

# Upshot of Factors of Severe Effect Affecting Small and Medium Size Construction Firms' Performance in Gombe State, Nigeria

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## ABSTRACT

This research thesis titled 'Upshot of factors of severe effect affecting Small and Medium Size Construction Firms' Performance in Gombe State, Nigeria'. The aim of the study was achieved through two objectives such as determining the severe effect of the factors affecting the performance of small size construction firms (SSCFs), assessing the severe effect of the factors affecting the performance of medium size construction firms (MSCFs) in Gombe State, and examining the relationship of the severe effect of the factors affecting performance of the small size and medium size construction firms in Gombe State. The research utilised a quantitative research design with a questionnaire used as tool for collecting the primary data analyzed using descriptive statistical methods of data analyses on a total of 68% retrieved questionnaire in the study. That concluded that: inadequate management skill, absence of research and development (R & D), and inadequate training and continuous professional development, limited access to funds from finance institutions, inadequate management of infrastructure, low level of educational and technical knowledge, and high transaction cost are the most factors of severe effect affecting the performance of small size construction firms (SSCFs) in Gombe State; inadequate training and continuous professional development, absence of research and development (R & D), low level of educational and technical knowledge, limited access to funds from finance institutions, and high

interest rate and inadequate management skill are the most factors of severe effect affecting the performance of medium size construction firms (MSCFs) in Gombe State; there is positive strong significant relationship between the factors of severe effects affecting performance in small and medium-sized construction firms (SMCFs) as the severity of factors affecting performance increases in small firms, it also tends to increase in medium-sized firms ( $r = 81.1\%$ ,  $N = 68$ ,  $p = 0.0007 < 0.01$ ). The study recommends that: management of SSCFs should attend to the necessary skills required for effective delivery of construction business through employing personnel with sound educational and technical know-how that can ensure more chances of accessing more funds for their construction businesses and to increase productivity and performance of the firm; the management of MSCFs should engage in proper training and continuous professional development by allocating more funds to research and development (R & D) to have more equipped personnel to compete with the ever-increasing challenges in the construction circle; SMCFs should adopt a functional structure that would encourage the involvement of personnel in decision making for rapid organisational growth.

**Keywords:** Construction industry and Its Composite, Small and Medium Size Construction Firms (SMSCFs), Construction Planning Importance in Construction Industry, Factors Affecting the Performance of Small and Medium

Sized Construction Firms (SMSCFs), Theoretical review.

## I. INTRODUCTION

### 1.1 Background to the Study

Construction sector plays a strategic role in the economic structure globally (Durdyev & Ismail, 2017), and considering efficiency in a construction project is very relevant. Decision-making of the project delivery system is an important link in the entire lifecycle of a project and is one of the critical factors leading to project success (Bingshenget al., 2015). The different delivery systems of projects are distinguished by their approach, the contract between the owner, the designer, and contractor are formed and the technical relationship that evolve between each party in these contracts (Okoreet al., 2017).

Firms in the construction industry have been grouped such that Small and Medium Firms (SMFs) were found to be the majority (Abdullahet al., 2012; Thwalaet al., 2012). Some of these construction firms were reported to exhibit low commitment to production resulting from their poor performance in both physical and service delivery output (Bilauet al., 2015); as the construction industry is dominated by small- and medium-scale contractors (SMCs) who face an emerging trend of unique challenges in the implementation of projects (Kulemekaeet al., 2015). Wibowo (2009) opine that the construction industry being a significant contributor to the development of both developed and developing nations provides necessary public utilities and private physical structures.

Construction efficiency in Nigeria is a crucial aspect of the country's building industry, considering the significant energy consumption in both residential and public buildings. Efficiency in project means meeting cost, time, and scope goals; whereas, success in project means meeting wider business and enterprise goals as defined by key stakeholders (Serrador & Turner, 2015). Efficiency dimensions of construction project success is a short-term perspective thereby exposing the needs for building construction management to ensure cost, time, quality, safety and cash-flow management as a safe practice in the building construction firms to remain competitive and to overcome the effect of deadly management diseases that affects the success of building construction projects to clients (Silva et al., 2016).

