IMPACT OF SOCIAL MEDIA ON CONSTRUCTION SMEs BUSINESSES IN ABUJA

ABSTRACT

Since the advent of social media in the early 2000s, its influence on the day to day life of people has impacted the way they conduct businesses. The construction industry is not widely perceived as innovative and collaborative as many other industries. The global construction industry is trying so much to change the perception with several short- and long-term strategies. Over the last few years, social media has changed the face of our personal interactions, with an unprecedented rate of adoption that outpaces previous innovations. Social media tools are intuitive to use and allow people to share information, collaborate, discuss common interests and build business relationships. Social media has influenced the corporate and business world as well, today there is an increase in the number of construction businesses joining the social media platforms. They are spending considerable amount of their time, energy and money to build and maintain their social media public pages to improve their standing in both local and global business space. This phenomenon is a relatively new invention to the global business environment, hence the limitation to the studies conducted in this area, majority of them are based on individual' perspective. This research study focuses on the positive impact of social media on construction industry businesses and its influence on promoting better marketing platform and business relationships. Using both the quantitative and qualitative means, this research study strives to find out how social media has or can further benefit construction product and services organization in optimizing their overall performance through the appropriate usage of this internet phenomenon. However, this research study focuses only on the positive aspects of social media and it's in depth reach with the customers, suppliers, manufacturers and competitors. This research assesses how social media has been beneficial to the sale and promotion of construction materials, product and services of some organization in the Regional building material market Dei Dei Abuja FCT. Through the questionnaires and semi structured interviews conducted with various respondents in the construction or building material organization we find out how social media has been utilized to foster better business development and establish business relationships with customers and suppliers of construction materials such as doors, tiles, roofing sheets, Laminate sheets for wood work, plumbing materials, paints, Plaster of Paris materials, machines, building technology equipment etc. The results obtained through this study show that social media has been able to positively impact the construction organizations in improving their visibility, enhanced customer service, better relationships within the industry and have above all, improved the organizations' communication with the global construction businesses.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The construction industry is a major and important contributor to Nigeria's economic growth. It plays an undisputed prominent role as a large employer of people; and also contributes 4.08 per cent in absolute value to the country's Gross Domestic Product in the first quarter of 2020 (National Bureau of Statistics [NBS], 2020). The sector provides an abundance of economic opportunities for SMEs to grow; with abundant business benefits for consumers. SMEs are perceived to be the mainstay of the economy of each country. As a result, governments across the globe are making numerous innovation efforts to enhance the effectiveness of SMEs in order for them to be able to participate more effectively and take advantage of the new business prospects.

However, the world of construction is growing rapidly on a daily basis and competition is becoming more intense. The needs and demands of construction clients are also becoming more sophisticated (Yeshwanth, 2017). As a result, the entire construction industry is under increasing pressure to provide a range of services that are innovative in nature and add value. This pressure is due to the responsibility placed on owners of organizations to map out survival strategies for their businesses in a rapidly changing and hyper-competitive construction business environment (Oyewobi, 2014).

Owning to this, organizations, most especially the SMEs operating within the construction industry have begun to innovate to continuously adapt to the complex and changing business environment (Asad et al.). This is because innovation is considered to be a veritable instrument for improving the competitiveness of organizations by implementing innovative ideas that can reduce the cost of doing business and ensure the continued existence of the organisation. Innovation and creative ideas are generally

recognized as a prerequisite for any competitive advantage. In fact, innovation will not benefits individuals, organization but a society at large and is closely linked to any country's economic growth (Seaden et al, 2003). In addition, innovation contributes to the growth or effective launch of new products or services by bringing changes to organizations through the productive use of novel concepts (Dodgson et al., 2002; Gann, 2004).

However, most companies have since taken the social media as a way of keeping up with developments in the market climate and targeting future customers. A huge pool of customers interacts with the social media. Hsu (2012) viewed social media as a customer information repository and serves as a platform for disseminating market presence information. Today, social media platforms rapidly shift the way company and public relations interact. The focus of these current internet channels has been changed from being consumer-based, to being engaging and relational, thus creating new avenues for engagement between organizations and the public (Henderson & Bowley, 2010). Social media through technological advancement enables individuals to compete better in the market and specifically use social media for managing business operations. In social media, information generated by users will be shared through reviews in real time and customer communities to help business processes (Constantinides and Fountain, 2008). It thus assists businesses and customers in manufacturing products together (Parise and Guinan, 2008). The findings of Bernoff and Li (2008) suggested that businesses employ social media technology in every industry sector, including sales and marketing, customer support, and business development, as well as R&D, and business innovation. Organizations that do not engage in social media and ignore the social media opinions of consumers would be at high risk (Evans, 2008; Sin *et al*., 2012). In addition, efficient networking is an important part of success for every company (Kelley, 2010). In fact, it

has been recognised that social media is an essential tool for businesses (Trainor et al., 2014). In spite of these benefits, there is no evidence that construction SMEs particularly building materials merchants have fully tapped into this opportunity to remain competitively relevant in the turbulent environment where they operate. To this end, this study examines the influence of social media usage in improving SMEs' businesses.

1.2 Statement of Research Problem

Despite improved social media adoption by many organisations, strategic management as well as IT researchers and business managers are still finding it difficult to appreciate the impacts of these new applications in enhancing organizational business processes. However, few studies have shown that the benefit of embracing social media in organizations outweighs an objective understanding of their usage and why they can change specific processes of the organization (Ogaro, 2014). The use of social networking is gaining more attention, and the way people exchange information around the world is being affected. The influence of social networks on businesses is therefore more and more prevalent, ranging from the economy, marketing to the social, and education (Pookulangara & Koesler 2011).

Social media is now a marketing tool. However, there is still a lack of assessment on how an investment in social media will be of benefits to organisations that adopts it. Different studies have examined the use of social networks adoptions by organisations and found that there were many advantages (AlSharji et al., 2018). While previous studies have shown how social media influences businesses most especially hospitality business (Tajvidi, & Karami, 2017), the impact of using social media on the results of SMEs in the construction industry is limited in empirical research.

Almost a few of the latest research focused on the way SMEs use social media platforms, considering its growing importance and potential value for SMEs (Durkin et al., 2013). However, only a few researchers have analysed the implementation of social media to enhance corporate operations and its effect on company competitive advantage in general (Ainin et al., 2015). Few research efforts have examined and provided little information concerning the potential barriers or obstacles as well as drivers to the adoption of social media by SMEs in many sectors (Fatairy, 2013; Jandal, 2013; Al-badi, 2014) yet nothing is understood about its impact on the performance of construction SMEs particularly in the Nigeria. Durkin et al. (2013) found that SMEs can benefit in particular from the use of alternative management instruments such as social media because of a lack of resources for conventional forms of management. This supported by Trainor et al. (2014) who posited that social media enhance capabilities of SMEs to improve their performance.

Despite the enormous benefits of social media for businesses, there are no any known empirical studies that have examined how Social Media adoption can affect the performance of SMEs in construction. This study intends to bridge this gap in literature by focusing on building materials merchants use of social media and how usage of social media can be valuable for their sustained performance.

1.3 Research Questions

In order to achieve this, the following research questions would be answered by this study.

1. What tools are currently being used by the organizations that employs social media to promote business?
2. What effect does social media have on business-to-to-business (B2B) relationships?
3. What are the determinants of social media usage in organizations?
4. What is the impact of social media usage on organizations performance?

5. To develop a model for enhancing the adoption of social media model to improve organizational performance.

1.4 Aim and Objectives

The research aimed at examining the impact of social media on the construction SMEs performance with a view to develop a model for improving construction businesses.

Research Objectives

The following research objectives have been identified:

1. To identify the most widely used social media tool in the Nigerian construction industry.
2. To examine how social media usage enhances business to business (B2B) relationships
3. To identify and examine the factors influencing the usage of social media by organizations
4. To assess the impact of social media usage on organizations performance.
5. To develop a model for enhancing organisational performance through the usage of social media.

1.5 Justification of the Study

Since social media has come to be a very close associate with the wider public, it's now often widely used as an effective instrument for individual customer contact. Many organizations make use of the established order of social media to increase and improve their business position in the industry. Despite of the quantum of studies on social media implementation in organisations, it has not been able to fully assess its overall effect on companies and how businesses use social media to achieve their business goals. Most of the research conducted focused on social media's benefits, barriers and responsibilities to organisations without discussing their specific influence on organisations. As a result, this

study adds to the existing literature on the point to which construction SMEs use social media and its impact on overall company objectives.

The study sought to explain how social media has motivated and modified consumers in terms of their desires and preferences about their goods and services. This study will allow stakeholders and organizations to better exploit and improve awareness of their dynamics and to better mitigate the challenges they are confronted with in the turbulent business environment. This allows company managers greatly to consider the real difference between the involvement of the social media and the business organisation. The study allows managers to recognize that this will go a long way in growing the business experience and client base by offering adequate support from leadership and clarity of vision with low investment and assured long term returns. The data obtained from this study can also be used and used by future researchers to examine more problems in the social media and in contemporary entrepreneurship and in society as a whole, and such work acts as a guide for both academics and practitioners.

1.6 Scope of Study

The study is centred on the effect of social media on construction SMEs businesses with a focus on construction materials merchant in Dei Dei regional market in Abuja. This is category of businesses were selected because many of the organizations have embraced and incorporated the usage social media into their business to enhance visibility and patronage of prospective customers by setting up a social a contact point on internet for its customers and stakeholders. The research focused on the way businesses use social networks help in growing their businesses, their benefits and their implications for consumers and stakeholders. The researcher focuses on the effects of social media in the construction market circle, as well as its positive effects on overall organizational performance.

CHAPTER TWO

2.0 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Brief Overview of Social Media

The amount of academic research on the effectiveness of social media in the workplace is increasing, particularly on organization effectiveness. Social media is being investigated and studied for their impact on marketing in the past (Kaplan, 2012; Michaelidou et al., 2011; Mathew Mount, 2014). The factors that aid the smaller companies in taking advantage of global social media usage were studied by Dilsand et al. (2014). Berthon et al. (2012), Kaas et al. (2012) and Jussila (2014) examined both the tangible and intangible aspects of the consumer-targeted impacts of social media in getting a message across. Most research has been done on individual usage, whereas only a few on the impact of social media within an organization. To this end, few researches have evaluated the role of social media in workplace performance, with results that were mixed. Conversely, in their work on this study, Parveen et al. (2015) demonstrated that social networks have a greater impact on client services and accessibility, while showing that it can help improve the effectiveness of marketing and advertising. Researchers have observed the usage of social network sites in the construction field in a research project described in a case study by Perera et al. (2015). Only a small percentage of construction organizations were found to be using social media. A significant consideration was added by Perera et al. (2015) who argued that despite the strong business opportunities that is present in social media, the employees do not fully grasp their social value. This was inferred to be the way all industries could benefit from the same tools and strategies for competitive advantage in the social media age.

2.2 Social media usage

As explained by Parveen (2016), the system-use is an important step in the system-to-value-development pathway that connects the system's goals to the capabilities of technology with construct to various outcomes of research. Social media is described as being used for marketing, dealing with customers, as well as customer service, and for the general dissemination of information.for marketing, customer relations and services and accessibility of information in organizations.

2.2.1 Customer service and services on social media

By providing a two-way communication, information technology has changed how consumers and organizations interact dramatically, as discovered by Hoyer and MacInnis (2010). By using social media websites, businesses have the capacity to benefit their current clients and connections, and deepen their connection with prospects. Additionally, the way business is done by businesses and the world in general has changed due to social media (Mersey et al., 2010; Leeflang et al., 2014; Patino et al., 2012; Schulz and Peltier, 2013).

