketing and technology management, as do medium-sized and large corporations, the owners of microenterprises generally perform these activities themselves. For these reasons, the implementation of CRM requires significant investment in information technology infrastructure, human resources, and know-how; this is more suited to medium and large firms, and may be difficult for microenterprises to undertake (Garcia, Pacheco, & Martinez, 2012). As a result, the CRM implementations by microenterprises tend to differ those of large and medium-sized enterprises. For example, scholars have suggested that while large corporations normally utilize state-of-the-art computerized systems for their CRM activities, microenterprises tend to rely on basic technologies such as email and simple accounting packages to support their operations (Bharati & Chaudhury, 2006; Kamal et al., 2011).

Recent studies have proposed that social media technology can provide the opportunity for microenterprises to implement CRM activities (Malthouse et al., 2013; Trainor et al., 2014; Woodcock et al., 2011). However, how microenterprises can utilize social media for CRM has not been well-documented. In this study, the authors adopt the conceptualization of CRM activities proposed by Peppers and Rogers (2011) as the framework for social media application for CRM. In this framework, CRM activities are classified into four processes, namely identification, differentiation, interaction, and customization. The first process of CRM, *identification*, involves collecting customer information, such as demographic characteristics, purchasing history, and personal preferences. The second process, *differentiation*, aims to segment customers into groups based on similar needs and values. The third process, *interaction*, involves interacting and communicating with customers to ensure that their expectations are well-understood, in order to aid the development of products and services that create long-term customer satisfaction. The fourth process of CRM, *customization*, involves customizing and tailoring marketing offers to each customer according to their specific needs and preferences.

In particular, microenterprises in Thailand use social media for all four CRM processes (Quevedo, 2012). First, for the *identification* process, when a person clicks "Like" on a company's Facebook page or leaves comments about posts, the company can view the profiles of that person and gain access to the information that the person has shared on his/her Facebook page. This function is similar in

Instagram; the profiles of a person can be viewed after he/she clicks "Follow" on the company's Instagram page. The customer information that the company obtains from social media is not limited to a person's basic demographic information, but it also encompasses their lifestyle and personal preferences, which can be inferred from the status updates and photos that they post and share publicly on his/her personal social media page, thereby allowing the company to use this information to create the customer database. More importantly, this information is also crucial for the *differentiation* process of CRM, because the company can use it to segment customers into groups based on similar characteristics and preferences. For the *interaction* process, the company can use social media as a channel to communicate with customers more effectively through status updates and personalized messages. In addition, the company can also receive feedback from the customer through the comments that they give to the posts on the company's social media page. These feedback systems allow the company to learn more about the needs and preferences of the customers (Castronovo & Huang, 2012; Hennig-Thurau et al., 2010; Trainor et al., 2014). Lastly, social media can be used to facilitate the *customization* process. Because social media has a function that allows members of the social media page to be assigned to different groups, the information about marketing offers can be customized and then posted to separate member groups, so that the offers match the specific preferences of each customer group. Also, the use of the hashtag (#) in social media posts can be applied to categorize products, which makes it easy for customers to view products according to their interests.

2.2. Social media use for CRM and business performance

Similar to the benefits that traditional CRM provides (Mazurencu, Mihaescu, & Niculescu-Aron, 2007; Sasvari & Majoros, 2013), using social media for CRM can benefit the business performance of microenterprises in many aspects. In particular, the ability of the companies to interact with customers and to customize their marketing communication on a one-to-one basis allows the companies to enhance customer satisfaction and commitment to a long-term relationship. In addition to the benefits that traditional CRM provides, using social media for CRM also provides more advantages, because communications in social media can be made in real-time, thereby allowing companies to interact with and respond to customers instantly. Given that the contents posted on social media can be viewed and shared by many social media users, social media marketing can help the companies to promote their products or services, and to expand the market more quickly and economically than by using traditional marketing channels. Using social media as a marketing tool also helps companies to reduce the operating costs normally incurred by traditional marketing channels. In recent research, the contributions of social media are also supported empirically by the study of Trainor et al. (2014), which found that the intensity of social media application in business positively and significantly links to higher financial and non-financial performance. Given the above support for the benefits of using social media, the following hypothesis is proposed:

Hypothesis 1. Entrepreneurs who use social media more intensively for CRM will achieve higher business performance satisfaction.

