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SMEs Social media adoption and financial and non-financial marketing performance

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C H R O N I C L E

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A B S T R A C T

The study employs the Technology, Organisational, and Environmental (TOE) theory to examine the role of SMEs' adoption of social media on financial and non-financial marketing performance in Ghana. Data were collected from SMEs in Accra, Ghana. The study tested seven hypotheses and two moderators. A total of 452 usable sample size were analyzed using structural equation modelling (SEM). The outcome reveals a positive and significant relationship between social media adoption and SMEs' financial and non-financial performance in Ghana. Additionally, a direct relationship between the TOE and SMEs' social media adoption was confirmed. Although the generalizability of this study is limited due to a single country study, it is still relevant in contributing to a better understanding of social media adoption literature among SMEs, especially from a developing country context. This study is part of the few studies that have used the Technology, Organisational, and Environmental theory to understand social media adoption and marketing performance in the context of an emerging country.

1. Introduction

Social media is receiving the necessary attention from practitioners and scholars (e.g., Ahmad et al., 2018; Qalati et al., 2021; Hanafizadeh et al., 2021). Researchers (e.g., Ahmad et al., 2018) indicated that social media adoption is a critical issue for SMEs because of how social media is constantly changing the landscape of doing business and, more importantly, the power of using social media to create value, make a profit, and remain competitive in this era of an unpredicted and turbulent business environment. With the ever-changing business environment and increasing rate of innovation, it is discernible that SMEs match the speed of innovation to enhance their performance. Social media is seen as a tool (Fan et al., 2021) to promote entrepreneurial innovations among SMEs and concurrently contribute to employment creation and economic advancement in most countries. The extant literature highlights the important role of SMEs in the growth and development of a country (Rana et al., 2019; Taylor, 2019). Rana et al. (2019) observed that SMEs form the majority of businesses in most economies in the world today, reducing unemployment and poverty levels in most of these countries. For instance, Abed (2020) posits that SMEs serve as the foundation and a springboard for most large firms in the sense that some of the activities of SMEs feed into the operations of large firms in performing their operations. Taylor (2019) believes that the nature of SMEs, such as innovativeness, flexibility, and their ability to earn income, are some of the reasons why SMEs serve as the foundation for which some large firms strive. Compared with their large counterpart firms, it is observed by researchers such as Cerchione and Esposito (2017), Senarathna et al. (2018), and Cassidy et al. (2019) that SMEs are confronted with numerous challenges, which makes it difficult for them to adopt technologies. These researchers indicated limited financial resources, technical know-how, non-existence of information management systems, and lack of resource availability as some of the challenges hindering the adoption of social media by SMEs. Apart from these challenges, Puklavec et al. (2018) also added that SMEs

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are also confronted with the rapid globalization of markets, a highly competitive business environment, a shorter product life cycle, complex consumer needs and wants, and increasing technological advancement. Accordingly, Yen et al. (2019) called for SMEs to adopt more innovative approaches to confront these challenges identified by scholars in the literature.

Social media is a good option for Ghanaian SMEs. Studies have shown that the adoption of social media is less expensive, has ease of use, and reduced the barriers to customer participation (Abed et al., 2015). Besides, SMEs can use it to promote their products and services, build strong online brand communities, and reach wider coverage of a segment of the market (Guha et al., 2018; Ghezzi et al., 2016). The use of media enables SMEs to build a strong image and reputation, gather information about customers, and ultimately build customer trust and loyalty (Han et al., 2016). Irrespective of the merits of SME adoption of social media, it is evident in the existing literature that more studies are needed from different contexts to enhance generalizability and understanding of the issues of social media adoption among SMEs. Hence, the objective of this study is to examine how social media adoption translates into the financial and non-financial marketing performance of SMEs in Ghana from the lens of the TOE model. The study admits past studies (see, for example, Odoom et al., 2017; Ahmad et al., 2018, Hanafizadeh et al., 2021) have examined social media adoption of SMEs as well as performance in general and with few exceptions (see. Ainin et al., 2015; Werdani and Djoko, 2018; Eze et al., 2020) that ascertain SMEs social media adoption and marketing performance. For example, Ainin et al. (2015) limited their studies to the non-financial and financial performance of Facebook usage among SMEs.