Mangold and Foulds (2009) state that buyers use social media as a service, which provides real-time connections, but in order to search for company information as well as products and promotional strategies. These audiences are more knowledgeable than ever; therefore, businesses must be present and accessible on any platform, including Blogs, Facebook, and Twitter at all times, and every point in the day. some businesses claim that clients can get negative vibes from their customers quickly reacting (Gordhamer, 2009; Bughin, 2015). It involves establishing customer relationships in the digital world, interacting with customers, managing customer operations, acquiring new customers through social media, and planning for potential upgrades in the digital world.

2.2.2 Social media for marketing

Research reveals how many different channels customers and businesses can interact, such as using social media sites like Facebook, YouTube, or Twitter to boost a brand's image (Gironda and Korgaonkar, 2014; Kim et al., 2014; Muk and Chung, 2014; Smith et al**.,** 2012**).** The newest technique of 'TVSensing' allows us to meet our customers at the lowest possible cost, as we know where they are already based, while also helping to build new customers as we don't restrict our sales and promotion efforts to a geographic region (Pradiptarini, 2011). Caruso (2016) found that using social media to monitor competitors' actions helped grow their company, particularly with regard to limits and various approaches to grabbing new customers.**A**round 60% of advertisers are using video-supported social media to market goals, and growth of market numbers continues to be a driving force for their current use of the live video spilling phenomenon, according to the Stelner (2016). Similarly, tactics such as engaging with consumers by posting creative content on social media and soliciting useful criticisms encourage search engine traffic (Dane, 2016). In recent years, it has become clear that the job of advertising and promoting goods and services on social media now includes selling and publicizing a brand and doing research for products and services.

2.2.3 Social media use for the purpose of information access

A company can gain greater access to consumer information through social media, new trends, manufacturing data, and product reviews, as well as people's ideas, expectations, issues, needs, and concerns. Twitter provides an efficient method for an organization to share its operations knowledge (Parveen et al., 2013; Parveen et al., 2016). In the context of digital marketing, Chang et al. (2016) contend that social media offers a very real opportunity to help generate a word-of-of-mouth proposal and, particularly in that context, word-of-of-of-mouth has limited power. There are some shoppers who would do

a search social media networks to determine whether to buy a particular product before making a decision (Gruen et al., 2006; Erkan, 2014; Leung and Baloglu, 2015). Additional elements such as icons, video and photographs may be used in electronic discussions (Velazquez et al., 2015). General information scan, information on competitors, as well as customer knowledge extraction, have been discussed in other articles by (Parveen, 2014).

2.3 Social Media and Small Construction Businesses

Increasingly information technology is continually transforming the way businesses are conducted. Because organizations are operating in a digital era, in this manner makes business sense. During the present times of great economic turbulence, the construction industry is quite distinctive for the same reason that having an enterprise must compete with other construction businesses to succeed: they have to outperform each other to ensure their own survival (Oyewobi 2014; Oyewobi, Windapo & Rotimi, 2016). Technological advancements have become a challenge for construction companies in both domestically and globally (Sexton & Barrett, 2003).A social media business tool has been deemed to be a significant new development (Trainor et al., 2014). eMarketer (2016) concluded that the global social media marketing expenditure was $30.97 billion in 2016 and expected to rise to $48.92 billion by 2019. Social media has started to be treated as a critical business process in it (Kietzmann et al., 2011). However, Ahmad et al. (2018) found that there is substantial evidence in the literature supporting the view that small and medium-sized businesses must deploy technology innovations at the market's right time, in a way that promotes competitiveness and yields peak performance. Socially-networked media have been shown to assist in providing various market advantages in previous studies (as indicated by Sagka et al., 2015; White et al., 2016; Ahmad et al., 2018).

According to Durkin et al. (2013), even though SMEs are disadvantaged in terms of capital, they benefit greatly from using social media for business. In the same way, construction companies have started to experiment with innovative approaches to stay competitive and continue to expand their business (Flanagan et al., 2007; Keung & Shen, 2017). Social media has recently proven to be an important for the small and medium size businesses because of its numerous benefits. Social media is an integrated strategy that helps businesses accomplish their social and business goals according to Altimeter (2015) and Li and Solis (2015). It's become a new practice in the business world for social media to keep an open channel of communication with the community.

By using openness as a guiding principle, the organization's clients and stakeholders gain a better understanding of their needs, as well as giving customers a meaningful voice, proactive participation, it empowers organizations to respond to client and client-requirement changes.

The ability of customers to produce their own unique ideas and solutions is an essential use of social media (Matuszak, 2007; Tapscott and Williams, 2006). SMEs can use social media, along with crowd-sourcing techniques to post their construction questions, as well as crowdsourcing techniques such as crowdsourcing to figure out which business strategy to take. In addition, construction firms can utilize their social media outlets to display their work output, provide product updates, and solicit clients. Similarly, Broughton et al. (2010) suggest that social media must be used in the workplace for better results.

2.4 Theoretical Background

The several concepts being brought in from other sectors have supported the research on how construction industry efficiency can be improved by bringing in new ideas and concepts. Diffusion of innovation (TOI), Technology-Organization-Environment (TOE)

and organizational Resources Based View (RBV). The conclusions from these theories are discussed within this study, as well as their applications to the research.

2.4.1 Diffusion of innovation theory

According to Venkatesh, Davis and Davis (2003), the process of adopting new technology is most often connected to acquiring a new product and then implementing it in a business using the diffusion of innovation theory (DOI).Different definitions of innovation exist in literature and this is hinged on the field and how innovative ideas occur in practice. For instance, Innovation can mean an enhancement of the design or marketing of a product or process (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. By definition, innovation entails change, whether in the media we are using or the means through which people actively participate in 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 explains many external influences affecting adoption of information technology, and also claims it is an important driver (Rogers, 2003). Advocates of theory of innovation state that an organisation can only see anything as revolutionary if it is unique, important, and available to all groups (Zaltman, Duncan, and Holbek 1973; Rogers, 1995). In contrast, Rogers (1995) declared that only four criteria would govern an organization's ability to accept or maintain innovation: relative advantage, icompatibility, complexity, observability, and trialability.

Despite this theory's significant contributions, it is still being opposed by others. As well, according to Parveen (2014), the theory disregards the social background of information technology adoption and broad adoption of information technology are both needed for an effective theory of information strategy. Moreover, the idea of diffusion of innovation did not take into account the different context and different environments required for technology implementation to be successful (DuPlooy, 1998).

2.4.2 Technology-organization-environment (toe) framework

A lack of consideration of environmental and organizational context results in a risk of innovation diffusion theory failure. This research utilizes a theoretical concept developed by Tornkuch and Fleischer (1990) in order to complement diffusion of innovation (DOI). TOE model matches with Rogers' (1983) DOI theory which places a premium on the att ributes of the internal and external organizations, as well as on the availability of new te chnologies (Ghobakhlo, Arias-Aranda, & Benitez-Amado, 2011)

The DOI does have weaknesses, such as Du Loy (1998) and Parveen (2014) indicate, which are due to a lack of technology and organization, while TOE focuses on the organizations three greatest strengths, technological, organizational, and environmental aspects. These features contribute to the adoption, implementation, and subsequent application of new technologies (Parveen, 2014).

While the TOE model has been decried for its alleged inability to deliver a strategy that encompasses the organizations' many complexities, however, it is able to give weight to those variables that are important to IT decision-related (Bose & Luo, 2011). IT has been encouraged by the technology-organization-organization-context theory to engage in exploring a much wider spectrum of possibilities (Jokonya et al., 2012).

2.4.3 Resources based view (RBV)

The two theories in this thesis, DOI and TOEs, in contrast, have succeeded in getting the innovation and sustainability processes moving forward, but do not explain the effect that impact of social innovations may have on organizations' performance. The use of social media in scholarly literature has been hotly debated (Tajvidi & Karami, 2017). Most of these theories stem from social media usage or adoption by individuals or businesses (Schaupp & Belanger, 2013). Innovative ideas and operational performance have not yet been linked as they don't understand how to explain one without the other It has been theorized that resource-based view, innovation diffusion, adoption, and organizational performance result generates all an improvement (Barney, 2001).

More recently, RBV concept has been applied to help building connection between social media and the economic value of organizations have been built around this. These arguments underline the RBV theory that competitive advantage is derived from deploying a complex mix of effective producing resources (Barney, 2001; Wernerfelt, 1984). Since these elements which are essential, rare, in supply, replaceable, and have special characteristics were believed to be a source of competitive advantage, therefore, these attributes are assumed to be the most critical for top performance (Barney, 2001; Peteraf, 1993). However, the distinction between sustainable and temporary advantage rested solely on an organization's capacity to utilize and restore distinctive resources was argued by Li and Ling (2012). 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).

2.5 Conceptual framework and propositions

The objective of this section is to trace the different constructs that research has established about organizational success and social media in order to help better understand how these concepts could be affected by social media use. Conceptual design results in providing the information on problems related to the focus of the enterprise, about social media use, about the opportunity to learn in the company, and about operational execution. The theoretical structure shows how interrelated the structures are in order to provide meaning for the analysis. Figure 1 provide an excellent understanding of the constructs discussed in this study, which is shown in Figure 1.

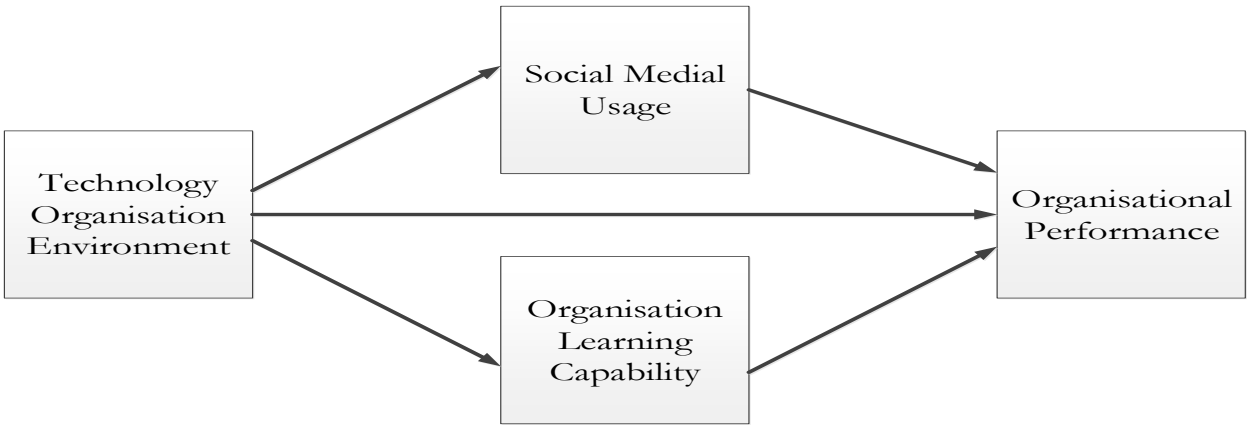

Figure 1: Conceptual Framework

2.5.1 Technology, organisation and environment

This current study attempted to demonstrate the relationships and interactions among the variables in the conceptual framework with different theories. The congruence of the TOE model and the DOI, for example, is being employed to demonstrate the effect of social networks application on the performance of SMEs. The TOE model is better suited to illustrating the environment factors in which SMEs conduct business, which the DOI

model cannot. According to Rogers (2003), five technological characteristics of technology adoption must be visible inside an organization. These are relative advantage, compatibility, complexity, trialability, and observability, which make the argument that organizations will only implement new technology if it is beneficial, compatible with previously technology, easy to use, has noticeable benefit, and is very simple to prove prior to use (Rogers, 1995). Similarly, it might be that all of these characteristics may have a negative effect on the pace at which technologies are adopted and put into use, but this remains a point of controversy (Teo & Pok, 2003; Valenzuela et al., 2009). In this study, organization refers to the technological environments within a business (Ahmad et al., 2018). These research findings have shown that when it comes to technology deployment, it is very important for the company to help foster a creative organizational climate (Ahmad et al., 2015; Ahmad et al., 2018). Meanwhile, environmental problems define the surroundings in which organizations operate, putting pressure on them to remain highly competitive relevant within the industry. As a result, the combined effect of TOE and RBV concepts suggests that organizational effectiveness can only be affected whenever there is a fit between both the organizational structure 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. The study thus hypothesised that:

H1: Technology is positively related to social media adoption

H2: Environment is positively related to social media adoption

H3: Organisation is positively related to social media adoption

H4: Technology is positively related to organizational learning capability

H5: Environment is positively related to organizational learning capability

H6: Organisation is positively related to organizational learning capability

2.5.2 Social medial and organisational performance

The use of social networks in the workplace has significantly increased in Parveen et al. (2015; 2016). However, social media usage in organizations has received little research attention thus far. As companies in all industries have increased their involvement in social media in the last few years, organizations have begun creating and putting in place social media profiles to improve their social networks, market their organizations, and build trust with the general public (Parveen et al., 2015). Although studies have illustrated how beneficial the internet use can be to companies, its impact on cost-cutting, revenue generation, and innovation administration has been demonstrated (Teo & Cho, 2001; Anderson, 2001). Ferrer et al. (found that social investment positively impacts organizational efficiency. Social networking could improve the customer-oriented process, which they argued benefits the organization's overall performance (Rodriguez et al., 2014). In other words, social media has a benefit for organizations. The study proposed that:

H7: social media is positively related to organisational performance

2.5.3 Organizational learning capability

The methodologies for identifying an organization's ability to learn and implement new knowledge have been very varied. While metrics such as collaboration, engagement with the external environment, innovation, dialogue, and risk taking have no clear impact on business success or the market, these are important aspects of learning organizationally. 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 to establish the nature of relationship that exist between organisational business orientation and performance.

