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HONORS THESIS



A Study of the Technology Acceptance Model for Social Media Adoption in Small & Medium Enterprises

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ABSTRACT

While some small businesses adopt social media into their business practices, others do not. This study utilizes the Technology Acceptance Model (TAM) to discover what factors or elements influence the adoption of social media within small and medium enterprises (SMEs). An extended version of the TAM was created to examine several factors that may influence SMEs' adoption of social media. Through an empirical analysis, several findings were uncovered. It was found that compatibility, perceived ease of use and cost all had a significant effect on SME's owner or marketers' attitudes toward adopting social media. The implications of these findings for SMEs are discussed.

INTRODUCTION

Although the use of social media is becoming increasingly popular, there are still 40% of small businesses that do not utilize social media in their business practices (Mckee, 2019). While some small businesses adopt social media, others do not. It was also found that, “a third of small businesses said that social media, digital advertising, email marketing, SEO, content marketing, and print ads/direct mail were not part of their marketing strategy.” Perhaps this is due to the fact that on average small and medium sized businesses can only spend 2 hours on marketing per week. (Feldman, 2019) However, there seems to be an inconsistency of small and medium businesses that utilize social media as a part of their everyday marketing strategy while others do not adopt social media at all. This study seeks to find what factors lead to social media adoption in small and medium enterprises (SMEs), what factors or elements influence SMEs’ attitudes toward adopting social media, and what influences SMEs’ actual use of social media.

Social media:

Digital marketing platforms consist of many different options for companies, however, “in the USA, internet users spent three times longer on blogs and social networking than on e-mail” (Rauniar et al., 2014). In prior literature, the concept of Web 2.0 was meant to include social media, among other capabilities. Web 2.0 can be defined, “as including the following four broad factors: social networking, interaction orientation, personalization/customization and user-added value” (Wirtz and Göttel, 2016). However recent studies have redefined social media as:

“innovative applications, platforms or portals in the internet, including a high potential for diverse designs in which the active configuration of contents through the cooperative participation between user and provider, but more importantly, among users, plays a major role in establishing and maintaining their permanent interconnectedness and sharing as the main goals” (Wirtz and Göttel, 2016).

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In this study we will define social media as such and focus on the interconnectedness and information sharing that can be used to benefit SMEs in their business practices if adopted by the firm.

SMEs:

“The economic importance of SMEs cannot be ignored. In the US, over 99% of businesses employ fewer than 100 people, and two-thirds to three-quarters of all new jobs in the US are created in SMEs” (Candi et al., 2018). We will define SMEs as businesses that employ 100 people or fewer. SMEs serve as a large part of the United States economy, and these organizations are challenged to compete in an adapting market against larger competitors. Due to this “key role in the economy, particularly in periods of dramatic structural change, it is necessary to understand the factors that support their performance in the digital organisation environment” (Quinton et al., 2018). With changing economic environmental factors and constant innovation in business technology, SMEs are tasked with strategic business technology innovation. In regards to SME “[information and communication technology] adoption is not an alternative but an imperative for future business success” (Jones et al., 2014). Although SMEs may acknowledge the importance of certain online communication platforms in business practices, nevertheless some SMEs do not adopt these technologies due to various internal and external factors.

The Technology Acceptance Model (TAM) (Davis et. al., 1989) has been widely used in the study of different technologies and their acceptance. The Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975) served as the basis for the (TAM), the TRA explores the idea of how attitudes and intentions to use something or complete a behavior can explain why someone does something, along with influences from certain subjective norms (Fishbein and Ajzen, 1975). The TAM expanded the TRA by uncovering that perceived ease of use (PEOU) and perceived usefulness (PU) of technology influences behavioral intention to use a technology (Davis et. al., 1989). For the purpose of this study we will focus on TAM and its extended models.