2.3. The moderating role of social competency and social media sales intensity

Although using social media as a CRM tool can provide benefits that help entrepreneurs to enhance business performance, the authors argue that the positive contribution of social media use for CRM on business performance satisfaction can be contingent on two factors. The first is the skill of the entrepreneur in the area of social competency. The second is whether or not the company generates most of its sales from social media. The reasons why these two factors matter will be discussed as follows.

First, social competency refers to "the ability to interact effectively with others as based on discrete social skills" (Baron & Markman, 2003, p. 41). In retail business, this competency involves various aspects, such as the ability to build good interpersonal relations with customers, to present the products to customers in an interesting and reliable manner, to communicate to customers with honesty, as well as to be enthusiastic in helping and sharing useful information with customers. Research has shown that individuals who exhibit good social competency tend to exhibit better performance in various areas (Belt, Richardson, & Webster, 2002; Hochwarter, Witt, Treadway, & Ferris, 2006). In fact, social competency is also proposed as a crucial skill that strongly determines entrepreneurial success (Baron & Markman, 2000, 2003). Possessing these aspects of social competency can allow the entrepreneurs to develop good relationships with customers, which can increase customer satisfaction, and eventually benefit the business performance (Cheung & Tsang, 2005; Cron, Marshall, Singh, Spiro, & Sujan, 2005).

Although possessing good social competency is important to help entrepreneurs develop good relationships with customers, which can eventually benefit the business, nevertheless a specific situation applies in the area of social media marketing. It is possible that entrepreneurs who exhibit lower social competency will have more opportunity to achieve better business performance when they use social media intensively for CRM than those who already exhibit higher social competency. The suggestion that entrepreneurs who lack social competency tend to benefit more from using social media for CRM can be explained by the social compensation hypothesis (Valkenburg, Schouten, & Peter, 2005), which has been deployed in literature to explain some of the motivations for individuals' social media use. The social compensation hypothesis suggests that individuals who have difficulty developing friendships with other people in the real world are more motivated to use social media, because they can help substitute online contacts for an undesirable social network (Zywica & Danowski, 2008). In particular, this role of social media communication is consistent with the media naturalness theory (Kock, 2004, 2005), which suggests that interaction that takes place through computer-mediated communication (CMC) tends to suppress key elements found in face-to-face communication (such as facial expressions, mood states, and body language), and this makes it difficult for a person to judge the real interpersonal skills of another person in CMC.

Moreover, research has shown that the lack of nonverbal cues in CMC such as social media can help enhance communication performance, especially through impression management (Hogan, 2010; Krämer & Winter 2008). This benefit of CMC can be explained by social information processing theory (Walther, 1992) and the social identification/de-individuation model (Lea & Spears, 1992). First, the social information processing predicts that without nonverbal cues, communicators adapt their relational behaviors to the remaining cues available in CMC such as content and linguistic strategies, as well as chronemic and typographic cues (Walther, 1992, 1996). Second, the social identification/de-individuation model argues that the lack of nonverbal cues in online interaction prompts users to form impressions that are based on the social categories of communicators and not interpersonal cues (Lea & Spears, 1992). In particular, Walther (1996) argued that visual

anonymity is the key characteristic of CMC that allows users to construct a predominately positive impression that leads to idealized impressions of one's communication partner (Lea & Spears, 1992). Studies also suggest that the absence of nonverbal cues also makes individuals more willing to disclose personal information when using CMC than in face-to-face interactions (Joinson, 2001).

Generally, because social and communication skills are crucial for relationship-building in the business exchange (Baron & Markman, 2000), the entrepreneurs who lack social skills tend to have more difficulty building good relationships with their customers when they interact face-to-face, when compared to those with better skills. However, because interacting with customers through social media tends to require less interpersonal skills than face-to-face interactions, entrepreneurs who lack good social skills can rely on social media interactions to enhance communication effectiveness. Without a nonverbal cue, customers are unable to detect true personality, style, and intention of the seller. Thus, using social media more intensively for CRM is crucial to help this type of entrepreneur to form better impression with their customers in order to achieve better business performance. Given the benefits that social media provides, the authors predict that the social competency of the entrepreneur will negatively moderate the benefits of social media use for CRM on business performance satisfaction. This leads to the following hypotheses:

Hypothesis 2. The social competency of entrepreneurs will positively associate with business performance satisfaction.

Hypothesis 3. The social competency of entrepreneurs will negatively moderate the association between the intensity of social media use for CRM and business performance satisfaction.