H8: Organizational learning capability is positively related to organisational performance

H9: Organizational learning capability is positively related to social medial usage

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The design of a research project entails the planning of scientific investigations or the development of a strategy for something (Dixon 1994). Atsar (2008) said that the nature of the research is not only about what is pursued, but also the best way to do it. Mainly the study focused on examining social media usage effects on the performance building materials merchants in the Abuja market. Quantitative approach included the use of questionnaires. Via well-structured questionnaires, the information is obtained from local building materials suppliers. This was designed to obtain an understanding of how to equalize the odds of getting all genders into employment.

3.2.1 Types of data required

There are various types of data required in research and their sources may differ.

3.2.2 Sources of data

The majority of the data for the study came from primary sources, specifically building construction material merchants in the study area. To improve the amount of data that was collected during field survey, the major and prominent building construction material market was considered for data collection.

3.2.2.1 Primary sources

Original data is any type of information obtained directly from the object of analysis. It excludes any data collected earlier by anyone else. As a result, one of the key sources of data used in this analysis was a well-structured questionnaire administered to building material merchants in the research areas. The questionnaire is divided into seven sections; the first segment is focused on background information and is used to gather data on the generic data of the participants in order to verify the integrity of the information that will

be used for analysis. It addresses topics such as the respondents' profession and years of industry experience. The second, third and fourth sections deal primarily with technology, environmental and organizational management problems. The fifth section focuses on business performance while the remainder focuses on social media adoption of their impact on business relationships. The parts are arranged in such a way as to relate the goals of the analysis and the questions were posed on a 5-point Likert scale with 5 being the highest of the ratings (Strongly Accept(SA) = 5, Accept(A) = 4, undecided = 3, Disagree(D) = 2, Strongly Disagree(SD = 1).

3.2.2.2 Secondary sources

The secondary data as defined by Scheurich (2007) is the type of data that the researcher has not been responsible for collecting on a 'first-hand' basis. Thus, it contains some facts that have been discovered by others and is formulated in various formats such as academic articles, surveys, annual reports, journals, magazines, and the internet. Furthermore, useful secondary sources of data are used to determine the social media's position in construction marketing materials. Strategies to exploit this source of data includes the surveys of the study area to reveal impact of social media on construction material marketing.

3.3 Research Population

Okonkwo (2001) believed that the population is a set of inferences that can be made from the data, whereas Oyewobi (2014) considered the population to be within limits to which the study findings applied. In the context of this research, the population is considered to be the number of building materials traders operating in the study area of this research. While the Study units of analysis is made up of those traders who adopt social media platforms for their businesses. These categories were chosen because they represent the units of analysis of the market in the study area. As a result, the populations for this

research are traders who adopt social media platforms to reach out to their intended customers.

3.4 Sample Size

The size of the sample of respondents for the questionnaire survey comprises of every individual merchant in Dei Dei building material market. A purposive (non-probability) sampling method was employed for all respondents due on the implicit opinion of researcher to assess public opinion on the research.

3.5 Sample Technique

Due to the inability of the researcher to identify all companies that are currently using the social media platform to promote sales and marketing of their products within the selected area of study (Dei Dei Regional Market; Kugbo and Idu building materials market), a combination of snowballing and sampling techniques has been used. A snowball sample is a non-probability sampling technique which is often used in research where elements of the population are difficult to locate. In this case, the actual number of traders on the market using the social media platform could not be determined, and a snowball sample was taken. This helps the researcher to obtain data from the few traders that the researcher can locate and have the social media tools symbol on their business cards or signposts, and then asks those identified to provide the information needed to locate the other members of the population they know. This involves an objective sampling of the selection of different traders from the available traders in the study area.

3.6 Design of Research Instruments

According to Atsar (2008), research design is concerned not only with what has been pursued but also with the method of achieving it. The aim of this research is to evaluate the effect of social media on construction material marketing in Abuja. During the process of this study, two sources of data were used. By use of quantitative questionnaires

administered to relevant participants in the construction industry, quantitative data can be extracted. The evidence found to help substantiate these theories were literature review sources as well as secondary sources of information, including construction industry market studies and trade journals.

3.6.1 Questionnaire

The questionnaires produced for this study were a multiple-choice format with different tables and check box and five parts A-E. The preliminary part of the questionnaire focused on background knowledge, with the goal of collecting data on the specific profile of the participants in order to determine the consistency of the data in preparation for analysis and interpretation. This first section serves as a source of data, containing information such as the respondent's position in the organization, highest academic qualification earned, age of respondents, gender, social media app used, number of years after implementation of social media, and number of employees in the organization.

The second part of the chapter concerns analysis focuses on research. Questions are set in relation to the aims of the project, with '5' being most important to '1' being insignificant. A team of researchers looked at how social media affected consumer and company outcomes, the influence of social media on corporate procedures, and attitudes, and how it could be used in B2B partnerships, all of companies.

3.6.2 Response rate

Table 3.l shows percentage rate of respondent. 110 numbers of questionnaires were administered to the merchants in the regional building material market. Out of 110 questionnaires administered, only 79 were retrieved, representing 71.82% response rate was attained from respondent in the regional market. From the table 4.l, it indicated 71.82% response level.

Table 3.1: Response Rate of Distributed Questionnaire

Questionnaire Issued	Questionnaire Retrieved	Response Rate
110	79	71.82%

Source: Researcher survey, 2019

3.7 Method of Data Analysis

The survey data was first entered into a Microsoft Excel spreadsheet for analysis. The data was analyzed using SPSS in terms of descriptive analysis. Respondents information and Business relations were evaluated using descriptive statistic (Mean score) through Statistical Package for Social Science (SPSS). A conceptual modeling analysis used Partial Least Square Equation (PLS) to test the theories in Chapter 2. PLS-SEM is a standardized regression model extension that is useful in evaluating the causal relationship between different buildings in a hypothesized model (Hedaya *et al*. 2017). In recent times, the MDA has been recognized for its ability to handle small samples (Hwang *et al*., 2010; Wong, 2013), but has struggled to focus on the distributional assumption of data (Vinzi etal. 2010) and this has been acknowledged by researchers (Hair *et al*., 2012). PLS SEM can be also adopted when the collected data is distorted, model accuracy is not guaranteed due to one or more defects in the selected variables or their relation, but predictive accuracy is still important (Hwang *et al*. 2010; Wong 2011).

3.7.1 Mean internal score

The mean score for each latent variable for the analysis of this study based on the Likert scale of 1 to 5 is determined as follows:

$$\text{Mean Score} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{n_5 + n_4 + n_3 + n_2 + n_1} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 5$$

Where n_1 = represent number of respondents that chose “very low” or “Strongly disagree”

n_2 = represent number of respondents that chose “low” or “disagree”

n_3 = represent number of respondents that chose “average” or “neutral”

n_4= represent number of respondents that chose “high” or “agree”

n_5= represent number of respondents that chose “very high” or “strongly agree”

3.7.2 Cronbach’s alpha reliability test

This tool is used to assess the internal consistency of the research variables, i.e. the interrelationship of the sample test variables. According to Sekaran (2003; 2005), reliability indicates the degree to which the instrument's measurements are free from bias or error and this indicates the accuracy and stability of the analysis.

In this analysis, Cronbach's alpha is used to check the reliability of the response from the sample population, to assess if their interpretation of the interests to be included in the compensation amounts and the problems concerning the compulsory acquisition exercise (in general) can be depended on. Cronbach's alpha provides a reliability coefficient that represents the positive relation between the elements of the instrument measures (Sekaran, 2003). The reliability of sample variables is rated based on the scale below:

Table 3.1: Cronbach’s reliability rating scale.

S/N	Cronbach’s Alpha	Internal consistency
1	$\alpha \geq 0.9$	Excellent
2	$0.9 > \alpha \geq 0.8$	Good
3	$0.8 > \alpha \geq 0.7$	Acceptable
4	$0.7 > \alpha \geq 0.6$	Questionable
5	$0.6 > \alpha \geq 0.5$	Poor
6	$\alpha < 0.5$	Unacceptable

Source: Sekaran (2005)

Cronbach’s alpha can be solved using the formula below:

$$\alpha = \frac{K}{K-1}\left(1 - \frac{\sum_{i=1}^{K} \sigma_{Y_i}^2}{\sigma_X^2}\right)$$

Where K is the number of items (questions to be responded)

σ^2_{Yi} is the sum of Individual item variance

And, σ^2_X is the variance of total individual respondents' score.

Table 3 illustrates that the reliability of measurement instruments vary from 0.802 to 0.605 on the scale used. The instrument's value has been reduced, thus leading to an inference that the instrument used in this research is very reliable. The rule of thumb required Cronbach alpha to be 0.7 and above until it could be determined that the objects were claimed to have retained internal consistency. As a result of the reliability test, Cronbach alpha was shown to be greater than 0.7 as the minimum reliability level as shown in Table 3.2 and thus the products chosen for the analysis were internally consistent. The internal accuracy of the points or questions posed is an indicator of the positive quality of the points or questions presented for further study. The opinion of the respondents on the impact of latent variables remained consistent internally and further research could be developed.

Table 3.3: Reliability Coefficients for the Measuring Scales

Latent Variables	Cronbach's Alpha
Environment	0.809
Learning Capability	0.8605
Organisation	1
Performance	0.8167
Social Media	0.6802
Technology	0.854

CHAPTER FOUR

4.0 DATA REPRESENTATION, ANALYSIS AND DISCUSSION OF RESULT

4.1 Demographic Characteristics of the Respondents

The survey provided an acceptable response rate of 71.8 percent, 79 credible responses were obtained from the 110 questionnaires distributed. This Idrus and Newman (2002) reported a study showed that a response rate of 30% is acceptable in the construction industry Included in this analysis are the participants mentioned in Table 1. Nearly two-thirds of the respondents were male executives from the corporations, with females making up the remaining 27 percent. In Africa, women's participation in business has declined to an all-time low, especially in Nigeria (Oyewobi et al., 2019). According to Table 1, 72 percent of respondents had a post-secondary diploma, while 84 percent had more than 5 years of work experience.