This study offers both a theoretical and practical understanding of how SMEs' social media adoption influences their financial and non-financial performance. The first theoretical contribution is that the study employs the use of TOE to understand the issues of social media adoption by SMEs. It is important to test the model's generalizability and rigour in different country contexts to better understand the model. Second, the study examined how the adoption of social media by SMEs would impact financial and non-financial marketing outcomes in a single study. In the practical contribution, SME owners and managers would benefit from the finding of this study in terms of what factors could influence their social media adoption and how they would benefit from the use of social media. Also, policymakers and regulators of the SME sector in emerging and/or developing countries and especially Ghana would be able to formulate policies regarding the use of social media by SMEs. The rest of the paper is organized as follows: The following chapter takes a look at the theoretical context and literature review, hypotheses and the research framework is presented in the following section, the research methodology is also presented, followed by the results and analysis, followed by the findings. The paper ends with the theoretical and practical lessons as well as the opportunity for future research.

2. Theoretical Background

The study is firmly rooted in the Technology, Organisational, and Environmental (TOE) framework, which is one of the seminal technology adoption theories. There is a rich body of studies (e.g., Ahmad et al., 2018; Cruz-Jesus et al., 2019; Ngah et al., 2017; Alsetoohy et al., 2019) that have applied the TOE model in understanding technology adoption. Typical of this model is the concentration on technology, organizational, and environmental factors which turns to influence the adoption of innovation (Oliveira et al., 2011). The foci for applying the TOE in this study are based on the several benefits of using this model as identified by past studies (Ahmad et al., 2018; Cruz-Jesus et al., 2019; Alsetoohy et al., 2019). The first reason is that the model is more flexible and allows the addition of other constructs and is widely applied, and is robust in explaining technology adoption in different industry settings and from different country contexts. The second reason is that the TOE model can explain the technological, organizational, and environmental factors of technology adoption. The study, therefore, draws insight from the TOE theory to examine SMEs' social media adoption and financial and non-financial marketing performance in Ghana.

3. Literature Review and Hypotheses Development

3.1 Technology, Organisational, and Environmental (TOE) Theory and SMEs Social Media Adoption

Like similar studies (e.g., Ahmad et al., 2019; Eze et al., 2020), the study relied on this TOE because researchers such as Alshamaila et al., 2013 have observed how enriched the TOE theory is and the ability of the theory to incorporate other factors in explaining SMEs social media adoption in Ghana. Besides, the theory also better explains the diffusion of innovation technology among firms (Ahmad et al., 2019; Wang et al., 2010). The extant literature (e.g., Eze et al., 2020) shows that the TOE theory consists of three main constructs: technological factors, organizational factors, and environmental factors. The technological factors deal with both the internal and external capabilities that have a potential impact on the firm and normally involve the tools and the practices of the form (Eze et al., 2020). Eze et al. (2020) further explained that technological factors also deal with internal and external benefits of using technologies that would enhance the efficient and effective performance of the firm and how the benefits of using technologies in the firm are examined before they are implemented. In addition, researchers (see, for example, Baker, 2012; Alshamaila et al., 2013; Ramdani et al., 2013; Liao et al., 2003) are of the view that the merits of technology usage, whether internally or externally, would inform firm innovation based on the benefits derived from the use of that technology. These researchers posit that firms are looking for how technological innovations would add positively to firms and, therefore, positive experience with technology would motivate firms to its use. Several researchers such as Eze et al. (2020), AlSharji et al. (2018), and Alshamaila et al. (2013) have used factors such as perceived

cost, relative advantage, compatibility, complexity, trialability, and observability as factors associated with technological factors. For this article, the study examines perceived cost as the technological factor necessary for the adoption of social media by SMEs in the Ghanaian context.

The next TOE factor is the organizational factor. The organizational factor deals with issues concerning the internal environment of the organization (Ahmad et al., 2019). According to Ahmad et al. (2019), the organizational factors deal with the size, the structure and procedures, employees and management-related issues, and the kind of relationships that exist among the workers. The current study used management support to investigate the organizational factors that are consonant with past studies (Ahmad et al., 2015; Maduku et al., 2016) who observed that SMEs' adoption of social media rests on the owners/manager since they drive the innovation strategies of SMEs.

