

An Examination of Social Media Role in Entrepreneurial Intention among Accounting Students: A SEM Study

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The purpose of this paper is to examine the current role of social media on entrepreneurial intention among the accounting students in Penang. A survey was designed and disseminated to the accounting students where 233 valid responses were collected. Through structural equation modelling, the findings indicated that entrepreneurial intention was significantly influenced by social media. The findings of this study provided useful information for the government to engage with other stakeholders and make use of the social media advantage to shape effective communication strategies to support entrepreneurial intention for accounting students.

Keywords: social media, entrepreneurial intention, accounting students

Introduction

Effective utilization of information technology (IT), especially social media will assist many businesses to experience better performance and gain a competitive advantage (AlSharji, Ahmad, & Abu Bakar, 2018; Talebi, Tajeddin, Rastgar, & Emami, 2012). Social media include swapping user-generated content, using real-time feedback, and developing communities of consumers to promote business progressions (Constantinides & Fountain, 2008). Rooted in cooperative nature of Web 3.0 (Fucshs, 2017), social media encourage collaboration between firms and customers in designing new products (Parise & Guinan, 2008). Bernoff and Li (2008) recommended organization to maximize the use of social media in several departments such as research and development, sales and marketing, and customer support. Khajeheian (2018) showed the use of enterprise social media in internal organizational communication. An online report by eMarketer (2016) highlighted that approximately US\$ 32.97bn was spent on social media marketing in 2016 and this value is anticipated to spike

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by 72% in 2019. The tremendous growth of social media has emphasized that social media are a crucial component in business (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011).

Findings from previous studies have also proven that small- and medium-sized enterprises (SMEs) are necessitated to incorporate technological innovations fittingly to ensure positive growth and profit (Dahnil, Marzuki, Langgat, & Fabeil, 2014; Derham, Cragg, & Morrish, 2011; Jagongo & Kinyua, 2013; McCann & Barlow, 2015). But, past studies have pointed out that SMEs have a tendency to be wary and careful in the integration of IT into their business (Zolkepli & Kamarulzaman, 2011) since SMEs often possess inadequate resources to operate large IT ventures (Durkin, McGowan, & McKeown, 2013). Durkin et al. (2013) also advised that there is a possibility for SMEs to grow unreasonably since social media are an inexpensive marketing instrument. Past studies have offered limited findings on the factors of social media diffusion in SMEs in the context of developing nations (Abdulla, Tenaiji, Sciences, & Cader, 2010; Al-badi, 2014; Fatairy, 2013; Jandal, 2013; Saleh, Jani, Marzouqi, Khajeh, & Rajan, 2011). Thus, further studies in this particular field can provide beneficial knowledge on the increased use of social media among SMEs (Ahmad, Ahmad, & Abu Bakar, 2017).

This study has two-fold contributions which are the development of a multi-faceted framework that encompasses related factors which influence the use of social media and the validation of this framework in a developing country setting. Although results from past studies can be generalized to developing nations, this study is important to identify the differences between developed and developing nations (Durkin et al., 2013; Lorenzo-Romero, Alarcon-del-Amo, & Constantinides, 2014). Thus, the purpose of this research is to examine the use of social use in influencing entrepreneurship intention among accounting students in Pulau Pinang.

Literature Review

The contribution of “hard technology” to resolve the problem has been thoroughly examined (e.g., see Damron, 2013; Daniell, Streatfield, & Rybicki, 2015 on biotechnology; Dawkins, 2014 on animal health and welfare; Möckel, 2015 on mechanisation). On the other hand, the contribution of “soft technologies” to fields such as communication and technology transfer has not received significant scholarly attention. Improving the flow of information is essential to ensure effective communication among suppliers, consumers, and customers. The social pressure for quality control has emphasized the need for effective communication. However, the necessity for business sustainability is also attributed to this.

The nature of each enterprise is exclusive and imitable. Usually, these enterprises do not have similar commercial processes. The enterprises are moulded and depended on EU CAP as the primary source of direct revenue. The business setting and extensive production cycles have put significant stress on the organizations since creating budgets and projections and also responding to the variation in the business industry are challenging. The industry mostly comprises of small-scale producers who do not run mutually and encounter pressure supply chain that incurs high input cost yet must adhere to the customers’ demand for low-priced food (Angus, Burgess, Morris, & Lingard, 2009). Although farmers acknowledge the benefit of technology incorporation to discontinue this cycle, others have chosen to utilize biotechnology, precision farming or mechanization. Several others have also observed technology from the managerial lens and chose to incorporate entrepreneurial responses to the challenges through the amplified use of Information Communications Technology and social media (Hansen, Melby Jespersen, Leck Jensen, Holst, Mathiesen, Brunori, Halberg, & Ankjær Rasmussen, 2014). Studies which have investigated on alternative income seeking

motives of farmers (Alsos, Ljunggren, & Pettersen, 2003; Grande, Madsen, & Borch, 2011) placed more emphasis on on-farm technology choices that can support profits development and success of cost and production effectiveness.