One of the key players in the construction project team is the contractor (Usmanet al., 2012; Idoro, 2011). Construction contractors are entrepreneurs involved in the management of

construction projects (Inuwaet al., 2013). Firms, companies or organizations that execute construction works are referred to as 'contractors' (Bamidele & Iyagba, 2015). They offer their skills and services and accept the challenge of executing the works in exchange for financial reward (Ugochukwu & Onyekwena, 2014). Odediranet al. (2012) opined that like other nations of the world, building contractors could be classified as small, medium and large in Nigeria, large firms are majorly dominated by the expatriates with very few indigenous that could be categorized as medium while most are categorized as small size firms. Construction contractors are categorized by several criteria: scope of operation (local, regional, national and multinational); specialization (building and engineering); size and category of contracts (small, medium and large); and the company's owners' nationality (foreign and indigenous) (Idoro, 2011; Idoro & Akande-Subar, 2008).

Small and medium size construction firms being an employer of labour have many factors affecting its existence, hence, denying such firms from reaching its potentials and benefits to national economy building. In Nigeria, small and medium enterprises (SMEs) are also perceived as the key to Nigeria's economic growth, poverty alleviation and employment generation. Small building contractors are not left out as they are also part of the small and medium scale enterprises (SMEs) sector (Bamidele & Iyagba, 2015).

Therefore, conducting research on assessing the upshot of severity factors affecting small and medium size construction firms in Gombe State, Nigeria is very vital to address how the construction firms of such capacity can yield to maximum benefits. However, this prompts the research of this nature.

### 1.2 Aim and Objectives of the Study

The research aimed at assessing the upshot of factors of severe effects affecting small and medium size construction firms' performance in Gombe State, Nigeria.

The specific objectives include:

- i. To determine the factors of severe effect affecting performance of small size construction firms (SSCFs) in Gombe State.
- ii. To assess the factors of severe effect affecting performance of medium size construction firms (MSCFs) in Gombe State.
- iii. To evaluate the relationship between the factors of severe effect affecting performance of small and medium sized construction firms in Gombe State.

## II. LITERATURE REVIEW

### 2.1 Construction Industry and its Composition

The Federation of Construction Industry (FOCI, 2001) in Ugwuodiora (2004) is currently made up of firms engaged in road construction works, building construction, railway construction, bridge and foundation construction, shore protection work, borehole engineering work, drainage and dredging works as well as furniture and wood works. There is only one umbrella controlling all the firms engaged in construction works in Nigeria, and all the firms engaged in any form of construction work in Nigeria is a member of construction industry (no matter the size). Even though the small, the medium and the large construction firms in the country belong to the same industry, the size of a company's business usually determines its grade in the industry. Generally, ministry of industry grades all companies in Nigeria into four different categories such as micro enterprise, small-scale enterprise, medium scale enterprise and large-scale enterprise.

#### 2.1.1 Micro Scale Enterprise

Any enterprise whose capital investment excluding cost of land is not more than ₦10 million and/or with a work force of not more than 30 full time workers and/or a turnover of not more than ₦2 million belongs to this category.

#### 2.1.2 Small Scale Enterprise

This is made up of any enterprise whose capital investment excluding cost of land is between ₦10 million and ₦100 million and/or with a work force of between 31 and 70 full time workers and/or with a turnover of not more than ₦10 million.

#### 2.1.3 Medium Scale Enterprise

An enterprise whose capital investment excluding the cost of land is between ₦100 million and ₦300 million and/or with a work force of between 71 and 200 full time workers and/or with a turnover of not more than ₦20 million is a member of this group.

#### 2.1.4 Large Scale Enterprise

This is a firm whose capital investment excluding the cost of land is above ₦300 million and with more than 200 full time employees, and/or with a turnover ranging from 20million to billions of naira.

In the past, the public work department (a government construction agency) was involved in

construction works in Nigeria, but it ceased to function nearly two decades ago when federal government decided to maintain the federal highways through contracts, and the most recent federal government effort on direct-labour road maintenance came in 2001 when the federal road maintenance agency was formed. At present, a few State governments involve in direct-labour maintenance of roads.

