

Impact of Social Media Usage on Performance of Small and Medium Construction Businesses (Smcbs): A Conceptual Framework

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Abstract

Many small and medium construction businesses are currently building and keeping social media pages in order for their enterprises to be visible to the public to improve their social interaction, promote business interest, build trust and relationships with their targeted audience on social media. The growth as well as the usage of social media amongst organizations cannot be overemphasised. However, there is no any known research that has investigated the impact of social media usage on the performance of SMCBs in Nigeria. This paper adopts desktop research approach which affords the researcher opportunity to obtain basic information that can be used as benchmark in process of further research. Therefore, the paper presents a literature review of past studies relating to impact of social media usage on business with specific attention on the construction organisation. The research approach assists in identifying constructs that reveals three aspects of organisation's physiognomies that impact the process of espousing, implementing and using technological innovations in conducting businesses. Literature findings on the relationship

between these constructs form the basis for the development of a conceptual framework that will serve as foundation for further empirical research targeted at quantitatively indicating the nature of relationship that exists among the constructs and their combine impact on construction business performance in the context of the Nigerian construction industry..

Introduction

Continuous revolution in information and communication technology systems has made it tough for organizations most especially in the construction industry to adjust themselves to the dynamics of the market. In fact, it becomes more challenging to introduce innovative ideas through research and development, because of changes in the attitudes of consumers which develops much quicker (Palacios-Marque´s, Devece-Caran˜ana & Llopis-Albert, 2016). SMCBs is known as one of the key contributors to the developmental process and growth of any nation. In spite of this main role in nowadays' global economy, they are faced with difficulties in adopting a new technology. Even though the uprising of internet and communication network has transformed the way people conduct business today, SMCBs still encounter barriers in accepting new technologies in doing business (Dahnil *et al.*, 2014).

Therefore, to keep pace with the changes in the business environment and to reach out to potential customers, many SMCBs have taken to social medial. Social media is the meeting place for a huge pool of consumers. Hsu (2012) viewed social media as the repository of consumer information and acts as channel for disseminating information to build market presence.

In last decades, the evolution as well as the usage of social media amongst organizations cannot be overstated and it has gained wider acceptance in today's business environment. The degree of choice and the level of interaction individual experience on the many social media platforms has influenced the way business is done in the contemporary business world. Parveen, Jaafar, and Ainin (2016) regarded social media, social networks, blogs and online communities as combined concepts within the philosophy known as Web 2.0 and these tools according to Sigala (2009) enable the formation of computer-mediated social networking and internet users' relationship. Gopakumar (2017)

argued that many organizations use different platforms of social media to assist in business development and to improve their performance. This is a paradigm shift in the strategy SMCBs adopt in conducting business in hyper-competitive construction business environment across the globe because of the fast spread and acceptance of social media by the general public and particularly the consumers. These platforms afford organizations the opportunity to explore the positive potentials of internet by shifting their attention to e-commerce and online transaction to achieve optimal performance.

According to Golden (2010) social media platforms are classified into two types based on ownership such as: firm sponsored or individual publications (e.g. blogs) and third-party forums (e.g. Facebook, Twitter and LinkedIn). While Scott (2014) and Grahl (2015) classified social media into six types based on the main activity of the platform which includes: Social networks: Facebook, LinkedIn, Google+; Media sharing: YouTube, Instagram, Pinterest, Flickr; Microblogging: Twitter, Tumblr; Blog Comments and Forums: Blogger; Social news: Reddit and Bookmarking site: Delicious, StumbleUpon. These platforms perform different function and it has been employed by different individual or organisation for different reasons to assist their business growth.

According Perera *et al.* (2015), the usage of social media has gone beyond individual or private usage in the contemporary world; it is adoption and implementation has been extended to business to improve visibility and sales. This is owing to the fact that social media enables two-way communication between potential clients and the business organizations (Parveen et al., 2016). However, evidence exist in literature (Harris & Rea, 2009) that business outfits that leverage on the benefit of social media technologies that are up-to-date may likely outperform their competitors by enjoying benefits such as lower costs and improved efficiencies. Whilst experiencing adoption barriers, employing social media marketing by SMCBs may possibly bring forth a huge opportunity that can change the shape and nature of its business across the globe. Therefore, the study presented here reviews relevant literature on the impact of social media on the performance of construction business, identify the constructs that are capable of influencing performance and develop a conceptual framework that could be tested empirically.

