The Adoption of Social Media as Marketing Tools:

Case Small and Medium Enterprises in Brunei Darussalam

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ABSTRACT

The rapid adoption of social media in business is becoming more evident over the years. Most businesses view social media as a chance to build two-way communication with customers and to create unique marketing communication tools. Nonetheless, research on social media adoption, particularly, in the case of small and medium-sized enterprises (SMEs) is still limited. In Brunei Darussalam, SMEs are regarded as a key player in industrial development. Thus, the objectives of this study are to investigate the factors that mainly drive social media adoption among the SMEs in Brunei, to determine the types of social media platforms that they used as well as to examine the potential benefits and challenges of adopting it. The researchers administered online questionnaires to 57 CEO or managers of local SMEs. Based on the empirical findings of this research, technological factors, ease of use and perceived benefits, are the prominent drivers for social media adoption among SMEs in Brunei.

KEYWORDS

Brunei Darussalam, Marketing Tools, SMEs, Social Media Adoption

INTRODUCTION

The Internet and its related technologies have evolved and consumers tend to search for information regarding products or services, company's background as well as reviews from other consumers through social media. This cause the use of social media to be recognised as part of business strategy and marketing in attracting the target group of customers. Asian countries have dominated the fourth position in utilising the social media across the globe (Kemp, 2017). By 2017, the most dominant and

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fast-growing social media used by active users worldwide is Facebook with 572 million active users, followed by WhatsApp and Instagram with 400 million active users (Chaffey, 2018).

Social media plays a significant role in the daily lives of Bruneians with 86% of the total population using social media (Othman, 2017). A survey conducted by Authority for Info-communications Technology Industry (AITI) (2016) found that 52% of the respondents are using social media for online shopping. This social media trends can be exploited by companies to reach many audiences quickly. It is considered as a fast approach in tailoring strategy to meet business objectives compared to traditional marketing.

The social media adoption enables companies to share messages or announcements through the page they have created. It allows two ways communication as the customers are able to give feedbacks and ask questions. Social media offers cost-effective marketing tools for small and medium sized enterprises (SMEs).

In Brunei Darussalam, many initiatives have been taken by the government to encourage the growth of SMEs as they can absorb unemployment and help in economic diversification (Iqbal & Rahman, 2015). SMEs help create jobs, provide opportunities to adapt some technological approaches, and promote the utilization of local resources. However, the benefits of using social media for marketing depends on how SMEs incorporate social media in their marketing strategy.

Many SMEs in Brunei use social media, especially for marketing their products or services. However, no study has been done to reveal factors that influence them in adopting social media. Thus, this study seeks to fill in the gaps and find out those factors. Therefore, objectives of this study are to investigate the factors that influences the adoption of social media among the SMEs in Brunei; to find out which social media platforms are used by SMEs as their marketing tools and lastly, to examine the challenges and the advantages gained by SMEs in the adoption of social media as marketing tools.

This paper is organised in the following way. Section 2 comprises of the literature reviews on social media adoption and the factors influencing it. Section 3 covers the conceptual framework and hypotheses derived from the framework. Section 4 contains the description of the methodology of this research study, and Section 5 describes the empirical findings. Whereas, Section 6 analyses the main findings of this research in terms of the social media as marketing tools along with the benefits and challenges when adopting it. Finally, conclusion will be drawn in Section 7 and the contribution, implication, limitations along with recommendations for further research are drawn in Section 8.

LITERATURE REVIEW

Social media is a platform that provides high interactivity with their users. Some examples of social media are WhatsApp, Twitter, Facebook and Instagram. With the current Brunei economy is still in recovering process, companies are being cautious in utilising effective techniques to channel their businesses to their potential and current customers. Many companies regard social media as an effective channel in spreading word-of-mouth (Cohn, 2010). In addition, social media offer companies to implement business practices such as brand building through distributing photos and videos (Billore & Sadh, 2015).

For SMEs social media offer numerous utilitarian benefits. It requires low IT skills and minimal costs to utilize social media. Apart from that, incorporating social media to business processes enables SMEs to promote their products and services, manage their business reputation, and reach various market niches to amplify business' popularity (Billore & Sadh, 2015). On that account, this produce an effective marketing tool for SMEs in achieving their business goals, developing relationship, gaining loyalty and trust along with obtaining feedback with customers.

Indeed, SMEs need to consider adopting social media as their business strategy to obtain huge benefits. This can help SMEs draw attention from both supplier relationship management (SRM) and customer relationship management (CRM). This includes updating latest products/ services, as

well as marketing activities through social media (Cesaroni & Consoli, 2015). Hence, it is crucial to identify the factors that could influence the adoption of social media, particularly in the case of SMEs.

The Technology-Organization-Environment (TOE) framework is an established theory that explains three factors (technology, organization, and environment) that influence a decision for an adoption by a firm (Baker, 2012).

Technology Factors

Siamagka et al. (2015) state that perceived benefits (PB) are the key contributor to the success of social media adoption for both business-to-business (B2B) firms and SMEs. In most existing research, sales and marketing purposes are the main benefits perceived from using social media as a marketing tool by SMEs. The adoption of social media is believed to enhance the customer base and help to sell the products at the digital channel, resulting in an increase of company profits (Góngora, 2016). The idea was supported by Torr (2015) that with a high exposure to the targeting tools, social media is believed to be an approach that will improve brand awareness and generate sustainable growth. Moreover, Sklar (2013) mentions that social media has been perceived as a timely customer engagement platform where companies can get instant feedbacks from customers and improve their products and service accordingly to market demand. Hence, it is understood that social media will be adopted as it is perceived as a valuable tool which generates profitability to SMEs.

The ease of use (EU) in social media, is defined as the extent an individual believes that using a technology would involve minimum effort (Davis, 1989). If social media has been perceived as EU, it is expected that business owners will adopt it. Therefore, the EU of social media is another key contributor to social media adoption among SMEs. According to Meske and Stieglitz (2013), the adoption of social media as a marketing tool for SMEs is believed to be an easy task as the majority of people, including employees and employers are already familiar with how social media works by their personal use on the daily basis. The number of social media users worldwide has increased more than 50%, from 0.97 billion to 2.47 billion between 2010 to 2017 (Statista, n.d.). Meske and Stieglitz (2013) also state that the learning curve to master social media has a correlation to the adoption of social media. It is not difficult to master social media marketing, but it requires effort and reinforcement within the companies to adopt it. Siamagka et al. (2015) mention some interesting points that the EU of social media also has a positive correlation with PB. It is understood that EU may be considered as a subset of PB that will also influence the decision of SMEs to adopt social media as a marketing tool.

Organisation Factors

Many previous studies that examined the adoption of information technology (IT) or information system (IS) in business organisations mentioned organisational characteristics can influence the IT/ IS adoption. Thong (1999) emphasised organisational characteristics such as business size (BS) and social media knowledge (SMK) are essential in the adoption of IT/ IS (as cited in Govindarajulu & Lippert, 2006). Larger companies are more inclined to adopt social media than smaller companies because of their abundant resources (Aspasia & Ourania, 2014). However, the flexibility and the simple organisational structures of the SMEs enables them to be more open in adapting new technologies (Frambach & Schillewaert, 2001).

Level of knowledge in social media can affect the company's decision to embrace social media as its marketing tools. The business owners and their employees are more inclined in using social media if they are more knowledgeable. If the business owners or the employees are familiar with the technologies (which in this case – social media), the company might be more open to the idea of using social media as part of its business strategies (Góngora, 2016). Nonetheless, it might be challenging for those who are not familiar with social media or any IT/ IS related applications (Borgman, Jones, & Ulusoy, 2015). Despite the relatively free and easy use of social media, there are still many SMEs

who have not fully utilised it. The reason might be that they have not fully apprehended the potential of adopting social media in their businesses.

