

Is Social Media Usage Enough to Achieve Superior Performance in Thai SMEs? The Mediation of Entrepreneurial Orientation

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Abstract

This paper aims to study the relationships among social media (SM) usage, entrepreneurial orientation (EO), and firm performance. Specifically, this paper tests mediation influences of EO on the relationships between SM usage and firm performance. A total sample of 313 SMEs in Thailand responded to the survey. The results indicate that the utilization of SM functions affects all elements of EO and improves business outcomes. SM usage directly and indirectly impacts firm performance through EO. Two elements of EO, risk-taking and proactiveness, have significant direct effects on firm performance, whereas innovativeness has only an indirect impact on business outcomes through the mediation of risk-taking and proactiveness. The findings lead to suggestions for best practice for SMEs, such as that SM usage may not lead to superior performance, and firms may need assets and skills such as entrepreneurial capabilities to attain improved performance. This paper studies the multidimensional angle of SM–EO and EO–performance relationships, and EO as the mediating construct. It provides an enhanced understanding of how small firms should use and benefit from SM to become innovative and attain superior firm performance through the various elements of EO and their interrelationships.

Keywords: Social Media Usage; Entrepreneurial Orientation; Firm Performance; SMEs; Thailand

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Introduction

With the growing use of information technology (IT) by organizations for improving their competitive advantage, social media (SM) is becoming an important strategic tool for driving innovation and performance (Parveen et al., 2016). To attain competitive advantage and long-term growth in highly competitive environments, organizations need to respond well to their environments by enhancing entrepreneurial capabilities (Kuratko & Morris, 2018). Entrepreneurial orientation (EO) has long been acknowledged as a critical strategic approach for innovation and economic growth because of its contribution to business outcomes (Martín-Rojas et al., 2020). According to the dynamic capabilities' perspective, EO is considered a key capability for small firms because it enables them to discover new opportunities for innovation and to better respond to their business surroundings (Teece, 2016).

SM technologies can help firms to enhance their entrepreneurial endeavors and activities (Parveen et al., 2016). The effective use of these technologies facilitates communication, collaboration, and relationship with other businesses and customers, and also generates value in line with their needs (Foltean et al., 2019). Accordingly, the application of SM enables firms to improve their innovation success in relation to understanding customer needs, exploiting market information, and proactively responding to new business opportunities (Crammond et al., 2018; Parveen et al., 2016). However, the influence of SM use on the EO of a firm has rarely been examined (Martín-Rojas et al., 2020; Parveen et al., 2016). Moreover, most empirical research on the adoption of SM from an organizational perspective has focused on large organizations; thus, the understanding of SM adoption by small firms – particularly small and medium-sized enterprises (SMEs) – is limited (Durkin et al., 2013; Franco et al., 2016). Similarly, the literature has highlighted a dearth of study in a holistic framework for identifying the effect of IT revolutions, particularly SM, on business outcomes while observing the mediating effect of EO in this link (Martín-Rojas et al., 2020).

Therefore, this paper purposes to fill the research gaps in the literature by empirically examining how SM usage influences the different elements of EO and, in turn, improves financial and nonfinancial indicators. Accordingly, this study addresses the following research question: Does SM usage influence EO to enhance SME performance? More specifically, in response to the call in the literature (as suggested by Martín-Rojas et al., 2020), this study intends to add knowledge by providing an enhanced understanding of how small firms should use and benefit from SM, with the aim of becoming more innovative and attaining superior business outcomes through the different elements of EO and their interrelationships. To the best of our knowledge, this is unique research that considers the multidimensional viewpoints of SM–EO and EO–performance and these linkages' mediating effects in the context of SMEs in Thailand. Previous studies (e.g., Parveen et al., 2016) have adopted the unidimensional EO perspective to investigate the effects of SM and EO. Later, Martín-Rojas et al. (2020) extended the study of Parveen et al. (2016) by addressing the multidimensional approaches to study the linkage between SM and firm performance through the mediation of various elements of corporate entrepreneurship (i.e., new business venturing, innovativeness, self-renewal, and proactiveness). As suggested by Dutot and Bergeron (2016), SM contribution to performance should include both financial and nonfinancial indicators, but Martín-Rojas et al. (2020) did not consider nonfinancial indicators to fully realize SM's impacts. The present paper therefore sheds light on the dynamic capabilities from the perspective of small firms by advancing the knowledge of how the various entrepreneurial capabilities of firms correlate or interact.

This paper is organized as follows: The first section presents the review of literature, and the next section presents the research methodology. This is followed by the research findings in the third section, and then the discussion of the results and their implications to the literature and practice in the fourth section. Finally, the fifth section highlights the conclusions of the study, its limitations, and recommendations for future studies.

Literature Review

Social Media (SM) Usage

SM refers to “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and allow the creation and exchange of user-generated content” (Kaplan & Haenlein, 2010, p.61). The SM functions of creating, editing, sharing, and reviewing online content about companies and products tend to influence firm survival and performance (Foltean et al., 2019). A firm strategy is increasingly engaged through many SM platforms (Crammond et al., 2018). The popular SM platforms adopted in SMEs are presented in Table 1.

Table 1: Popular Social Media Typologies

Platform	Main Functions	Categories
Facebook	A channel to sharing content (articles, picture, and video), publications, lead, and interaction between users.	Generalist
Twitter	A social networking service that allows users to post messages and interact through its micro blogging site. It enhances the virality of communication as well as the diffusion of information.	Micro-publication
YouTube	A video sharing service where users can watch, like, share, comment and upload their own videos. It enhances the virality of communication.	Sharing platforms
Line	Instant communications that allows users exchange texts, images, video and audio, and conduct free VoIP conversations and video conferences.	Instant messaging/ chat app

Sources: Adapted from Crammond et al. (2018); Dutot and Bergeron (2016)

A stream of studies (e.g., Olanrewaju et al., 2020; Parveen et al., 2016; Sasatanun & Charoensukmongkol, 2016) have demonstrated a significantly positive association between SM usage and business outcomes (e.g., cost reduction, growth of profits and sales, customer relationships, and innovation). However, some recent studies have found a nonsignificant or negative effect of SM usage on business outcomes (Ahmad et al., 2018; Grimmer et al., 2018). In particular, Grimmer et al. (2018) highlight that some factors influence the link between SM and business outcomes. The moderating and mediating variables (e.g., strategy, customer relationship, and innovation) are considered in the SM and entrepreneurship literature (e.g., Olanrewaju et al., 2020). However, studies examining SM–performance relationships in the context of SMEs and these relationships’ mediating influences are scant (Crammond et al., 2018; Parveen et al., 2016).