According to Ahmad et al. (2018), approximately 70% of the respondents in Table 4.1 were between the ages of 30 and 50, which is characteristic of SMEs who are mainly young and mostly informed about recent trends in the construction industry. According to Ahmad et al. (2018), more than 60% of survey participants have used social media platforms for more than five years (2018). In terms of the number of workers in their companies, 47 percent had more than 11 employees.

Table 4.1: Demographic characteristics of the respondents			
Characteristics of respondents	Participant	Frequency	Percentage
Position within the organization	Owner	22	27.85
	Executive	13	16.46
	Manager	20	25.32
	Senior manager	14	17.72
	Top manager/ Director	10	12.66
	Total	**79**	**100**
Gender	Male	58	73.42
	Female	21	26.58
	Total	**79**	**100**
Academic Qualification	Secondary school or lower	22	27.85
	PhD	4	5.06
	MSc/MTech	17	21.52
	HND/BSc/BTech	36	45.57
	Total	**79**	**100**
Working Experience	Below 5 Years	13	16.46
	5-10 Years	21	26.58
	10-15 Years	27	34.18
	15 Years Above	18	22.78
	Total	**79**	**100**
Age of Respondent	Less than 30years	13	16.46
	31-40 years	30	37.97
	41-50 years	25	31.65
	More than 50 years	11	13.92
	Total	**79**	**100**
Number of Years since Adoption	Less than a year	5	6.33
	1-2 years	8	10.13
	3-4 years	17	21.52
	More than 5years	49	62.03
	Total	**79**	**100**
Number of employees in your organization	Fewer than 10	42	53.16
	11 to 30	24	30.38
	31 and above	13	16.46
	Total	**79**	**100**
	Sanitary wares	14	17.72
Type of business	Tiles and granite slabs	12	15.19
	Wooden laminate	13	16.46
	Security doors	7	8.86
	Paints	10	12.66
	Roof materials	12	15.19
	Aluminium windows frame and car port	2	2.53
	Metal works (doors & Frames	7	8.86
	Other businesses	2	2.53
	Total	**79**	**100**

4.2. Most Widely used Social Media Tool in the Nigerian Construction Industry

Figure 4.1 illustrate the level of usage of social media by organizations in the regional market. The figure reveals that 22% of merchants use WhatsApp and Facebook, while 7% of merchants use blogs, 3% of merchants uses iTunes or podcast. None of the merchants use Pinterest, 9% of merchants uses google+, 10% of merchants uses YouTube, 13% of merchants use Instagram to showcase their products, 12% of merchants have twitter handle, while 1% uses LinkedIn. The findings are in tune with similar studies conducted by Parveen (2014) and Ahmad et al. (2018), where Facebook, WhatsApp and Instagram were identified as the most widely used social media application in their study areas.

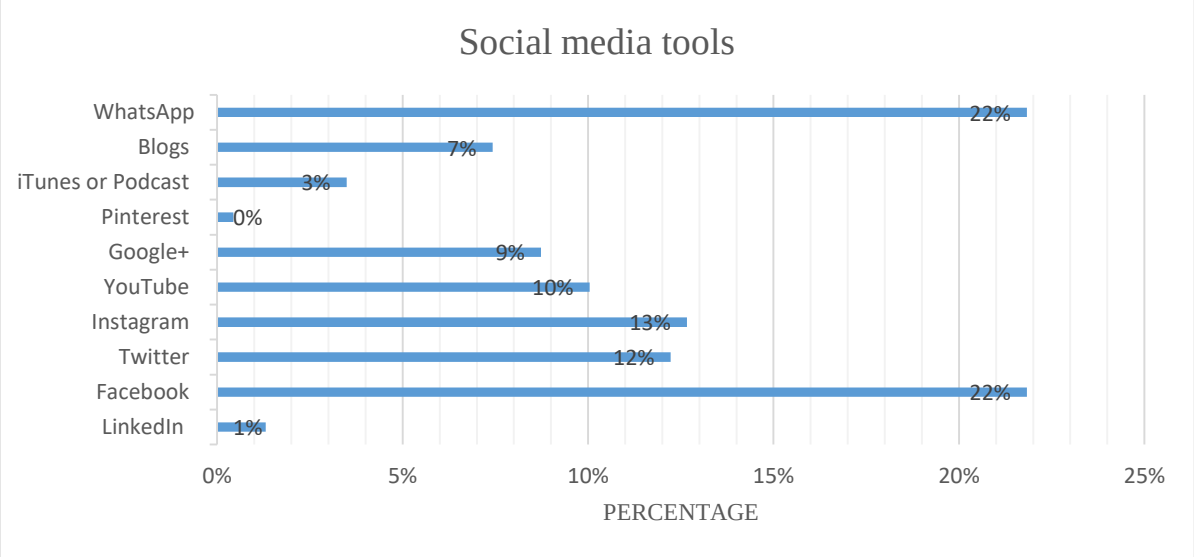

Fig 4.1 Analysis of Demographic Profiles on social media usage
Source: Researchers survey 2019

4.3 Influence of Social Media Usage on Business to Business (B2B) Relationships

Preliminary data in Figure 4.2 demonstrate how social media is believed to benefit B2B relationships. 65% (51) of the respondents felt social media fosters stronger business-to-to-business relationships. The respondents (15%) felt that social media helps their

company in their businesses. This is consistent with the ideas of Kim and Ko (2012) that social media promotes improved consumer and partnership relationships because it is simple and less labor intensive. To put it another way, 5% (4) disagreed. 9.9% somewhat disagreed that increased presence on social media had no effect on their business relationships, with 61% (46%) saying that it is true and 9.9% (7%) expressing a firm agreement, 4% disagreed. The presence of social media in business networks has a positive impact on business interactions 62% of respondents think social media facilitates two-way interactions between companies. This highlights the findings of Parveen et al. (2016) that businesses can better interact with customers by leveraging social media platforms, especially Twitter. close to nearly two-thirds (57 percent) of the respondents accepted that social media should be a significant component of a business' marketing mix Another advantage promoted by Lu and Julian (2007), as he suggests, is that social media benefits the company's overall marketing efficiency while also reducing costs (Molla & Heeks, 2007). About 60% of respondents agreed that social media posts affect business transactions are overwhelmingly in line with Thao and Swierczek (2008) who found that organizations gain both transactional and interactive benefits from the use of the internet.

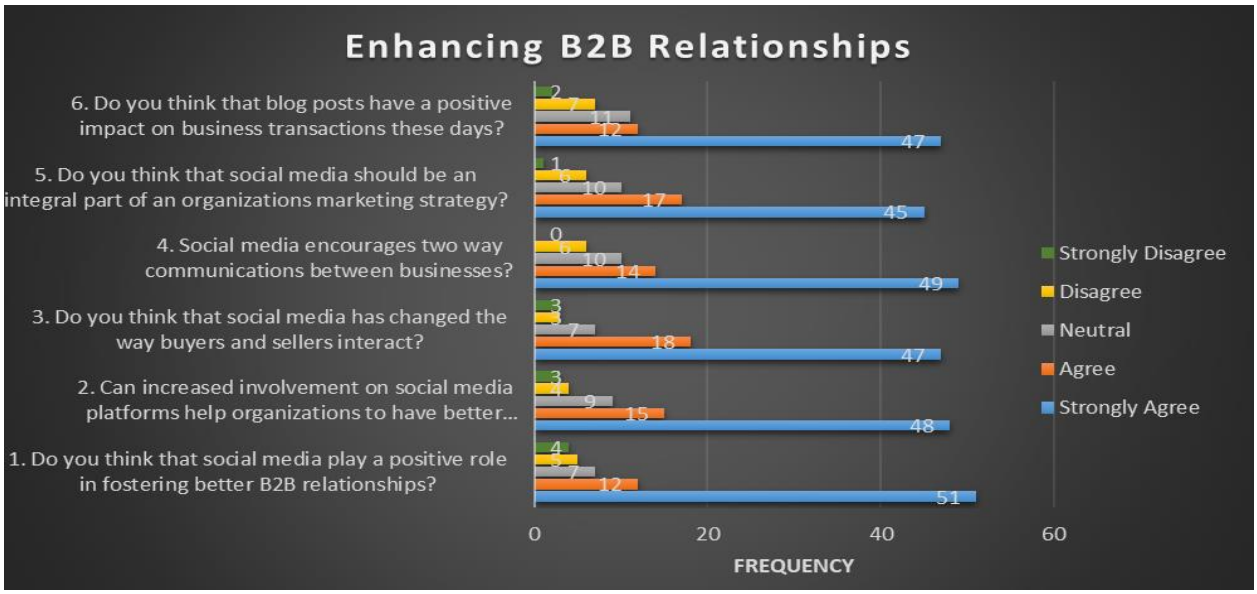

Figure 4.2 Impact of social media adoption on enhancing B2B relationships

4.4 The Revolutionary Impact of Technology on the Construction Industry

In assessing the impact of technology on the adoption of social media for construction related businesses, 25 variables were assessed using a 5-point Likert scale with 1 depicting 'Strongly disagree, 2 - 'Disagree', 3 - 'Neutral' 4 - 'Agree' and 5 - 'Strongly Agree'. From Table 4.2, it is evident that on the overall, all the assessed variables are considered to have high impact as they all have MIS of an above average of 4.0. Chief amongst these variables are Social media provides new opportunities (MIS = 4.84), we can see the results of our social media program (MIS = 4.76), Social media allows for better advertising and marketing (MIS = 4.72), Social media allows us to accomplish specific tasks more quickly (MIS = 4.71), and social media is compatible with our customers (MIS = 4.71). However, the result also revealed that the least rated variables are that `it would not affect the firm if it finally chooses not to adopt social media (MIS = 4.10) and we can see our customers like social media when we use it (MIS = 4.14). While these variables might have been ranked least among others, they are still capable of having a significant impact on the technological adoption of social media on construction businesses since an MIS of higher than 4.0 was derived for the variables. An

overall group mean of 4.50 was derived for all the assessed variables thus implying that the technology adoption can have a high impact on the usage of social media on construction businesses in the industry considering how technologies that could assist businesses are evolving.

Table 4.2: Descriptive Statistics on impact of technology on the adoption of social media

Code	Variable description	Mean	Std. Deviation	Ranking
RLA1	Social media provides new opportunities	4.84	0.41	1
RLA2	Social media allows us to accomplish specific tasks more quickly	4.71	0.53	4
RLA3	Social media allows us to enhance our productivity	4.66	0.6	8
RLA4	Social media allows us to learn more about our competitors	4.61	0.59	9
RLA5	Social media allows for better advertising and marketing	4.72	0.48	3
RLA6	Social media enhances the company's image	4.39	0.74	18
CMP1	Social media is compatible with our culture and values	4.28	0.66	21
CMP2	Social media is compatible with our preferred work practices	4.25	0.69	23
CMP3	Social media security is compatible with us	4.28	0.77	22
CMP4	Social media legal issues are compatible with us	4.54	0.68	13
CMP5	It would not affect the firm if it finally chooses not to adopt social media	4.1	0.89	25
CPX1	I find it easy to get social media to do what I want to do	4.42	0.67	15
CPX2	It is easy to become skilful at using social media	4.33	0.63	20
CPX3	I find social media easy to use	4.39	0.65	16
CPX4	Interaction with social media is clear and understandable	4.61	0.63	10
CPX5	Social media is flexible to interact with	4.58	0.71	11
TRB1	Social media-created changes are compatible with our business	4.67	0.57	6
TRB2	Social media is compatible with our customers	4.71	0.56	5
TRB3	Being able to try out social media was important for the firm to use it	4.56	0.67	12
TRB4	Social media is relatively cheap/free, so the firm could pilot its use	4.66	0.57	7
TRB5	We can see our customers like social	4.34	0.7	19
OBS1	We can see our customers like social media when we use it	4.14	0.66	24
OBS2	We have no difficulty telling our customers and partners what our social media program is	4.39	0.65	16
OBS3	Our customers know about our firm when we use social media	4.51	0.64	14
OBS4	We can see the results of our social media program	4.76	0.54	2

4.5 Impact of Organisational Environment on the Adoption of Social Media for Construction Businesses

In assessing the impact of organizational environment on the adoption of social media for construction businesses, 11 variables were explored in assessing the impact using a 5-point Likert scale with 1 depicting 'Strongly disagree, 2 - 'Disagree', 3 - 'Neutral' 4 - 'Agree' and 5 - 'Strongly Agree'. From Table 4.3, it is evident that on the overall, all the assessed variables are considered to have high impact as they all have MIS of an above average of 3.0. The most rated amongst these variables are Social media would allow our firm to generate higher profits (MIS = 4.84), Social media would increase our firm's ability to outperform competition (MIS = 4.78), and top management in my organization considers social media adoption important (MIS = 4.77). Nevertheless, the results have also shown that the lowest rated variables are that ` Social media would allow our firm a stronger competitive advantage (MIS = 3.94) and Social media is a popular application, so our firm would like to use it as well (MIS = 4.28). While these two variables might have been ranked least among others, it does not mean that they are not capable of having a significant impact on the adoption of social media for construction businesses since business environment is a determinant of organizations performance (Oyewobi et al., 2016) and it also has an MIS of higher than 4.0 was derived for the variables. An overall group mean of 4.51 was derived for all the assessed variables thus implying that the organizational environment can exhibit a significant impact on the usage of social media for construction businesses in the industry considering how organizational environment plays a major role in business growth.