External Factors

Social media marketing is seen as a new business practice which involves the marketing of goods, services and brands. Chi (2011) states that social media has become an avenue where companies can extend their marketing efforts to a wide range of customers as it provides a connection between brands and consumers. According to Kim and Ko (2010), companies effectively make use of social media for advertising, marketing, communicating and build relationship with customers. SMEs can successfully use social media to promote their businesses.

Nowadays, online shopping across the globe are favoured and well received by customers. Some customers prefer to shop using social media instead of physical shopping due to strenuous work schedules and family commitments. By using social media, businesses are not only able to grow their businesses but also obtain opportunity to get diverse customers ranging from different ages. Furthermore, the mass range of target markets can be reached as there are various users using social media (Cha, 2009). Sinclaire and Vogus (2011) claim that consumers' mass adoption of social media is the main factor of SMEs adopting the technology as it increases ability and convenience for businesses to interact with customers.

Competition is another major reason why SMEs should adopt social media as a marketing tool in order to improve their competitiveness. SMEs perceived technology or social media as a tool to compete against their competitors (El-Gohary, 2012; Al-Qirim, 2007; Ifinedo, 2011; Grandon & Pearson, 2004). SMEs will start to embrace the new technology or social media when they see their competitors doing the same.

SMEs also have to deal with pressure coming from their suppliers. Majority of the suppliers are changing their business style into more 'IT way' as it is a more effective and timely communication tool. Al-Qirim (2007), Ifinedo (2011), Kendall (2001), and Stockdale and Standing (2006) mention that SMEs are likely to adopt the technology and accept transactions electronically when the suppliers, vendors, business partners are ready to use them.

THE RESEARCH FRAMEWORK

The Technology Acceptance Model (TAM) is one of the prominent conceptual frameworks that helps explain the adoption of technology by organisations (Davis 1989; Rogers, 2010; Wamba & Carter, 2013). Although the theory is often used to analyse the online shopping behaviours and attitudes, the theory is originated to comprehend the computer-based technologies. It appears that the usage of TAM theory is applicable for organisation with few layers of hierarchical level such as SMEs. Thus, allowing more convenience for direct decision-making processes to be developed (Thrassou & Vrontis, 2008).

BS and SMK are treated as the determinants under the organisational factors. In brief, size is important in every organisation. SMEs face difficulty in regard to their limitation of finance, human capital and technological assets (Iacovou et al., 1995; Kuan & Chay, 2001). If SMEs want to survive, a new adoption of technology such as social media is essential. However, adoption of social media requires expertise of knowledge and technical skills in its use. Prior studies posit that SMEs need this expertise in order to adopt the innovation. Thus, making SMK as the next determinant for the research.

Meanwhile, pressure from customers (CU) and competitors (CM) are considered as other determinants of construct and they have been discussed by certain researchers in their studies. These days customers prefer to use social media and as a result, it pressurises the businesses, especially SMEs to begin adopting the technology. By adopting social media, businesses begin to attract more customers and able to meet their expectations (Mehrtends et al., 2001). Góngora (2016) emphasises that pressure from competitors (CM) may cause SMEs to look into different alternatives to gain

competitive advantage. These pressures may lead SMEs to adopt the social media to ensure they are more innovative and not behind from their competitors.

The proposed framework (Figure 1) is a revised model from earlier studies, especially from Góngora (2016) and TAM (Davis, 1989). We use this framework to investigate the factors that influence SMEs in adopting social media. There are seven independent variables in this framework, which are business size (BS), social media knowledge (SMK) ease of use (EU), perceived benefit (PB), pressure from customers (CU), pressure from competitors (CM), and Pressure from Suppliers (PS). While the dependent variable is the adoption of social media among the SMEs. With reference from TAM, the Ease of Use is expected to influence the PB.

Business Size (BS)

In this research BS is represent the total number of employees in a company. Prior studies revealed that large companies tend to adopt social media faster than smaller companies. With the abundant of wealth, Harland et al. (2007) state large and well-organized corporates can hire professional employees to fulfil the task of this digital marketing via social media tools. The prosperity that big companies have allowed them to acquire emerging technologies and knowledge faster than small companies (He et al., 2014). They also have professional teams who can support them in utilising social media more fluently (Cragg & Mills, 2011). With their inferior size and limited capital resources, many small businesses would rather save cost for promoting their product and rely on creativity and word of mouth to serve local needs.

Organisational **Factors Business Size** Social Media Knowledge H1 H₂ Technological **Factors** Ease of Use **H3** Adoption of **H5** Social Media H4 Perceived among SMEs Benefits H₆ **External Factors** H7 Pressure from H8 Customers Pressure from Competitors Pressure from

Figure 1. Proposed research framework (modified from Góngora, 2016)

Suppliers

Nevertheless, Durst and Edvardsson (2012) thought that SMEs have faced a complication in terms of limited resources and budget. SMEs' flat organisation structure is an advantage, thus allowing a company to make decisions and respond to innovation change faster. Recent SMEs are more inclined to embrace social media as a tool to promote their business, but the problem lies on insufficient knowledge to exploit the tools, putting into question SMEs' effectiveness and efficiency.

The following Hypothesis (H_1) asserts that business size will be positively significant to the adoption of social media.

H₁: Business size will be positively significant to the adoption of social media.

Social Media Knowledge (SMK)

SMK is the degree of expertise of knowledge and technical skills in using social media. At the initial stage, using social media for own comfort is very convenient. This can be done by building an account, connecting with people, and enjoying the platform. However, many business owners found that to exploit social media effectively, in the long run, is quite a challenging task. A survey from 1000 SMEs' owners in Germany who adopted social media for their business benefits indicated after a few months, one-tenth of the owners decided to discontinue their use of social media. It is founded that utilising social media brought no improvement in their profitability. Several respondents mentioned that they have insufficient amount of knowledge in practicing or utilising social media (Hurley, 2012). Meske and Stieglitz (2013) point out, based on their research, 21% of SMEs show lack of SMK is one of the constraint factors to adopting social media in their company.

Soto-Acosta et al. (2014) urged that to utilise social media effectively, it required experiences and expertise in many areas including developing the front-end and back-end. If SMEs has used a 2.0 website to create sales online at the website, the company need to have a server to collect the data of transactions and information on each web pages. So, professional back-end developer is needed (Soto-Acosta et al., 2014). Not only that, Nobre and Silva (2014) point out that social media like Facebook is frequently changing its algorithm so Facebook users which are utilizing it as a promotional tool need to be flexible and ready to learn new algorithms at all times. Hence, the following hypothesis (H_2) is proposed.

H₂: Social media knowledge will be positively significant to the adoption of social media.

Ease of Use (EU)

Davis (1989) termed ease of use (EU) as the measurement of how easy the finished products are to be used by end-users. The survey administered in Germany discloses that social media is being used in daily routine by employees as they perceived it user-friendly (Merske & Stieglitz, 2013). They also stated that the learning curve to master social media has a correlation to the acceptance of social media amongst the employees. The longer the learning curve the less likely business owners will adopt social media (Merske & Stieglitz, 2013). The research by Krishnan and Hunt (2015) supports that there is a connection between the EU of technology, adaptation and use of social media. However, it is also mentioned that EU is one of the variables that reinforce the decision to adopt a social media, but it is not the only variable which captures or direct feelings into adopting decision (Krishnan & Hunt, 2015). Hence, the following hypothesis (H_2) is proposed.

H₃: Ease of use will be positively significant to the adoption of social media.

Perceived Benefits (PB)

PB is the extent to which believes that using social media would have benefits and advantages (Davis, 1989). Jackson (2017) stated that there are 38 benefits of using social media among businesses and several of them include the benefits of branding, customer service, advertisement, sales, human resources, content promotion, marketing and research development and other related fields. Consistently using social media can improve brand loyalty. In terms of sales and advertising, social media is proved to be useful. A mixture of social media approach can help expand the business and generate more sales. Jackson (2017) also stated that social media has proven an effective tool for the sales team as 64% of sales professionals reported to close at least one deal from social media.