According to the dynamic capabilities philosophy, achieving competitive advantage is increasingly dependent on how small firms are able to develop new capabilities despite their limited resources (Dutot & Bergeron, 2016). The use of SM platforms in an organization’s activities drives the improvement of necessary skills and abilities, which lead to better

performance (Nylén & Holmström, 2015; Wang & Kim, 2017). Yet, SM usage and its effects on entrepreneurial capabilities and business outcomes remains underexplored, and there has been a call for more empirical research in this area (Foltean et al., 2019). Based on the study of Paveen et al. (2016), the present study measures SM usage based on various purposes and benefits, including marketing activities, customer relationship management, and information accessibility. Such effective use of SM in organizations can lead to enhanced use of technology, which in turn generates improved organizational innovation and performance (Paveen et al., 2016).

Entrepreneurial Orientation (EO)

EO refers to a company's strategic orientation, describing entrepreneurial facets of decision-making approaches, processes, practices, and actions (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005). EO is a frequently used firm-level concept in entrepreneurial research (Lomberg et al., 2017, p.975) and also one of the most-applied strategic orientation constructs in the strategic management literature (Covin & Wales, 2012). As is the case with the majority of existing EO research, the present study deems EO to comprise three elements: innovation, proactiveness, and risk-taking (Lomberg et al., 2017). Numerous empirical studies have focused on the influence of all dimensions of EO together on business outcomes, rather than considering them as a multidimensional perspective (Covin & Wales, 2012). The multidimensional concept was originally developed by Lumpkin and Dess (1996) who argued that not all EO dimensions lead to a firm's desired outcomes at one point, and suggest the EO construct as the independent behavioral dimension. Scholars have demonstrated that different strategies and activities of firms possibly will make different contributions to business outcomes (Buli, 2017; Fadda, 2018). Accordingly, this study adopts a multidimensional approach, and a first-order theoretical construct of EO is the most feasible approach for advancing the understanding the origin of EO as well as the influence of each dimension on the link between SM usage and firm performance.

Some studies have indicated that not all EO activities lead to better performance (Buli, 2017; Yu et al., 2016). Masa'deh et al. (2018) further indicated that firms adopt different dimensions of organizational performance according to their different business goals. Hence, this study adopts a multidimensional approach, and a first-order factor of firm performance is most viable approach to the idea that financial and nonfinancial instruments are beneficial in analyzing the effects of EO on business outcomes with respect to time and different business goals (Carton & Hofer, 2006; Zahra, 1991). Financial indicators can contribute to nonfinancial indicators and vice versa (Lekmat & Chelliah, 2014). Gentry and Shen (2010) demonstrate that financial and nonfinancial aspects correlate to each other; thus, a company is encouraged to invest resources into supporting its business growth. However, the qualitative measurement items of SM–performance are rarely considered as effects of EO (Dutot & Bergeron, 2016). Therefore, this study adopts a different approach and considers EO's impact on business outcomes through a company's financial and nonfinancial aspects.

Hypothesis Development

SM Usage and EO

Innovation capability or innovativeness is a company's propensity to encourage new ideas, creativity, and experiments that contribute to the introduction of new or improved products, services, and processes (Lekmat, & Chelliah, 2011; Lumpkin & Dess, 1996). Innovativeness is

viewed as a critical process that companies employ in responding to the market and pursuing opportunities (Martín-Rojas et al., 2020, p.399). Innovation with respect to SM can be successful through enhancement of cooperation with customers and business partners (Olanrewaju et al., 2020). Bharati et al. (2015) discovered that the implementation of SM functions to connect with customers and suppliers helps firms to improve their existing product quality and develop new products. Therefore, the following hypothesis is formulated:

H1: In Thai SMEs, SM has a positive effect on innovativeness.

Risk-taking refers to management's willingness to commit a substantial amount of resources with the expectation of high returns (Ndubisi & Iftikhar, 2012) and to take bold actions such as venturing into uncertain new markets (Lumpkin & Dess, 1996). Parveen et al. (2016) studied the relationship between SM usage and EO in Malaysian SMEs. They demonstrated that SM usage enhances a firm's tendency to take risks to improve its knowledge of customers and to reconfigure small business processes from traditional marketing methods into a more modern approach. Such market knowledge applied to decision making enables firms to widen markets and their entrepreneurial horizon through the use of SM (Crammond et al., 2018). Therefore, the following hypothesis is formulated:

H2: In Thai SMEs, SM has a positive effect on risk-taking.

Proactiveness is concerned with a future outlook where firms attempt to seek out opportunities and exploit resources, introduce new or improved products and services, and establish future markets (Lekmat & Chelliah, 2014). In attempting to identify opportunities in markets, SM enables small firms to acquire, retain, and exploit market information (Kaplan & Haenlein, 2010; Manfreda et al., 2015). The exploitation of market knowledge on SM allows opportunities to be recognized, created, and utilized in the market, responding to customer needs and preferences (Crammond et al., 2018, p.309). Such identification and enactment of opportunities through SM adoption promotes the creation of new businesses, particularly among SMEs in emerging nations (Olanrewaju et al., 2020). Therefore, the following hypothesis is formulated:

H3: In Thai SMEs, SM has a positive effect on proactiveness.

Innovativeness and Proactiveness

The performance impacts of the correlated influences of the elements of EO can be explained as the degree of change in business results related to changes in at least two of the components of EO (Lomberg et al., 2017). Anderson et al. (2015, p.1583) confirm that "while innovation is a necessary condition for entrepreneurship, it is not sufficient, nor is it meaningfully independent from proactiveness." Similarly, Rosenbusch et al. (2011, p.638) suggested that firms must pre-emptively seek new allocations of resources that are deployed in different business perspectives to transform the opportunities related to competitive business situations into higher business results; moreover, those resource allocations should involve a high level of innovativeness. Accordingly, a study of 201 Spanish technology firms by Martín-Rojas et al. (2020) demonstrated that proactive opportunity seeking, which relates to launching new products and services as well as taking bold action in expectation of future markets, leads to improved business results in the long run. Therefore, the following hypothesis is formulated:

H4: In Thai SMEs, innovativeness has a positive effect on proactiveness.