2.4. Moderating role of social media sales intensity

Lastly, the study proposes that the positive association between social media use for CRM and business performance satisfaction will also depend on the degree to which companies' sales volumes mainly arise from social media sales. Specifically, the authors argue that the benefit of social media use for CRM will be significantly higher for companies that have more sales volume from social media than those with more sales volume from physical stores. Essentially, companies that sell intensively on social media need to focus mainly on social media users as their target customers. Selling intensively on social media platforms implies that they will also face high competition from other sellers supplying similar products on social media. Thus, using social media for CRM tends to be the most effective channel to help companies distinguish themselves from their competitors, because it provides the opportunity to deliver marketing messages to this target customer group more precisely and effectively; and this allows them to enhance customer satisfaction better than competitors who do not perform social media CRM. The contribution of social media application to business performance for this group of companies can be explained by the resource-based view (RBV), which emphasizes the role of critical resources and capabilities that allow companies to achieve superior performance (Barney, Wright, & Ketchen, 2001; Makadok, 2001). In particular, for companies that rely extensively on social media sales, the ability to deploy social media in relationship marketing is considered a unique competency of companies that enables them to provide superior services to customers (Ainin, Parveen, Moghavvemi, Jaafar, & Shuib, 2015). Given that the business performance of companies that sell intensively on social media tends to depend strongly on the satisfaction of the social media customers, being able to enhance customer satisfaction through

social media CRM may be the most crucial marketing practice in enabling this group of companies to increase their business performance satisfaction. This prediction is also supported by prior research that found that the benefits of information technology (IT) capability on companies' performance tended to be more prominent in high-IT-intensity companies than in low-IT-intensity ones (Ravichandran, Lertwongsatien, & Lertwongsatien, 2005; Zhu & Kraemer, 2002). Considering this possibility, the following hypothesis is presented:

Hypothesis 4. The intensity of social media sales will positively moderate the association between the intensity of social media use for CRM and business performance satisfaction.

3. Methods

3.1. Sample and data collection

The sampling frame encompasses small shops located in seven major marketplaces in Bangkok, Thailand. Because the focus of the study is social media use for CRM, the respondents were pre-screened to make sure that they actually sold products on social media. A self-administered questionnaire survey was used for data collection. The questionnaires, along with a cover letter, were distributed in person to the owners of the shops at the marketplaces and were then collected in person by the authors. A total of 258 questionnaires was distributed and 220 questionnaires were returned, which accounts for an 85.27 percent response rate. Of this amount, three had not been properly answered, so they were removed. Overall, there were 217 completed surveys available for data analysis; none of them contained missing data.

Table 1 summarizes the descriptive statistics of the sample's characteristics. In particular, most of the sample firms were considered to be microenterprises which employed fewer than ten full-time employees. On average, more than half of their sales volume came from social media sales. The majority of the sample reported that they primarily sold on Facebook (86 percent), followed by Instagram (86 percent). Nonetheless, about half of the sample (49 percent) reported that they used both Facebook and Instagram to sell their products.

3.2. Measures

All of the scales used to measure the concepts in the hypotheses were developed by the authors. The scale development was performed through a series of steps suggested by previous researchers (DeVellis, 1991; Netemeyer, Bearden, & Sharma, 2003). A comprehensive item pool was generated from the literature review and an in-depth interview with a panel of marketing experts and business owners that had solid experience of social media marketing. The initial questions were sent to three marketing academics and fifteen entrepreneurs who had used social media in businesses, to help review the clarity and accuracy of the questions. The questions were then edited based on their suggestions. After the first draft of the questionnaire was created, the authors conducted a pre-test with 40 entrepreneurs to test the reliability and validity of the scales. The results from the pre-test showed satisfactory results. All items that were developed by the authors are listed in the appendix.

Social media use intensity for CRM was measured by eight questions that encompassed four aspects of CRM activities implemented through social media, comprising identification (two items), differentiation (two items), interaction (two items), and customization (two items). All items were rated on five-point Likert scale ranging from 1 (very little) to 5 (very extensive). *Social*