The last TOE factor is the environmental factor which deals with issues concerning the environment in which the organization operates. Previous studies (Alsetoohy et al., 2019; Ahmad et al., 2018; Awa et al., 2016) have studied factors such as external support, competitive pressure, environmental uncertainty, national IT infrastructure, and industry competition as some of the factors linked to environmental factors. This study used industry competition to reflect the technological factors necessary to enable social media adoption in the context of Ghana. Cited in the work of Ahmad et al. (2018), Zhu et al. (2003) are of the view that industry competition is a threat organization face, which has the potential impact on firms losing their competitive advantage. Porter and Millar (1985) posit that the adoption of technological innovation can change the dynamic of firms altering the industry structure.

The relationship between TOE factors and Social media among SMEs has well been documented in the literature (e.g., Dahnil et al., 2014; AlSharji et al., 2018; Abed, 2020; Eze et al., 2020; Qalati et al., 2021). The definition of social media is still not settled among scholars. However, this study applies the definition provided by the seminal work of Kaplan and Haenlein (2010) who defined social media 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" (p.60). Social media is seen as an important tool for SMEs and researchers have identified several benefits SMEs stand to gain when they take advantage of using social media (e.g., Guha et al., 2018; Ghezzi et al., 2016; Han et al., 2016). Studies (e.g., Ahmad et al., 2018) have also shown that the impact of using social media is evident in both developed and developing countries, even though the impact is felt more by developed countries. For example, benefits such as cost reduction, increase in sales, the building of customer relationships, promotion, advertising, sharing of information, and communicating with customers are some of the benefits SMEs stand to benefit from when they properly manage the adoption of social media (Hoffman and Fodor, 2010; Kaplan and Haenlein, 2010, AlSharji et al., 2018; Eze et al., 2020). Empirically, Qalati et al. (2021) studied social media adoption among SMEs in the context of developing countries by using the TOE theory and the results show that the TOE factors examined influence the adoption of social media. Also, similar studies by Eze et al. (2020) on social media adoption among Nigerian SMEs through the lens of the TOE theory show the predictive power of the TOE theory. From the extensive review, this study argues that the TOE factors used in this study could influence the adoption of social media in the Ghanaian context, hence the study suggests the following hypotheses

H_1: *Perceived cost positively leads to the adoption of Social Media by SMEs.*

H_2: *Management and staff support positively leads to the adoption of Social Media by SMEs.*

H_3: *Industry Competition leads to the adoption of Social Media by SMEs.*

3.2 Social media adoption and marketing performance

The influence of SMEs' social media adoption on the performance of SMEs has been documented in the extant literature from both developing and developed countries (see, for example, Ainin et. al, 2015; Qalati et al., 2021; Oyewobi et al., 2021). Studies have also been conducted and it is interesting to know that there is no support for social media adoption and SMEs performance (Ahmad et al., 2018). A review of empirical studies shows that Cao et al. (2018) conducted a study among 285 organizations in China and the outcome reveals that social media adoption has a significant positive relationship with organizational performance. Also, Ainin et al. (2015) conducted a study on the social media adoption and performance relationship among 259 SMEs in Malaysia and found a positive relationship between the constructs. Although researchers have demonstrated the relationship between social media and firm performance in general, performance has both financial and non-financial performance dimensions, which have been limitedly studied (Ainin et al., 2015). This study focuses on social media and the dual performance dimensions of financial and non-financial performance, which have been often treated separately and examined by researchers (cf. Magno and Cassia, 2019; Cao et al., 2018). The study is of the view that SMEs adoption in Ghana from the marketing point of view can trigger both financial and non-financial benefits at the same time. The study, therefore, proposes the following hypotheses for consideration

H_4: *SMEs Social Media adoption positively leads to non-financial marketing performance.*