All the firms engaged in construction work in Nigeria belong to the same industry, and the large, the medium and the small-scale firms are under one umbrella body known as the federation of construction industry in Nigeria (FOCI, 2001).

The private construction firms in Nigeria are made up of both foreign and indigenous firms, and private construction firms get their jobs through contract award from the following sources:

- i. From the Federal Government Ministries/Parastatals.
- ii. From the State Government Ministries/Parastatals.
- iii. From public corporations/public companies.
- iv. From private companies.
- v. From Individuals.

The possibility to learn and improve from one project to the next is something that any project organization should be interested in doing. Under the umbrella of project management, the concepts of efficiency, effectiveness and efficacy are commonly used but rarely defined (Yousef & Nils, 2017).

### 2.2 Small and Medium Size Construction Firms (SMSCFs)

Small and medium size construction firms (SMSCFs) as a basis for competitive advantage require to successfully create a process to drive the development of a continuous flow of innovation through Absorptive Capacity (Ofori, 2009). This is considered as a means to innovation which is an essential factor for a firm's development (Kamal & Flanagan, 2014; Wu & Guo, 2008). The construction industry being a significant contributor to the development of both developed and developing nations provides necessary public utilities and private physical structures (Ofori, 2009; Wibowo, 2009). In addition, SMCFs play a vital role in the industry accounting for about 80% of the total number of construction enterprise, its high percentage of employment production and its being a major beneficiary of government contract (Bilau, 2011; Ofori, 2009).

Table 1: Classification of firms in Nigeria

| SN | Firm's Size Category | No. of employees | Assets in (₦000,000:00) (excluding land and buildings) |
|----|----------------------|------------------|--------------------------------------------------------|
| 1  | Micro                | Less than 10     | Less than 5 million                                    |
| 2  | Small                | 10 – 49          | 5 – 50 million                                         |
| 3  | Medium               | 50 – 199         | 50 to less than 500 million                            |
| 4  | Large                | Greater than 199 | Greater than 500 million                               |

**Source:** SMEDAN and NBS (2013).

SMSCFs are also considered by many to be an integral part of any healthy economy considering the role they play in the creation of jobs and the fostering of innovation. Nevertheless, in the long run their importance as a provider of employment is evident and, for this reason alone, SMFs are necessarily of interest to those concerned with employment relations and considered to be critical to organizational (Greasly, 2005) and performance improvement in order for them to gain competitive advantage (Ofori, 2009).

Small and medium sized construction firms (SMSCFs) have been a source of economic development through its vast creation of employment, wealth creation and innovation by introducing competitive strategies which set them apart from other firms (Anna, 2008). These include their ability to re-engineer products and service delivery to meet clients' demand by putting in place innovative techniques or development of new strategies (Ajagbe, Ismail, Aslan, & Choi, 2012; Ismail, Tengku-Azhar, Yong, Aslan, Omar, Majid, & Ajagbe, 2012; Ajagbe & Ismail, 2014). According to Aris (2007), the drive of most economies towards industrial development is dependent on the development of SMFs considering its large numbers and structure which under adequate conditions gives them the flexibility and ability to stand adverse economic situations. As a result, SMSCFs development and competitiveness affect any economy's position since it improves the efficiency of local markets (Aris, 2007; Anna, 2008; Ofori, 2009). It also makes adequate and productive use of an economy's scarce resources thereby facilitating a long-term growth for the economy.

It was highlighted that, mutual coordination and cooperation are practical and helpful for organising the operations and processes of a project in both small and medium size construction firms (Hazır, 2015). Also, implementing team leadership, project monitoring and feedback, can ensure team satisfaction (Alzahrani & Emsley, 2013); also, such can lead to contributing to higher client satisfaction (Alinaitweet et al., 2013). The business world today is

considered diverse and more intricate than it was just 10 years ago. To survive and grow in this new millennium, business must move towards innovation in a way to build and sustain competitive advantage (Ali et al., 2011).