Table 4.3: Descriptive Statistics on impact of organisational environment on the adoption of social media				
Code	Variable description	Mean	Std. Deviation	Ranking
CPT1	It is easy for our customers to switch to another company for similar services or products	4.33	0.76	9
CPT2	Our customers are able to easily access several existing products or services in the market which are different from ours but perform the same functions	4.47	0.75	7
BDP1	Social media is a popular application, so our firm would like to use it as	4.28	0.82	10
BDP2	We follow others in adopting social media	4.53	0.66	6
BDP3	We choose to adopt social media because many other firms are already using it	4.34	0.68	8
CPP1	Social media would allow our firm a stronger competitive advantage	3.94	0.25	11
CPP2	Social media would increase our firm's ability to outperform competitio	4.78	0.57	2
CPP3	Social media would allow our firm to generate higher profits	4.84	0.41	1
ORG1	Top management in my organization is interested in adopting social media	4.58	0.73	5
ORG2	Top management in my organization considers social media adoption important	4.77	0.58	3
ORG3	Top management in my organization has shown support for social media adoption	4.7	0.46	4

4.6 Impact of Organisational Learning Capability on the Adoption of Social Media for Construction Businesses

In order evaluate the impact of organizational learning capability on the adoption of social media for construction businesses, 22 measures of learning capability were examined using a 5-point Likert scale with 1 depicting 'Strongly disagree, 2 - 'Disagree', 3 - 'Neutral' 4 - 'Agree' and 5 - 'Strongly Agree'. From Table 4.4, it is evident that on the overall, all the assessed variables are considered to have high impact as they all have MIS of an above average of 3.0. The most rated amongst these variables are Employees are encouraged to communicate (MIS = 4.73), Cross-functional teamwork is a common practice here (MIS = 4.71), and Reduced the cost of communication with customers (MIS = 4.67). Though, the results have also indicated that the lowest rated variables are that ` There is a free and open communication within my work group (MIS = 3.48) and Enabled easier access to market information (MIS = 3.66). Despite the fact that these two variables might have been ranked least among others, they really showed that learning organization

will tend to outperform those that do not embrace knowledge gained to assist in the adoption of social media to improve their businesses since an MIS of higher than 3.0 was derived for the variables. An overall group mean of 4.33 was derived for all the assessed variables thus implying that the organisational ability can exhibit a significant impact on the usage of social media for construction businesses in the industry.

Table 4.3: Descriptive Statistics on impact of organisational environment on the adoption of social media

Code	Variable description	Mean	Std. Deviation	Ranking
CPT1	It is easy for our customers to switch to another company for similar services or products	4.33	0.76	9
CPT2	Our customers are able to easily access several existing products or services in the market which are different from ours but perform the same functions	4.47	0.75	7
BDP1	Social media is a popular application, so our firm would like to use it as	4.28	0.82	10
BDP2	We follow others in adopting social media	4.53	0.66	6
BDP3	We choose to adopt social media because many other firms are already using it	4.34	0.68	8
CPP1	Social media would allow our firm a stronger competitive advantage	3.94	0.25	11
CPP2	Social media would increase our firm's ability to outperform competitio	4.78	0.57	2
CPP3	Social media would allow our firm to generate higher profits	4.84	0.41	1
ORG1	Top management in my organization is interested in adopting social media	4.58	0.73	5
ORG2	Top management in my organization considers social media adoption important	4.77	0.58	3
ORG3	Top management in my organization has shown support for social media adoption	4.7	0.46	4

4.7 Impact of Social Media Adoption on Construction Organisations Business Performance

The study assessed the impact of social media adoption on construction organizations business performance, 12 variables were used in assessing the impact on a 5-point Likert scale with 1 depicting 'Strongly disagree, 2 - 'Disagree', 3 - 'Neutral' 4 - 'Agree' and 5 - 'Strongly Agree'. From Table 4.5, it is evident that on the overall, all the assessed variables are considered to have high impact as they all have MIS that is above 4.0 threshold. The highly rated variables are that social media assist their organizations to `reach new customers (MIS = 4.70), search for competitor information (MIS = 4.65), and

search for customer information (MIS = 4.62). Surprisingly, the results have also shown that the least rated variables are that social media assist to `receive customer feedback on new/future product/services (MIS = 4.23) and conduct customer service activities (MIS = 4.30). While these two variables might have been ranked least among others, it actually showed that they have significant impact on the adoption of social media for construction businesses with an MIS values of higher than 4.0 was derived for the variables. An overall group mean of 4.49 was derived for all the assessed variables thus implying that the organizational environment can exhibit a significant impact on the usage of social media for construction businesses in the industry considering how organizational environment plays a major role in business growth.

Table 4.3: Descriptive Statistics on impact of organisational environment on the adoption of social media

Code	Variable description	Mean	Std. Deviation	Ranking
CPT1	It is easy for our customers to switch to another company for similar services or products	4.33	0.76	9
CPT2	Our customers are able to easily access several existing products or services in the market which are different from ours but perform the same functions	4.47	0.75	7
BDP1	Social media is a popular application, so our firm would like to use it as	4.28	0.82	10
BDP2	We follow others in adopting social media	4.53	0.66	6
BDP3	We choose to adopt social media because many other firms are already using it	4.34	0.68	8
CPP1	Social media would allow our firm a stronger competitive advantage	3.94	0.25	11
CPP2	Social media would increase our firm's ability to outperform competitio	4.78	0.57	2
CPP3	Social media would allow our firm to generate higher profits	4.84	0.41	1
ORG1	Top management in my organization is interested in adopting social media	4.58	0.73	5
ORG2	Top management in my organization considers social media adoption important	4.77	0.58	3
ORG3	Top management in my organization has shown support for social media adoption	4.7	0.46	4

4.8 Test and Validation of Conceptual Model

The goal of this research is to investigate the degree to which an organization's social media and learning capacity are related to business success in terms of the environment,

technology, and the impact of management feedback. At the time, these interactions had been examined seldomly in the research, particularly in the field of construction management, so there was no well-established concept that could primarily serve as the theoretical basis for the latent constructs. As a consequence, the primary aim of the research discussed here is to determine the predictive power of the independent variable (technology, climate, organization, social media, and learning capability) on the dependent variable (business performance), thus making PLS a potential effective analytical tool.

To test the proposed hypothetical paths and constructs outlined in Chapter two, partial least square structural equation modeling (PLS-SEM) was employed with SmartPLS software version 2.0 M3 to test the hypothesized causal paths (Ringle, Wende & Will, 2005). However, since this is an exploratory study, the use of PLS-SEM in examining the hypothetical paths is deemed as being the most suitable analytic technique to be used. There are many explanations for using PLS-SEM for exploratory research of this kind. PLS-SEM, for example, can evaluate complicated structures. PLS makes less rigid presumptions about data delivery. PLS does not even necessitate a multivariate normal distribution of data. Since PLS is based on regression, it typically only includes the data distribution assumptions of the ordinary least squares (OLS) regression (Peng & Lai, 2012). Interestingly, studies in the construction management area (such as Oyewobi 2014; Jimoh et al., 2019) have used PLS to validate theory and examine path models.

4.8.1 Measurement Model

The following parameters were checked to ensure that the measurement model was adequate. Internal consistency (construct rigidity), discriminant validity and convergent validity (average weight extracted average) are key characteristics of an instrument. The item loadings, indicators reliability, composite reliability, average variance, and p-values

for measurement model reliability are shown in Table 4.3. The research, nevertheless, established that the minimum permissible standards were met in order to determine a reflective measurement model. All factor loading was higher than 0.70 and significant at the 0.001 level, suggesting indicator convergent validity. According to Hair et al. (2014), outer loading measures with outer standardized loadings less than 0.40 should be omitted from the measurement model. The model was iterated further, and indicators with latent variables between 0.40 and 0.70 were removed, whereas only those with outer loadings greater than the necessary threshold were kept. As a consequence, three reflective indicators for technology, climate, social media, and efficiency were kept, while five indicators for learning capacity were maintained. However, just only one indicator was used to assess organization.

It was found that all AVE values are greater 0.50, meaning construct validity is present. The Composite Reliability value is greater than or equal to 0.70, meaning the system is working as expected. Though a reliability score of 0.6 or higher is acceptable for exploratory study (Hair Jr. et al. 2014). F igure 4.2 illustrates estimation models, as well as outer loadings (factor loading). Finally, discriminant validity was checked with respect to the latent variables and it was found that the different models were distinct (Table 4.4). To assess discriminant validity, it demands that the sum of squares of the product of all latent variables be larger than the other latent variables' mean values. The findings in Table 4 suggests that all latent variables are generally conform to the Fornell–Lar criterion (Fornell & Larcker, 1981). Therefore, the results in Table 4 indicate that the measurement model is appropriate.

Table 4.4: Results Summary for Reflective Outer Models

Latent Variable	Indicators	Loadings	Indicators Reliability	T-Stat.	Composite Reliability	AVE	Cronbach's Alpha
Environment	Bandwagon pressure	0.899	0.808	25.474	0.888	0.726	0.809
	Competitive pressure	0.888	0.788	26.940			
	Competitive Intensity	0.764	0.583	7.373			
Learning Capability	Dialogue	0.815	0.664	19.406	0.900	0.642	0.861
	Experimentation	0.744	0.553	10.536			
	Interaction with the external environment	0.823	0.677	21.381			
	Participative decision making	0.799	0.639	12.286			
	Risk taking	0.822	0.676	13.801			
Organisation	Top management support	1.000	1.000	0.000	1.000	1.000	1.000
Performance	Impact on Cost Reduction	0.890	0.792	24.483	0.891	0.732	0.817
	Improved Customer Relations & Service	0.765	0.585	8.406			
	Enhanced Information Accessibility	0.905	0.819	33.319			
Social Media	SM for Customer relations and service	0.768	0.590	8.363	0.824	0.610	0.680
	SM for Information accessibility	0.843	0.711	15.060			
	SM for Marketing	0.728	0.530	5.986			
Technology	Complexity	0.911	0.831	35.102	0.911	0.774	0.854
	Observability	0.857	0.734	18.867			
	Trialability	0.871	0.758	30.846			

Table 4.5: Fornell-Larcker Criterion Analysis for Checking Discriminant Validity

	Environment	Learning Capability	Organisation	Performance	Social Media	Technology
Environment	**0.852**					
Learning Capability	0.780	**0.801**				
Organisation	0.218	0.344	**1.000**			
Performance	0.550	0.698	0.389	**0.856**		
Social Media	0.719	0.594	0.283	0.614	**0.781**	
Technology	0.554	0.629	0.239	0.561	0.549	**0.880**

Note: Diagonals represent the square root of the average variance extracted (AVE) while the other entries represent the correlations.