H_5: *SMEs Social Media adoption positively leads to financial performance.*

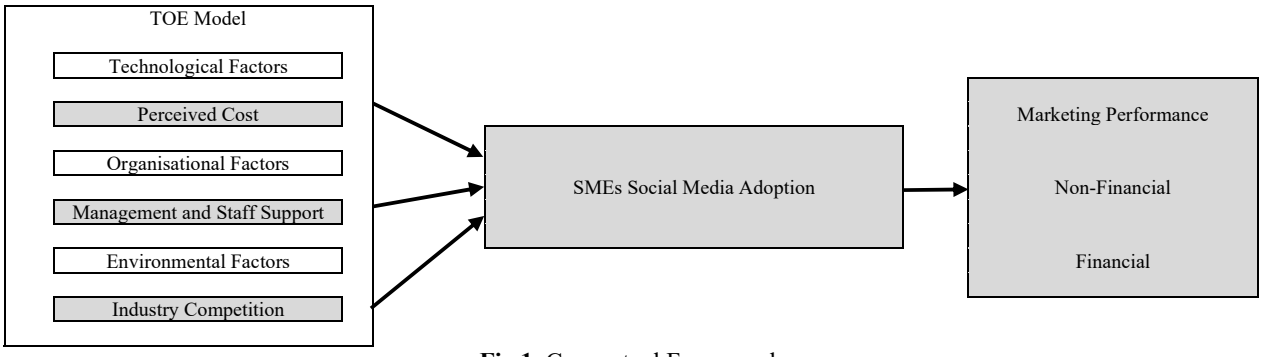

Fig.1. Conceptual Framework

4. Research design and procedure

4.1 Sample and procedure

Data was obtained from a sample of 452 management-level personnel of SMEs in Accra, Ghana. 27 final year BSc. Marketing students, who are mostly working in the formal and informal sector, were recruited to assist with the data collection. In exchange, studies were conducted by researchers like Greenbaum et al. (2014) and Mayer et al. (2012). The students were taken through the intended data collection process to ensure the veracity of the data. Students were informed to purposely administer the question to management level personnel of the SMEs they would contact. Since the research instrument was shareable online structured questions, the students were told to encourage their focal contacts to share the weblink with their peers in other SMEs. 479 responses were received at the of the seven weeks data collection period. However, after accounting for the valid responses, 452 valid responses constituted the final dataset, representing a 94.3% response rate. This response rate was good, because it was above 80%, as per Donk et al (2016). The profile of the respondents is shown in Table 1.

Table 1
Demographic Information

		Frequency	Percentages
Gender	Male	237	48.9
	Female	248	51.1
Age Groups	18- 20 years	66	13.6
	21-29 years	152	31.3
	30-39 years	93	19.2
	40-49 years	108	22.3
	50-and above years	66	13.6
Educational Qualification	BECE	9	1.9
	WASSCE	93	20.57
	Diploma	81	16.7
	HND	98	20.2
	Degree	180	37.1
	Masters	22	4.5
	Doctorate	2	0.44
Position in the Company	Manager	200	41.2
	Accountant	86	17.7
	Owner, CEO, or MD	199	41.0
Industry of Operation	Agriculture and Agro-Processing	90	18.6
	Textiles and Garment	88	18.1
	Food Processing	102	21.0
	Health	61	12.6
	Oil and Gas	45	9.3
	Tourism	5	1.0
	Mineral Processing	24	4.9
	Utilities	17	3.5
	Others	53	10.9
Number of Employees	1-5	25	5.2
	6-9 employees	98	20.2
	10-19 employees	54	11.1
	20-49 employees	117	24.1
	50-99 employees	27	5.6

4.2 Instrumentation

The items for measuring each construct were adapted from the extant literature. Besides the demographic variables, the items measuring the main constructs were anchored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Perceived Cost was rated with 3 items that were sourced from Odoom (2017) and Qalati et al. (2021) with an internal consistency value of 0.758. An example of the items is "Using social media helps us save costs associated with Marketing, branding and Customer Service". Management and Staff Support were also accessed using 3 items developed by Qalati et al. (2021). The Cronbach's alpha is 0.798 and a sample item is "Management and staff are very keen on adopting social media". Data on industry competition was generated with 3 items modified from Ahmad et al. (2018). The Cronbach's alpha is 0.845 and an example of the items is "We would be able to outperform our competitors through the use of social media".
Social media adoption was measured with 3 items Ainin et al. (2015) developed. An example of the items is "We would lose customers to our competitors if we do not adopt social media in our organization." and the reliability value is 0.811. Both non-Financial Performance and financial measured were rated with 2 items each adapted from Ainin et al. (2015). The Cronbach's alpha for non-financial performance is 0.774 and a sample item is "The use of social media has helped us to build a strong image in our market" while the Cronbach's alpha for Financial Performance is 0.738 and a sample item is "Adoption of social media has increased our sales growth".