competency was measured by six questions that were developed based on the review of prior research (Belt et al., 2002; Cheung & Tsang, 2005; Hochwarter et al., 2006). All items were rated on five-point Likert scale ranging from 1 (very little) to 5 (very extensive). *Social media sales intensity* was measured by simply asking the respondents to indicate the percentage of sales that their store generated from social media as compared to total sales. This method to measure firm transaction intensity has been widely used in previous research (e.g., Pla-Barber & Alegre, 2007). *Business performance satisfaction* was measured by a self-rating scale, which has been widely adopted in previous research due to the difficulty of obtaining actual financial performance figures from small firms in developing countries (Calantone, Kim, Schmidt, & Cavusgil, 2006; Hashai, 2011). Using performance satisfaction is also appropriate for microenterprises because research has showed that they normally underreport financial outcomes (de Mel, McKenzie, & Woodruff, 2009). The respondents were asked to evaluate to what extent they were satisfied with their firm's performance in eight aspects. The items were rated on a five-point Likert scale ranging from 1 (*very dissatisfied*) to 5 (*very satisfied*).

In addition to the main independent variables presented in the hypotheses, the authors also controlled for firm-specific characteristics and some external factors that can influence business performance. Control variables represented by firms' characteristics include firm size (measured by the number of full-time employees) and firm age (measured by the number of years that the company has been established). In addition, the analysis also controlled for the effect of *business competition intensity*. This variable was measured subjectively by asking the respondents to assess the intensity of the business competition that they encountered in three aspects; they were measured a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

3.3. Statistical analysis

Partial least squares (PLS) regression was the statistical technique used for data analysis. The major benefit of PLS regression is that it does not require data to be normally distributed, and it supports a smaller sample size for the analysis (Gefen, Straub, & Boudreau, 2000; Hair, Ringle, & Sarstedt, 2011). In particular, PLS regression is appropriate for this study because the Jarque-Bera test of normality (Jarque & Bera, 1980) was performed prior to data analysis, which indicated that all key variables in the hypotheses were not normally distributed, thereby making PLS provide more reliable results than other covariance-based structural equation modeling techniques. PLS regression analysis was performed in WarpPLS 5.0.

4. Results

Because the main constructs were measured as the reflective latent variables, it was important to test the reliability and validity of the constructs. A convergence validity test was conducted to assess factor loadings. All the factor loadings were above the 0.5 minimum requirement as suggested by Hair, Black, Babin, and Anderson (2010). A discriminant validity test was implemented by comparing whether the average variance extracted (AVE) was greater than the squared correlation coefficient (Fornell & Larcker, 1981). The results, as presented in Table 2, show that all indicators satisfied this requirement. Construct reliability was estimated by Cronbach's alpha coefficient. The reliability indicators of all latent variables were higher than the minimum requirement of 0.7 (Nunnally, 1978).

The degree of multicollinearity among the indicators was evaluated by full collinearity Variance Inflation Factor (VIF) statistics.

Table 1
Demographic and trading characteristics of samples.

Variables	Descriptive statistics
Firm age (years)	Mean: 2.86
	S.D.: 1.56
	Max: 1
	Min: 7
Firm size (number of full-time employees)	Mean: 1.90
	S.D.: 0.78
	Max: 5
	Min: 1
Social media experience in business (years)	Mean: 2.16
	S.D.: 0.93
	Max: 5
	Min: 1
Social media sales intensity (percentage of social media sales to total sales)	Mean: 72.26
	S.D.: 16.29
	Max: 100
	Min: 20
Primary social media used in business	Facebook: 139 (64 percent)
	Instagram: 78 (36 percent)
Number of social media sites used in business	Only one social media site: 50 (23 percent)
	More than one social media site: 167 (77 percent)
Type of product sold	Clothing and accessories: 168 (77 percent)
	Mobile phones and gadgets: 21 (10 percent)
	Foods and dietary supplements: 12 (6 percent)
	Cosmetics: 10 (5 percent)
	Home decorations: 6 (3 percent)

Table 2
Correlation among variables and square root of average variance extracted.

Variables	BFS	SCRM	SC	SSI	SIZE	AGE	BCI
BFS	(0.544)	0.367**	0.238**	−0.096	0.011	0.033	−0.196**
SCRM		(0.528)	0.118	−0.019	0.060	−0.009	−0.234**
SC			(0.573)	0.063	−0.058	−0.030	−0.085
SSI				(1)	−0.469**	−0.660	−0.116
SIZE					(1)	0.444**	0.081
AGE						(1)	2**
BCI							(0.692)

Notes: **p < 0.01, *p < 0.05.
Square roots of average variance extracted of latent variables are shown in the parentheses.
BF = business performance satisfaction, SCRM = social media use intensity for CRM. SC = social competency, SSI = social media sales intensity, SIZE = firm size, AGE = firm age.
BCI = business competition intensity.