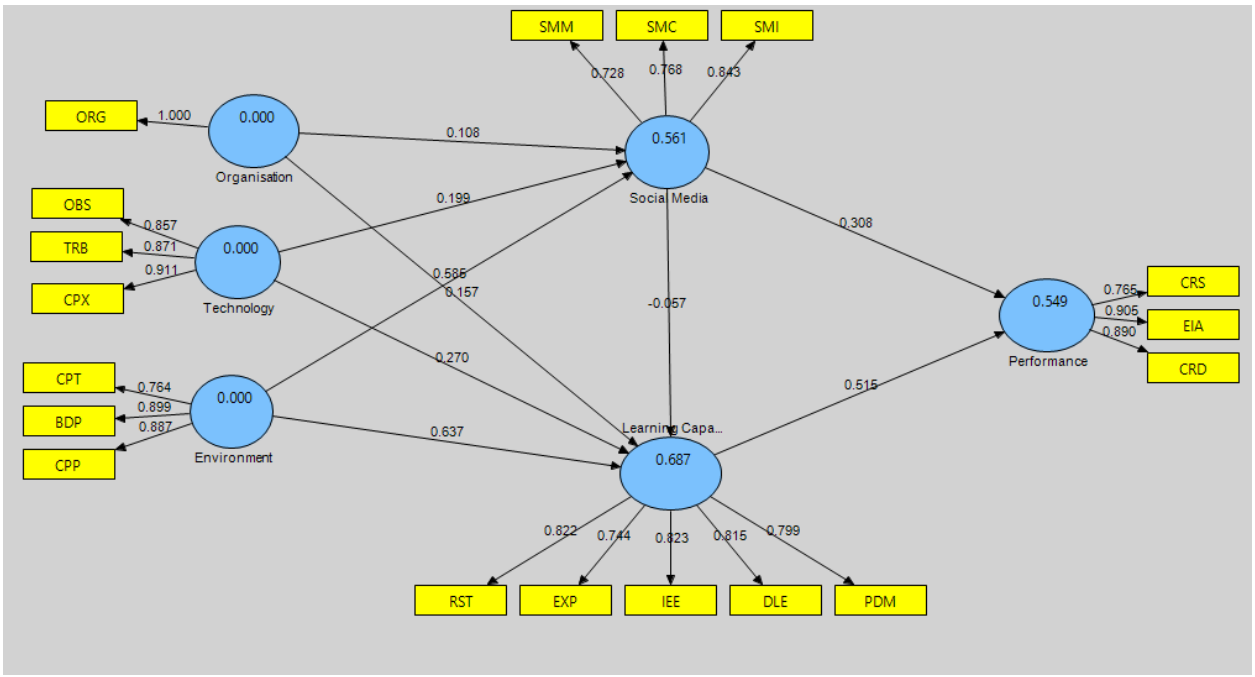

Figure 4.3: Measurement model

4.8.2 Structural model

Second, the Structural Equation Model will be investigated in PLS-SEM results, as indicated by Hair et al. (2014). It should be judged on the strength and consistency of the structural model relationships, and the R2 should be calculated to evaluate model capacity.

The results of the structural model were shown in Tables 4.5 and 4.6. Bootstrapping method was implemented with 5000 iterations, and the significance of the structural paths was computed. The latent and direct paths in Figure 4.3 are shown in this figure. The results obtained with the hypothesis tests revealed that some of the path values were considered to be significant at 90%, 95%, and 99% confidence. The output R2 for the group-to-construction is 0.581, and the social media R2 is 0.52, whereas that for an exogenous construct is 0.68 and the learning R2 is 0.59. (1998). According to Sarsted et al. (2014), the R-squared is a good approximation of the model's ability to predict an endogenous variable's variability.

For each path, the hypotheses were tested by applying t-values. For purposes of determination, the following T-values were employed: It is known that the path coefficient is significant at $p < 0.10$, it can be concluded that when t increases to 1.96 the path coefficient is significant (Oyewobi, 2014). It was revealed in Table 4.6 that the tested hypotheses were appropriate. Table 4.6 indicates that only two paths (capacity for learning and social media) were nonsignificant, while in all the other cases the t-values were greater than 1.65. Which represents the fact that all the metrics used to measure the latent variables were at 99% confidence level, revealing that the models latent variables completely explained the observed variability (Jimoh et al., 2019). All the seven of the hypothesis were supported by this assessment of path coefficients (H1, H2, H3, H4, H5, H7 and H8).

To further analyze the conceptual model, the coefficient on one of the independent variables is compared to the original R2 values (the influence on learning capability), and the change in R2 values can be used to check whether the variable has a substantive effect on the original constructs. The technique was selected as the result of understanding that there are numerous exogenous constructs in the organizational process (in addition to

technology, organization, social media, and learning capability), so two exogenous constructs (directly linked variables) were selected to demonstrate their relative impact on performance: using the equation:

$$f^2 = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{included}}}$$

Cohen (1988) suggested that, in order to measure the effect size, f2 values would vary between 0.02, 0.15, and 0.35, corresponding to a small, medium, or large effect of the exogenous latent variable. The effect size (f2) of social media and learning capability are respectively 0.102 and 0.370, which are considered to be medium and high effect sizes (Cohen, 1988). The Q2 of Stone–Geisser for endogenous constructs are 0.44, 0.397 and 0.318, respectively to indicate an adequate predictive power for learning capabilities, performance and social media. The thesis measured the goodness of fit (GoF) following Tenenhaus et al. (2005) to look at the overall consistency of the research model. However, Hensel and Sarsted (2012) challenged the concepts, and the study revealed that PLS fit does not constitute a goodness-of-fit criterion; furthermore, researchers should not make use the GoF as a test for the overall model. Since the study's model lacks formative indicators, making GoF difficult to use, the study explores the overall consistency of the model developed using GoF. and it is calculated as:

$$\text{GOF} = \sqrt{\overline{\text{communality}} \times \overline{R^2}}$$

$= \sqrt{0}.7453\ X\ 0.6039\ =$ **0.6709**

According to the rule of thumb, 0.1 is called low goodness of fit, 0.25 is considered medium, and 0.36 is considered to be satisfactory (strong Goodness of Fit). The GoF of this current study indicates that the model developed has strong Goodness of Fit with 0.6709 value obtained.

Table 4.6: R Square, Communality, and Redundancy

	R Square	Communality	Redundancy	Q^2	f^2
Environment		0.7263			
Learning Capability	0.6869	0.6419	0.369	0.44	0.370
Organization		1.0000			
Performance	0.5491	0.7320	0.3297	0.397	
Social Media	0.5609	0.6103	0.2887	0.318	0.102
Technology		0.7743			
average	0.5990	0.7475	0.3291		

Table4.7: Path coefficient and hypotheses testing

Path relationship		Path coefficient	T Statistics	**P-values**
Technology -> Social Media	H1: Technology is positively related social media adoption	0.199	1.978	0.05
Environment -> Social Media	H2: Environment is positively related social media adoption	0.586	5.175	0.00
Organisation -> Social Media	H3: Organisation is positively related social media adoption	0.108	1.326	
Technology -> Learning Capability	H4: Technology is positively related organizational learning capability	0.27	2.85	0.00
Environment -> Learning Capability	H5: Environment is positively related organizational learning capability	0.637	4.543	0.00
Organisation -> Learning Capability	H6: Organisation is positively related organizational learning capability	0.157	1.938	0.10
Social Media -> Performance	H7: Social media is positively related organisational performance	0.308	2.847	0.00
Learning Capability -> Performance	H8: Organizational learning capability is positively related organisational performance	0.515	4.844	0.00
Social Media -> Learning Capability	H9: Organizational learning capability is positively related social medial adoption	-0.067	0.417	

*** p<0.01 (>2.58), **p<0.05 (>1.96), p<0.10 (>1.645)

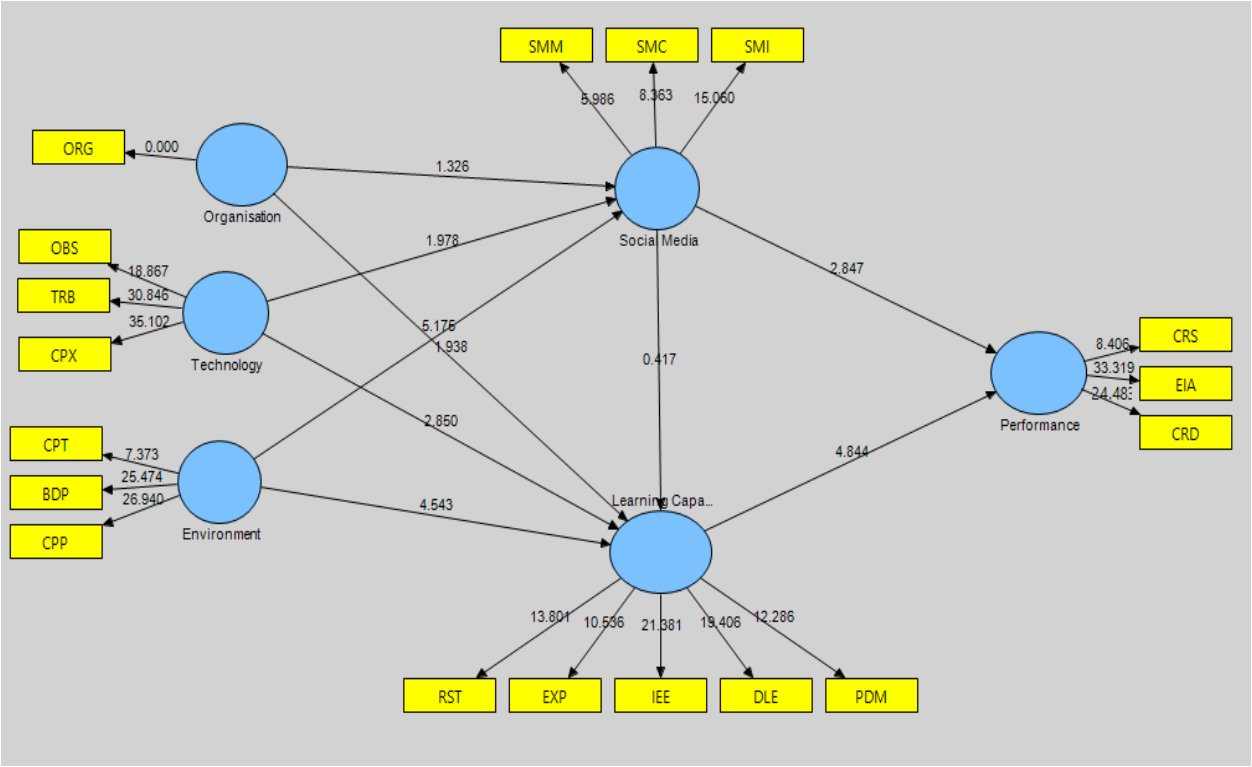

Figure 4.4: Structural model

4.8.3 Total Effect and Mediation Analysis

A comprehensive analysis of the model has shown that the effect of learning capability is stronger in business than social media use. However, further investigation revealed that learning capacity mediated the relationship between organizational business performance and social media; the total impact was calculated as indicated by Sarstedt et al (2014)

For: Social Media -> Learning Capability-> Performance;

Total effect = Direct effect + Indirect effect = 0.306 + 0.591*0.522 = 0.6145

According to the results of the research, learning ability helps to moderate the influence of social media on the overall business. The research measured the learning capacity mediating the effects on performance by first evaluating the total effects, as Sarstedt et al. (2014) suggested. The direct impact of social media on organizational performance was 0.617, and it was statistically important at the 99 percent trust level. When the complete model is estimated, the resulting bootstrapping results yield 0.308, which is also

important at 99 percent confidence levels. In order to calculate the model's variance accounted for (VAF), VAF was calculated using the following formula:

$$VAF = \frac{\text{indirect effect}}{\text{Direct effect}} = \frac{0.3085}{0.6145} = 0.5020$$

It is complete mediation if VAF is greater than 80 percent, the mediator is partially involved, if it is between 20 percent and 80 percent, and there is no involvement if it is less than 20 percent. It came to light that learning capability interacts to some degree with business success on social media platforms.