4.3 Analytical procedure

SmartPLS-SEM, a covariant-based structural equation modeling (SEM), is "a statistical test for determining if a model fits a set of data or if it matches a theoretical expectation" (Vogt, 2005, p. 135), was used to evaluate both measurement and structural models. The factor loading, convergent reliability, and discriminant validity were assessed. The item loadings that failed to meet the threshold of 0.708 (Ringle et al., 2015) were removed and the indicative loadings are reflective of the constructs (see Table 2). Further, the model hypotheses were tested based on a bootstrap analysis (Ringle et al., 2015). Finally, SPSS was used to analyze the demographic profiles of the sample. Available evidence suggests that "method bias influences item validities, item reliabilities, and the covariation between latent constructs" (Podsakoff et al., 2012; MacKenzie, & Podsakoff, 2012, p. 542). Hence, the Harman single-factor test was performed to ascertain the level of inter-correlations among the constructs. The indicated total explainable variance revealed no indication of common method bias for this study.

5. Results

The data quality was assessed through the measurement model evaluation criterion (Henseler et al., 2009). The outcome in Table 2 revealed that Cronbach's alpha and composite reliability are greater than the recommended threshold of 0.70 and 0.60, respectively. Again, the results show the Average Variance Extracted (AVE) value obtained for each construct exceeds the 0.50 critical point (Hair et al., 2018; Ringle et al., 2015; Bido et al., 2014). This means convergent validity for all constructs is acceptable.

Table 2
Construct reliability and validity results

Constructs	Indicators	Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Financial Performance			**0.738**	**0.744**	**0.849**	**0.652**
	FP1	0.788				
	FP2	0.799				
	FP3	0.834				
Industry Competition			**0.845**	**0.847**	**0.906**	**0.764**
	IndCom1	0.888				
	IndCom2	0.896				
	IndCom3	0.837				
Management and Staff Support			**0.798**	**0.819**	**0.878**	**0.707**
	ManSS1	0.847				
	ManSS2	0.843				
	ManSS3	0.832				
Non-Financial Performance			**0.774**	**0.783**	**0.870**	**0.690**
	NFP1	0.788				
	NFP2	0.818				
	NFP3	0.883				
Perceived Cost			**0.758**	**0.762**	**0.861**	**0.675**
	PC1	0.818				
	PC2	0.784				
	PC3	0.860				
Social Media Adoption			**0.811**	**0.812**	**0.876**	**0.639**
	SMA1	0.754				
	SMA2	0.811				
	SMA3	0.825				
	SMA4	0.806				

Table 3 presents the outcomes of the assessment of the Fornell-Larcker Criterion, which was supported by the heterotrait-monotrait ratio (HTMT) criterion. The discriminant validity explains which is "the extent to which a construct is empirically different from other constructs in the structural model" (Hair et al., 2018, p. 9). The results show that constructs satisfy the requirement for discriminant validity with HTMT values lower than the threshold of 0.85 (Henseler et al., 2015).

Table 3
Discriminant validity

Fornell-Larcker Criterion	**FP**	**IndCom**	**ManSS**	**NFP**	**PC**	**SMA**
Financial Performance (FP)	0.808					
Industry Competition (IndCom)	0.642	0.874				
Management & Staff Support (ManSS)	0.458	0.550	0.841			
Non-Financial Performance (NFP)	0.649	0.505	0.550	0.831		
Perceived Cost (PC)	0.505	0.536	0.606	0.528	0.821	
Social Media Adoption (SMA)	0.652	0.732	0.473	0.505	0.536	0.800
Heterotrait-Monotrait Ratio (HTMT)						
Financial Performance (FP)						
Industry Competition (IndCom)	0.773					
Management & Staff Support (ManSS)	0.552	0.656				
Non-Financial Performance (NFP)	0.865	0.621	0.690			
Perceived cost (PC)	0.656	0.667	0.760	0.692		
Social Media Adoption (SMA)	0.823	0.875	0.562	0.636	0.682	

Table 4 shows the factor loadings and item cross-loadings with the outcomes exceeding the 0.50 criterion (Hair *et al*., 2016).