Literature review

Previous studies on social

A number of studies have been conducted across industries to establish the influence of social medial on performance of organisations. Some of the studies

examined how and why the usage of social media play an important role in the mind of consumers and significance of social media in the global market explosion in recent time (Kaplan, 2012; Michaelidou *et al.*, 2011; Mathew Mount, 2014). Dahnils et al. (2014) examined the factors influencing social media marketing adoption in SMEs and organization in Malaysia which afford them the opportunity to establish a balanced image of the present state of global social media marketing adoption research. Also, Berthon *et al.* (2012), Kusera (2012) and Jussila *et al.* (2014) examined both the tangible and intangible advantages of social media in achieving effective marketing and their impact on the consumers decision making process. According to Parveen et al. (2016) many of the studies on the usage of social media focused on individual perspective while only a few are based on the organizational perspective. In spite of this, only limited number of studies have explored the actual influence of social media usage on organizational performance. For instance, Parveen *et al.* (2015) explored the impact of social media usage on organizational performance and findings indicated that social media has a greater impact on the performance of organizations in terms of enhancement in customer relations and customer service activities, improvement in information accessibility and cost reduction in terms of marketing and customer service. Also, Perera *et al.* (2015) explored the usage of social medial within the construction industry using a case study. The findings of the study indicated a very low usage of social media within the construction organisations. It was further argued by Perera *et al.* (2015) that despite the business potential of social media for construction business, the social media platforms were poorly appreciated by the employees and its benefit is undervalued. This assertion inferred that like all other industries, the construction industry can equally benefit from the tools and strategies that are used on social media to increase their competitiveness and returns.

Social media and small construction businesses

It is a general believe that the continuous advancement in information technology has enduringly transformed the approach with which businesses are conducted nowadays. This is simply because organisations now operate in a digital phase, where business are no longer been confined to a building or market. The construction industry is quite distinct to other industries due to its fragmented nature which makes it hyper-competitive in way that construction

business organisations have to outperform competitors to ensure survival in the turbulent construction environment (Oyewobi 2014; Oyewobi, Windapo & Rotimi, 2016). However, changes in the global way of doing business has increasingly challenged the operators within the construction industry to be more innovative in order to meet the demands and needs of construction clients while improving their competitiveness in active and harsh markets (Sexton & Barrett, 2003).

Social media has been identified as an innovative tool for doing business and as such is becoming increasingly indispensable for businesses (Trainor *et al.*, 2014). Its importance was entrenched in research conducted and published on the website of the eMarketer (2016), which made it obvious that the worldwide expenditure on social media marketing stood at US\$32.97bn in 2016 with an expectation of possible increase to 72 per cent by 2019. This implies that business organisations have begun to appreciate social media as a fundamental tool for conducting business (Kietzmann *et al.*, 2011). However, Ahmad *et al.* (2018) reported that evidence exist in literature that suggest the need for small and medium businesses to embrace technological innovations such as social media at the appropriate time in a way that will assist them remain competitive and achieve optimal performance at market level. Earlier researches (Siamagka *et al.*, 2015; White, Kenly and Poston, 2016; Ahmad *et al.*, 2018) that focused on the usage of social media in businesses reported that social media has many benefits to offer organisations. This was corroborated by Durkin *et al.* (2013) who posited that although SMEs are often deficient in having required resources for traditional approach to managing business, but they can benefit from the usage of social media as alternative business management tools.

In the same vein, construction businesses (SMCBs) have started exploring more effective ways to improve the competitiveness and sustains their growth opportunities (Flanagan *et al.*, 2007; Keung & Shen, 2017). Recent amongst the strategies being used by SMCBs to improve their efficiency is the usage of social media because of the numerous advantages it offers. This assertion is underscored by Altimeter (2015), Li and Solis (2015) who believed that social media is a social business strategy that allows organisation to integrate social media into business objectives and goals. Social media has changed the way businesses are conducted. It enables open communication which helps organizations to understand customer needs and also motivates organisations to proactively respond to customer needs in an efficient manner. Another

important feature of social media is that innovation can be encouraged by monitoring customer communications, feedback, and opinions (Matuszak, 2007; Tapscott and Williams, 2006). This is achieved by SMCBs through the use of their social media accounts to post their construction questions, as well as crowd-sourcing endorsements such as which firm to engage, best business strategies to adopt in winning a new construction or new bids. Also, construction organisations can use their social platforms to showcase their output/product, offer updates and harvest useful insights from clients through feedback on their current and past projects. This is in tune with the suggestion of Broughton et al. (2010) who stated that specialist on social media recommends that social media must be encouraged in working environment for better results.