According to Kock (2012), the full collinearity VIF test is more powerful than the traditional VIF test because both the vertical and lateral collinearity are assessed simultaneously. In addition, Kock and Lynn (2012) argued that the full VIF test can serve as the indicator that captures the possibility of common method variance (Lindell & Whitney, 2001) in the PLS model. The maximum full VIF presented in the analysis is below the critical threshold of 3.3, as suggested by Petter, Straub, and Rai (2007). In addition, Kock and Lynn (2012) proposed that a full collinearity VIF that is lower than the critical value of 3.3 can provide some evidence that the common method bias (CMB) may not be a major threat to the analysis in the PLS model. Nevertheless, in order to lessen the concern about the CMB issue, Harman's one-factor test, as recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003), was also conducted. The findings indicated that the one-factor confirmatory factor analysis model did not fit with the data very well ($\chi 2 = 1865.582$; d.f. = 209; p < 0.001). Overall, these results alleviate the concern about CMB in the analysis.

Table 3 reports the results from the PLS analysis. The first column reports the results from the base model without the moderating effect. The result supports a positive relationship between

Table 3
Results from PLS regression.

Variables	Model 1	Model 2	Model 3	Model 4
Social media use intensity for CRM	0.355***	0.204***	0.314***	0.185***
Social competency	0.172**	0.124*	0.197***	0.142**
Intensity of social media sales	−0.104*	−0.124*	−0.075	−0.098*
Social media use intensity for CRM × Social competency	n/a	−0.406***	n/a	−0.388***
Social media use intensity for CRM × Intensity of social media sales	n/a	n/a	0.244***	0.151**
Control variables				
Firm size	−0.076	−0.043	−0.031	−0.02
Firm age	0.061	0.03	0.049	0.024
Business competition intensity	−0.145**	−0.086	−0.097*	−0.054
R-square	0.223	0.354	0.265	0.382
Δ R-square	n/a	0.131	0.042	0.159
Maximum full VIF	1.919	1.93	1.97	1.978

Notes: ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.
Standardized coefficients are reported.

social media use intensity for CRM and business performance satisfaction ($\beta = 0.355$; $p < 0.001$). The second column reports the results that include the moderating effect of social competency. It shows that the interaction term of social media use intensity for CRM and social competency is negative and statistically significant ($\beta = -0.406$; $p < 0.001$). The increase in the r-square suggests that the moderating effect of social competency explains the outcome variable by 13.1 percent additionally from the base model. The third column reports the results that include the moderating effect of social media sales intensity. It shows that the interaction term of social media use intensity for CRM and social media sales intensity is positive and statistically significant ($\beta = 0.244$; $p < 0.001$). Also, the increase in the r-square suggests that the moderating effect of social media sales intensity further explains the outcome variable by 4.2 percent from the base model. The fourth column reports the results that include the moderating effect of social competency and social media sales intensity. The results are consistent with the previous findings. The interaction term of social media use intensity for CRM and social competency is negative and statistically significant ($\beta = -0.388$; $p < 0.001$), while the interaction term of social media use intensity for CRM and social media sales intensity is still positive and statistically significant ($\beta = 0.151$; $p = 0.004$). The increase in the r-square suggests that the moderating effect of social media sales intensity further explains the outcome variable by 15.9 percent from the base model. Overall, the results from the final model still support Hypothesis 1, which predicts the positive association between social media use intensity for CRM and business performance satisfaction ($\beta = 0.185$; $p < 0.001$). The results in the final model also support Hypothesis 2, which predicts the positive association between social competency and business performance satisfaction ($\beta = 0.142$; $p = 0.006$). They also support Hypotheses 3 and 4, which predict the moderating effect of social competency and social media sales intensity respectively. The moderating effects are presented in Fig. 1.

5. Discussion

The present study explored the association between the intensity of social media use for CRM and the business performance satisfaction of Thai microenterprises. In addition to the main effect of social media use for CRM, the analysis also took into consideration the moderating roles of the entrepreneurs' social competency and the intensity of companies' social media sales. Overall, the results from PLS analysis supported all hypotheses proposed. First and foremost, the analysis showed that the entrepreneurs who

used social media intensively for CRM tended to report higher satisfaction with their business performance. In particular, the finding about the positive contribution of social media use for CRM provides additional support to prior research, which had suggested that social media can serve as a channel for companies can implement CRM in order to enhance business performance (Baird & Parasnis, 2011; Malthouse et al., 2013; Woodcock et al., 2011). This finding is also consistent with the recent empirical study of Trainor et al. (2014), which found the positive contribution of social media use to the performance of small and medium enterprises in Malaysia.