Besides, it improves marketing performance along with providing strategic benefits for the companies (Lu & Julian, 2007; Teo & Choo, 2001). In fact, it helps to reduce marketing cost, enhance company image and reputation, improve customer relationships and provide competitive benefits for the company (Molla & Heeks, 2007). Furthermore, a study by European Commission (2013) identified 'increased connectivity, knowledge surfacing, and better communication and collaboration' as the PB of social media to SMEs. Thus, we proposed that the following hypothesis (H_4) that states PB will be positively significant to the adoption of social media.

H₄: Perceived benefits will be positively significant to the adoption of social media.

We adopt the TAM construct that there is a relationship between EU and PB: EU influence PB expressed in the following hypothesis (H_s).

H₂: Ease of use will be positively significant to perceived benefits.

Pressure From Customers (CU)

CU is the extent to which the decision of adopting social media is influenced by customers' demand. Most literature reveals businesses are influenced by their customer's expectations whereby the customers are Internet users and active on their social media platforms (Mehrtens et al., 2001). According to Global Digital Statistics in 2014, there are about 2.95 billion active Internet users with 2.03 billion penetrations in social media while 1.56 billion have accessed social media through their mobile devices (We Are Social, 2014). Hence, pressure for businesses to adopt social media as a marketing tool is unavoidable. It is a 'must-have' marketing tool for every business. Today, the virtual hub of customer activity increases within social media. With the worldwide explosion of social media usage, businesses are feeling pressured to be where their customers are.

Social media is giving the enormous potential for businesses not only to build customers relationship but also help to increase business revenues, reduce cost and increase efficiencies. Farber (2016) mentions that customers are going to the Internet for most of their purchases as shown in the annual survey conducted by analytics firm comScore and UPS. The survey polled more than 5000 consumers and results showed that 51% of their purchases are done through online media in 2016 as compared to only 47% in 2014. Hence traditional retailers should start utilising social media as people are becoming more familiar in using web 2.0. After all, most customers are able to shop online and use social media intensively.

This research anticipates CU will be positively significant to the adoption of social media in the following hypothesis (H_s) .

H.: Pressure from customers will be positively significant to the adoption of social media.

Pressure From Competitors (CM)

CM is the extent to which competition increases the probability of a business adopting social media. Extra-firm relationships are crucial in the making decision for small businesses in adopting technology (Currah & Wrigley, 2004; Nohria & Ghoshal, 1997). Extra-firm relationships are considered as the relationship companies have with others in their environments such as competitors and suppliers. Consequently, small businesses may be forced to embrace technologies because others in their industry have done the same. The view is supported by Scupola (2003), she found that external pressures from competitors have caused SMEs in Italy to adopt to Internet commerce.

Zhu et al. (2006) define 'competitive pressures' as how much businesses are affected by market competition. Competition can influence companies to adopt innovations such as social media in order to maintain their competitive advantage. Porter (2001) argues that by integrating business processes with online activities, companies will be able to alter the rules of competition which in turn can affect the industry structure and leverage new ways to surpass their competitors.

Previous studies have shown that due to competition, businesses adopt innovation such as social media (Kimberly & Evanisko, 1981; Link & Bozeman, 1991). Especially when competition is intense, SMEs have to look for alternative ways to get their competitive advantage hence they are more inclined to consider adopting social media.

In this research we anticipate CM will be positively significant to the adoption of social media.

H_a: Pressure from competitors will be positively significant to the adoption of social media.

Pressure From Suppliers (PS)

PS is the extent to which the decision of adopting social media are influenced by the suppliers. Short (2015) states that most businesses overlook the opportunity to engage with suppliers by using social media. For instance, Huy and Shipilov (2012) had conducted a survey in 2010 asking more than 1000 executives in regard to their utilisation of social media to acquire competitive advantage. The outcome indicates 50% of those surveyed said that their companies do not use social media and only 12% of the companies claim to use some form of social media to connect with their suppliers.

The pressures surfaced from the surroundings of institutional that could influence businesses to adopt similar routines and norms. Ke et al. (2009) point out that the agents may exert pressures along with a firm's key customers, suppliers, competitors, and government. Several studies have taken an institutional method to learn more on Internet technologies, usage and their adoption (Chatterjee et al., 2002; Ke et al., 2009; Liu et al., 2010; Purvis et al., 2001; Teo et al., 2003). In the context of social media, businesses are likely to adopt social media due to the external pressures exerted from suppliers.

By looking through the literature review, this research anticipates that pressure from suppliers will influence the adoption of social media as expressed in the following hypothesis (H_s) .

H₈: Pressure from suppliers will be positively significant to the adoption of social media.

METHODOLOGY

Measurement of Variables

Dependent and independent variables are derived from the framework discussed in the previous section (Figure 1) and the research tool (questionnaire) are designed in which each variable have a clear measurement.

The questionnaire is comprised of two main sections. The first section covers the general information of the companies (refer Appendix) whereas the second section is divided further into eight sections (Section A until Section G) composing of both close-ended and open-ended questions.

These sections will allow us to examine the factors influencing social media adoption (SMA) as marketing tools by SMEs in terms of business size (BS), social media knowledge (SMK), ease of use (EU), perceived benefits (PB), pressure from customers (CU), pressure from competitors (CM) and pressure from suppliers (PS).

The measurable items were operationalized from the related literature reviews in the field of information technology (IT) adoption in general, as well as SMA among SMEs (Refer Table 1). A five-point Likert Scale was used for measuring the variables that can influence the adoption of social media by the SMEs (refer Appendix). This likert scale is easy to use and it can initiate interest among respondents.

Population and Sample

In this research, we decided to select SMEs in Brunei Darussalam as our target population. Nonetheless, due to resource constraints only about 57 SMEs participated for our research study. The targeted population for this research was comprised of Brunei's SMEs that are currently adopting social media as their marketing tools. As for method in data collection process, convenience sampling was used to get the number of targeted respondents as this is the most cost-efficient approach (Zikmund et al., 2010). This method was administered towards the CEO and the managers of SMEs who were conveniently available to participate in this research.

Data Collection

To address our research objectives, a quantitative research approach was adopted by administering online questionnaire to acquire primary data. Meanwhile, the design of this research study is cross-sectional in nature as the data was collected a single point in time (Zikmund et al., 2010). Prior to data collection of the main study, a pilot study was conducted in which a preliminary survey was distributed to a pilot group of 10 respondents. Any ambiguity in the item measurements can be rectified and the response clarity can be enhanced. Next, a self-administered online questionnaire was posted in the online software tool 'Qualtrics' (Qualtrics, 2018). Subsequently, the online survey was distributed to our targeted research sample through email and WhatsApp messages to collect the required primary data. This online survey was open for about two weeks after distribution.

Data Analysis

The analyses data were conducted by using IBM SPSS Statistics version 23.0 (SPSS, 2015). Firstly, Shapiro-Wilk test was conducted to examine the normality of the data. P-value more than or equal to 0.05 denote normality in the dataset. Then, to measure the reliability of item measurements for each construct, Cronbach's Alpha (α) was conducted (Cronbach, 1951). This Cronbach's Alpha (α) ranges from 0 to 1. Generally, coefficient alpha (α) more than 0.7 indicates higher internal reliability. Thirdly, the values of factor analysis were obtained from Kaiser–Meyer-Olkin (KMO) and Bartlett's tests as to confirm the dataset adequacy and sphericity. Factor loadings greater than 0.55 are considered evidence of construct validity (Nunnally, 1967). Lastly, the relationship between dependent variable (adoption of social media among SMEs) and independent variables was investigated using correlation matrix and multi-linear regression.