Innovativeness and Risk-taking

Firms that engage in risk-taking behavior are willing to allocate resources to launch new products into new markets (Larsen & Korneliusen, 2012, p.81). Lomberg et al. (2017) confirm that innovativeness and risk-taking have a shared influence in explaining business results. A risk-taking proclivity is also correlated with an inclination to identify, sense, shape, and seize opportunities rather than focus on threats in any given context (Lumpkin & Dess, 1996; Teece, 2016), which can lead firms to commit and reconfigure resources into different product and market introductions (i.e., innovativeness; Dai et al., 2014; Kraus et al., 2012). As such, Liu et al. (2017) suggest that highly preemptive SMEs tend to invest considerable efforts and resources into support for innovation activities, which allows them to launch different products and services to the marketplace regularly. Therefore, the following hypothesis is formulated:

H5: In Thai SMEs, innovativeness has a positive effect on risk-taking.

EO and Firm Performance

EO is viewed as a valuable strategic orientation because technology and customer needs change rapidly and extensively (Lumpkin & Dess, 1996). EO enables firms to better adapt to competitive environmental conditions (Dutot & Bergeron, 2016), and those appropriate adjustments tend to influence the business results of small companies (Lomberg et al., 2017; Wiklund & Shepherd, 2005). Thus, numerous empirical studies have reported a positive impact of EO on business results among companies from different business sectors and national settings (Covin & Wales, 2012; Kraus et al., 2012; Lumpkin & Dess, 1996).

Buli (2017) demonstrated that proactiveness and risk-taking contribute to improved growth and financial indicators in manufacturing SMEs in emerging markets. Fadda (2018) also demonstrated that proactiveness and innovativeness positively correlate with performance measures (i.e., sales and profit) in tourism firms. That is, firms that proactively act toward the outside environment in relation to the advancement of customer needs and preferences, offering new products or services and staying ahead of competitors, will improve their sales and profits (Fadda, 2018). Furthermore, Martín-Rojas et al. (2020) demonstrated that innovation capabilities can encourage creative product and process strategies that influence business performance. Innovativeness also allows firms to undertake risky activities such as improving existing products and services as well as creating new ones, which ultimately improves those firms' growth and profitability (Kraus et al., 2012). Therefore, the following hypothesis is formulated:

H6: In Thai SMEs, EO (innovativeness, proactiveness, and risk-taking) has a positive effect on financial performance.

In addition to the evidence for the impact of EO on financial indicators in the literature, Ndubisi and Iftikhar (2012) highlight the influence of the entrepreneurial capabilities of small firms on nonfinancial performance. They suggest that these firms' active responses to the external environment and the implementation of business initiatives with uncertain outcomes can improve the quality of their performance (e.g., cost efficiency, improved product quality and customer services, and enhanced collaboration and information sharing). Accordingly, entrepreneurial capabilities enable firms to integrate innovative activities into customer relationship management, in turn creating customer loyalty and positioning advantage (Mamun et al., 2018; Ndubisi & Iftikhar, 2012). That is, EO leads to innovative products or services that

meet customers' wants and tastes, creating greater customer value, leading to improved business results (Mamun et al., 2018). Therefore, the following hypothesis is formulated:

H7: In Thai SMEs, EO (innovativeness, proactiveness, and risk-taking) has a positive effect on nonfinancial performance.

Relationship between SM, EO, and Firm Performance in Thai SMEs

Empirical research on the link between three variables – SM, EO, and firm performance – remains narrow. Nevertheless, some academics have addressed the need to explore the influences of SM on EO and performance (Martín-Rojas et al., 2015). Although many companies have invested in Internet-based applications, performance outcomes have been unclear (Crammond et al., 2018; Foltean et al., 2019). Some researchers have discussed the idea that the use of SM enables companies to enhance dynamic capabilities, which contributes to improved business results when SM is complemented with necessary capabilities and resources (Foltean et al., 2019; Olanrewaju et al., 2020). The previous empirical evidence remains inconsistent and shows a negative effect or nonsignificant relationship (Dutot & Bergeron, 2016; Grimmer et al., 2018; Moen et al., 2008). Therefore, this paper, proposes to fill the research gap in the literature. In particular, it aims to empirically examine the link between SM usage, EO, and firm performance. Additionally, this paper employs multidimensional instruments of EO as well as performance, including financial and nonfinancial indicators, and considers entrepreneurial capabilities to be a mediating influence in this link. Therefore, the following hypothesis is formulated:

H8: In Thai SMEs, EO mediates the relationships between SM usage and firm performance (finance performance and nonfinancial performance).

Theoretical Model

Based on the aforementioned set of hypothetical relationships, the authors developed the following theoretical model (Figure 1). This model was tested with empirical data, and the process is explained in the next section