Table 4
Loadings and Cross loadings

Indicators	**FP**	**IndCom**	**ManSS**	**NFP**	**PC**	**SMA**
FP1	0.788	0.686	0.489	0.469	0.507	0.608
FP2	0.799	0.354	0.256	0.532	0.323	0.440
FP3	0.834	0.459	0.323	0.583	0.362	0.500
IndCom1	0.519	0.888	0.492	0.430	0.483	0.631
IndCom2	0.495	0.896	0.521	0.444	0.474	0.584
IndCom3	0.653	0.837	0.433	0.446	0.447	0.690
ManSS1	0.377	0.471	0.847	0.474	0.499	0.408
ManSS2	0.295	0.393	0.843	0.431	0.434	0.275
ManSS3	0.445	0.495	0.832	0.470	0.563	0.462
NFP1	0.608	0.376	0.430	0.788	0.406	0.402
NFP2	0.485	0.416	0.444	0.818	0.441	0.393
NFP3	0.528	0.463	0.493	0.883	0.466	0.461
PC1	0.399	0.405	0.537	0.469	0.818	0.423
PC2	0.428	0.430	0.449	0.455	0.784	0.425
PC3	0.420	0.482	0.508	0.383	0.860	0.470
SMA1	0.524	0.515	0.418	0.399	0.416	0.754
SMA2	0.482	0.552	0.365	0.409	0.438	0.811
SMA3	0.537	0.603	0.361	0.420	0.403	0.825
SMA4	0.539	0.662	0.370	0.389	0.455	0.806

5.1 Structural assessment

Following the steps of Hair et al. (2018), a bootstrapping procedure was conducted to assess the hypotheses and the statistical significance of model relationships. The outcomes are presented in Fig. 2 and Table 5.

Table 5
Summary of path analysis

Paths	**Original Sample (O)**	**Sample Mean (M)**	**Standard Deviation (STDEV)**	**T Statistics (|O/STDEV|)**	**P Values**	**Decision**
Perceived Cost → Social Media Adoption	0.257	0.254	0.100	2.573	**0.010**	**H1= Accepted**
Management and Staff Support → Social Media Adoption	-0.153	-0.157	0.096	1.592	**0.112**	**H2= Not Accepted**
Industry Competition → Social Media Adoption	0.812	0.820	0.076	10.687	**0.000**	**H3=Accepted**
Social Media Adoption → Non-Financial Performance	0.633	0.631	0.045	14.092	**0.000**	**H4= Accepted**
Social Media Adoption → Financial Performance	0.838	0.837	0.041	20.557	**0.000**	**H5= Accepted**

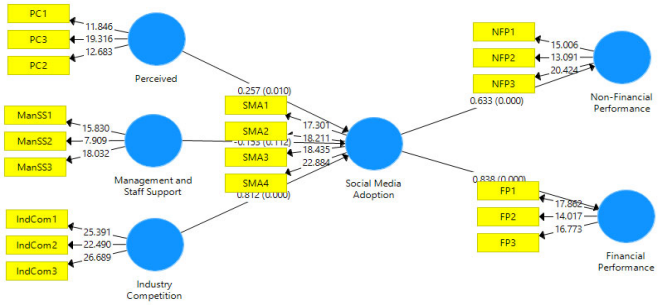

Fig. 2. A path model showing the constructs' relationships

The result, β=0.257, t=2.573, and p=0.000, indicates that perceived cost has a positive and significant relationship with social media adoption, thus, accepting H1. Yet, management and staff support were found not to have a positive and significant effect on social media adoption as β= -0.153, t=1.592, and p>0.112, hence rejecting H2. Industry competition also has a positive relationship with social media adoption since β=0.814, t=10.687, p=0.000, thereby accepting H3. Also, the result revealed that social media adoption has a positive and significant relationship with non-financial performance (β=0.633, t=14.041, p=0.000) and financial performance (β=0.838, t=20.557, p=0.000), thus, accepting H4 and 5, respectively.