Theoretical Background and Conceptual Framework

A plethora of theories have contributed to the research on how transference of innovative concepts from other industries could impact on performance of organizations operating within the construction industry. Strong amongst these theories are the Diffusion of Innovation Theory, Technology-Organization-Environment (TOE) and Resources Based View (RBV). These theories are explained in brief within this paper and how it informed the study is also highlighted.

Diffusion of Innovation Theory

According to Venkatesh, Morris, Davis and Davis (2003), the diffusion of innovation theory (DOI), is applied to marketing and business, and its adoption often refers to the purchasing of a new product and it plays a very key role in increasing actual adoption of a technology and its subsequent intention. Different definitions of innovation exist in literature and this is hinged on the field and how innovative ideas occur in practice. For instance, in manufacturing industry, innovation is seen as a practical application of one or some of invention into a product or process that can be marketed (Jokioinen & Suomala, 2006). However, within the construction industry, UK Department of Trade and Industry (2003) defined innovation as the successful utilization of new concepts or philosophies which is central to confronting challenges through investments in new processes, products or services and using novel approaches of doing

business. Innovation by definition includes change, either in the media we use or the means by which we engage a traditional process (Parveen, 2014).

According to Akça and Özer (2014), diffusion involves a process of bringing new ideas, application, product and technologies (innovation) through a particular passage between the members of an organisation. Diffusion of innovation theory describes many exogenous factors that affect decision on usage of information technology innovation and stated that diffusion of innovation a significant determinant of organisation's success (Rogers, 2003). Proponents of diffusion of innovation theory argued that an organisation will only consider a technology to be innovative if it is considered to be new, relevant and advantageous in terms of convenience, economic, social, prestige and satisfaction (Zaltman, Duncan, and Holbek 1973; Rogers, 1995). However, Rogers (1995) emphasised that how organisation adopts or retain innovation is dependent on 28 attributes classified under main five characteristics: relative advantage, compatibility, complexity, trialability and observability.

In spite of the contribution made by this theory, it has not escape criticism from researchers. For instance, Parveen (2014) asserted that theory ignores the social context of information technology adoption in organisations which makes to be regarded as unsophisticated in addressing issues of societal context in which the acceptance and diffusion of information technology occur. In fact, Du Plooy (1998) argued that diffusion of innovation theory failed to understand both environmental and organizational setting required for information technology implementation to be a success.

Technology-Organization-Environment (TOE) Framework

Considering the failure of diffusion of innovation theory to take into cognisance the environmental and organizational context which is a potential recipe for successful adoption of information technology. This study considers TOE model developed by Tornatzky and Fleischer (1990) to complement the diffusion of innovation theory (DOI). This simply because the TOE model is in tune with the Rogers' (1983) DOI theory as both theories place premium on internal and external characteristics of the organisation, along with technological characteristics necessary to drive new technology adoption and diffusion (Ghobakhloo, Arias-Aranda, & Benitez-Amado, 2011). The weakness of DOI as stated by Du Plooy (1998) and Parveen (2014) is about the environmental and organisational settings for the adoption of innovation,

whereas TOE model draws its strength from three key aspects of an organisation's features specifically technological, organizational and environmental. These features are considered to have impact on the process of adopting, implementing and applying innovative ideas through technology (Parveen, 2014).

While the TOE model has been criticised for its failure to offer an inclusive model required for explaining the factors that impact on the adoption of IT decision-making within organizations in spite of its ability to successfully classify the adoption factors in their respective context (Bose & Luo, 2011). The technology-organization-environment theory's main contribution has been to encourage researchers to broaden the context on IT adoption in organizations (Jokonya et al., 2012).