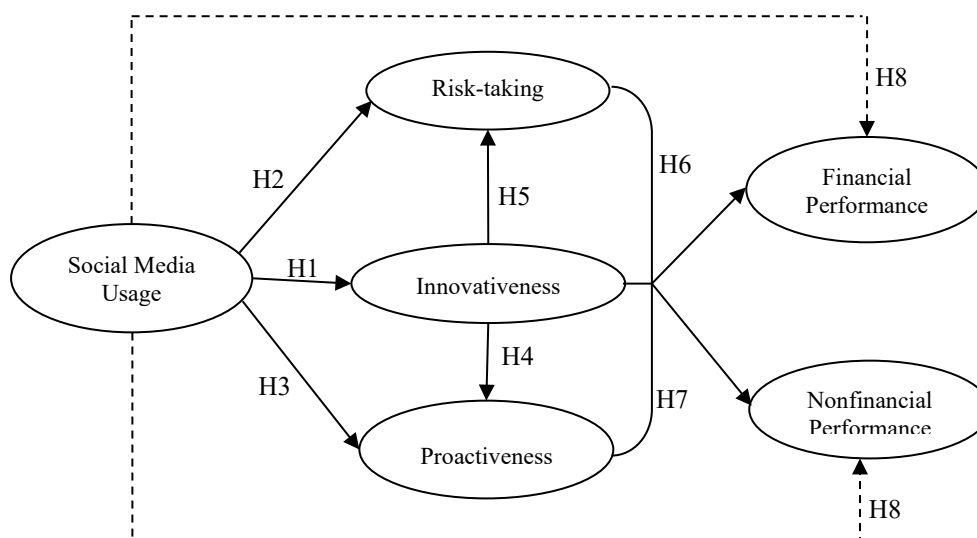


Figure 1: Theoretical Model of the Study

Research Methodology

Population and Sample

The country selected for the investigation is Thailand. SMEs are considered an important engine driving Thailand's economic growth as they account for the majority of firms and comprise the main source of job creation. According to a report by the Office of SME Promotion [OSMEP] (2019), SMEs represent 99.53% of all enterprises across the country and 69.48% of total employment. In financial terms, SMEs contribute 35.30% of the national GDP.

In terms of SM usage by companies, Electronic Transactions Development Agency [ETDA] (2020, p.22) reports that 95% of all organizations have mostly used Facebook for their online advertising, whereas SMEs have spent 30.27% of their online marketing budget on public relations through this channel. Moreover, a report by the Commonwealth of Australia [COA] (2018, p.10) reveals that Thailand is the world's largest social commerce market, accounting for 51% of consumers buying products through popular social platforms or channels such as Facebook, Instagram, and LINE. The government intends for Thailand to become a leading digital hub in South-East Asia within 10 years. Consequently, the government supports both the private and public sector efforts to make e-commerce accessible to Thai people (COA, 2018). To stay competitive, SMEs can benefit from exploring and exploiting market opportunities by utilizing SM as an effective mechanism for enhancing entrepreneurial capabilities, which ultimately leads to the improvement of firm performance (Martín-Rojas et al., 2020).

Data Collection and Organizational Profile

For this research, data was collected from a person at the management level of an organization. The survey questionnaires were distributed by hand to the owner-managers or CEOs of 350 SMEs that participated in workshops and seminars held by the Thai Chamber of Commerce on 26 March 2018. The owner-managers or CEOs were selected to answer the questionnaires as the managerial level or higher rank of SMEs would be most knowledgeable and experienced about the activities, orientations, and performance of the firms (Amin et al., 2016). The convenience sampling technique was used in order to reach suitable sample (Masa'deh et al., 2018); it also ensured that the executive managers were available and were willing to participate. The companies that had used SM marketing for more than one year were selected for data collection, as this sample was sufficient for observing the impact of SM usage on business outcomes (Parveen et al., 2016). A total of 328 questionnaires were returned at the end of the workshops and seminars. Of these, a total of 313 questionnaires were usable, producing a valid response rate of 89.43%. The high response rate could be the result of the assistance in questionnaire distribution provided by the Thai Chamber of Commerce. To reduce possible bias and protect the privacy of the respondents, this study ensured anonymity and confidentiality and aggregated the data collected (Martín-Rojas et al., 2020). The respondent attributes are presented in Table 2.

Table 2: Respondents' Demographic Characteristics (N = 313)

Description	%
<i>Firm size</i>	
0–30	19.17
31–50	32.91
51–100	26.52
101–200	21.41
<i>Business type</i>	
Manufacturing	15.97
Trading	36.42
Service	47.61
<i>Industry classification</i>	
Agricultural product	9.58
Apparel and textiles	7.04
Electronic components	10.54
Consumer products	25.24
Food and beverage	19.81
Tourism and services	4.47
Health and beauty products	23.32

Measures

The questionnaire was originally developed in English and was then translated into Thai. After that the survey had been reviewed by 10 owner-managers or CEOs of SMEs in order to identify any problems with the wording or content of the questions, some minor changes were made based on the executives' suggestions (Masa'deh et al., 2018, p.3127). All items were evaluated on a five-point Likert scale. The items for measuring each construct were developed from previous studies, where they had been demonstrated to be valid and reliable. The items for assessing EO were developed based on those of Zhang et al. (2014) and Lin et al. (2008), which were drawn from the original EO scale, an EO measurement instrument with proven cross-cultural validity (Kreiser et al., 2002). The items were in three components, regarding decision making at the top level and a firm's actions with respect to product/market innovation, risk-taking, and proactiveness. The items for SM usage were adjusted from Parveen et al. (2016), who adapted them from various studies to cover several business tasks in which an information technology system is utilized. The items covered three dimensions, namely SM used for marketing, SM used for customer relations and services, and SM used for information accessibility.

To gain more insight into different aspects of business performance, this study categorized the performance construct into the two dimensions of financial (as external factor e.g., profitability, sales level, and cash flow) and nonfinancial performance (as internal factor e.g., cost reduction, improved customer relations and services, and enhanced information accessibility). All items were adapted from Carton and Hofer (2006), Lomberg et al. (2017), and Parveen et al. (2016). This research used subjective measures of performance since objective measures of performance are difficult to obtain in the SME setting (Liu et al., 2017). Moreover, previous studies have shown that subjective and objective measures of performance are correlated (Liu et al., 2017; Mamun et al., 2018).

Results

To assess the theoretical model, this paper employed structural equation modeling (SEM), where factor analysis is combined with multiple regression analyses (Hair et al., 2006). First, a confirmatory factor analysis (CFA) was conducted to analyze the reliability and validity of the constructs. Then, a path analysis was employed to test the hypotheses.

Common method variance is required to examine when data are obtained via self-reported questionnaires, particularly when both the predictor and criterion variables are collected from the same person (Podsakoff et al., 2003). According to Podsakoff et al. (2003), a common method bias may occur from common rater effect and same measurement time effect. Thus, Harmon's Single Factor Test was employed to address this issue. All variables used in the current study were entered into an unrotated factor analysis to determine the number of factors. If a single factor explains most of the variance, then a common method variance is assumed to exist. In this study, a single factor did not emerge; Factor 1 accounted for 32.07% of the variance and did not explain the majority of the variance, meaning that common method bias is not a serious problem in the data in this study.