Furthermore, the results from the moderating effect analyses provided extra evidence that extends the findings of prior research. Interestingly, the analyses found that the positive relationship between social media use intensity for CRM and business performance satisfaction appeared to be significantly higher for the entrepreneurs who exhibited lower levels of social competency in business. In particular, the finding about the higher positive contribution of social media use of this group of entrepreneurs is in line with the prediction suggested by the social compensation hypothesis (Valkenburg et al., 2005; Zywica & Danowski, 2008) and the media naturalness theory (Kock, 2004, 2005) that were mentioned in the beginning. Although the social compensation hypothesis was previously used to explain the benefits that individuals who have difficulty communicating with others in the real world can obtain from social media communication, this research shows that it can also be used to explain the benefits that the entrepreneurs who lack social competency might obtain when social media are used intensively to interact with the customers. In particular, this finding implies that social media interaction can be used as the channel that facilitates entrepreneurs who lack the social skills to develop face-to-face relationships with customers to compensate for this weakness. Given that communication in social media tends to involve less interpersonal interactions than face-to-face communication, using social media for CRM activities tends to be essential in enabling entrepreneurs with low social competency to interact with customers to improve customer satisfaction.

In addition to the moderating role of the social competency of the entrepreneurs, the analysis further indicated that the positive contribution of social media use for CRM was also significantly higher for the companies that generated more sales from social media. Generally, this finding implies that using social media for CRM tends to be more crucial for companies that primarily target customers who are social media users. This finding confirms the importance of conducting CRM activities on social media, as it can