Resources Based View (RBV)

The two theories discussed above; DOI and TOE have succeeded in setting the pace for the adoption and retention of technology without a clear explanation of how innovative ideas such as social media may influence the performance of organisations. Although social media has been seen from diverse theoretical viewpoints as obtained in literature (Tajvidi & Karami, 2017). Some of these theories are either founded on adoption of social media at the individual level or organizational level (Schaupp & Belanger, 2013). They have not been able to explain the linkage between innovative ideas (social media) and organisational performance. Hence, the relationship between innovation diffusion, adoption and organisation's environment to yield improved performance; Resources Based View (RBV) theory has been proposed by researchers (Barney, 2001).

Recently, RBV concept has been employed to assist in laying the foundation for the association between social media and their value for organisations. The RBV theory underpins the postulation that the ability of an organisation to achieve sustained competitive advantage is hinged on its application of the bundle of productive resources (Barney, 2001; Wernerfelt, 1984). This is because the proponents of the theory considered organisation resources and capabilities that are valuable, rare, inimitable and distinctive to be an essential source of competitive advantage and superior performance (Barney, 2001; Peteraf, 1993). However, Li and Ling (2012) argued that the cause of sustainable competitive advantage rests solely on the internal capacity of an

organisation to effectively exploit and restore distinctive organisational resources, rather than focusing on positioning the organisation in the right industry niche. The capability in this context denote the proficiency of an organisation in making judicious use of its resources and assets advantageously. Meanwhile, for organisation to achieve sustained competitive advantage, it must be able to implement IT and innovations in a way that cannot be imitated. Social media thus, offer organisation the chance to maximize advantage accrued from an organisation's IT resources and networking capabilities to improve its performance by reducing marketing cost, improve customer relationships, enhance business image and competitive advantage (Molla and Heeks, 2007; Trainor et al., 2014).

Conceptual framework

The focus of this section is to explain the concepts adopted by this research to make obvious the linkages between the main constructs identified in literature that will explain how social media could influence organisational performance with regards to the current discus in the construction management field. Consequently, a conceptual framework is developed to provide the needed understanding on the issues relating to the organisation business orientation, social medial usage, organisation learning capability and performance could be disentangled. The conceptual framework presented here shows the alignment of the researcher on how the problem being examined is conceptualised in order to give direction to the study by showing the interrelationship proposed between the constructs. The constructs included in the framework and their relationships would be discussed in brief to provide a better understanding of the conceptual framework given in this paper as indicated in Figure 1.