Measurement model analyses

Firstly, CFA was conducted to assess the constructs' reliability, convergent validity, and discriminant validity. Cronbach's alpha of each construct exceeded the cut-off point of 0.70 (ranging from 0.75 to 0.86), and composite reliability (CR) for constructs were higher than the cut-off value of 0.70 (ranging from 0.76 to 0.92), indicating acceptable construct reliability and internal consistency, as shown in Table 4. Furthermore, all factor loadings were statistically significant ($p < 0.001$; ranging from 0.64 to 0.91), signifying convergent validity, as presented in Table 3. The discriminant validity of each construct was also evaluated by examining the average variance extracted (AVE) and it was found that the AVE of all constructs exceeded the threshold value 0.50 (ranging from 0.54 to 0.72) (see Table 4). Moreover, the square root of the AVE of each construct was larger than its correlations with other constructs (see Table 4). The results confirmed that discriminant validity existed between the constructs (Martín-Rojas et al., 2020).

Table 3: Construct Measures and Validity Measurement

Constructs	Items ^a	Mean	SD	Std. Loadings
SM Usage ¹	SMMKT1	4.20	0.85	0.84
	SMMKT2	4.17	0.87	0.78
	SMMKT4	4.16	0.82	0.73
	SMCUST1	4.25	0.73	0.74
	SMCUST3	4.13	0.79	0.75
	SMCUST4	4.27	0.79	0.77
	SMINFO1	4.15	0.78	0.78
	SMINFO2	4.09	0.84	0.81
	SMINFO3	4.23	0.82	0.82
Innovativeness ¹	INNO1	4.03	0.78	0.75
	INNO2	4.09	0.79	0.78
	INNO3	4.13	0.80	0.74
	INNO5	4.14	0.83	0.67
Proactiveness ¹	PROACT3	4.01	0.82	0.71
	PROACT4	4.01	0.90	0.85

Table 3: Construct Measures and Validity Measurement (Cont.)

Constructs	Items ^a	Mean	SD	Std. Loadings
Risk-taking ¹	RISK1	3.90	0.89	0.80
	RISK2	3.88	0.90	0.89
Financial performance ²	FPPIN1	4.03	0.78	0.84
	FPPIN2	4.02	0.83	0.83
	FPPIN3	3.93	0.85	0.79
Nonfinancial performance ²	FPCOST1	3.80	0.83	0.70
	FPCOST2	3.78	0.82	0.87
	FPCUST1	4.18	0.73	0.76
	FPCUST3	4.17	0.83	0.87
	FPCUST4	4.19	0.81	0.85
	FPINFO1	3.87	0.80	0.64
	FPINFO2	3.97	0.81	0.91

Note: ¹please indicate how much you agree and disagree with each of the following statements. Five-point scale with 1 = “strongly disagree” to 5 = “strongly agree” scale anchors; ²please indicate how well your firm has performed compared to your competitors. Five-point scale with 1 = “very low” to 5 “very high.” ^aItem retained during the scale validation process.

Table 4: Descriptive Statistics, Reliability, and Validity of the Constructs

	Mean	SD	AVE	Alpha	CR	1	2	3	4	5	6
1. SM	4.23	0.50	0.61	0.91	0.93	0.78					
2. Inno	4.32	0.55	0.54	0.82	0.83	0.35	0.73				
3. Risk	4.30	0.46	0.72	0.83	0.83	0.36	0.41	0.85			
4. Proact	4.15	0.56	0.61	0.75	0.76	0.40	0.48	0.37	0.78		
5. Finan	3.73	0.71	0.67	0.86	0.86	0.36	0.29	0.28	0.30	0.82	
6. Nonfin	3.87	0.56	0.65	0.83	0.92	0.42	0.27	0.35	0.41	0.55	0.81

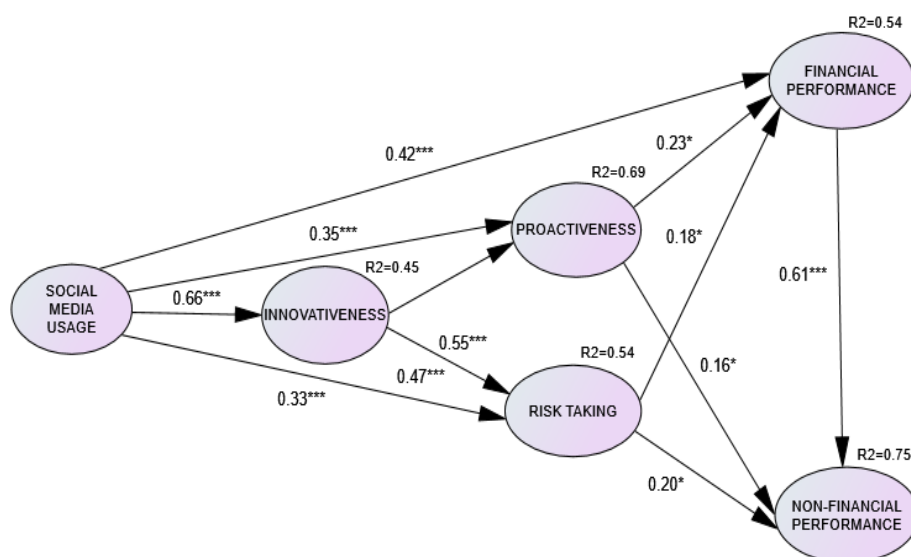
Note: Numbers on the diagonal represent the square root of the AVE of each construct. Numbers below the diagonal indicate the correlation between the constructs. The inter-construct correlations are below the diagonal.

Hypothesis Testing

This study then evaluated a full structural equation model and found that it did not fit the data: CMIN/DF = 24.71, SRMR = 0.07, GFI = 0.84, and CFI = 0.84. In order to fit the structural model, relationships that were not significant were removed. Moreover, consideration of the modification indices regarding theory validation suggested that adding structural paths from “social media usage” to “financial performance,” and “financial performance” to “nonfinancial performance” improved the model: CMIN/DF = 2.74, SRMR = 0.02, GFI = 0.98, and CFI = 0.98. Therefore, the modified model shown in Figure 2 was found to be acceptable.