4.9 Discussion

In order to learn about how social media affects the efficiency in small construction businesses. Hence, the formulation of a conceptual construct was tested using PLS-SEM, it generated the same test results as seen in actual use. The results of this research show that social media yields significant benefits with regard to knowledge connectivity, cost savings, and improved relationships with customers which is s imilar to Parveen's findings (2016). Schniederjans et al. (2013) posited that using social media had a positive effect on organizational performance. Using social media allows companies to provide better customer support and strengthen their relationships while lowering marketing costs, according to Parveen (2016). This has also enabled businesses to obtain clients' and competitors' information.

Technology characteristics (observability, complexity, and trialability) have a major effect on individual and collective use of social media. This finding contradicts those made by Ahmad et al. (2018), who found that social media attributes (preference) have a limited impact on technology adoption. In a research study of Malaysian SMEs published by Ainin et al. (2015), they found a significant correlation between a business's intention to use social media and technical characteristics. The current research found a highly

important relationship between complexity and ability to use social media (Tsai et al., 2013; Ahmad et al. 2018). According to Ahmad et al., trialability and observability had no effect on social media use. Previous research has discovered that trialability, observability, and intent to implement social network usage are essential factors (Chong, 2004; Lin & Chen, 2012).

Due to the results of the top management's significant impact on social media acceptance, a conclusion that there is a significant correlation was reached at 90% confidence. As noted by Ramani et al. (2013) and Ahmad et al. (2015), the assistance of managers is needed for technology adoption by organizations. The conclusions show that the implementation of social media technology in companies calls for a policy implemented from on the senior management level, which facilitates integration with corporate technologies (Ahmad et al., 2018; AlSharji et al., 2018).

In a more recent study, it was determined that the market conditions affect social media use and adoption as pressure, competition, and competitiveness have a reciprocal effects. This contradicts Ahmad et al., (2018 a & b) who found no association between having competitive advantages and wanting to embrace social media. Lertwongsatien and Wongpinatana's (2003) found a positive relationship between competition and e-commerce. In light of these findings, it seems clear that market participation in social media by small and medium-sized companies is connected to the use of increased competition (bandwagon pressure). Research has shown that competition within the industry has been quite directly correlated with the level of adoption of social media. It is confirmed by both Lin (2014) and Wang and Cheung (2004) who assert that small and medium-sized businesses are constrained by the competitive climate in their sector and the contribution they can make to social media use. To establish the connection between adoption of social media and learning capability, the outcomes also revealed that social

media adoption exhibits negative impacts the learning capability of the organization which is insignificant at 95 per cent confidence level (β= -0.067, T-statistics =0.417, $\rho \neq 0.05$). However, this finding is contrary to the result of the research conducted by Parveen et al. (2016) where a positive effect of social media application on entrepreneurial orientation was reported. The finding does not also correspond to that of Elliot and Boshoff (2005), who has found a significant link between entrepreneurial orientation and Internet marketing's perceived success.

According to Mori *et al*. (2016), technology plays a vital part in the accomplishment of an organization's objectives in terms of innovation and production process. It referred to knowledge and skills required for a business organization to develop, use, adapt, absorb and transfer technologies (Salisu & Abu Bakar, 2020). From the result of the PLS-SEM, technology has positive significant influences on learning capability. This affirmed the assertion of Baark et al. (2011) that technological advancement within an organization is capable of improving its learning capability as well as resources allocation. Dynamic external environment is a major factor in organizational learning and this allude to the reason for the significant positive relationship exhibited by the two constructs (β= 0.27, T-statistics =2.85, $\rho \leq 0.05$). This is underscored by Sok and O'Cass (2011) as well as Santos-Vijande *et al.* (2012) who posited that learning capability is a tactical skill required for business survival competitive construction business environment. The study also showed that positive significant relationships exists between top management support organization learning capabilities. The results also indicated that learning capability exert positive influences on organizational business performance. This finding is in tandem with the result reported by Colton *et al*. (2010) that learning capability have significantly positive impact on success of organizations.

The research, however, conceptualizes learning capacity as a mediator between the application of social media and business performance (such as Wang et al., 2006; Hailekiros & Renyong, 2016).In fact, Baxter (2015) and Parveen et al. (2016) opined that social media tools key potentials are in their ability to provide organization the needed support for the concept of organizational learning which in turn lead to improved performance. This corroborated the concept postulated in this study that organizational learning capability facilitates performance which is also in consonance with the findings of Alegre and Chiva (2008) and Goh et al. (2012).

4.9.1 Summary of Findings

Findings it can be concluded that social media encourages two-way communications between businesses and helps in reducing marketing cost for organisations that used the social media tools.

The research findings it was revealed that the factors which influence social media include technology, environment and top management within an organisation. Competitive pressure and intensity emerge to have significant impact on the adoption of social media which are great factors that influence the usage of social media.

Moreover, organizations have realized that they can reach many consumers at once using social media tools such Facebook or Instagram to achieve significant saving in cost of marketing or advertising.

The PLS results revealed that the causal link between technology, climate, organizational top management, and learning capacity is positive and important.

The PLS models (measurement and structural model) revealed an overall predictive power (R2) of approximately 55% for business success, 56% for social media, and 69% for learning capacity.

The finding revealed the importance of learning capability in mediating in the relationship between social media adoption and organizational business performance

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

From the results in Chapter Four the following were deduced: Findings it can be concluded that social media encourages two-way communications between businesses and helps in reducing marketing cost for organisations that used the social media tools.

The research findings it was revealed that the factors which influence social media include technology, environment and top management within an organisation. Competitive pressure and intensity emerge to have significant impact on the adoption of social media which are great factors that influence the usage of social media. Moreover, organizations have realized that they can reach many consumers at once using social media tools such Facebook or Instagram to achieve significant saving in cost of marketing or advertising.

The PLS results revealed that the causal link between technology, climate, organizational top management, and learning capacity is positive and important.

The PLS models (measurement and structural model) revealed an overall predictive power (R2) of approximately 55% for business success, 56% for social media, and 69% for learning capacity.

The finding revealed the importance of learning capability in mediating in the relationship between social media adoption and organizational business performance. However, previous authors limited their research work to the following: Previous studies have shown how social media influences businesses most especially hospitality business (Tajvidi, & Karami, 2017), few researchers analysed the implementation of social media to enhance corporate operations and its effect on company competitive advantage in general (Ainin et al., 2015).

Few studies examined and provided little information concerning the potential barriers or obstacles as well as drivers to the adoption of social media by SMEs in many sectors (Fatairy, 2013; Jandal, 2013; Al-Badi, 2014) yet nothing is understood about its impact on the performance of construction SMEs particularly in the Nigeria. Durkin et al. (2013) found that small and medium-sized enterprises can benefit in particular from the use of alternative management instruments such as social media because of a lack of resources for conventional forms of management. Despite the enormous benefits of social media for businesses, there are no any known empirical studies that have examined how social media adoption can affect the performance of SMEs in construction. Hence the research and findings.

From the results in Chapter Four, it emerged that Facebook and WhatsApp were the commonly adopted social media tools used by the building materials merchant in Dei Dei Regional market followed by Instagram while other social media tools twitter such as LinkedIn, iTunes or podcast, blogs, Youtube, and Google+ were also being used but not very prominent like the first three mention. It was revealed that the organizations use these social media tools because they are the frequently being used by their customers and as a result, the organizations are able to communicate many customers using the social media tools.

Influence of social media usage on business to business (B2B) relationships was examined and it was revealed that the usage of social media fosters better relationship because it enhances marketing and communication with customers. From the findings it can be concluded Social networking promotes two-way inter-business contact and helps in reducing marketing cost for organizations that used the social media tools.

From the research findings it was revealed that the factors which influence social media include technology, environment and top management within an organization.

Competitive pressure and intensity emerge to have significant impact on the adoption social media which are great causes that impact the usage of social media. Moreover, organizations have realized that they can reach many consumers at once using social media tools such Facebook or Instagram to achieve significant saving in cost of marketing or advertising.

Top management support for social media incorporation into marketing and organizational processes is also a significant factor for an organization's use of social media. Executive support and participation were found to be significant in the research. The managers of companies must accept, fully promote the use of technology and use them themselves of order to enable their workers to use social media resources. Organizational leaders should demonstrate how valuable these tools are by deciding to use their services in improving business performance.

The benefits of social media found in the study include reducing marketing costs, enhancing customer relations, improved brand identity and competitive standing. Consequently, integrated marketing can be done with much lower effort and costs than before by social networking sites. Social networking may also have an effect on organizations in such fields as brand image enhancement, improving value, relationship and customer loyalty, digital advertising and marketing, addressing customer complaints, mining innovative ideas and build relationships with customers.

Social networking sites such as Twitter, Instagram, LinkedIn are different than further advertisement channels as it retains information about all its users while ensuring content meets an organization's unique target audience. Social media sites are a great step in which businesses can develop a background knowledge, and companies can use stored data on social media sites to enhance their company image. Social media platforms are being used to improve a company's brand awareness and expand their target audience as

innovative media allow for more intimate, targeted interactions, also enhanced customer engagement in the development of promotional and product relevant information.

The study uses the Partial Least Square Structural Equation Modeling (PLS-SEM) approach to develop the model and evaluate the cumulative effect of the latent variables on outcomes. The model evaluated its performance by the impact on cost savings, client services and satisfaction and enhanced access to information. The PLS results revealed that the causal link between technology, climate, organizational top management, and learning capacity is positive and important. Except for the relationship between organization top management and social media, the relationships between technology, climate, and organization top management are all important. The association between social networks and organizational market performance was observed to be significantly important with respect to performance measures. Similarly, a substantial link was discovered between learning capacity and organizational business performance. The Partial least squares (measurement and structural model) models demonstrate an improved prediction (R2) strength of about 55% for business success, 56% for social networks and 69% for learning ability. The partial model has a high predictive capability (GoF=0.6709) based on the global goodness of fit criterion (GoF index) of the Tenenhaus et al. (2005). It also provides assistance in validating the PLS model on a global scale (Wetzels et al., 2009). According to the report, using a social media predictive model to enhance organizational market efficiency would not only increase their competitive edge, but it will also improve organizational learning capability.

The finding revealed the importance of learning capability in mediating in the link between social media usage and organizational corporate performance. The relationship was positive and significant. This affirm the significance of learning capability as the planned capability organization requires in order to integrate and transmute the external

data and knowledge from their customers to improve business to business relationship and improve competitiveness and performance of organizations. It could be concluded that learning capability assists organisation in the usage of social networking in reacting to the customers' needs and enquiries; and it also entrenches within the organisation how the social media tools makes it possible for products to be accepted by more people thus allowing organisations move into them without much effort. That is achieved by the introduction of social media platforms, which can be quickly navigated and effectively used even by people with technical difficulties.

5.2 Recommendations

This study thereby recommends the following;

1. Different organizations are taking advantage of these social media technologies, thus, it is important for each organization's management to develop the social media tools which are frequently used by their consumers and the public, and to focus on those changes that are expected to impact the effective use of these technologies in order to improve business performance.
2. According to the report, organizations and individuals should engage in social media platforms for advertising and platforms to publicize awareness of the organization's activities, events, and services and goods in order to place the brand.
3. Organizations implementing social media platforms need to have a strategic plan in place before making any decisions on what technology to implement because implementation of revolutionary innovations without a business plan that will facilitate the strategic adoption of innovative technology is a possible recipe for failure.