RESULTS

Validity and Reliability of Measurement

The results of Kaiser–Meyer-Olkin (KMO) test is 0.659 and Bartlett's test of (χ 2(595) = 1854.220, p= 0.00) reveal high sampling adequacy. The internal reliability of item measurement for each construct is shown in Table 2. The alpha (α) of items measuring for SMA, SMK, EU, PB and CU, CM and

Table 1. The operationalization of constructs and their related measurements

Construct	Item Measurement
Social media adoption	SMA1: I prefer to use social media platforms to promote my products/services than to other marketing tools. SMA2: I think adopting social media for my business is a good idea. SMA3: I think using social media as a marketing tool is very attractive. SMA4: I expect the usage of social media for my business to increase in the future. (Engel et al., 1995; Lee et al., 2006; Zolkepli, 2015)
Organisational factors Business size	BS1: Total number of employees (including the owner) BS2 Social media is more applicable for our company as we don't need good IT infrastructure and specialization to use the social media. (BFC, 2014; Rahbi & Abdullah, 2017; Thong & Yap, 1995)
Social media knowledge The degree of expertise of knowledge and technical skills in using social media.	SMK1: It is important to have human resources that have better understanding on information technology and social media. SMK2: I know how to use almost all social media platforms' tools that I use. SMK3: I am knowledgeable about social media platforms that I use. SMK4: I am very active in social media. (Góngora, 2016; Syuhada & Gambett, 2013)
Technological factors ease of use The extent to which an individual believes that using a social media would involve minimum effort (Davis, 1989).	EU1: It is easy to use social media platforms. EU2: It is easy to become skillful in using social media platforms. EU3: Creating a profile/page in social media is easy. EU4: Using social media is most convenient way to attain customers' loyalty and attract potential customers. (Kabue, 2013)
Perceived benefits The extent to which believes that using a social media would have benefits and advantages. (Mehrtens et al., 2001)	PB1: Social media can help promote my products/services. PB2: Social media can help me boost sales. PB3: Social media can help me engage with customers. PB4: I can forecast my sales more easily with the help of social media. PB5: Using social media can increase the amount of information provided to my customers about my products/services. PB6: By incorporating social media into business processes differentiates my company from competitors. PB7: I consider social media an effective marketing strategy. PB8: The potential risk and security intervention hinder/delay the use of social media as marketing tool for company activities. (Frambach & Schillewaert, 2002; Góngora, 2016; Kabue, 2013)
External factors pressure from customers The extent to which the decision of adopting social media are influenced by the customers' demand. (Mehrtens et al., 2001)	CU1: Most of my customers are using social media. CU2: My customers are active in using social media. CU3: My customers often ask whether my business has a social media page/profile. CU4: My customers inquire me through social media. CU5: Customers often give feedback on my products/services through social media. (Góngora, 2016)
Pressure from competitors The extent to which competition increases the probability of a business adopting social media. (Grandon & Pearson, 2004)	CM1: It is easy to find products/services similar to mine in other companies. CM2: Most of my competitors are using social media. CM3: My competitors are active in using social media. CM4: Our main competitors are already selling successfully online. (Góngora, 2016; Li, 2011)
Pressure from suppliers The extent to which the decision of adopting social media are influenced by the suppliers. (Grandon & Pearson, 2004)	SP1: Most of my suppliers are using social media. SP2: My suppliers are active in using social media. SP3: By using social media, it helps to improve my relationship with suppliers. SP4: We exchange information with suppliers frequently and informally using social media. (Jiang, 2011; Góngora, 2016; Ylimaula & Ulkuniemi, 2013)

Table 2. Coefficient of Cronbach alpha (α) of each construct

	No. of Items	Alpha (α)
Social Media Adoption (SMA)	4	0.695
Business Size (BS)	2	0.102
Social Media Knowledge (SMK)	4	0.646
Ease of Use (EU)	4	0.832
Perceived Benefits (PB)	8	0.853
Pressure from customers (CU)	5	0.967
Pressure from competitors (CM)	4	0.935
Pressure from suppliers (PS)	4	0.948

SP denote that these items measurements were reliable. However, only items measuring BS had an alpha (α) of 0.102 which indicates a very low reliability.

Sample Characteristics

Table 3 exhibit characteristics of the research respondents based on the industrial sector, social media platforms. Through our findings, all of the respondents were using more than one social media. The majority (94.7%) of the respondents were using Instagram, then followed by Facebook and WhatsApp with 78.9% and 70.2%, respectively. In addition, more than half of respondents (56.1%) used social media several times a day. Moreover, the majority of respondents (71.9%) have adopted social media for 0 - 4 years.

Factors Influencing Social Media Adoption

Pearson's correlation matrix and multi-linear regression were used to test H_1 , H_2 , H_3 , H_4 , H_6 , H_7 , and H_8 hypotheses as shown in Table 4 and Table 5. Based on Pearson's correlation analysis (Table 5), independent variables SMK, EU, PB and CU, CM and SP exhibited positive correlation to SMA among SMEs. The coefficient of correlation ranges from 0.062 to 0.599. On the contrary, independent variable BS showed a negative but weak correlation to SMA among SMEs. Moreover, the relationship between EU and PB showed a positive correlation with the coefficient value of 0.655.

Based on the multi-linear regression analysis (Table 5), the predictor model was only able to account for 45.6% of the variance in SMA among local SMEs with F(7,49) = 5.856, p > 0.05, R2 = 0.456. All research hypotheses were rejected except for the technological factors (EU and PB). The SMK (β = 0.131, t = 1.344) and SP (β = 0.223, t = 0.941) were positively, but not significantly, influencing SMA among local SMEs. Meanwhile, BS (β = -0.150, t = -1.285), CU (β = -0.193, t = -1.380) and CM (β = -0.029, t = -0.165) were negatively, but not significantly, influencing SMA therefore, providing no support for H₁, H₂, H₆, H₇, H₈. Whereas, EU (β = 0.360, t = 2.300) and PB (β = 0.352, t = 2.080) were positively and significantly correlated to SMA among local SMEs, providing support for H₃ and H₄.

Furthermore, to test the H_5 that state EU positively and significantly influence PB, a linear regression analysis was conducted (Table 6). Based on the analysis, the predictor model was only able to account for 42.9% of variance with F(1,55) = 41.320, p>0.05, $R^2 = 0.429$. EU ($\beta = 0.655$, t = 6.428) was positively and significantly related to PB, thus, supporting H_5 alternative.

Table 3. The characteristics of the research respondents

Characteristic	N	%
Industry sector		
Agriculture	2	3.5
Media & Entertainment	2	3.5
Consumer Services	3	5.3
Fashion/Beauty	3	5.3
Food	11	19.3
Financial Services	18	31.6
Wholesale & Retail	7	125
Others	11	19.3
Social media platforms use		
Facebook	45	78.9
Instagram	54	94.7
WhatsApp	40	70.2
Others	7	12.3
Frequency of using social media		
Several times a day	32	56.1
Once a day	9	15.8
Several times per week	13	22.8
Once per week	3	5.3
No. of experience of using social media		
0 - 4 years	41	71.9
5 - 9 years	12	21.1
More than 9 years	4	7.0

Table 4. The descriptive statistics and Pearson's correlation matrix of constructs (* p < 0.05, ** p < 0.01, *** p < 0.001)

Pearson's Correlation Matrix										
Variables	Mean	SD	BS	SMK	EU	PB	CU	CM	SP	SMA
BS	3.22	3.24	1	-	-	-	-	-	-	-
SMK	1.68	0.54	0.054	1	-	-	-	-	-	-
EU	1.58	0.54	0.242	0.365**	1	-	-	-	-	-
PB	1.64	0.51	0.204	0.569**	0.655**	1	-	-	-	-
CU	2.85	1.44	0.262*	0.210	0.237	0.205	-	-	-	-
CM	3.26	1.23	-0.003	0.048	0.180	0.135	0.578*	1	-	-
SP	3.13	1.24	0.105	-0.184	-0.113	0.049	0.402	0.0662**	1	-
SMA	1.25	0.38	-0.12	0.372**	0.525**	0.599**	0.26	0.126	0.062	-