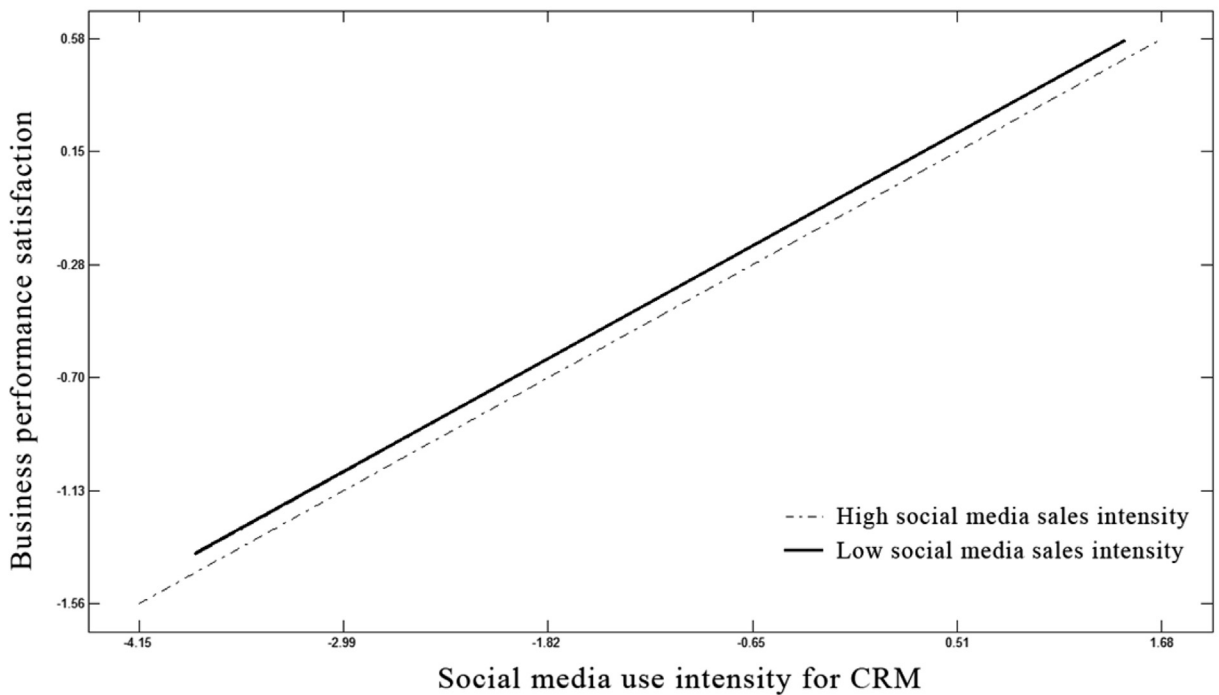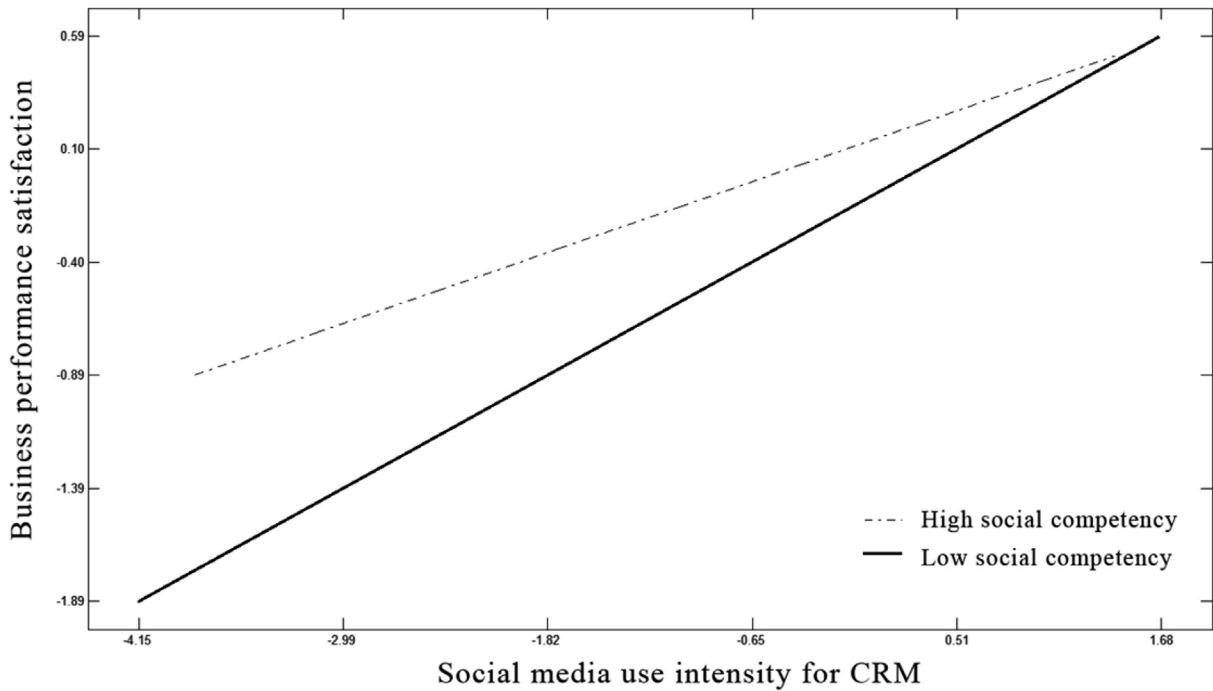
Fig. 1. Interaction effects.

help companies that focus on social media customers to enhance their business performance.

6. Research limitations and directions for future research

Despite the contributions that the present study provides, the authors need to discuss some research limitations. First of all, the data used in the analysis were obtained from self-reported measures, which can be susceptible to subjective bias from the respondents. Second, the statistical analysis was performed by using cross-sectional data. Hence, the interpretation of the results can only be made in terms of correlations between constructs. Third, the study collected data from only a small portion of the microenterprise sample in the Bangkok area. Thus the small sample size can limit the extent to which the findings can be generalized to a large population of microenterprises at the county level. Therefore, future study will need to expand the sample coverage in order to increase the generalizability of the research findings.

The authors will also provide directions for future research. In the present study, the moderators used were limited to the social competencies of entrepreneurs and firms' social media sales intensity. Future research will need to extend the present research by focusing on other aspects of entrepreneurs and firms' characteristics that might moderate the benefits of social media use on business performance. For example, other characteristics of the entrepreneurs, such as their competency to present the products/ services on social media in an interesting manner, might be factors that moderate the benefits that they can derive from social media marketing. Moreover, given that there have been few studies on the role of social media use in marketing activities, future research will need to explore the contribution of social media use in different countries.