The arrows in Figure 2 show that all hypotheses are confirmed (also see Table 5). This paper demonstrates that SM usage positively correlates to all dimensions of EO, namely innovativeness ($\beta = 0.66, p < 0.001$), risk-taking ($\beta = 0.33, p < 0.001$), and proactiveness ($\beta = 0.35, p < 0.01$), thus supporting H1, H2, and H3. In addition, innovativeness positively correlates to risk-taking ($\beta = 0.47, p < 0.001$) and proactiveness ($\beta = 0.55, p < 0.001$), thus supporting H4 and H5. Furthermore, two dimensions of EO, namely risk-taking ($\beta = 0.18, p < 0.05$) and proactiveness ($\beta = 0.23, p < 0.01$), positively correlate with financial indicators, while

two dimensions of EO, namely risk-taking ($\beta = 0.20, p < 0.01$) and proactiveness ($\beta = 0.16, p < 0.05$), positively correlate with nonfinancial indicators. However, the direct effects of innovativeness on financial and nonfinancial performance are nonsignificant; hence, H6 and H7 are partially supported. Although innovativeness has no statistically significant and direct effect on business results, this study reveals an indirect effect of innovativeness on business results through risk-taking and proactiveness. In addition, the mediating effects of EO on the relationships between SM usage and financial and nonfinancial performance were tested. A bootstrapping procedure was used to test the indirect effects. The results show that the indirect effects of EO on the SM usage–financial performance link ($\beta = 0.25, p < 0.01$) and EO on the SM usage–nonfinancial performance link ($\beta = 0.13, p < 0.01$) are significant. Thus, given the significant relationships between SM usage, EO and financial and nonfinancial aspects, as explained in the model fit in Figure 2, support H8 for the mediating effect of EO on SME performance in Thailand.



Note: * significant at $p < 0.05$, ** significant at $p < 0.01$, *** significant at $p < 0.001$

Figure 2: Final Model of SM Usage, EO, and Performance

Table 5: SM usage, EO, financial and nonfinancial performance supporting the hypotheses

Hypotheses	Testing	Status
H1. SM -> innovativeness	($\beta = 0.66, p < 0.001$)	Support
H2. SM -> risk-taking	($\beta = 0.33, p < 0.001$)	Support
H3. SM -> proactiveness	($\beta = 0.35, p < 0.001$)	Support
H4. innovativeness -> proactiveness.	($\beta = 0.55, p < 0.001$)	Support
H5. innovation -> risk-taking	($\beta = 0.47, p < 0.001$)	Support
H6. EO (innovativeness, proactiveness, risk-taking) -> financial performance	innovativeness (<i>n.s.</i>); proactiveness ($\beta = 0.23, p < 0.01$); risk-taking ($\beta = 0.18, p < 0.05$)	Partial support
H7. EO (innovativeness, proactiveness, risk-taking) -> nonfinancial performance	Innovativeness (<i>n.s.</i>); proactiveness ($\beta = 0.16, p < 0.05$); risk-taking ($\beta = 0.20, p < 0.01$)	Partial support
H8. SM usage -> EO -> firm performance (finance performance and nonfinancial performance).	financial ($\beta = 0.25, p < 0.01$); nonfinancial ($\beta = 0.13, p < 0.01$);	Support

Beyond the hypothesized model, the results suggest that SM usage has a positive influence on financial indicators ($\beta = 0.42, p < 0.001$). The findings also reveal that different elements of EO, including innovativeness, risk-taking, and proactiveness, have direct effects on financial and nonfinancial indicators as well as indirect effects (through financial performance) on nonfinancial performance. Lastly, the R^2 values indicate that the model explains 45% of innovativeness and 54, 69, 54, and 75% of risk-taking, proactiveness, financial performance, and nonfinancial performance, respectively.

Discussion

This paper shows that SM usage impacts three elements of EO: innovativeness, risk-taking, and proactiveness. This finding supports previous research. Parveen et al. (2016) demonstrated that SM usage influenced the EO of Malaysian SMEs. In addition, Martín-Rojas et al. (2020) demonstrated that SM was significantly related to all entrepreneurial capabilities of SMEs in Spain. Through the lens of dynamic capability theory, Martín-Rojas et al. (2020) suggested that online SM platforms serve as channels of market knowledge that enhance a firm's ability to make decisions to exploit and/or explore opportunities, and, thus, to become innovative and proactive in response to their business environments.

In addition, innovativeness influences risk-taking and proactiveness. This result is similar to those of previous research (e.g., Lomberg et al., 2017), suggesting that different entrepreneurial capabilities of firms are related and that they interact, uniquely contributing to an explanation of business performance. That is, innovation capability helps firms to respond promptly to market changes and develop new market opportunities to improve their performance (Martín-Rojas et al., 2020).

Furthermore, two elements of EO, especially risk-taking and proactiveness, were found to enhance financial performance. These results support previous studies. In exploring the link between proactiveness and performance, Fadda (2018) discovered that firms that proactively anticipate their environments in relation to advancing customers' needs and wants – by, for example, launching new products, services, or processes or initiating actions to stay ahead of the competition – will improve their sales and profit. In addition, Buli (2017) reported the crucial role of risk-taking on performance in manufacturing SMEs. Entrepreneurial firms will achieve high growth and financial performance if they intend to take some degree of risks and uncertainty in unknown new markets (Larsen & Korneliusen, 2012).

Moreover, it was found that two elements of EO, risk-taking and proactiveness, improve nonfinancial performance. These results support the findings of Ndubisi and Iftikhar (2012), who indicate that entrepreneurial capabilities such as proactiveness and risk-taking are robust in SMEs. They suggested that an active response to the outside environment and the implementation of risky investments and business initiatives with uncertain outcomes can improve quality performance (e.g., cost efficiency, product quality and customer services, and collaboration and information sharing).