Table 5. Coefficients of multi-linear regression between independent variables (BS, SMK, EU, PB, CU, CM, SP) and dependent variable (SMA). (* p < 0.05, ** p < 0.01, *** p < 0.001)

Model	Unstandardized Coefficients		Standardized Coefficients		
	В	SE	β	t	P-Value
1 (Constant)	0.286	0.202		1.416	0.163
BS	-0.018	0.014	-0.150	-1.285	0.205
SMK	0.092	0.098	0.131	0.941	0.351
EU	0.253	0.111	0.360	2.300	0.026
PB	0.263	0.126	0.352	2.080	0.043
CU	-0.051	0.037	-0.193	-1.380	0.175
CM	-0.009	0.054	-0.029	-0.165	0.870
SP	0.069	0.051	0.223	1.344	0.185
$R^2 = 0.456$ Adjusted $R^2 = 0.378$					

Dependent variable: Social Media Adoption (SMA)

Table 6. Coefficients of multi-linear regression between variables EU and PB (* p < 0.05, ** p < 0.01, *** p < 0.001)

Model	Unstandardized Coefficients		Standardized Coefficients			
	В	SE	β	t	P-Value	
1 (Constant)	0.668	0.160		4.181	0.023	
EU	0.617	0.096	0.655	6.428	0.00***	
$R^2 = 0.429$ Adjusted $R^2 = 0.419$						

Dependent variable: Perceived Benefits (PB)

DISCUSSION

Factors Influencing the Adoption of Social Media

This study is conducted to determine factors influencing the adoption of social media among SMEs in Brunei. After testing the data using multi-linear regression, the independent variables – BS, SMK, along with CU, CM, and PS are negatively significant to the social media adoption (SMA). In contrary, the results show that EU and PB are positively significant to SMA. Thus, only H_3 , H_4 , and H_5 are accepted while the other hypotheses are rejected.

The outcome of this research provides validity of the TAM model as seen in Figure 2; with only the hypotheses for technological factors are accepted. The development revealed that two technological factors (EU and PB) are indeed influencing the SMEs decision in utilising social media as marketing tools. Based on the survey given to Brunei SMEs, a large number of them perceived social media as EU. This fact is also clear when looking at the statistic of Brunei's population that are using social media. As stated earlier, around 86% of Brunei's total population has social media account. A large number of the social media users in Brunei imply that these social media platforms are easy to use as pointed out by Rauniar et al. (2014). They stated that there is a link between the large number of social media users and EU.

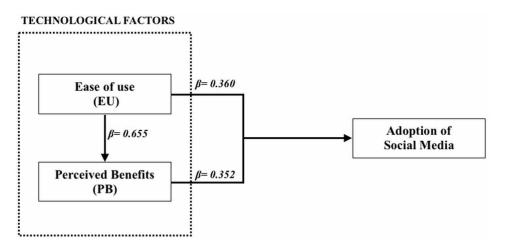


Figure 2. The final research framework based on the empirical findings (prepared by the authors)

Siamagka et al. (2015) mention that PB has a significant role in determining the adoption of social media in SMEs. Increase in profits, positive impacts on the company's brand, sustainable growth are some of the perceived benefits of social media (Torr, 2015). Moreover, Sklar (2013) points out that since social media is allowing SMEs to interact with their customers in real time, they can instantly receive customer's feedback and thus, allowing them to make any necessary changes to their products or services.

Furthermore, the regression analysis between EU and PB also confirms to H_5 . The result is similar to the study from Siamagka et al. (2015) where there is a positive relationship between EU and PB.

On the other hand, it was discovered that the SMA among SMEs in Brunei are not influenced by the organisation and external factors. As highlighted earlier in the results section, BS has low reliability compared to other variables. Research by Bode (2014) also produced the same result whereby there is no significant relationship between BS and the SMA.

Social Media Platforms as Marketing Tools

Based on the survey, the majority of SMEs in Brunei are using Instagram as part of their marketing tools. The popularity of Instagram is undeniable, and this is shown in its number of users. In 2013, there were 90 million Instagram users (Dogtiev, 2018) and the numbers had increased exponentially to 800 million users in 2017 with 500 million of daily users (Instagram Business, 2017). Moreover, according to the qualitative study that was conducted by Abd. Latif and Safiee (2015), business owners chose Instagram because of these four factors: Instagram filters, popularity, right audience, and word of mouth (eWOM). They also highlighted that the 'trendy' factor of Instagram, as well as the usage of smartphones, has contributed to the reasons why business owners chose Instagram.

However, the statistics also show that SMEs are utilising other social media platforms like Facebook and WhatsApp. This means that most of the SMEs are using more than one social media as their marketing strategy. These three social media applications are the most widely used applications among Bruneians. Based on the 2016 survey that was administered by AITI, 97.3% of Bruneians are using WhatsApp, followed by Facebook with 91.7% and Instagram at 87.4%.

Benefits of Using Social Media as Marketing Tools

Interactive Communication Channel

As mentioned earlier, without social media customers are unable to interact with companies quickly and properly. With the adoption of social media, such as WhatsApp, Facebook and Instagram,

companies can communicate with customers effectively and efficiently. The social media acts as a mechanism to channel communication between companies and customers. Since SMEs have constraint resources compared to large enterprises, SMEs reason in utilising social media is often associated towards these constraint matters.

Our research indicates that local SMEs are feeling at ease when they are able to interact with their customers constantly through social media. In fact, most of our respondents mentioned they use social media platform several times a day to market their products or services. Since the result reveals that EU is positively significant to social media (H₃ is accepted), the technological factor EU has enabled SMEs to access their social media anywhere they want thus making it convenient for them to be active in social media.

The other advantages of using social media in marketing include the exposure of SMEs reputation along with increasing number of customers in purchasing their products or services. Since social media is a powerful marketing tool to reach target audience faster, it assists SMEs in understanding their interests and collect feedback from them easily. Thus, provide interactive 2-ways communication between the company and customers (Collier, 2018).

Minimise Cost Investment for Marketing Increase Sales

For SMEs, having low financial expense in marketing is crucial to thrive in the current volatile economy. Since SMEs prefer to minimise their cost level, social media provides the opportunity to reduce their investment in marketing (Billore & Sadh, 2015). Due to their constraint amount of assets, they need to fully exploit their capital i.e. human resources to learn more about technology and social media marketing. We found that many business owners in Brunei who have an insufficient number of employees and budget to market their businesses indicate that social media is affordable and convenient for them.

Increase Sales and Raise Brand Awareness

The previous studies pinpoint that PB allied with social media lead to an increase in sales in a short amount of time, enhancing the brand image and create sustainable growth to companies (Torr, 2015). This statement is proved to be true as PB is positively significant towards SMA (β =0.352) when using regression analysis. More than half of the SMEs respondents believe social media enhance their sales and create more awareness to their customers about their brand images and products. Since SMEs prefer to utilise social media for marketing approach, it helps them to incur cost at a minimal level and boost up their sales revenue as more people become aware of their products or services.

This is confirmed by the study conducted through online research company which reveals that the use of online advertising raise brand awareness by 6% (Giovannucci et al., 2010). In fact, brand awareness escalates faster through social media rather than using another type of advertisement. Through our investigation, it is found that the development of local SMEs continues to improve by adopting social media. Most of the respondents indicate improvement in their sales and brand awareness after 24 months of utilising social media.

Challenges in Adopting Social Media

Potential Risks

Although there is exponential growth in online shopping through social media by 52% in 2016 (Othman, 2017) but there are often embedded with risk. Based on our findings and results, H_4 (perceived benefits) (PB) is accepted. We identified local SMEs perceived more benefits by accepting social media as their marketing approach. Despite that PB weigh more than risks, there is potential risks infused within social media. Risks are not solitarily confined in privacy and security breach; risks may include ineffective marketing strategy, inappropriate and disturbing information and the chance SMEs unable to deliver their messages towards target market audiences.