6. Discussions

This study empirically investigates social media adoption and marketing performance by drawing insight from using the Technological, Organisational, and Environmental (TOE) theory. The study examined marketing performance from both financial and non-financial performance. The study tested five hypotheses and four were supported except one which was not supported. One hypothesis was tested in each of the TOE factors based on the context of the study and further proceeded to look at social media adoption on financial performance and non-financial performance also testing one hypothesis each.

One hypothesis was examined to reflect technological factors: H1: Investigating the influence of perceived cost on social media adoption by SMEs. The study found support (β=0.257, t=2.573, and p=0.000) for the relationship between perceived cost and social media adoption among SMEs. Perceived cost is considered one of the factors predicting social media adoption and three items were adapted from Odoom et al. (2017) and Qalati et al. (2021) to measure this construct. As in several studies (see, for example, Ainin et al., 2015; Odoom et al., 2017; Qalati et al., 2021), the perceived cost has been seen as significantly influencing social media adoption among SMEs. In the technological context, this study's outcome aligned with past studies on perceived cost (Odoom et al., 2017).

In the context of the organizational factor, this study investigated how management and staff support related to SMEs' adoption of social media: H2. The outcome of this study contradicted several studies (Ahmad et al., 2018; Abed, 2020; Qalati et al., 2021) that provided support for this relationship. Thus, this study did not find support (β= -0.153, t=1.592, and p>0.112) for the relationship between management and staff support and social media adoption among SMEs. To investigate this construct, three items were also adapted from Qalati et al. (2021).

Concerning the environmental factor of the TOE theory, the study examined industry competition: H3 as an environmental factor influencing the adoption of social media among SMEs. Consistent with various past studies (Ahmad et al., 2018; Qalati et al., 2021; Oyewobi et al., 2021) the study found support (β=0.814, t=10.687, p=0.000) for industry competition and social media adoption. Also, three items were adapted from (Ahmad et al., 2018) to perform the analysis of this construct. The study further proceeded to examine how social media adoption would influence non-financial and financial-marketing performance among SMEs. After performing the SEM analysis, the result for social media and non-financial marketing performance (H4) was supported (β=0.633, t=14.041, p=0.000). The outcome confirmed the results of previous studies such as Ainin et al. (2015) and Werdani and Djoko (2018). Three items were also adapted from (Ainin et. al., 2015) to perform the analysis.

Finally, the study also examined the influence of social media on financial marketing performance, H5. The outcome of the analysis showed support for social media adoption and financial marketing performance (β=0.838, t=20.557, p=0.000). The findings support past researchers (Ainin et al., 2015; Werdani and Djoko, 2018) claim on the relationship between social media and financial marketing performance. Three items were used to measure this construct was adapted from (Ainin et al., 2015).

7. Theoretical Implications

This study contributes to the academic scholarship by employing the TOE theory to investigate SMEs' social media adoption and their financial and non-financial performance from a developing country perspective, where there is a paucity of studies employing such a theory. Testing this theory in different contexts contributes to the generalizability of the concept and also the explanatory power of the theory of the various constructs. This would enrich the understanding and enhance the applicability of the theory. The study proceeded to investigate how the adoption of social media by SMEs influences financial and non-financial marketing performance simultaneously in a single study as compared with studies, which examine performance as one construct (see, for example, Ahmad et al., 2018; Tajvidi and Karami, 2021). This study differentiates how social media adoption can influence these two constructs at the same time which provides a better understanding of how social media adoption benefits SMEs. The management and staff factor which is associated with the organizational factor of the TOE theory did not find support for social media adoption. This is contrary to the numerous studies (Ahmad et al., 2018; Abed, 2020). This calls for more studies on the various constructs linked to the TOE theory since the outcomes may vary as seen in the case of this study. This would make the TOE theory more robust and benefits the social media and SMEs literature, particularly in the context of developing countries where the potential for social media adoption by SMEs is still in the infant stages.