7. Practical implications

The main findings of this research also provide practical implications for microenterprise entrepreneurs. Although microenterprises tend to be in a disadvantaged position in terms of financial, human capital, and knowledge resources when compared to larger firms, scholars have still insisted that microenterprises need to utilize information technology to help them enhance business performance (Sasvari & Majoros, 2013). Despite the difficulty for microenterprises to invest in a state-of-the-art information technology infrastructure and to hire personnel to perform CRM activities in the manner of larger firms, they can manage relationships with their customers by using social media CRM. Even though the CRM activities performed through social media may not be comparable to the activities performed in the traditional CRM, it at least provides the opportunity for the entrepreneurs to exploit technology to help them increase business competitiveness. Because social media has now become an integral part of peoples' daily activities, and the number of social media users has increased dramatically, applying social media as the CRM tool can provide significant opportunities for microenterprises to expand their market by gaining access to more potential customers who are social media users. Given that social media CRM can be implemented at a low cost, while providing great benefits, it should be considered a powerful marketing tool that helps microenterprises to enhance their business performance.

In particular, as suggested by our research findings, social media CRM seems to be even more crucial for companies that sell intensively on social media. To date, the number of companies that sell on social media has increased substantially in many countries, especially in Thailand (Quevedo, 2012). The increase in the number of social media sellers implies these sellers have to face more intense competition in this business environment. Therefore, just setting up a social media page to sell the products is not enough for these companies to be successful. Instead, the companies need to actively implement social media marketing to build and substantiate good relationships with customers in order to enhance customer satisfaction. Social media CRM can be a marketing practice that companies should undertake to enhance their chance of success in the social media business environment. Moreover, using social media as a CRM tool can be particularly important for entrepreneurs who lack the social skills to build good relationships with customers in the bricks-and-mortar business environment. Generally, it is unarguable that good interpersonal skills is one of the characteristics that entrepreneurs should possess in order to build long-term relationships with customers. But for entrepreneurs who lack this social competency, using social media as the CRM tool can help them compensate for this interpersonal communication weakness by exploiting computer-mediated communication to promote relationship-building.

8. Conclusion

In summary, this research has provided empirical evidence to support the importance of social media use for CRM as being a marketing practice that can help microenterprises in Thailand achieve higher business performance satisfaction. Overall, these findings offer additional contributions to the previous research that proposed the benefits of social media use in business, particularly in the area of CRM. The study also filled the research gap by showing that the benefits that companies can obtain from social media use for CRM can be contingent on some entrepreneur and firm characteristics. Lastly, the authors suggest that as more and more companies have begun to deploy social media in business to take advantage of the market opportunity presented by the increasing number of social media users, it is very important for firms, especially microenterprises, to learn to adapt social media for marketing purposes, in order to help them compete effectively in business.

Appendix

Measurement scales

Social media use of intensity for CRM (α = .848)
To what extent do you use social media in the following activities?
(1: very little: 5 very extensive)

1. Compile data for each customer who purchases your product.
2. Differentiate and classify customers in terms of their gender, age, career, level of education, monthly income, etc.
3. Interact with, talk to, and share opinions with customers.
4. Facilitate customers to obtain details of products or their orders at any time.
5. Study the needs of individual customers and offer the products that suit their tastes.
6. Categorize products to make it easy for customers to view products according to their interests, such as the use of a hashtag (#) to categorize products.
7. Create groups of customers who are interested in the same types of products (such as the creation of personal groups, which makes it easy to offer products to specific groups of customers).
8. Create a specific strategy for each group of customers to make it easy to respond to their specific demands.

Social competency (α = .845)
Please assess the level of your skills or characteristics as follows:
(1: very little: 5 very extensive)

9. Having good interpersonal relations with customers.
10. Promptness and enthusiasm in communicating with or offering services to customers.
11. Honest and sincere with customers and business networks.
12. Skilled at customer relationship management, such as talking to customers regularly.
13. Skilled at solving problems quickly for customers.
14. Willing to share useful information with customers.

Perceived firm performance (α = .89)
Please assess the level of your satisfaction towards your business performance in consideration of the following indicators:
(1: very dissatisfied: 5 very satisfied)

15. Sales volume
16. Sales growth
17. Profit
18. Profit growth
19. Return on investment
20. Customer satisfaction
21. Customer long-term retention
22. Overall satisfaction with business performance

Business competition intensity ($\alpha = .905$)

Please assess the level of competition in your business in the following aspects:

(1: very low: 5 very high)

23. The intensity of competition in your type of business.
24. The pressure from the competition in your type of business.
25. The risk of failure in your type of business.

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