The main problem about SMEs compared to large corporations is that they have a limited amount of resources to do the large scale of marketing. Due to this problem, SMEs divert their attention to social media to help them market their products or services at minimum cost (Muir, 2018). SMEs need to be cautious about the information they share through social media. One of the few rules in adopting social media is that companies need to make sure the topic and contents are not disturbing and insensitive in nature (Muir, 2018). A good practice in IT must be utilised to avoid security breaches from occurring.

The self-concept of social presence is created to control others impression about the companies thus making positive impression about them by obtaining rewards (Goffman, 1959; Kaplan & Haenlein, 2010). The rewards include incline of sales figures and enhancement of brand awareness. In truth, several respondents of local SMEs agree that they need to be careful when promoting and sharing information through social media. Information can be misleading, worst case scenario, a company's reputation will be ruined if customers think the information created is unfavourable to them.

Social Media May Not Suitable for All Business

Nonetheless, the use of social media to market products and services is not suitable to all types of companies. Although social media is a current trend to communicate and reach your audience, it has to make 'sense' for the target audience. For companies that involve in protecting customers' confidential information and deal with security procedures, social media is not the best way to communicate with customers (Popovic, 2015). For instance, financial services companies might find connecting with customers through social media in appropriate. Since they need to protect their customers' privacy and confidence, it requires them to use their own platforms or contacting their customers personally in regard to concerns, products and services offered as well as promotion. Few SMEs mentioned that the usage of social media can prove to be challenging as it might not be suitable to promote their businesses.

Pressure From Competitors (CM)

Nevertheless, the main challenge for SMEs in adopting social media would be their competitors. One of the main reasons SMEs decide to use social media platform is probably due to their competitors' influence. The result indicates pressure from competitors (CM) are positively correlated to the adoption of social media.

The challenge then lies in the ability of SMEs in utilising the social media and what their plans are against their competitors in grasping customers attention. Zhu (2004) pointed out that social media help companies to be more responsive towards their customers at the same time enhance companies' performance and efficiency. In this case, SMEs need to be one step ahead from their competitors by formulating better marketing product features, use effective cost leadership strategy and learn more on how they are able to comprehend the customers' pattern and behaviour through the usage of social media. All in all, the existence of digital marketing strategy embeds within social media. SMEs need to be nimble and 'know how' to exploit it or else fail in adopting it.

CONCLUSION

In essence, the empirical findings of this study showed that technological factors consist of ease of use and perceived benefits reinforce local SMEs in adopting social media. It is found that organizational and external related factors do not influence the decision for adoption of social media by SMEs in Brunei.

The majority of respondents selected Instagram as a marketing tool, followed by WhatsApp and Facebook. Although social media enables easy communication between SMEs and customers, SMEs should create a proper e-marketing strategy to promote their products properly in order to reach out to their customers and maintain a relationship with them. Customers should be seen as an important resource for the SMEs profitability. However, other external factors such as trendy cultures, government

procedures and Brunei economy could give impacts on SMEs decision to adopt and manage social media as component of their business strategy.

There are some challenges in incorporating social media in Business. However, these challenges can be addressed properly. SMEs in Brunei should utilise social media as communication and marketing channels to transform their traditional practices into current trends and stay competitive in a market which enables them to get access to a larger market.

Contribution, Implication, Limitations and Future Research

This research was sought to study the adoption of social media by SMEs as marketing tools used by 100 companies. This study used quantitative content as its research approach with selected samples, but few of selected SMEs participants has shown no intention to answer this survey questions while others leave them partially incomplete. Thus, we only obtained 57 SMEs companies as valid respondents. Nevertheless, with the current scope it is difficult to assess on what conditions influence decisions to adopting social media as marketing tools.

Nonetheless, this study contributes to the body of knowledge on the issues of adoption of social media by SMEs in Brunei. This study confirms the TAM framework, hence only technology related variables (ease of use and perceived benefits) affect the adoption of social media by SMEs in Brunei. For SMEs managers or owners, this finding helps them to focus more on improving knowledge and skills to optimally use social media for their benefits.

In the future research, we would like to design research methodology that focuses on large sized sample and wide range. This can be useful to find out the firm marketing activities using social media and how does the firm increase its social media effectiveness. Meanwhile, future researchers should explore business promotion strategies involving social media, its effectiveness in managing a relationship with customers and retailers. They should consider exploring the comparison of social media utilisation between SMEs and large organisation in longitudinal areas and focus on the limitation resources along with external factors compromising of culture societies and government regulation that induce companies in adopting social media as marketing tools.

REFERENCES

Abd. Latif, Z., & Safiee, N. A. S. (2015). New business set up for branding strategies on social media – Instagram. *Procedia Computer Science*, 72, 13–23. doi:10.1016/j.procs.2015.12.100

Al-Qirim, N. (2007). The adoption of eCommerce communications and applications technologies in small businesses in New Zealand. *Electronic Commerce Research and Applications*, 6(4), 462–473. doi:10.1016/j. elerap.2007.02.012

Aspasia, V. & Ourania, N. (2014). Social media adoption and managers' perceptions. *International Journal On Strategic Innovative Marketing*, 1.

Authority for Info-communications Technology Industry. (2016). *Brunei Darussalam: Household ICT survey report 2016*. Retrieved from https://www.aiti.gov.bn/downloadables/Downloadables%20Library/Household%20 ICT%20Survey%202016%20Report.pdf.pdf

Baker, J. (2012). The technology-organization-environment framework. In Y. Dwivedi, M. Wade, & S. Schneberger (Eds.), *Information Systems Theory* (pp. 231–245). New York: Springer.

BFC. (2014). Survey on MSME access to finance in Georgia [Measurement Instrument]. Retrieved from http://pubdocs.worldbank.org/en/831911430846153177/MSME-Finance-Survey-GEORGIA-EnterpriseAccessToFinance.pdf

Billore, A., & Sadh, A. (2015). Mobile advertising: A review of the literature. *The Marketing Review*, 15(2), 161–183. doi:10.1362/146934715X14373846573586

Bode, M. (2014). What makes them social? – An analysis of the influence of organizational factors on business social media adoption [Master's thesis]. University of Twente, Enschede. Retrieved from http://essay.utwente. nl/65787/1/Bode_MA_MB.pdf

Borgman, R., Jones, N., & Ulusoy, E. (2015). Impact of social media on small businesses. *Journal of Small Business and Enterprise Development*, 22(4), 611–632. doi:10.1108/JSBED-09-2013-0133

Cesaroni, F. M., & Consoli, D. (2015). Are small businesses really able to take advantage of social Media? *Electronic Journal of Knowledge Management*, 13(4), 257–268.