8. Practical Implications

The study also has practical implications for owners/managers of SMEs, especially in a developing countries context. This study presents a good overview of the factors that would inform owners and managers of SMEs about the outcomes of adopting social media. The various factors of the TOE theory contributing to social media adoption are highlighted in this study for owners/managers to pay attention to and channel more resources into these areas. For instance, the study did not find support for top management and staff, which indicate that the decision to adopt social media in most SMEs depends on the owner or manager's approval. Without the approval of the owners/manager to adopt social media and support from staff, it would be difficult for SMEs to adopt social media. This information would let owners/managers of SMEs cognize that their support is very important if they want to benefit from the use of social media. This article also provides owners/managers of SMEs with insight into how a well-planned social media adoption influences their financial performance. For instance, the adoption of social media has been noted as increasing sales and eventually the profitability of the organization (Ainin et al., 2015). The result of this study, which demonstrated the relationship between SMEs' social media adoption and financial and non-financial performance, provides beneficial information for owners/managers of SMEs. The extant literature has documented the use of social media to engage and build customer relationships and loyalty (Ahmad et al., 2018; Abed, 2020; Qalati et al., 2021), enhance brand image and reputation, and facilitate the promotion of products and services (see, for example, Abed, 2020, and Qalati, et al., 2021). The study, therefore, unearths the positive relationship between social adoption and SME marketing performance in developing countries, particularly in Ghana.

9. Limitations and Future Studies

Although the study provided theoretical and practical contributions, it is without limitations. The first limitation is that the study focused on SMEs in the capital city of Accra and not the entire country. There are various SMEs across the country but the study was limited to Accra which makes it difficult to generalize the findings of the study. A future study could examine other regions of Ghana and a comparative study conducted. The study also selected one factor each linked with the TOE theory in relation to the context of the study. Since the TOE theory has several other factors linked to the theory the study encourages future studies to study other factors linked to the theory apart from the current factors examined under each of the TOE factors. Finally, the study used a quantitative approach, a mixed-method is recommended for a more in-depth understanding of the issues of social media adoption among SMEs in developing countries.

10. Conclusion

The study employs the Technology, Organisational, and Environmental (TOE) theory to examine SMEs' social media adoption and financial and non-financial marketing performance in Ghana. This study contributes to the understanding of SMEs' social media adoption and marketing performance literature from the context of a developing country. The findings of this study would serve as a guide to SME owners/managers to plan and execute their social media adoption in such a way that would allow them to enjoy the total benefits of social media adoption in their enterprises. This study also serves as the foundation for future studies to be conducted using the TOE theory in a similar manner to enhance the robustness and the generalizability of the TOE theory.

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Appendix

Survey questionnaire

		Technological Factors
		Perceived Cost
1	*PC1*	Using Twitter/Facebook helps me to reduce the cost of Communications for marketing.
	PC2	Using social Media helps us save costs associated to Marketing, branding and Customer Service
	PC3	For us, Twitter/Facebook is more cost-efficient than Conventional media
		Organisational Factors
		Management and Staff Support
2	*ManSS1*	Management and Staff are very keen in adopting social media
	ManSS2	Social media adoption is given a top priority by Management and Staff.
	ManSS3	There is total support by Management and Staff when it comes to social media adoption.
		Environmental Factors
		Industry Competition
3	*InDCop1*	The use of social media will give our business a greater competitive edge.
	InDCop2	We would be able to outperform our competitors through the use of social media
	InDCop3	The use of social media would allow us to be ahead of the competition
		Non-Financial Performance
5	*NFPCuSat1*	The use of social media has increased customer satisfaction in our organization
	NFPBd1	The use of social media has helped us to build a strong image in our market
		Financial Performance
6	*FPSG*	Adoption of social media has increase our sales growth
	FPP	Adoption of social media has increased our profit
		Social Media Adoption
7	*SMA1*	We would lose customers to our competitors if we not adopt social media in our organisation
	SMA2	We would continue to use social media for all our business activities
	SMA3	My organization would use social media instead of the traditional printed ads