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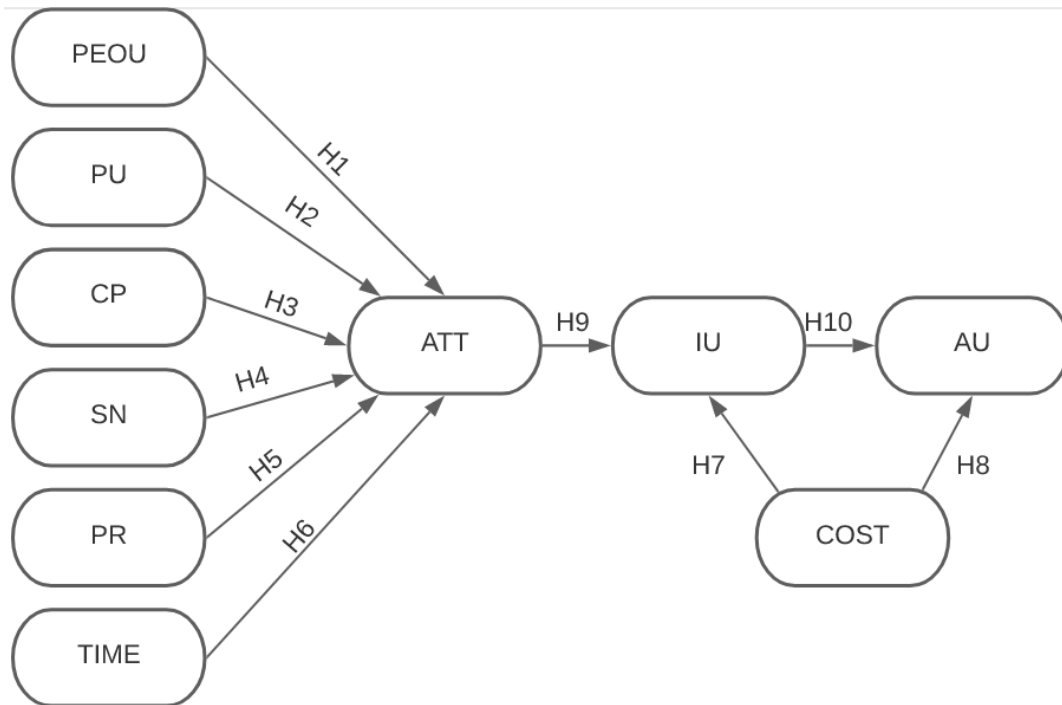
While TAM was originally tested to gauge the acceptance of computers (Davis et. al., 1989) it has also been used or adopted for other purposes and technologies, including various studies of social media. Such as social media acceptance among college students (Efosa et. al., 2018), the usage behavior of Facebook (Rauniar et al., 2014), social media as a business platform for student entrepreneurs (Nawi, 2019), social media in the tourism industry (Matikiti, 2018), and social media adoption for small businesses (Amiruddin, 2017). This study proposes an extended TAM to be used to further analyze the adoption of social media in small and medium businesses (SMEs).

SOCIAL MEDIA ADOPTION FOR SMES

After conducting an extensive literature review on TAM, its various extended models and its predecessors, as well as conducting a couple exploratory interviews with small business owners, a new model was developed. Based on the hypotheses and given research: perceived risk (PR), subjective norm (SN), time (TIME), perceived ease of use (PEOU), perceived usefulness (PU) and compatibility (CP) are theorized to influence attitudes toward social media adoption for SMEs. To be consistent with the original TAM (Davis et. al., 1989), attitudes toward social media adoption (ATT) is theorized to influence behavioral intentions to adopt social media (IU) and consequently actual use of social media (AU). The final construct cost (COST) is also theorized to influence behavioral intentions to adopt social media and consequently actual use of social media.

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Proposed Extended TAM Model for Social Media Usage in SMEs (Figure 1):



Perceived Ease of Use:

The perceived ease of use (PEOU) variable was theorized and proven in Davis' original TAM (Davis et. al., 1989). Perceived ease of use is the idea that using a system is somewhat free of effort, for the purpose of this study it will be defined as such. (Efosa et. al., 2018) This construct measures one's perception of the technology being easy to understand, learn and operate. It was found that since social media is relatively easy to understand and requires low effort, that this will be perceived well by a potential user. (Rauniar et al., 2014) Studies on e-commerce and e-marketing have also proven that perceived ease of use has influenced attitudes toward technology adoption. (Matikiti, 2018)

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Owners' perceptions about the use of social media platforms may affect their attitudes toward using social media. For example, "the difficulty owners perceive in creating online content, particularly in social media channels" (Alford and Page, 2015). Some managers or owners may not adopt social media into their practices due to perceptions that it is hard to use. The difficulties, "faced by micro-enterprises in their attempts to adopt [information and communication technology] (ICT): they often have little or no training in ICT usage and a lack of awareness of the benefits to be accrued from adoption" (Jones et al., 2014). A lack of training resources may lead managers to have a negative perception of perceived ease of use for social media, thus leading them to not adopt the technology.

There are also several other factors to consider in terms of PEOU when it comes to SMEs. For example, SMEs have less employees and therefore "their owner-managers' human capital and knowledge... have a great impact on digital marketing and its success" (Nikunen et. al., 2017). A limited number of employees also creates a limited skill set for SMEs. It has been realized that for owners of SMEs to have a, "positive view of adopting technology for marketing into a clear plan is hindered by a lack of technical competency" (Alford and Page, 2015). While some firms may have a positive attitude toward using digital marketing, the firm may lack the technical skills required to have a successful marketing plan. "Since the rate of change in terms of new techniques and changes to existing techniques" develop quickly in the realm of digital marketing, it is even more difficult for SMEs to acquire new skills and training with fewer employees (Chaffey, 2010). Given fewer employees, constant changes in technology or techniques and therefore a limited skill set, may affect an SMEs perception of ease of use for social media. It is hypothesized that:

H1: Perceived Ease of Use influences attitudes toward adopting social media.

Perceived Usefulness:

Perceived usefulness (PU) was also theorized and developed in the original TAM (Davis et. al., 1989). Perceived usefulness is defined, for the purposes of this study, as one's perception

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that social media will improve the performance of their business (Efosa et. al., 2018). Certain aspects of social media have been thought to provide more ‘utilitarian value’ to the social media user, such as various types of tools in addition to the expected primary offerings from using a social media app. The higher the perceived ‘utilitarian value,’ the more perceived usefulness positively influences attitudes toward social media adoption. (Rauniar et al., 2014) Given the context of social media, perceived usefulness was an important factor in determining attitudes toward adoption when managers perceived that social media would streamline their tasks and provide valuable information or insights (Austermann and Mertins, 2014). Perceived benefits contribute to overall perceived usefulness and can affect attitudes or intentions toward adopting certain technologies (Matikiti, 2018).