Entrepreneurship

Real-world implementation of entrepreneurial policy within small- and medium-size enterprises (SMEs) has not received much attention (Clark, 2009). Studies by Klodziński (1987) and Fernandez-Cornejo, Mishra, Nehring, Hendricks, Southern, and Gregory (2007) contend that farmers are the most important challenge to progress and the main preventive of an enterprises financial performance (Alabdullah, Laadjal, Ahmed, & Al-Asadi, 2018; Alabdullah, Nor, & Ries, 2018; Alabdullah, 2016). Studies have proven that this is a problem for not only SMEs but also rural enterprises that have insufficient skills and motivations to participate in entrepreneurial activities (Laukkanen & Nittykangas, 2003). Entrepreneurial activities can be observed as human action in pursuit of value creation by expanding to maximize new products, processes, or markets, and revolutionizing in the application of innovative or significantly enhanced goods/services, processes, possibly buttressed by enhanced promotion or administration approaches (Organization for Economic Co-operation and Development, 2002). Still, numerous rural commerce can be labelled as lifestyle businesses (Deakins & Freel, 2003). The present literature has focused on the evolution of managers to entrepreneurs (Carter, 1998; Alsos et al., 2003; Hron, Macák, & Huml, 2009; McElwee, 2006). McElwee (2006) views managers entrepreneurs with technology adoption observed as a rural entrepreneurship opportunity. Morone (1989) reflects on the reasons why several enterprises seem to develop a competitive advantage on the foundation of technology (efficiency-focused) or technology-based prospects (differentiation/diversification focused) yet other enterprises do not. Morone (1989) suggests that effective enterprises have superior technology management. Additional vital deliberations comprise the level and capacity of employees' managerial and marketing skills and the effect of networking procedures for handling variations (Clark, 2009; Simmons, Durkin, McGowan, & Armstrong, 2007). Galloway and Mochrie (2005) studied information and communication technologies connections with the entrepreneurship literature and discovered that the business owner or decision-maker is the focal blockade to information and communication technologies adoption which comprises social media. The literature on the role of social media and entrepreneurship is inadequate with the exclusion of Samuel and Joe (2016) who explored the role of social media and entrepreneurship in SMEs settings. The study discovers that social media improve customer relations and market access while also being a valued instrument for strategic development. Nevertheless, the presence of market opportunity, rising from location and (digital) connectedness may remain as an imperative influence (Midmore, 2011; Galloway, Sanders, & Deakins, 2011).

Social Media

Social media explained as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content” (Kaplan & Haenlein, 2010, p. 61). Chui, Manyika, Bughin, Dobbs, Roxburgh, Sarrazin, Sands, and Westergren (2012) identified 1.5 billion users of social technology globally where Pechrov'a, Lohr, and Havlicek (2015) refer 1.3 billion of users as Facebook users, approximately 54.2 million pages, and observed a rise of 22% between 2002 and 2013. Allen and Nelson (2013) arguably stated that 56% of Internet users utilize social media to explore original food products. This number is to be expected to have amplified substantially due to upgraded connectivity, amplified acceptance of smartphones, and customers desiring to explore production

procedures, and also the origin of their food.