Cha, J. (2009). Shopping on social networking Web sites: Attitudes toward real versus virtual items. *Journal of Interactive Advertising*, 10(1), 77–93. doi:10.1080/15252019.2009.10722164

Chaffey, D. (2018). *Global social media research summary 2018*. Smart Insights. Retrieved from https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/

Chatterjee, D., Grewal, R., & Sambamurthy, V. (2002). Shaping up for e-commerce. institutional enablers of the organizational assimilation of web technologies. *Management Information Systems Quarterly*, 26(2), 65–89. doi:10.2307/4132321

Chi, H. H. (2011). Interactive digital advertising vs. virtual brand community: Exploratory study of user motivation and social media marketing responses in Taiwan. *Journal of Interactive Advertising*, 12(1), 44–61. doi:10.1080/15252019.2011.10722190

Cohn, M. (2010, May 15). *The benefits of social media in the current economy*. Compukol. Retrieved from https://www.compukol.com/the-benefits-of-social-media-in-the-current-economy/

Collier, A. (2018). 10 ways social media marketing can help grow your business [Blog post]. Constant Contact. Retrieved from https://blogs.constantcontact.com/why-social-media-marketing/

Cragg, P., & Mills, A. (2011). IT support for business processes in SMEs. *Business Process Management Journal*, 17(5), 697–710. doi:10.1108/14637151111166141

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–335. doi:10.1007/BF02310555

Currah, A., & Wrigley, N. (2004). Networks of organizational learning and adaptation in retail TNCs. *Global Networks*, 4(1), 1–23. doi:10.1111/j.1471-0374.2004.00078.x

Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of Information Technology. *Management Information Systems Quarterly*, 13(3), 319–340. doi:10.2307/249008

Dogtiev, A. (2018, February 27). *Instagram revenue and usage statistics 2018*. Business of Apps. Retrieved from http://www.businessofapps.com/data/instagram-statistics/#2

Durst, S., & Edvardsson, I. R. (2012). Knowledge management in SMEs: A literature review. *Journal of Knowledge Management*, 16(6), 879–903. doi:10.1108/13673271211276173

El-Gohary, H. (2012). Factors affecting E-Marketing adoption and implementation in tourism firms: An empirical investigation of Egyptian small tourism organisations. *Tourism Management*, *33*(5), 1256–1269. doi:10.1016/j. tourman.2011.10.013

Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). Consumer behavior. Orlando, FL: Dryden Press.

European Commission. (2013). *Use of social media by European SMEs*. Retrieved from http://www.europskifondovi.eu/sites/default/files/dokumenti/KK0113565ENN_002.pdf

Farber, M. (2016, June 8). Consumers are now doing most of their shopping online. Fortune. Retrieved from http://fortune.com/2016/06/08/online-shopping-increases/

Frambach, R. T., & Schillewaert, N. (2001). Organizational innovation adoption: A multi-level framework of determinants and opportunities for future research. *Journal of Business Research*, 55(2), 163–176. doi:10.1016/S0148-2963(00)00152-1

Giovannucci, D., Barham, E., & Pirog, R. (2010). Defining and marketing "local" foods: Geographical indications for US products. *The Journal of World Intellectual Property*, *13*(2), 94–120. doi:10.1111/j.1747-1796.2009.00370.x

Goffman, E. (1959). The presentation of self in everyday life. NY: Doubleday Anchor Books.

Góngora, M. O. (2016) Study of the factors influencing the adoption of social media in SMEs [Master's thesis]. Universitat Politècnica de Catalunya. Retrieved from https://upcommons.upc.edu/bitstream/handle/2117/88058/TFM%20%20MARTA%20ORTEGA%20Document%201-Report%20and%20Annexes.pdf

Govindarajulu, C., & Lippert, S. K. (2006). Technological, organisational, and environmental antecedents to web services adoption. *Communications of the IIMA*, 6(1), 147–160.

Grandon, E. E., & Pearson, J. M. (2004). Electronic commerce adoption: An empirical study of small and medium US businesses. *Information & Management*, 42(1), 197–216. doi:10.1016/j.im.2003.12.010

Harland, C. M., Caldwell, N. D., Powell, P., & Zheng, J. (2007). Barriers to supply chain information integration: SMEs adrift of eLands. *Journal of Operations Management*, 25(6), 1234–1254. doi:10.1016/j.jom.2007.01.004

Hurley, J. (2012). Relentless social media use a 'turnoff' for business. *The Telegraph*. Retrieved from http://www.telegraph.co.uk/finance/businessclub/9457034/Relentless-social-media-use-a-turn-off-for-businesses.html

Huy, Q., & Shipilov, A. (2012). The key to social media success within organizations. *MIT Sloan Management Review*, 54(1). Retrieved from https://sloanreview.mit.edu/files/2012/09/735298261f.pdf

Iacovou, C. L., Benbasat, I., & Dexter, A. S. (1995). Electronic data interchange and small organizations: Adoption and impact of technology. *Management Information Systems Quarterly*, 19(4), 465–485. doi:10.2307/249629

Ifinedo, P. (2011). Internet/e-business technologies acceptance in Canada's SMEs: An exploratory investigation. *Internet Research*, 21(3), 255–281. doi:10.1108/10662241111139309

Instagram Business. (2017). Strengthening our commitment to safety and kindness for 800 million. Retrieved from https://business.instagram.com/blog/safety-and-kindness-for-800-million/

Iqbal, B. A., & Rahman, M. N. (2015). Contribution of ASEAN-6 SMEs to economic growth of ASEAN. *Economics World*, 3(11-12), 258–269.

Jackson, D. (2017, May 2). 38 benefits of social media marketing for business. Sprout Social. Retrieved from https://sproutsocial.com/insights/benefits-of-social-media/

- Kabue, J. N. (2013). Factors influencing adoption of social media advertising on growth of small medium enterprises: A case of Nairobi country, Kenya. Retrieved from http://erepository.uonbi.ac.ke/bitstream/handle/11295/59479/Factors%20Influencing%20Adoption%20Of%20Social%20Media%20Advertising%20On%20Growth%20Of%20Small%20And%20Medium%20Enterprises%20A%20Case%20Of%20Nairobi%20County%20Kenya.pdf?sequence=3
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68. doi:10.1016/j.bushor.2009.09.003
- Ke, W., Liu, H., Wei, K. K., Gu, J., & Chen, H. (2009). How do mediated and non-mediated power affect electronic supply chain management system adoption? The mediating effects of trust and institutional pressures. *Decision Support Systems*, 46(4), 839–851. doi:10.1016/j.dss.2008.11.008
- Kemp, S. (2017, February 9). Digital snapshot: Internet and social media use in 2017. *Tech in Asia*. Retrieved from https://www.techinasia.com/talk/digital-snapshot-internet-social-media-2017
- Kendall, J. D., Tung, L. L., Chua, K. H., Ng, C. H. D., & Tan, S. M. (2001). Receptivity of Singapore's SMEs to electronic commerce adoption. *The Journal of Strategic Information Systems*, *10*(3), 223–242. doi:10.1016/S0963-8687(01)00048-8
- Kim, A. J., & Ko, E. (2010). Impacts of luxury fashion brand's social media marketing on customer relationship and purchase intention. *Journal of Global Fashion Marketing*, 1(3), 164–171. doi:10.1080/20932685.2010.1 0593068
- Kimberly, J. R., & Evanisko, M. J. (1981). Organizational innovation: The influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management Journal*, 24(4), 689–713. PMID:10253688
- Krishnan, A., & Hunt, D. S. (2015). Influence of a Multidimensional Measure of Attitudes on Motives to Use Social Networking Sites. *Cyberpsychology, Behavior, and Social Networking*, 18(3), 165–172. doi:10.1089/cyber.2014.0423 PMID:25751048
- Kuan, K. K., & Chau, P. Y. (2001). A perception-based model for EDI adoption in small businesses using a technology–organization–environment framework. *Information & Management*, 38(8), 507–521. doi:10.1016/S0378-7206(01)00073-8
- Lee, H. H., Fiore, A. M., & Kim, J. (2006). The role of the technology acceptance model in explaining effects of image interactivity technology on consumer responses. *International Journal of Retail & Distribution Management*, 34(8), 621–644. doi:10.1108/09590550610675949
- Li, X., Troutt, M. D., Brandyberry, A., & Wang, T. (2011). Decision factors for the adoption and continued use of online direct sales channels among SMEs. *Journal of the Association for Information Systems*, *12*(1), 1–31. doi:10.17705/1jais.00255
- Link, A. N., & Bozeman, B. (1991). Innovative behavior in small-sized firms. *Small Business Economics*, 3(3), 179–184. doi:10.1007/BF00400023
- Liu, H., Ke, W., Wei, K. K., Gu, J., & Chen, H. (2010). The role of institutional pressures and organizational culture in the firm's intention to adopt internet-enabled supply chain management systems. *Journal of Operations Management*, 28(5), 372–384. doi:10.1016/j.jom.2009.11.010
- Lu, V. N., & Julian, C. C. (2007). The internet and export marketing performance: The empirical link in export market ventures. *Asia Pacific Journal of Marketing and Logistics*, 19(2), 127–144. doi:10.1108/13555850710738480
- Mehrtens, J., Cragg, P. B., & Mills, A. M. (2001). A model of Internet adoption by SMEs. *Information & Management*, 39(3), 165–176. doi:10.1016/S0378-7206(01)00086-6
- Meske, C., & Stieglitz, S. (2013, June). Adoption and use of social media in small and medium-sized enterprises. In Working conference on practice-driven research on enterprise transformation (pp. 61-75). Springer. doi:10.1007/978-3-642-38774-6 5
- Molla, A., & Heeks, R. (2007). Exploring e-commerce benefits for businesses in a developing country. *The Information Society*, 23(2), 95–108. doi:10.1080/01972240701224028