One of these perceived advantages is obtaining knowledge of customers’ needs and wants. The “purposive inflows of knowledge from customers and competitors and capabilities to efficiently manage internal knowledge are even more relevant for sustainable competitiveness of small- and medium-sized enterprises (SMEs)” (Pérez-González et. al., 2017). This customer and competitor knowledge obtained from social media can help SMEs gain a competitive advantage. The capabilities that social media provides SMEs “particularly the interactivity afforded by social media, which in addition to communication also provides the opportunity to gain customer insight” (Alford and Page, 2015). This insight can help owners and managers gain a new perspective that they would not have had the opportunity to obtain had they not adopted social media into their practices. For example, in a previous study, one entrepreneur provided her personal perspective on social media, “So for me, Twitter’s not just a one-way thing, I’m learning a lot about our market through it as well. (Karen, owner-manager, Self-catering accommodation, 1 employee)” (Alford and Page, 2015). This business owner’s perspective explains how a social media platform, Twitter, has helped her as an owner to gain insight into the market in which the business is in.

More specifically, SME owners and managers can use customer insight for innovation purposes. Through the adoption of an online strategy, “companies could take advantage of collective intelligence by means of using [social media technologies]” (Pérez-González et. al.,

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2017). The new found access to collective intelligence on social media can then be used to help inform business decisions. For instance, “customer involvement in innovation on social media is related to greater knowledge gained for innovation from customers” (Candi et al., 2018) SMEs have the opportunity to have an interactive tool where customers can provide feedback on their products or services. With this insight SMEs can adjust their current products or services and innovate new ways to make the business more successful. Given these perceived benefits, or perceived usefulness, it is proposed that:

H2: Perceived Usefulness influences attitudes toward adopting social media.

Compatibility:

Compatibility has been used in extended versions of the TAM (Venkatesh and Davis, 2000); (Venkatesh, 2003) and helps to define how a tool can effectively help the user accomplish a task with improved productivity (Efosa et. al., 2018). This construct seeks to define how the technology matches the use situation and the task to be completed by the user. In terms of this study, it will be more specifically defined as social media’s ability to match the ‘experiences, needs and values’ of the user, in this case a SME and its organizational fit. (Ghazizadeh et. al., 2012)

Compatibility with social media in an SME is congruent with social media having a strategic purpose within a SME. Although some SMEs have incorporated certain technologies, “a prime reason for the failure of [information and communication technology] adoption has been identified as the lack of a strategic model for implementation” (Jones et al., 2014). Without proper implementation SMEs are using their capabilities toward tasks that may be unproductive for their firm. Managers of “SMEs need to look beyond individual initiatives, and consider organisational practices as well as the broader environment” (Quinton et al., 2018). With proper considerations for a strategic marketing fit SMEs can improve their digital marketing use. Perceived long term compatibility is an important factor in SMEs’ attitude towards adopting social media. It is therefore hypothesized:

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H3: Compatibility influences attitudes toward adopting social media.

Subjective Norm:

Subjective norm takes into account environmental influences that may affect someone's decision to adopt a certain technology (Austermann and Mertins, 2014), this concept and construct can be seen in the TRA (Fishbein and Ajzen, 1975). Similar to the subjective norm, network externality has also been used to test outside influences specifically for companies and their 'network of relationships' (de Araújo and Zilber, 2016). However, for the purposes of this study, the subjective norm construct will be utilized and defined as the impact that certain social influences could have on a decision or attitude toward adopting social media (Austermann and Mertins, 2014).

These subjective norms, or external factors, affect owners' perceptions of social media adoption. For example, "external factors such as market structures and demands, dynamic competitive strategies and rapidly emerging opportunities and threats online, are viewed as important influences on owner/manager attitudes towards [information and communication technology] adoption" (Jones et al., 2014). When companies are looking to obtain information from competitors, social media platforms, "have become an important tool for capturing external knowledge and competitive information" (Pérez-González et. al., 2017). This perception may impact the decision the user makes to adopt the platform.

In relation to competitors, if SMEs notice other SMEs using certain social media tools, they may feel 'mimetic pressure.' In other words, "the organisation feels pressured to imitate the technological behaviour of other organisations." (Quinton et al., 2018) This perceived pressure can also influence whether or not a company decides to adopt social media technology. For example, one SME owner stated, "I think our competitors inspired me to set up a website;" and another also mentioned "I was aware of the number of businesses and particularly competitors in the industry" (Jones et al., 2014). The perceived presence of

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competitors using a certain marketing tool may influence technology adoption as well. It is therefore proposed that:

H4: Subjective Norm influences attitudes toward adopting social media.

Perceived Risk:

The perceived risk variable was originally developed in Pavlou's Theory of Planned Behavior (TPB), which built upon the TAM and TRA. Perceived risk was found to include monetary, personal and privacy risk. (Pavlou, 2003) Therefore, perceived risk is parallel to the concept of uncertainty, due to there being little or no prior knowledge of, in this case, social media some people may perceive a greater risk (de Araújo and Zilber, 2016). For the purposes of this study, perceived risk will be defined as one's perception of negative consequences from completing a particular action or new task, especially when the outcome of a particular decision is not entirely known. (Nawi, 2019) Extended versions of TAM have included perceived risk to assist in measuring one's feelings of 'anxiety, discomfort, uncertainty and concern' when adopting a new technology (Ainin et. al., 2015) It was found that attitudes toward technology adoption is affected by perceived risk in that the more perceived risk, the less likely people were to adopt social networking sites (Nawi, 2019). Therefore, it is proposed that:

H5: Perceived Risk influences attitudes toward adopting social media.