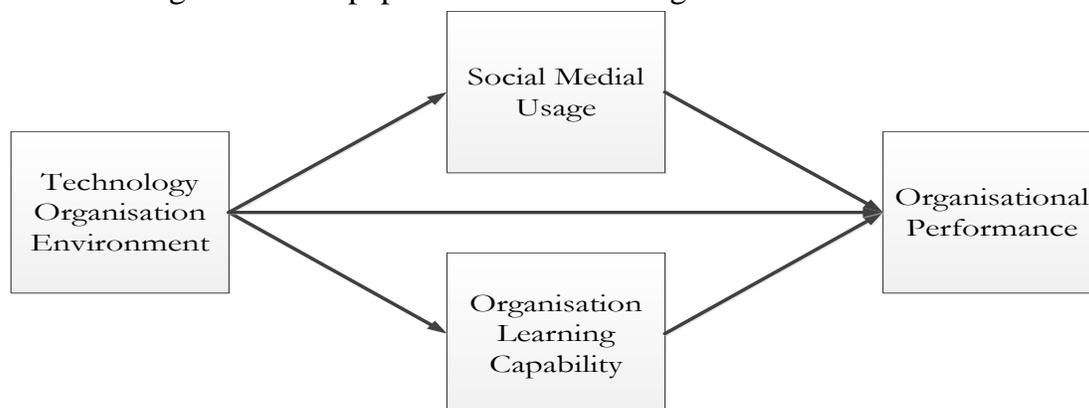


Figure 1: Conceptual Framework

Technology, Organisation and Environment

This current research engaged a number of theories to show the connectivity and relationships amongst the construct presented in the conceptual framework. For instance, complementarity of TOE model and DOI could be used to explain the impact of social media adoption on SMCBs performance. TOE model is more positioned in explaining the environmental context in which SMCBs operates which could not be explained by DOI. According to Rogers (2003), there are five technological features of innovation adoption that must be present within an organisation. These are relative advantage, compatibility, complexity, trialability and observability which argues that organisation will only adopt new technology if it is considered to be advantageous, consistent with organisations existing technology, easy to use, has visible advantage and very easy to put into test before usage respectively (Rogers, 1995). However, there are incongruences in the outcome of previous studies on how each of these features influences technology adoption, then performance (Teo & Pok, 2003; Valenzuela et al., 2009). Organisation in this context refers to the internal environment of a company that could impact on the adoption of new technology (Ahmad et al., 2018). This study therefore, argued that organisation depicted by top management is very important in the adoption and implementation of new technology by creating enabling environment that is conducive for the implementation of innovative ideas (Ahmad et al., 2015; Ahmad *et al.*, 2018). Meanwhile, environmental issues define the climate within which organisations operate which exerts pressure on organisation to remain competitively relevant within the industry. Hence, combination of TOE and RBV theories suggest that organisational performance could only be influenced when there is a fit between structure of the organisation and the environmental contingent factors (Oyewobi, 2014). This underscores the assertion of earlier researcher (such as Hartmann, 2006) that the focus of these theories could also outline the opportunities for effective and efficient organisational performance through the adoption of innovative ideas such as social medial which is capable of altering organisation's business strategies in responding to market threats. However, the paper argue that business environment could either have direct relationship with performance or the have the relationship being mediated by social medial usage and organisational learning ability.

Social medial and organisational performance

Researchers such as Parveen *et al.* (2015; 2016) have emphasised that the usage of social media has grown enormously among organizations. However, there is paucity of research that actually examined impact of social media usage on organizational performance. In recent times, organizations across industries have started developing and maintaining public pages on social media to enhance their social network relationship, promote interest in their organizations, and build trust with the online public Parveen *et al.* (2015). Previous researches have shown that internet usage exhibits positive impact on organizations in many areas and capable of providing strategic benefits to organisations in terms of reduction in cost, generation of revenue, enhancing innovation and effectiveness of managerial (Teo & Cho, 2001; Anderson, 2001). Specifically, Ferrer *et al.* (2013) examined the use of social media technologies in growing business and found that positive relationship exists between the social investment of an organization and in turn impact on organisational performance. In the same way, Rodriguez *et al.* (2014) also reported that social media usage within an organization could positively influence the customer-orientated process, therefore, impacts the performance of an organization. It can therefore, be argued that social medial has positive influence on organisational performance.

Organizational Learning Capability

Organizational learning capability has been measured using myriad of indicators or construct. For instance, Chiva and Alegre (2009) measured organizational learning capability using five dimensions experimentation, risk-taking, interaction with the external environment, dialogue, and participative decision making and conclude that these dimensions is positively related to superior financial and/or market performance. Zahra and Covin (1995) asserted that proactive businesses often experiment to create competitive advantage by being the first to market with a product or services, this will permit the organisation to establish brand recognition that is strong and gain customer loyalty ahead of competitors. Organisations that are innovative can interact with environment by introducing new products and technologies, to achieve improved economic performance which in turn becomes the power house of business growth (Covin *et al.*, 2005). Construction organisations have been tasked to be more proficient at successful innovation to better meet client needs

through dialogue with employees and encouragement of free and open communication to engender teamwork. This approach often results to enhance business competitiveness. However, Wiklund and Shepherd (2005) argued that the link between risk taking and performance are not easily seen, but evidence in literature suggest that risky business strategies may lead to performance differentials while proven business strategies may lead to high mean performance. This study lays foundation for hypothesis that will be tested by future research to establish the nature of relationship that exist between organisational business orientation and performance.

Conclusion

This study has been able to unravel how social media could contribute to improved performance of organisations and it has also identified the latent variables that could enhance sustained competitive advantage. However, the paper only presents a conceptual approach which has been tested to assist in drawing inferences. This is a major limitation of this paper. The paper addresses the impact of social media usage by SMCBs and to have a better understanding of the concept, the study draws strengths from three theoretical perspectives the DOI, TOE and RBV. Although, social media adoption and application has received substantial consideration from researcher in the mainstream management, but the same attention is lacking within the construction management research. Hence, the impact of social media adoption by construction businesses, particularly SMCBs, remain unknown. Most of earlier studies have focused more at the individual or large organisational level of adoption with few attentions on small and medium sized businesses. This study thus presents a conceptual framework to be tested in future. It is believed that the study presented in this aper will provide a good foundation for further work on how social media adoption could impact on the performance of construction businesses.

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