Social media play as a facilitator for media entrepreneurship (Achtenhagen, 2017; Khajeheian, 2019; Labafi & Williams, 2018). Pechrov'a et al. (2015) found that assimilating prospects may have vanished due to the farmers' limited understanding on the potential of social media since this communication using social media is not being part of their day-to-day routines. Simmons et al. (2007) investigated small- and medium-size enterprises (SMEs) and argued that inadequate marketing capability and adverse attitudes to internet adoption have stalled online business tool acceptance. Efficient usage of the transformative influence of social media as a universal acknowledge marketing instrument can help fulfil the sustainable escalation that the policymaker yearns. Rapp, Skinner Beitelspacher, Grewel, and Hughes (2013) identified that social media are capable of changing business communication method across distribution channels and with customers; thus, SMEs cannot be secluded from this change. Gregurec, Vranesevic, and Dobrinic (2011) stated that companies expended \$ 62 billion on social media marketing in 2010, stressing how businesses are closely connected with this technology. The current literature which investigates the effect of social media in the SMEs is scarce (Rhoades & Aue, 2010), focusing on the implementation of social media by SMEs service businesses, predominantly mass media and broadcasters. Nevertheless, the current study must question: If the SMEs industry is slow in incorporating social media, are the media effective in reporting to the industry or are they reporting externally to consumers? Rhoades and Aue (2010) recognize that websites are viewed as a main source of data gathering. Nevertheless, social media may also be utilized as a primary data source since Pechrov'a et al. (2015) view social media as being able to offer opportunities to cater to small markets or clientele who do not have easy access.

Past research discovered a positive relationship between social media adoption and business performance (Ahmad et al., 2017; Ainin, Parveen, Moghavvemi, & Jaafar, 2015; Paniagua & Sapena, 2014; Parveen et al., 2014; Rodriguez, Peterson, & Krishnan, 2012). Correct use of social media can potentially improve sales, diminish costs, expand customer service, grow brand awareness, drive traffic to the company website, and grow business-to-business relations (Hoffman & Fodor, 2010; Kaplan & Haenlein, 2010; Mangold & Faulds, 2009; McCann & Barlow, 2015). Hence, social media have gradually become strategically important for most industries and have been widely implemented as a mandatory component of business operations (McCann & Barlow, 2015). But, it is critical for organizations to initially think of the goals and aims of social media usage and methods to quantify the findings (Hoffman & Fodor, 2010; Murdough, 2009). McCann and Barlow (2015) discovered SMEs that do not have a well-designed social media adoption plan fail to maximize the full potential of social media. Therefore, the gap between successful and unsuccessful or non-adopters of social media is broadening. This, in turn, increases the level of difficulty for non-adopters to endure the competition (White, Kenly, & Poston, 2016).

Methodology

Quantitative methods assist in deriving meaning from the data collected. Statistical analyses of the numerical data are stressed in quantities studies (Sekaran & Bougie, 2013). Saunders and Lewis (2012) elucidated that quantitative methods utilize a deductive approach to examine a theory or a model. Statistical techniques used in quantitative studies also enable relationships between variables to be examined and analyzed. Individuals are the unit of analysis of this study. The population of this study is the accounting students who are studying in Pulau Pinang.

The unit of analysis in this study is individuals. A non-probability sampling method was selected where

convenience sampling is chosen due to time limitation yet ensuring sufficient responses are collected. Questionnaires were utilized to collect the data for this study.

Table 1

Estimated Population by Gender, Penang State

Gender	'000			
	* 2010	2011	2012	2013
Male	790.7	802.5	814.0	824.0
Female	785.2	798.4	811.9	823.7
Total	1,575.9	1601.0	1,625.8	1,647.7

Note: * based on the adjusted data 2010 Population and Housing Census of Malaysia.
Source: Population Quick Info, DOSM

The questionnaires are derived, adapted, and adopted from various authors and literature. The respondents of this study will be asked to describe, on a 5-point Likert Scale (1 = strongly disagree; 5 = strongly agree), their degree of disagreement or agreement with each item as it represents social media. Meanwhile, a 7-point Likert Scale (1 = never; 7 = always) was used to measure entrepreneurship behaviour.

Table 2

Questionnaire Items and Sources

Construct	Items	Sources
Social media	Posts of links to recycling websites appear in my newsfeed of my social media account	Oakley and Salam (2014)
	Posts of statement referring to recycling activities appear in my news feed of my social media account	
	Posts of video on recycling events appear in my news feed of my social media account	
Entrepreneurship intention and behavior	I plan to take part in entrepreneurship activities	Park and Yang (2012)
	I am willing to take part in entrepreneurship activities advocated in social media in the near future	Park and Yang (2012)
	I intend to buy and sell products made for entrepreneurship	Oakley and Salam (2014)

Results

Table 3 derived that majority of respondents have one social media account (45%). Respondents mostly visit Facebook (75%) and other social media platforms (25%) such as Twitter, Instagram, Google Plus, and LinkedIn. Moreover, it has been reported in 2013 that there were 10.3 million Facebook users in Malaysia alone and those aged between 18 and 34 years old were the most active users (Ismail, Ahmad, Noor, & Saw, 2019). This reiterates UNICEF's report (2014) that 82% of Internet users in Malaysia access Facebook and it is the most popular social media platform in Malaysia compared to alternate social media platforms such as Twitter, LinkedIn, Instagram, and other social media channels. It is also interesting to note that many of the respondents used the Internet (89%) and engaged with social media (76%) more than five years and three years respectively. Many spent more than five hours a day (37%) on the Internet. On the contrary, a very small number of respondents (4%) were hardcore users of social media, spending more than eight hours a day whilst 77% of respondents spent less than three hours on social media.