Time:

Time will be defined as the amount of time it takes a person to make a profile page, learn how to use social media for their business and learn how other businesses are utilizing social media (Matikiti, 2018). It was observed that, "time was also identified as a negative resource constraint for a sole proprietor" (Jones et al., 2014). While some SMEs have adopted certain digital marketing techniques, the manner in how they implement the technologies into their business practices have portrayed certain problematic trends, due to a perceived lack of time.

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One commonality has shown that “solo-entrepreneurs appear to neglect a long-term focus on digital marketing tools even though they have many opportunities to benefit from digitalisation” (Nikunen et. al., 2017). This short sighted vision does not ensure growth and longevity for SMEs who, like large firms, need to plan for the future. The “small businesses tend to opt for a just doing approach rather than for formal planning” (Alford and Page, 2015). The ‘just doing’ approach, with minimal reasoning or purpose, could also lead SMEs to waste precious resources such as time or money.

H6: Time influences attitudes toward adopting social media.

Cost:

Cost will be defined as the perceived expenses of adopting social media (Wu and Wang, 2004). Studies have shown conflicting results in whether cost negatively or positively impacts someone’s behavioral intention and actual use of technology (Ainin et. al., 2015).

Considering the smaller size of SMEs, there are certain limitations in given “resource factors (e.g. time and money) and these limitations are well documented in the small business literature” (Alford and Page, 2015). These limited resources were cited when SME owners were studied in regards to technology adoption. In terms of cost some SMEs have difficulty with perceiving strategic benefits to adopting new technologies. For example, “negative perceptions regarding costs and a lack of resources, resulted in a failure to see the strategic fit of these [information and communication technology] applications with their business model” (Jones et al., 2014). The cause of this perception may be “challenges which owner-managers face in attributing the business they gain from digital marketing and accurately measuring return on investment (ROI)” (Alford and Page, 2015). Due to cost uncertainty or burden, some SMEs may decide to not adopt certain technologies into their business, for example, social media.

However, on the other hand, some SMEs may view, “social media as a low-cost means for involving customers in the innovation process and gaining knowledge from them makes a

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social strategy particularly relevant in the context of (SMEs)” (Candi et al., 2018). Since social media may be considered a low cost alternative to other marketing strategies, and many SMEs have financial constraints, this form of digital marketing can serve as a cost effective informative tool. It was observed that “better communication and marketing of products/services is one of the main benefits identified from the use of social media among the small business” (Nikunen et. al., 2017). It is hypothesized:

H7: Cost influences behavioral intention to use social media.

H8: Cost influences actual use of social media.

METHODOLOGY

Construct Measurement:

A web based questionnaire was thus conducted utilizing items based on the given constructs (see Table 1). The first part of the questionnaire asked the participants to rate their level of agreement (7-point Likert Scale) with the given statements listed in (Table or appendix). The following values were given for each level: strongly disagree (1), disagree (2), somewhat disagree (3), neither agree nor disagree (4), somewhat agree (5), agree (6), and strongly agree (7). The latter half of the questionnaire asked the participants about their demographic information, including their age, income, education, and gender.

Subjects:

For the purposes of this study, we were only interested in gathering information and data from SME owners or marketers. As previously discussed, SMEs are defined as having 100 employees or less. To limit irrelevant responses, the questionnaire included a qualifying question and asked if the subject did in fact own or market for a SME of 100 employees or less. The survey was primarily sent via email through university alumni channels and a local

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chamber of commerce newsletter. The questionnaire was live for two weeks on qualtrics XM and received just over 200 general responses. All responses were recorded and maintained all confidentiality.