Muir, P. (2018). *Top 10 risks of social media*. Religion Communicators. Retrieved from http://www.religioncommunicators.org/top-10-risks-of-social-media

Nobre, H., & Silva, D. (2014). Social network marketing Strategy and SME strategy benefits. *Journal of Transnational Management*, 19(2), 138–151. doi:10.1080/15475778.2014.904658

Nohria, N., & Ghoshal, S. (1997). The differentiated network: Organizing multinational corporations for value creation. San Francisco, CA: Jossey-Bass.

Nunnally, J. C. (1967). Psychometric theory. New York: McGraw-Hill.

Othman, A. (2017, August 8). Surge in mobile phone, broadband penetration in Brunei. *Borneo Bulletin*. Retrieved from https://borneobulletin.com.bn/surge-mobile-phone-broadband-penetration-brunei/

Popovic, K. (2015, May 12). 7 reasons you should not use social media for business [Blog post]. Online Marketing Institute. Retrieved from https://www.onlinemarketinginstitute.org/blog/2015/05/7-reasons-you-should-not-use-social-media-for-business/

Porter, M. E. (2001, March). Strategy and the internet. Harvard Business Review, 79(3), 63-78. PMID:11246925

Purvis, R. L., Sambamurthy, V., & Zmud, R. W. (2001). The assimilation of knowledge platforms in organizations: An empirical investigation. *Organization Science*, 12(2), 117–135. doi:10.1287/orsc.12.2.117.10115

Qualtrics. (2017). The world's first experience management platform. Retrieved from https://www.qualtrics.com/uk/

Rahbi, A. L., & Abdullah, H. S. (2017). Factors influencing social media adoption in small and medium enterprises (SMEs) [Doctoral dissertation]. Brunel University London. Retrieved from http://bura.brunel.ac.uk/bitstream/2438/14514/1/FulltextThesis.pdf%20

Rauniar, R., Rawski, G., Jei, Y., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: An empirical study on Facebook. *Journal of Enterprise Information Management*, 27(1), 6–30. doi:10.1108/JEIM-04-2012-0011

Rogers, E. M. (2010). Diffusion of innovations (5th ed.). NY: Simon and Schuster.

Scupola, A. (2003). The adoption of Internet commerce by SMEs in the south of Italy: An environmental, technological and organizational perspective. *Journal of Global Information Technology Management*, 6(1), 52–71. doi:10.1080/1097198X.2003.10856343

Short, A. (2015, September 23). Adoption of social media to engage with suppliers vs customers [Blog post]. Vizibl. Retrieved from http://blog.vizibl.co/adoption-social-media-to-engage-with-suppliers/

Siamagka, N., Christodoulides, G., Michaelidou, N., & Valvi, A. (2015). Determinants of social media adoption by B2B organizations. *Industrial Marketing Management*, 51, 89–99. doi:10.1016/j.indmarman.2015.05.005

Sinclaire, J. K., & Vogus, C. E. (2011). Adoption of social networking sites: An exploratory adaptive structuration perspective for global organizations. *Information Technology Management*, 12(4), 293–314. doi:10.1007/s10799-011-0086-5

Sklar, C. (2013, March 13). How to use social media to understand and engage your customers. *The Guardian*. Retrieved from https://www.theguardian.com/media-network/media-network-blog/2013/mar/13/social-media-customer-engagement

Soto-Acosta, P., Perez-Gonzalez, D., & Popa, S. (2014). Determinants of Web 2.0 technologies for knowledge sharing in SMEs. *Service Business*, 8(3), 425–438. doi:10.1007/s11628-014-0247-9

SPSS. (2015). IBM SPSS Software. Retrieved from https://www.ibm.com/analytics/us/en/technology/spss/

Statista. (n.d.). *Number of social media users worldwide 2010-2021*. Retrieved from https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

Stockdale, R., & Standing, C. (2006). A classification model to support SME e-commerce adoption initiatives. *Journal of Small Business and Enterprise Development*, 13(3), 381–394. doi:10.1108/14626000610680262

Syuhada, A. A., & Gambett, W. (2013). Online marketplace for Indonesian micro small and medium enterprises based on social media. *Procedia Technology*, 11, 446–454. doi:10.1016/j.protcy.2013.12.214

Teo, H. H., Wei, K. K., & Benbasat, I. (2003). Predicting intention to adopt interorganizational linkages: An institutional perspective. *Management Information Systems Quarterly*, 27(1), 19–49. doi:10.2307/30036518

Teo, T. S. H., & Choo, W. Y. (2001). Assessing the impact of using the Internet for competitive intelligence. *Information & Management*, 39(1), 67–83. doi:10.1016/S0378-7206(01)00080-5

Thong, J. Y., & Yap, C. S. (1995). CEO characteristics, organizational characteristics and information technology adoption in small businesses. *Omega*, 23(4), 429–442. doi:10.1016/0305-0483(95)00017-I

Thong, J. Y. L. (1999). An integrated model of Information Systems adoption in small businesses. *Journal of Management Information Systems*, 15(4), 187–214. doi:10.1080/07421222.1999.11518227

Thrassou, A., & Vrontis, D. (2008). Internet marketing by SMEs: Towards enhanced competitiveness and internationalisation of professional services. *International Journal of Internet Marketing and Advertising*, 4(2-3), 241–261. doi:10.1504/IJIMA.2008.017024

Torr, D. (2015, 13 March). Why is social media important? 7 reasons you can't ignore. [Web log post]. Hootsuite. Retrieved from https://blog.hootsuite.com/why-is-social- media-important-for-business/

Wamba, S. F., & Carter, L. (2014). Social media tools adoption and use by SMEs: An Empirical Study. *Journal of End User and Organizational Computing*, 26(2), 1–17. doi:10.4018/joeuc.2014040101

We Are Social. (2014). 2014 Asia-Pacific digital overview. Retrieved from https://visionanalytics.files.wordpress.com/2014/02/2014-asia-pacific-digital-overview.pdf

Ylimaula, K. A., & Ulkuniemi, P. (2013). Exploring the potential of social media in supplier relationship management. In *IMP 2013 Conference*. Academic Press.

Zhu, K. (2004). Information transparency of business-to-business electronic markets: A game-theoretic analysis. *Management Science*, 50(5), 670–685. doi:10.1287/mnsc.1040.0226

Zhu, K., Kraemer, K. L., & Xu, S. (2006). The process of innovation assimilation by firms in different countries: A technology diffusion perspective on e-business. *Management Science*, 52(10), 1557–1576. doi:10.1287/mnsc.1050.0487

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business research methods* (9th ed.). Australia: South-Western Cengage Learning.

APPENDIX

Tests of Normality (Shapiro-Wilk)

	Statistic	df	Sig.
SMA	0.701	57	0.000
BS	0.674	57	0.000
SMK	0.927	57	0.002
EU	0.862	57	0.000
PB	0.936	57	0.005
CU	0.882	57	0.000
CM	0.891	57	0.000
SP	0.943	57	0.009

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