Table 3

Descriptive Summary of Social Media Usage (N = 233)

Variables	Category	Frequency	Percentage (%)
Member of social media	Yes	233	100.0
Number of social media accounts	1	105	45.1
	2	65	27.9
	3	42	18.0
	>3	21	9.0
Social media website visited frequently	Facebook	174	74.7
	Twitter	11	4.7
	Instagram	23	9.9
	Google Plus	20	8.6
	LinkedIn	5	2.1
Usage of Internet (years)	< 1 year	4	1.7
	1-5 years	22	9.4
	> 5 years	207	88.8
Usage of social media (years)	< 1 year	18	7.7
	1 - 3 years	37	15.9
	> 3 years	178	76.4
Time spent on Internet (hours)	< 2 hours	57	24.5
	2-5 hours	90	38.6
	> 5 hours	89	36.9
Time spent on social media (hours)	< 1 hour	74	31.8
	2-3 hours	105	45.1
	4-5 hours	38	16.3
	6-7 hours	8	3.0
	> 8 hours	9	3.9

Internal Consistency Reliability Analysis

It is recommended to examine and report Cronbach alpha, composite reliability (CR), and the average variance extracted (AVE) for reflective measurement model analysis (Peng & Lai, 2012). Hair, Hult, Ringle, and Sarstedt (2014) recommended the use of CR due to the limitation posed by Cronbach alpha in which it considered all indicators as equally reliable and its sensitivity to the number of items in the scale. Moreover, PLS-SEM places prominence on the individual reliability of the indicators, suggesting CR as the most appropriate measure to assess internal consistency reliability. The CR value ranges from 0 to 1 which is similar to Cronbach alpha threshold value. A value between 0.7 and 0.9 is considered as satisfactory; 0.6-0.7 as acceptable; and less than 0.6 indicates a lack of internal consistency reliability (Hair, Ringle, & Sarstedt, 2011). Outer loading values less than 0.4 must be deleted to ensure indicator reliability. Nevertheless, Hair et al. (2014)

cautioned researchers to examine the improvement of CR and AVE values when indicators with values between 0.4 and 0.7 were removed. Outer loading values between that stipulated scopes were recommended to be retained if the deletion does not improve CR and AVE measurements.

Table 4

Measurement Model

Construct	Items	Loading	AVE	CR
Social media	SMN1	0.881		
	SMN2	0.881		
	SMN3	0.890	0.782	0.915
Entrepreneurship	RCI1	0.907		
	RCI2	0.877		
	RCI3	0.767	0.697	0.901

Notes. AVE—average variance extracted; CR—composite reliability; Average variance extracted (AVE) = (summation of the square of the factor loadings)/{(summation of the square of the factor loadings) + (summation of the error variances)}; Composite reliability (CR) = (square of the summation of the factor loadings)/{(square of the summation of the factor loadings) + (square of the summation of the error variances)}.

With reference to Table 4, items with an outer loading value of 0.7 and above were retained. Several indicators valued between 0.6 and 0.7 were also retained as the AVE values for the respective construct exceed the required threshold value of 0.5.

Convergent Validity

Convergent validity indicates the degree to which a latent construct explains the variance of its indicators. The AVE value should be higher than 0.5 at the construct level to ensure adequate convergent validity (Hair, Hult, Ringle, & Sarstedt, 2014; Peng & Lai, 2012). Anything less than 0.5 portrays that the construct is not well-explained by the observed indicators. The findings in Table 4 illustrate that all the constructs displayed AVE of 0.5 and above.

Discriminant Validity

Table 5 depicts the indicator loadings of a construct loads greater on its associated construct compared to its correlation values with all other constructs. Generally, the reliability and validity tests performed on the measurement model are satisfactory. This confirmed the measurement model for this study is valid and fit to be further analyzed in the structural model.