RESULTS

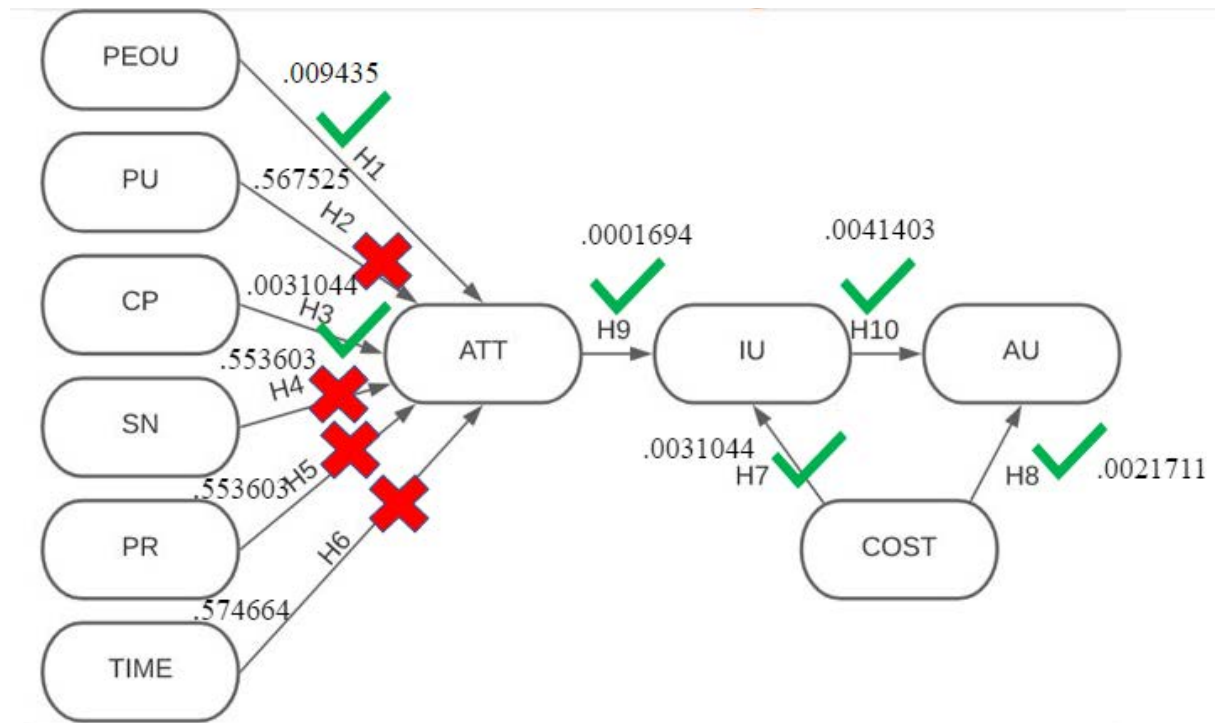
Descriptive Results:

After the data was cleaned, any incomplete information or answers and non-qualified participants' responses were removed, there was qualified data from 101 participants. These responses were utilized for statistical analysis. The majority of participants (48.48%) worked for or owned businesses with 1-4 employees. The platforms used by most participants were Facebook (33.33%), LinkedIn (27.55%), and Instagram (19.39%). The most used digital marketing platform was websites (28.19%) and email systems (21.08%). As far as demographic data, the gender breakdown was .92% preferred to self-describe, 37.61% identified as female and 61.47% identified as male. The majority of the age range (29.36%) fell between 55-64 years and the next age range was 45-54 years (26.61%). Most participants had a bachelor's degree (47.22%) or a Master's degree (32.41%). The majority (39.18%) of participants' income was more than \$150,000.

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Hypothesis Testing:

TAM Empirical Results (Figure 2):



A linear regression analysis was utilized to analyze the given hypotheses. A p-value of less than .05 is statistically significant and thus gives grounds to reject the null hypothesis. PEOU was run against ATT (H1) and had a p-value of .009435 (p-value < .05), (R-squared = .352099). PU was run against ATT (H2) and had a p-value of .567525 (p-value > .05), (R-squared = .0144376). CP was run against ATT (H3) and had a p-value of .0031044 (p-value < .05), (R-squared = .361025). SN was run against ATT (H4) and had a p-value of .553603 (p-value > .05), (R-squared = .0362085). PR was run against ATT (H5) and had a p-value of .553603 (p-value > .05), (R-squared = .0362085). TIME was run against ATT (H6) and had a p-value of .574664 (p-value > .05), (R-squared = .021472). COST was run against IU (H7) and had a p-value of .0031044 (p-value < .05), (R-squared = .361025). COST was run against AU (H8) and had a p-value of .0021711 (p-value < .05), (R-squared = .500562). ATT was run

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against IU (H9) and had a p-value of .0001694 (p-value <.05), (R-squared = .466187). IU was run against AU (H10) and had a p-value of .0041403 (p-value <.05), (R-squared = .391894).

DISCUSSION

Since, PR, PU, SN, and TIME all had a p-value above .05, when compared to ATT, the corresponding hypotheses are rejected (H2, H4, H5, H6). Therefore, perceived risk, perceived usefulness, subjective norm, and time do not influence attitudes toward social media adoption for SMEs. Perhaps these results could change if there were more subjects in this study. However, there could be other underlying reasons for these results. For example, people who own or market for small businesses may be more likely to take risks and therefore perceived risk does not affect their decision to adopt (or not adopt) social media.

From the hypothesis testing, H1 is supported and indicates that perceived ease of use has a significant effect on attitudes towards adopting social media. The majority of respondents rated their knowledge of social media as average (37.12%) or above average (35.61%). As prior knowledge and familiarity is an important component of perceived ease of use, having knowledge of social media, for this study, could have been a factor for PEOU having a significant relationship with attitudes towards adopting social media.

H3 was also supported and compatibility has a significant effect on attitudes towards social media adoption. This study was completed during the COVID-19 pandemic and most SMEs have had to virtualize much of their business activities. One of the items that measured CP asked respondents about the compatibility of social media with their current situation. COVID-19 has inhibited a lot of in person events and some SMEs have turned to social media to better promote their products or services. This circumstance may have had an effect on the perceived compatibility SMEs' have toward social media.