Construction projects are naturally high risky and complex due to their wide divergence of project sites, high pressure on demanding construction time and cost, involve many project participants with different objectives as well as increasing complexity on construction techniques (Silva et al., 2016). Construction project is viewed as high-value, time bound, special construction mission creating a construction facility or service, with predetermined performance objectives defined in terms of quality specification, completion time, budgeted cost and other specified constraints (Chitkara, 2013). The implementation of project management helps in creating strategic value chains that enable an organisation to have competitive advantage in high-risk sectors and international markets.

Meeting functional performance, technical specifications, fulfilling customer's needs, solving a customer's problem, the customer is using the product, as well as, customer satisfaction is what should be known as impact on the customer (Serrador & Turner, 2015; Shenhar & Dvir, 2007).

The impact of the development of the construction business is the growing numbers of construction service companies, so that competition between companies getting tougher. Every construction company (small, medium or large size) must be able to innovate and have advantages so that it can compete with other construction service companies; and, one of the things that must be achieved by such company is the ability to improve performance in completing every job given by the client, so that the client will feel satisfied.

The achievement of project objectives as planned will be able to increase customer satisfaction from stakeholders, especially from the project. Customer satisfaction is someone's happy or disappointed feelings resulting from comparing a product/work produced to the desired expectations (Kotler & Keller, 2009).

In this present environment, businesses whether gigantic or tiny will not get far success if lack hard work, commitment or devotion (Ali et al., 2011); and for effective transformation of business into a success story there must be a shared vision divided into different success factors or different milestones leading towards ultimate success. Commercial success, and, creating a large market share is known as business success (Serrador& Turner, 2015). There are certainly few factors that play vibrant role to take the business towards success. Companies and businesses should have an adaptive style to incorporate the demands of changed market conditions (Ali et al., 2011).

Radihaet al. (2009) made a determinants of small business success as professed and experienced by rural entrepreneurs and they

empirically discovered that internal and external factors are vital for the success of small business. The factors for business success are: external environment, market accessibility, entrepreneurial quality, human resource, and market support by the government pricing, delivery and service. Also, Rogoff et al. (2004) revealed that external and internal factors are determinants of business success; as the internal factors include characteristics of the business owner, business size and years in business, the ability to attract outside capital investment, management, financing, planning, experience, and skill to implement any identified projects. The external or environmental factors are sales tax rates, infrastructure expenditure.

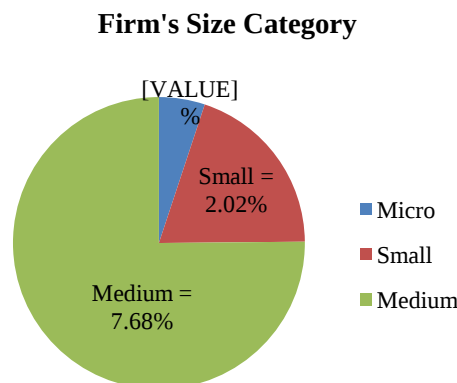


Figure 1: MSMEs Contribution to Building & Construction GDP in 2013

### 2.3 Construction Planning Importance in Construction Industry

The construction sector is the provider of physical infrastructure essential for human sustenance and economic development. Moreover, the advancement in vertical city expansion is enormous and to be celebrated; however, in Nigeria, such development comes with huge human and material losses (Hamma-Adama, 2017). In an organisation, efficiency is a concept, a tool and a complex variable, concertante and synergistic, which expresses the aggregate performance of the company, its economic value, revealing various aspects of its business results, different perspectives of assessing the company's comprehensive income (Manolescu & Geamănu, 2010). Construction can be characterized as a specific type of project industry, with specific features concerning production, such as temporality, restricted location, and one-off products (Omonori& Lawal, 2015). Bowen et al.

(1997) stated that, construction is defined as a complete system industry, through which by-projects, temporary coalitions of firms and heavy customer involvement in the product life cycle are the norm. Therefore, Sami (2009) contributed that, due to the complex nature of construction and the special characteristics of project production, construction has had several problems in producing quality in a customer-oriented manner. In this, manner, construction planning will have an impact on the efficient and effective delivery of construction projects.