4. The study's results could be used as a guide for those merchants who presently use social networks on a base level to learn how social media could be used for a broader range of purposes as the indicated in the research findings, and even organizations that intend to use social networks in the future.

5.3 Contribution to Knowledge

This study provides some significant practical and theoretical insights which are summarized as follows:

This report provides many useful theoretical and practical ideas for academics and professionals. In the first place, the findings from this first study discussed an observation about the relationship between the use of social media and corporate performance in the construction industry. Presently, there are very few or no studies that investigate the correlation between organizational success and social media adoption. For better understanding of the theory, the study, used theories to explain the importance of social media's role in construction companies by discussing four theories: (TAM, IDT, TOE and RBV).

Researchers investigating social media have shown considerable benefit to the use and adoption of social media, but there is no clear understanding of their impact on the construction industry. The implementation of social media by construction firms, particularly small businesses, is still in the early stages of understanding. Previous research has concentrated on the acceptance at the organizational level of individual and large-scale, but paid less attention to small and medium-sized firms. In addition, the study resulted in a conceptual representation that was confirmed. It is believed that the findings of this research will be the basis for future research on how social media affects construction companies' efficiency.

As a result of the current discourse on the social network's advantages and disadvantages, organizations are losing touch with social media. The conclusions of the study will be more meaningful and insightful with a greater understanding of social media. Businesses who have yet to adopt the new technologies assume performance. "Look at what other people have done, then look at what you want to do next." - Strategy use: Preparing organizations' future deployments will be better learned from the experience of others.

5.4 Limitation of the Study and Areas for Future Research

The results of the study are limited by a lot of factors which are stated as follows:

As previously stated, this study's results do not apply to all firms. This included conducting an extensive survey on the amount of quantitative data with numbers. This method would benefit from additional analysis triangulation with primary data, as well as being enhanced by the use of the multi-case approach. Another criticism of the research findings was that it used only cross-sectional data to look at businesses; however, long-term studies are encouraged by the results of this one. Second, all the companies are in the same sector, represent the same market, and use the same line of business; thus, it is more realistic to include many businesses than to include a small one. Finally, the study failed to address these other issues: the correlation between social media use and the strategy or organizational structure. Doing long-term and in-depth analysis of companies that have specific business plans for the implementation of new technologies may yield different results.

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APPENDIX

FEDERAL UNIVERSITY OF TECHNOLOGY
SCHOOL OF ENVIRONMENTAL TECHNOLOGY
DEPARTMENT OF QUANTITY SURVEYING

Dear Sir/Ma,

SURVEY ON

"IMPACT OF SOCIAL MEDIA USAGE ON THE PERFORMANCE OF CONSTRUCTION SMEs BUSINESSES IN ABUJA, NIGERIA."

Research has shown that social media has significant impact on organizations which are capable of influencing their performance in the construction industry. The many benefits of adopting social media for businesses include trust, improved return and enhanced customer relationship. It must however be stressed that not much is not well understood about the impact of social media on organisational performance within the construction industry. This study intends to fill these identified gaps in the research literature. This exercise will lead to the award of an MTech degree in the Department of Quantity Surveying, Federal University of Technology, Minna.

Your kind response to the questions contained in the questionnaire attached herein will be highly appreciated and treated as strictly confidential. The entire questionnaire takes an estimated twenty-five (25) minutes to complete. Thank you for your anticipated contribution.

OLORUNYOMI Olufemi Seth (MTech Student)
Reg Number: MTECH/SET/2017/7291
Email: olufemi.md@gmail.com

Section A: Respondent Information

1. **Construction Experience**

(a) Less than 10 years ☐
(b) 11 – 20 years ☐
(c) 21 – 30 years ☐
(d) More than 30 years ☐

2. **Position within the organisation**
   a) Owner
   b) Executive
   c) Manager
   d) Senior manager
   e) Top manager/Director

3. **Highest academic qualification obtained**

(a) ND ☐
(b) HND ☐
(c) B.Sc ☐
(d) PGD ☐
(e) MSc ☐
(f) PhD ☐
(g) Others ☐

4. **Age of respondent**

(a) Less than 30 years ☐
(b) 31 – 40 years ☐
(c) 41 – 50 years ☐
(d) More than 50 years ☐

5. **Gender of respondent**
   a) Male
   b) Female

6. **Profession of respondent**

(a) Architect ☐ (e) Quantity Surveyor ☐
(b) Builder ☐ (f) Others ☐ Specify: _____
(c) Engineer ☐
(d) Estate Manager ☐

7. **Firm's level of utilization**
   a) Minimal
   b) Basic
   c) Moderate
   d) Extensive

8. **Social media apps used**
   a) LinkedIn

b) Facebook
c) Twitter
d) Instagram
e) YouTube
f) Google+
g) Pinterest
h) iTunes or Podcast
i) Blogs
j) WhatsApp

9. Number of years since adoption

a) Less than a year
b) 1-2 years
c) 3-4 years
d) More than 5 years

10. Number of employees in your organisation

a) Fewer than 9
b) 10-35
c) 36-75

11. Type of construction business

a) Building materials merchant
b) Professional consultancy services
c) Construction and contracting

SECTION B: Technology

The section examines the **impact of technology on the adoption of social media**. Please (tick) as appropriate to indicate your level of agreement regarding the level of technological impact of social medial usage on organisation.

Very effective	effective	Somehow effective	ineffective	very ineffective
5	4	3	2	1

A	**Technology**	**Rating**				
		5	**4**	**3**	**2**	**1**
	Relative advantage					
RLA1	Social media provides new opportunities					

RLA2	Social media allows us to accomplish specific tasks more quickly					
RLA3	Social media allows us to enhance our productivity					
RLA4	Social media allows us to learn more about our competitors					
RLA5	Social media allows for better advertising and marketing					
RLA6	Social media enhances the company's image					
	Compatibility					
CMP1	Social media is compatible with our culture and values					
CMP2	Social media is compatible with our preferred work practices					
CMP3	Social media security is compatible with us					
CMP4	Social media legal issues are compatible with us					
CMP5	It would not affect the firm if it finally chooses not to adopt social media					
	Complexity					
CPX1	I find it easy to get social media to do what I want to do					
CPX2	It is easy to become skilful at using social media					
CPX3	I find social media easy to use					
CPX4	Interaction with social media is clear and understandable					
CPX5	Social media is flexible to interact with					
	Trialability					
TRB1	Social media-created changes are compatible with our business					
TRB2	Social media is compatible with our customers					

TRB3	Being able to try out social media was important for the firm to use it					
TRB4	Social media is relatively cheap/free, so the firm could pilot its use					
TRB5	We can see our customers like social					
	Observability					
OBS1	We can see our customers like social media when we use it					
OBS2	We have no difficulty telling our customers and partners what our social media program is					
OBS3	Our customers know about our firm when we use social media					
OBS4	We can see the results of our social media program					

SECTION C: Organisational environment

The section examines the impact of organisational environment on the adoption of social media. Please (tick) as appropriate to indicate your level of agreement regarding the level of organisational environment impact on social medial usage.

Very severe	severe	Moderately	Not severe	Not very severe
5	4	3	2	1

A	**Environment**	**Rating**				
		5	**4**	**3**	**2**	**1**
	Competitive Intensity					
CPT1	It is easy for our customers to switch to another company for similar services or products					
CPT2	Our customers are able to easily access several existing products or services in the market which					

	are different from ours but perform the same functions					
	Bandwagon pressure					
BDP1	Social media is a popular application, so our firm would like to use it as well					
BDP2	We follow others in adopting social media					
BDP3	We choose to adopt social media because many other firms are already using it					
	Competitive pressure					
CPP1	Social media would allow our firm a stronger competitive advantage					
CPP2	Social media would increase our firm's ability to outperform competition					
CPP3	Social media would allow our firm to generate higher profits					
	Organisation					
ORG1	Top management in my organization is interested in adopting social media					
ORG2	Top management in my organization considers social media adoption important					
ORG3	Top management in my organization has shown support for social media adoption					

SECTION D: Effects of ineffective communication on construction project site

The section examines the **Effects of effective communication on construction project site**. Please (tick) as appropriate to indicate your level of agreement regarding the effects.

Very severe	severe	Moderately	Not severe	Not very severe
5	4	3	2	1

A	**Dimension of organisational learning**	**Rating**				
		5	**4**	**3**	**2**	**1**

	Experimentation					
EXP1	People here receive support and encouragement when presenting new ideas					
EXP2	Initiative often receives a favourable response here, so people feel encouraged to generate new ideas					
	Risk taking					
RST1	People are encouraged to take risks in this organisation					
RST2	People here often venture into unknown territory					
	Interaction with the external environment					
IEE1	It is part of the work of all staff to collect, bring back, and report information about what is going on outside the company					
IEE2	There are systems and procedures for receiving, collating and sharing information from outside the company					
IEE3	People are encouraged to interact with the environment: competitors, customers, technological institutes, universities, suppliers etc.					
	Dialogue					
DLE1	Employees are encouraged to communicate					
DLE2	There is a free and open communication within my work group					
DLE3	Managers facilitate communication					
DLE4	Cross-functional teamwork is a common practice here					
	Participative decision making					
PDM1	Managers in this organisation frequently involve employees in important decisions					
PDM2	Policies are significantly influenced by the view of employees					

PDM3	People feel involved in main company decisions					

SECTION E: ORGANISATION PERFORMANCE

The section explores the **level of performance of organisation using social medial**. Please (tick) as appropriate to indicate your level of importance of the social medial with respect to the strategies.

Very important	important	Somehow important	Not important	Very unimportant
5	4	3	2	1

A	**Organizational Performance**	**Rating**				
		5	**4**	**3**	**2**	**1**
	Impact on Cost Reduction (Imp on CR)					
CRD1	Reduced the cost of communication with customers					
CRD2	Reduced the cost of advertising and promotion					
CRD3	Reduced the cost of customer service and support					
	Improved Customer Relations & Service (Imp on CS)					
CRS1	Enhanced customer service					
CRS2	Increased customer loyalty and retention					
CRS3	Improved customer relationship					
	Enhanced Information Accessibility (Imp on IA)					
EIA1	Enabled easier access to competitor information					
EIA2	Enabled easier access to market information					
EIA3	Enabled faster delivery of information to customers					

SECTION F: Social Media Usage

The section explores the impact of **Social Media Usage on organisational performance**. Please (tick) as appropriate to indicate your level of importance of the following with respect to the organisational performance

A	Social Media Usage	Rating				
		5	4	3	2	1
	SM for Marketing					
SMM1	Advertise and promote product and services					
SMM2	Create brand visibility					
SMM3	Conduct marketing research Get referrals (word of mouth via likes, shares and followers in Facebook)					
	SM for Customer relations and service					
SMM4	Develop customer relations					
SMM5	Communicate with customers					
SMM6	Conduct customer service activities					
SMM7	Receive customer feedback on existing product/services					
SMM8	Receive customer feedback on new/future product/services					
SMM9	Reach new customers					
	SM for Information accessibility					
SMM10	Search for general information					
SMM11	Search for competitor information					
SMM12	Search for customer information					

SECTION G: IMPACT OF SOCIAL MEDIA ON ENHANCING B2B RELATIONSHIPS

The section assesses the impact of social media on enhancing B2B relationships

Please (tick) as appropriate to indicate your level of importance of the following with respect to B2B relationship.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

	Enhancing B2B relationships	**Rating**				
		5	**4**	**3**	**2**	**1**
1	Do you think that social media play a positive role in fostering better B2B relationships?					
2	Can increased involvement on social media platforms help organizations to have better business relationships?					
3	Do you think that social media has changed the way buyers and sellers interact?					
4	Social media encourages two way communications between businesses?					
5	Do you think that social media should be an integral part of an organizations marketing strategy?					
6	Do you think that blog posts have a positive impact on business transactions these days?					