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Concerning cost, H7 and H8 are supported, indicating that cost has a significant effect on intention to adopt and actual use of social media. Many of the items asked for the cost construct (see Table 1), asked about social media and its cost effectiveness. Therefore, the respondents most likely felt less cognitive dissonance, as social media is typically less expensive than other marketing methods. Income could have also affected the intention to use and actual use of social in relationship to cost. Most respondents made more than \$150,000 and this could have influenced their perception of cost and cost effectiveness.

In line with Davis' original study of the TAM (Davis et. al., 1989), H9 and H10 were supported. This result indicates that attitudes towards using social media has a significant effect on intentions to adopt social media. Therefore, intentions to adopt social media also had a significant effect on actual use of social media.

IMPLICATIONS FOR SMES

As far as Compatibility is concerned, social media need not only be the correct fit for work style, but also for the company's current marketing practices and long term strategy. A strategic purpose for adopting social media will better the company's overall performance in terms of marketing effectiveness. The social media platforms also need to be compatible with the audience the SME is trying to target. The study revealed that nearly 100% of the subjects utilized Facebook for their businesses. Those who used Facebook were also more likely to use LinkedIn. While these platforms may be compatible with the audience SMEs want to target, they need to do the proper research to ensure they are reaching their intended audience. For example, if an SME's intended audience or wants to target Generation Y or Z, Instagram should be adopted for this particular audience.

Perceived Ease of Use can also be improved for SMEs by utilizing certain resources, such as social media training sessions, online courses or resources. These tools would help a SME owner or marketer better understand social media and its uses. Once social media is perceived

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as being ‘easier to use,’ it is more likely to encourage one to adopt the technology and achieve the desired performance outcomes of social media.

The study revealed that cost effectiveness was a key determinant of intentions to use social media and actual use. When subjects were asked about their digital marketing platforms, while the majority of respondents had websites and blogs, the majority of respondents did not utilize paid search ads or Google ads. These types of ads were, “found to have an improved short-term and long-term benefit on company performance compared to traditional advertisements” (Bayer et al., 2020). Paid search ads and Google ads are also more cost effective as compared to traditional ads which typically have a set price. These forms of digital advertising are usually paid on a per click basis which gives the advertiser more control over the price and their budget (Melogi).

LIMITATIONS & CONSIDERATIONS FOR FUTURE STUDIES

Data was collected during the COVID-19 pandemic and this circumstance could have influenced the results. The sample size represents a small portion of all SMEs, and more studies need to be completed to solidify the results in order to generalize data. The online survey was also only open for a short period and attitudes or perceptions may change over time. However, this research could lead to the creation of a longitudinal study using the TAM. Future research can also focus on a specific social media platform to achieve, such as Instagram adoption for SMEs and test how adoption perceptions may change based on the type of platform. Another study could focus on a particular SME industry.

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APPENDICES

Appendix A – Questionnaire

<i>Construct</i>	<i>Question</i>	<i>Source</i>	<i>Scale</i>
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Perceived Ease of Use (PEOU)

<i>PEOU1</i>	Overall, I believe social media is easy to use	(Efosa et. al., 2018)	<i>7 point Likert scale</i>
<i>PEOU2</i>	I believe that it is easy to get social media to do what I want it to do	(Efosa et. al., 2018)	<i>7 point Likert scale</i>
<i>PEOU3</i>	Learning to operate Social Media is easy for me	(Efosa et. al., 2018)	<i>7 point Likert scale</i>

Perceived Usefulness (PU)

<i>PU1</i>	Using social media improved my decision-making abilities when doing the task	(Efosa et. al., 2018)	<i>7 point Likert scale</i>
<i>PU2</i>	Social media allowed me to understand the task problem more quickly	(Efosa et. al., 2018)	<i>7 point Likert scale</i>
<i>PU3</i>	Overall, using social media is advantageous	(Efosa et. al., 2018)	<i>7 point Likert scale</i>
<i>PU4</i>	Using social media enhanced my problem-solving behavior for the task	(Efosa et. al., 2018)	<i>7 point Likert scale</i>

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PU5	I found social media useful	(Efosa et. al., 2018)	7 point Likert scale
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Compatibility (CP)

CP1	Using social media is compatible with all aspects of my company	(Efosa et. al., 2018)	7 point Likert scale
CP2	Using social media is completely compatible with my current situation	(Efosa et. al., 2018)	7 point Likert scale
CP3	I think that using social media fits well with the way I like to work when completing tasks	(Efosa et. al., 2018)	7 point Likert scale
CP4	Using social media fits into my work style	(Efosa et. al., 2018)	7 point Likert scale

Subjective Norm (SN)

SN1	The company began to use social media that its competitors were using	(de Araújo and Zilber, 2016)	7 point Likert scale
SN2	The company began to use social media that its customers were using	(de Araújo and Zilber, 2016)	7 point Likert scale
SN3	The company began to use social media that its employees were using	(de Araújo and Zilber, 2016)	7 point Likert scale

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Perceived Risk (PR)

<i>PR1</i>	The costs of adopting social media in company activities are difficult to measure	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>PR2</i>	The results obtained from the incorporation of social media into the company's activities are little known	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>PR3</i>	Potential security and privacy risks hinder the use of social media in company activities	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>PR4</i>	There are important legal issues regarding the use of social media that remain unresolved	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>PR5</i>	There is no guarantee that currently available social media will be available in the future	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>PR6</i>	The use of social media in the company's business processes can generate conflicts because of current organizational culture	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>