However, the direct effects of innovativeness on financial and nonfinancial performance are nonsignificant. These findings are similar to those of other studies (e.g., Buli, 2017; Kraus et al., 2012), indicating the indirect performance effect of innovativeness. Thus, a strong need exists for the multidimensional characteristics of the EO and performance paradigms when observing the link between EO and performance (Lumpkin & Dess, 1996). Furthermore, the possible explanation for the nonsignificant association between innovativeness and performance is that

firms encounter an extensive diversity of internal and external environments that impact the success of business objectives and then impact business results (Kraus et al., 2012). Thus, this study clarifies that EO mediates between the SME constructs.

Though this study indicates that innovativeness has no direct impact on business outcomes, it also reveals the significance of the indirect influence of innovativeness on performance through risk-taking and proactiveness. Anderson et al. (2015, p.1583) suggested that, “While innovation is a necessary condition for entrepreneurship, it is not sufficient, nor is it meaningfully independent from risk-taking and proactiveness.” Lumpkin and Dess (1996, p.151) asserted that the various elements of entrepreneurial capabilities can change independently of one another in a specified context, and suggested that each element may not lead to improved business results. Lomberg et al. (2017) further highlighted the strong correlations between the elements of entrepreneurial capabilities, arguing that this is practical in the subject of EO in “the extent to which variation in performance can be attributed to unique variations in exploration or exploitation, or to their covariation” (p.22). Therefore, the multidimensional perspective can provide more insights into the foundation of the EO concept and the effect of each element on business outcomes (Fadda, 2018).

The findings of this paper indicate that EO is considered to be the link between SM usage and business results. This supports the findings of the aforementioned past studies. Based on the dynamic capabilities theory, Martín-Rojas et al. (2020) argued that SM usage in small firms influences entrepreneurship and firm performance, and entrepreneurial management as a key capability improves the link between SM usage and firm performance. Furthermore, Dutot and Bergeron (2016) indicated that improved business outcomes are attained when SM usage is implemented with necessary capabilities or resources. Skills, such as the ability to innovate to pursue growing opportunities and the ability to tolerate risk (Kraus et al., 2012, p.168), integrated with an EO would lead small firms to reconfigure their business processes, and, thus, it would be expected that their business results would improve (Crammond et al., 2018). Given the skills embedded by an EO, Wiklund and Shepard (2003) highlighted EO as a valuable asset or skill that enables a firm to adapt to its external context and, subsequently, to achieve organizational goals and good performance (Fadda, 2018). Therefore, SM usage is vital to integrating entrepreneurial capabilities with the aim of enhancing business results (Martín-Rojas et al., 2020).

Additionally, the findings reveal that SM usage enhances financial performance. This is consistent with the findings of previous studies. Franco et al. (2016) demonstrated that SM is well-suited to SMEs because it makes use of networking to support marketing activities, reduce costs, and expand the business, leading to sales growth and increased profitability. In addition, Dutot and Bergeron (2016) highlighted the importance of SM for SMEs, as the use of SM allows these firms to increase sales due to the larger customer base and improved customer relationship management.

Interestingly, the findings suggest that different elements of EO influence nonfinancial measures indirectly through financial measures in addition to their direct impacts on financial and nonfinancial indicators. Another study indicates that different types of corporate strategies and actions may have different impacts on the measurements of business outcomes (Lumpkin & Dess, 1996). Accordingly, this paper shows that a focus on multidimensional instruments, including quantitative and qualitative measurement items, would enrich understanding of the link between SM usage and firm performance (Dutot & Bergeron, 2016). The findings of this

paper provide useful suggestions for both academics and business practitioners, which are detailed in the following subsections.

Theoretical Contributions

This paper has several implications for IT, entrepreneurship, strategic management, and dynamic capabilities literature. First, based on the theory of dynamic capabilities, this study extends the scope of the literature to explain the relationship between SM usage and entrepreneurial capabilities. The positive influences of SM usage found in this study provide additional evidence to confirm the dynamic capabilities concept that technology increases a firm's current capabilities.

Second, the findings advance IT literature, especially SM research, by empirically revealing the effect of SM usage on different dimensions of EO. In respect of the review of SM and entrepreneurship studies, the effect of SM on firm EO has rarely been examined (Martín-Rojas et al., 2020; Olanrewaju et al., 2020). Furthermore, whereas extensive prior studies have examined the impact of EO on several facets of technology and business performance (e.g., Dutot & Bergeron, 2016), this study (as suggested by Parveen et al., 2016) provides different evidence that online platform usage has a strong positive effect on firm EO. The findings confirm that SM usage enhances social networks and connectivity with customers and business partners, enabling firms to analyze risks and opportunities, and to capture market opportunities by introducing new product-market offerings (Kaplan & Haenlein, 2010; Wang et al., 2016). Moreover, SM usage allows firms to capture and exploit market information and trends by anticipating changes and responding to customer needs (Kraus et al., 2012). The results corroborate that the usage of SM increases firms' capabilities to be proactive and reconfigure resources into successful innovations (Martín-Rojas et al., 2020). Therefore, this research provides valuable insights that contribute to this area of research.

Third, the mediating role of entrepreneurial proclivity in the SM–performance relationship is another contribution to the strategic management literature. Several moderator and mediating variables have been investigated from an SM perspective, but the mediating role of EO on the SM–performance relationship has rarely been examined in IT and entrepreneurship literature (Olanrewaju et al., 2020). The findings advance the state of knowledge about the contributions of SM usage and entrepreneurial capabilities to business outcomes by demonstrating that the use of SM alone to enhance business outcomes is insufficient, and that the use of SM leads to enhanced business outcomes by improving entrepreneurial capabilities. In this respect, this study supports the dynamic capabilities theory, suggesting that resource deployment is an effective mechanism for sustaining competitive advantage (Teece, 2016). The effective deployment of a firm's skills and assets is dependent on the strategic adaptation of that firm, which is necessary to generating value and enhancing performance by utilizing SM (Foltean et al., 2019; Martín-Rojas et al., 2020). This study argues that the strategic use of SM platforms enables firms to create dynamic capabilities, especially entrepreneurial capabilities, which lead to superior business outcomes.