Table 5

Discriminant Validity

	Social media	Entre-intention
Social media	0.884	
Entre-intention	0.282	0.835

Note. The values in the diagonal (bolded) represent the square root of the AVE while the off-diagonals represent the correlations.

Hypothesis Testing

Path coefficient or standardized beta (β) values range from -1 to +1. Estimated values closer to +1 indicate a strong positive relationship. Meanwhile, a value nearer to zero indicates a weak relationship. On contrary, negative values indicate an inverse relationship. However, the importance of path coefficient value depends on

the t-value generated by means of bootstrapping. The t-value generated is used to evaluate the significance of the path model relationships between constructs (Henseler, Ringle, & Sinkovics, 2009). With reference to Table 6, social media proved to have a positive and significant relationship with entrepreneurship intention ($\beta = 0.067$, $p < 0.1$). Therefore, the hypothesis was supported.

Table 6

Hypothesis Testing

Hypothesis	Standard beta	Standard error	t-value	Result
Social media \geq Enter-Intention	0.067	0.045	1.484*	Supported

Discussion

This study confirms the previous studies that support the role of social media in facilitation and promotion of entrepreneurship for accounting students. The study's findings show differences from previous studies on the technology used by individuals. Previous research has usually examined entrepreneurship-related technologies, such as e-commerce, enterprise resource planning, and cloud technologies. This study is focused on technology that is popular among consumers (Morris & James, 2017). Therefore, its influence and impact on organizations are very different. The first difference was that the technology construct had no significant influence on SMEs' adoption of social media. The literature is inconclusive on whether internal or external factors are the most influential in SMEs' adoption of technology.

The analysis of the findings found that the relationship was indeed positive. Hence, the hypothesis was supported. Notably, a recent work by Rapp et al. (2013) found social media act as a civic communication channel whereby the public, especially virtual communities are encouraged to participate in entrepreneurship activities. The findings reinforced that the posting of messages, images, and links related to social issue heighten the awareness in addressing such matters and support the concept of electronic viral due to social media network capabilities.

The present study resonates with Pechrov'a, Lohr, and Havlicek (2015) that social networks influence and impact the intention of individuals in entrepreneurship. Apart from the social norm described above, technology has an influential role in changing individuals' use of entrepreneurial desirable behaviors (Klibanoff, Marinacci, & Mukerji, 2005). The relative ease of use also affects individuals' intention to use a particular technology. This relationship between complexity and adoption or intent to use is very clear for individual innovation adoption (Liaw, 2008; Martinez-Torres, Toral Marin, Barrero Garcia, Gallardo Vazquez, Arias Oliva, & Torres, 2008; Park & Yang, 2012).

Studies by AlSharji, Ahmad, and Abu Bakar (2018) discovered supporting findings that social network influences an individual behaviour. Although social media in relation to this study were found to be statistically significant, it appeared to be the weakest predictor compared to other predictors. This resonates with Wattanacharonesil and Schuckert (2015) that interesting and engaging content on social media plays a critical role as it generates buzz and interest.

Social media sites such as Facebook, LinkedIn, and Google Plus primarily consist of an individual's close friends and family. Thus, they may have more influencing power to exert certain entrepreneurial intention; however, this study finding is consistent with social norm findings that such imposition of social pressure through different means of social interaction platform was not the best predictors of entrepreneurial intention

among accounting students. Thus, it can be concluded that although social media facilitate the influence of online messages on recycling intention, the outcome clearly indicated that accounting students in Penang are not easily influenced by online content towards entrepreneurial intention. The majority of the respondents in this study chose Facebook as the most frequently visited social media. Thus, relevant authorities and appointed leaders could use this particular social media platform to disseminate information and engage in interactive communication (i.e., live streaming) with the accounting students, especially in promoting entrepreneurship activities.

Research Limitations

The respondents of this study are limited to geographical location of Penang. Thus, it is suggested that the scope of the study is widened to cover other parts of Malaysia (Sabah and Sarawak). The collection of findings may reveal a broader perspective of entrepreneurship for accounting students from Malaysians, especially in relation to the role of social media. Past studies established that subjective norm tends to be higher in collectivistic society compared to individualist society.

Executive Implications

In Malaysia, minimal studies have been carried out on interaction within social media which facilitate the adoption towards entrepreneurial intention among accounting students. It could be due to lack of content creation related to entrepreneurship in social media platforms. Thus, formal and private institutions such as governmental agencies, schools, companies, and manufacturers could play an active role in creating the right and persuasive content that could influence individuals' intention.

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