Time (TIME)

<i>TIME1</i>	Using social media is too time consuming	(Matikiti, 2018)	<i>7 point Likert scale</i>
<i>TIME2</i>	We cannot commit time to sustain social media marketing initiatives	(Matikiti, 2018)	<i>7 point Likert scale</i>
<i>TIME3</i>	The time needed for social media marketing is too much for our company	(Matikiti, 2018)	<i>7 point Likert scale</i>

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Cost (COST)

<i>COST1</i>	Social media is more cost effective than other types of marketing or customer service technologies	(Ainin et. al., 2015)	<i>7 point Likert scale</i>
<i>COST2</i>	My company can avoid unnecessary cost and time by using social media	(Ainin et. al., 2015)	<i>7 point Likert scale</i>
<i>COST3</i>	Social media saves costs (time and effort in marketing, branding and customer service)	(Ainin et. al., 2015)	<i>7 point Likert scale</i>

Attitude Toward Using Social Media (ATT)

<i>ATT1</i>	I think positively about using social media for my company	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>
<i>ATT2</i>	Social media is a positive tool for our company	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>
<i>ATT3</i>	Using social media is a wise idea	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>
<i>ATT4</i>	Social media is worth using for my company	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>
<i>ATT5</i>	I plan on using social media on a regular basis in the future	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>
<i>ATT6</i>	Using social media within the company is pleasant	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>

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Intent to Use Social Media (IU)

<i>IU1</i>	I intend to continue using social media for my company	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>
<i>IU2</i>	I intend to frequently use social media for my company	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>
<i>IU3</i>	Assuming I have access to social media, I intend to use it for my company	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>
<i>IU4</i>	Given that I have access to social media for my company, I predict that I would adopt it	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>

Actual Use (AU)

<i>AU1</i>	Social media are used extensively in the company's marketing department	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>AU2</i>	Social media are used extensively in the company's human resources department	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>AU3</i>	Social media are used extensively in the company's sales department	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>AU4</i>	Social media are used extensively in the company's logistics department	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>AU5</i>	Social media are used extensively in the company's research and development (R&D) department	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>

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<i>AU6</i>	Social media are used extensively in the company's financial department	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>AU7</i>	Social media are used extensively in the company's production department	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>AU8</i>	Social media are used extensively in the company's communications department	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>AU9</i>	Social media are used extensively for product development	(de Araújo and Zilber, 2016)	<i>7 point Likert scale</i>
<i>AU11</i>	How many times do you use social media for your company in a week?	(Austermann and Mertins, 2014)	<i>7 point Likert scale</i>

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REFERENCES

- Ainin, Sulaiman, et al. "Factors Influencing the use of Social Media by SMEs and its Performance Outcomes." *Industrial Management & Data Systems* 115.3 (2015): 570-88. *ProQuest*. Web. 22 Mar. 2021.
- Alford, Philip, and Page, Stephen John. "Marketing Technology for Adoption by Small Business." *Service Industries Journal*, vol. 35, no. 11–12, Aug. 2015, pp. 655–669. *EBSCOhost*, doi:10.1080/02642069.2015.1062884.
- Amiruddin Ahamat, et al. "Factors Influencing the Adoption of Social Media in Small and Medium Enterprises (Smes)." *Ijasos- International E-Journal of Advances in Social Sciences*, vol. 8, no. 3, 2017, pp. 338–348. *INSERT-MISSING-DATABASE-NAME*, *INSERT-MISSING-SERVICE-NAME*, doi:10.18769/ijasos.336544. Accessed 21 Mar. 2021.
- Austermann, Jennifer, and Birte Mertins. *Technology Acceptance Model Revised - An Investigation on the Managerial Attitudes towards Using Social Media in Innovation Processes*. Linnaeus University, 30 May 2014, www.diva-portal.org/smash/get/diva2:726178/FULLTEXT01.pdf.
- Bayer, Emanuel, et al. "The Impact of Online Display Advertising and Paid Search Advertising Relative to Offline Advertising on Firm Performance and Firm Value." *International Journal of Research in Marketing*, vol. 37, no. 4, 2020, pp. 789–804., doi:10.1016/j.ijresmar.2020.02.002.
- Candi, Marina, et al. "Social Strategy to Gain Knowledge for Innovation." *British Journal of Management*, vol. 29, no. 4, Oct. 2018, pp. 731–749. *EBSCOhost*, doi:10.1111/1467-8551.12280.
- Chaffey, Dave. "Applying Organisational Capability Models to Assess the Maturity of Digital-Marketing Governance." *Journal of Marketing Management*, vol. 26, no. 3–4, Mar. 2010, pp. 187–196. *EBSCOhost*, doi:10.1080/02672571003612192.