Finally, this study is useful to entrepreneurship literature as its findings confirm that different dimensions of EO correlate and interact. Innovativeness positively correlates to proactiveness and risk-taking, which in turn improves both the financial and nonfinancial aspects considered in this paper. That is, innovation capability enables strategic processes that allow a firm to respond quickly to market changes and anticipate new opportunities, as well as

enter new businesses and markets, ultimately producing a positive effect on firms' profit, as well as on its productivity and customer satisfaction (Lomberg et al., 2017; Martín-Rojas et al., 2020). Therefore, this research advances the understanding of how entrepreneurship should heterogeneously emerge and produce successful business outcomes in different contexts (Fadda, 2018).

Managerial Implications

In addition to this study's contributions to research, its results yield crucial practical implications. The findings provide decision makers in SMEs with a framework that will help them to understand how to benefit from SM technologies for improving the EO of their firms and enhancing business performance. More specifically, this framework will help those small firms to make smart investments with their limited resources, and to cultivate the entrepreneurship that leads to superior performance.

The business environment, particularly in developing countries, is increasingly competitive and complex; thus, companies need to choose appropriate strategic options and identify capabilities for survival and growth. SM is therefore considered to be an effective tool for driving innovation and competitive advantage. This study suggests that firms should realize that more proactive use of SM contributes to business performance by encouraging EO. Given that firms can use SM to capture, retain, and exploit market knowledge for developing innovation, this knowledge helps firms to become aware of new opportunities or threats, to reconfigure their business processes, and develop new market opportunities, thus responding to the nature of market change. Thus, firm strategies and capabilities should be aligned to exploit opportunities in the market.

In addition, SM is mainly considered an instrument for enhancing entrepreneurial capabilities, which in turn contributes to improved financial indicators. However, this paper suggests that firms should adopt other performance measures to determine the success or failure of their use of SM. Accordingly, they should consider employing nonfinancial indicators such as cost reduction, improved customer relations and services, and enhanced information accessibility. Thus, SM is highly beneficial to firm success when it both financial and nonfinancial indicators are integrated. This paper also highlights the power of SM for knowledge sharing and transfer, as well as for cost reduction. SM is suited to SMEs as an effective platform for improving firm growth and profitability, leading to improved productivity, knowledge quality, and customer satisfaction.

Lastly, the findings suggest that the influences of each component of EO must be carefully clarified regarding the different organizational contexts, as well as in relation to the other components of EO. That is, firms need to adjust their entrepreneurial capabilities in a more effective manner to help them improve performance. For example, firms should cultivate proactive behavior so that they can anticipate environmental changes by creating new products, services, or processes, thereby shaping the direction of the environment. Such actions underline the alignment of proactiveness and innovativeness for achieving superior financial performance and customer value. Moreover, firms should embrace the idea that risk-taking is essential for innovation since risks that are implemented with innovativeness contribute to performance.

Conclusion

Brief Summary

The main objective of this paper is to advance the knowledge about the relationship between SM usage, EO, and business performance. It provides a clear understanding of the effects of SM usage on individual elements of EO in terms of innovativeness, risk-taking, and proactiveness as the pathway for SMEs to improve performance. This study confirms that SM usage, having already been successfully leveraged to foster EO in developed countries, can also be exploited in developing countries.

Limitations and Future Research

This paper has some limitations, which suggest interesting focuses for future studies. First, this study was conducted on Thai SMEs, and, therefore, the results are limited to this context. Future studies should replicate the analysis in other segments and nations, and with a bigger sample size, to clarify whether significant variances exist between countries and cultures. Second, this study uses a unique data source; therefore, future studies should gather data from different sources within firms to verify the variations in their points of view. Furthermore, this study measures SM usage for various business purposes and tasks. Given the various purposes of SM usage, future research may consider other areas of SM usage, such as skills, learning, knowledge management, business networking, or manager and employee support for SM (Crammond et al., 2018; Martín-Rojas et al., 2020; Olanrewaju et al., 2020). Finally, the data in this paper are cross-sectional, and therefore, there seems to be a fascinating opportunity to employ other research designs in future studies.

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Appendix

Table A1. Questionnaire items

Variables	Items	Sources
SM usage		
– SM usage for marketing	<ol style="list-style-type: none"> 1. Advertise and promote product and service 2. Create brand visibility 3. Conduct marketing research 4. Get referrals (word of mouth via likes, shares, and followers in Facebook) 	Parveen et al. (2016)
– SM usage for customer relations and services	<ol style="list-style-type: none"> 1. Develop customer relations 2. Communicate with customers 3. Conduct customer service activities 4. Receive customer feedback on existing products/services 5. Receive customer feedback on new/future products/services 6. Reach new customers 	
– SM usage for information accessibility	<ol style="list-style-type: none"> 1. Search for general information 2. Search for competitor information 3. Search for customer information 	
EO		
– Innovativeness	<ol style="list-style-type: none"> 1. Our organization frequently tries out new ideas 2. Our organization seeks out new ways to do things 3. Our organization is creative in our methods of operation 4. Our organization often is the first to do marketing for new products and services 5. Innovation in our organization is perceived as too risky and is resisted 	Lin et al. (2008); Zhang et al. (2014)
– Proactiveness	<ol style="list-style-type: none"> 1. Our organization actively takes actions to elicit the response from the competitors 2. Our organization has a strong ambitions to take the lead of the competitors 3. Our organization always invests more resources than the major competitors in forecasting and exploiting 	
– Risk-taking	<ol style="list-style-type: none"> 1. Our organization seeks the sales growth, our organization is willing to execute some risky projects 2. Even though the costs for some projects are high, under some conditions, our organization will still launch those projects 3. Our organization can accept the uncertainties existing in the projects 	
Financial performance	<ol style="list-style-type: none"> 1. Sales volume 2. Profitability 3. Cash flow 	Carton and Hofer (2006); Lomberg et al. (2017)
Nonfinancial performance		
– Impact on cost reduction	<ol style="list-style-type: none"> 1. Reduced the cost of communication with customers 2. Reduced the cost of advertising and promotion 3. Reduced the cost of customer service and support 	Parveen et al. (2016)
– Improved customer relations and service	<ol style="list-style-type: none"> 1. Enhanced customer service 2. Increased customer royalty and retention 3. Improved customer relationship 	
– Enhanced information accessibility	<ol style="list-style-type: none"> 1. Enabled easier access to competitor information 2. Enabled easier access to market information 3. Enabled faster delivery of information to customers 	