A Study of the Technology Acceptance Model for Social Media Adoption in Small & Medium Enterprises
Honors Thesis for Lily Iacurci

- Davis, Fred D., et al. "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models." *Management Science*, vol. 35, no. 8, 1989, pp. 982–1003. JSTOR, www.jstor.org/stable/2632151. Accessed 6 Mar. 2021.
- de Araújo, Jozé Braz, and Silvia Novaes Zilber. "What Factors Lead Companies to Adopt Social Media in Their Processes: Proposal and Test of a Measurement Model." *Brazilian Business Review (English Edition)*, vol. 13, no. 6, Nov. 2016, pp. 260–290. EBSCOhost, doi:10.15728/bbr.2016.13.6.5.
- Efosa, Carroll Idemudia, Mahesh S. Raisinghani, and Olusola Samuel-Ojo. "The Contributing Factors of Continuance Usage of Social Media: An Empirical Analysis." *Information Systems Frontiers* 20.6 (2018): 1267-80. ProQuest. Web. 21 Mar. 2021.
- Feldman, Sarah. "Top 2019 Small Business Marketing Tactics in the U.S." *Statista*, 31 May 2019, www-statista-com.bryant.idm.oclc.org/chart/18236/small-business-marketing-tactics/.
- Fishbein, M., & Ajzen, I. *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, Mass.: Addison-Wesley, 1975.
- Ghazizadeh, Mahtab, John D. Lee, and Linda Ng Boyle. "Extending the Technology Acceptance Model to Assess Automation." *Cognition, Technology & Work* 14.1 (2012): 39-49. ProQuest. Web. 22 Mar. 2021.
- Jones, Paul, et al. "An Exploration of the Attitudes and Strategic Responses of Sole-Proprietor Micro-Enterprises in Adopting Information and Communication Technology." *International Small Business Journal*, vol. 32, no. 3, May 2014, pp. 285–306, doi:[10.1177/0266242612461802](https://doi.org/10.1177/0266242612461802).
- Matikiti, Rosemary, Mercy Mpinganjira, and Mornay Roberts-Lombard. "Application of the Technology Acceptance Model and the Technology–Organisation–Environment Model to Examine Social Media Marketing use in the South African Tourism Industry." *South African Journal of Information Management* 20.1 (2018)ProQuest. Web. 21 Mar. 2021.

A Study of the Technology Acceptance Model for Social Media Adoption in Small & Medium Enterprises
Honors Thesis for Lily Iacurci

- Mckeon, Kelsey. "How Small Businesses Use Social Media in 2019." *Visual Objects*, Visual Objects, 28 Mar. 2019, visualobjects.com/web-design/top-web-designers/small-business-social-media-2019.
- Melogli, Rodolfo. "Google Ads vs. Traditional Advertising: Top 4 Benefits." *Ecommerce & Beyond*, www.ecommerceandbeyond.com/google-adwords-vs-traditional-advertising/.
- Nawi N.C, et al. "Factors Affecting the Adoption of Social Media As a Business Platform: A Study among Student Entrepreneurs in Malaysia." *Vision*, vol. 23, no. 1, 2019, pp. 1–11., doi:10.1177/0972262918821200.
- NIKUNEN, TUULIA, et al. "Micro-Enterprise's Digital Marketing Tools for Building Customer Relationships." *Management (18544223)*, vol. 12, no. 2, Summer 2017, pp. 171–188. *EBSCOhost*, doi:10.26493/1854-4231.12.171-188.
- Pavlou, Paul A. "Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model." *International Journal of Electronic Commerce*, vol. 7, no. 3, 2003, pp. 101–134. JSTOR, www.jstor.org/stable/27751067. Accessed 7 Mar. 2021.
- Pérez-González, Daniel, et al. "Social Media Technologies' Use for the Competitive Information and Knowledge Sharing, and Its Effects on Industrial SMEs' Innovation." *Information Systems Management*, vol. 34, no. 3, July 2017, pp. 291–301. *EBSCOhost*, doi:10.1080/10580530.2017.1330007.
- Quinton, Sarah, et al. "Conceptualising a Digital Orientation: Antecedents of Supporting SME Performance in the Digital Economy." *Journal of Strategic Marketing*, vol. 26, no. 5, Aug. 2018, pp. 427–439. *EBSCOhost*, doi:10.1080/0965254X.2016.1258004.

A Study of the Technology Acceptance Model for Social Media Adoption in Small & Medium Enterprises
Honors Thesis for Lily Iacurci

- Rauniar, Rupak, et al. "Technology Acceptance Model (TAM) and Social Media Usage: An Empirical Study on Facebook." *Journal of Enterprise Information Management* 27.1 (2014): 6-30. ProQuest. Web. 24 Feb. 2020.
- Venkatesh, Viswanath, and Fred D. Davis. "A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies." *Management Science*, vol. 46, no. 2, Feb. 2000, p. 186. *EBSCOhost*, doi:10.1287/mnsc.46.2.186.11926.
- Venkatesh, Viswanath, et al. "User Acceptance of Information Technology: Toward a Unified View." *MIS Quarterly*, vol. 27, no. 3, Sept. 2003, pp. 425–478. *EBSCOhost*, doi:10.2307/30036540.
- Wirtz B.W, and Gittel V. "Technology Acceptance in Social Media: Review, Synthesis and Directions for Future Empirical Research." *Journal of Electronic Commerce Research*, vol. 17, no. 2, 2016, pp. 97–115.
- Wu, Jen-Her, and Shu-Ching Wang. "What Drives Mobile Commerce?an Empirical Evaluation of the Revised Technology Acceptance Model." *Information & Management*, vol. 42, no. 5, 2005, pp. 719–729., doi:10.1016/j.im.2004.07.001.