Construction (project) planning involves determining what needs to be done in terms of scope and deliverables, how will it be accomplished, who will implement it, what is the duration, how much it will cost and what the risks are. The results of the planning process are baseline plans (Clements & Gido, 2012). Project planning as decisions made on how the project will be performed in order to meet the objectives outlined

at the initiation stage (Dawson, 2014). In project management there are interdependent goals that should be met which are scope, cost and time (AbuHussein et al., 2016). The detailed strategy laid out in the plan becomes check method for the cost, schedule, and quality developed during project definition (Verzuh, 2015). Risk management in a project must come into play as they remained an unforeseen condition that has a positive or negative effect on one of the goals such as cost, scope, time and quality (PMI, 2013). At the planning stage, the risks associated with the project are identified (Robb, 2014).

The project planning is one of the core project management processes and, in that stage is

where the team singles out all the work to be done. It's an ongoing activity almost to the end of the project with the main priority, during the planning phase, is to plan time, costs and resources for the project. Based on those requirements the team is developing the strategy that has to be followed. Construction planning involves a series of steps that determine how to achieve a particular community or organizational goal or set of related goals. This goal can be identified in a community plan or a strategic plan. Project plans can also be based on goals or action strategies developed through meetings and gatherings, tribal council or board meetings, or other planning processes.

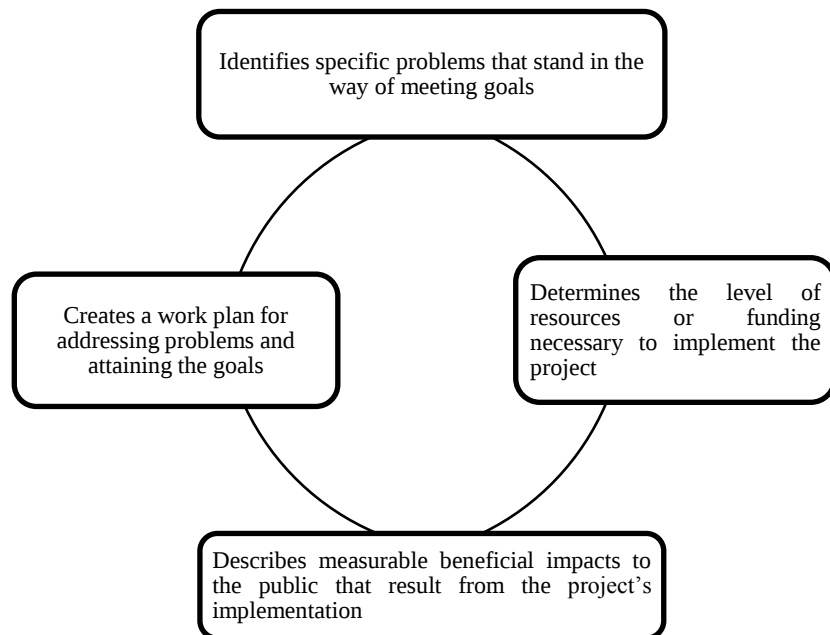


Figure 2: Benefits of Construction Planning

Table 2: Importance of Construction (project) planning for effective delivery

| SN | Construction (project) Planning helps in:      | Construction (project) Planning helps to eliminate: |
|----|------------------------------------------------|-----------------------------------------------------|
| 1  | Assign resources and responsibilities          | Unsustainable projects                              |
| 2  | Make the best use of resources                 | Unstructured project work plans                     |
| 3  | Motivate staff and the community               | Poor planning                                       |
| 4  | Clarify goals and develop a vision             | Undefined problems                                  |
| 5  | Think ahead and prepare for the future         | Overambitious projects                              |
| 6  | Identify issues that will need to be addressed |                                                     |
| 7  | Motivate staff and the community               |                                                     |
| 8  | Choose between options                         |                                                     |
| 9  | Consider whether a project is possible         |                                                     |
| 10 | Achieve the best results                       |                                                     |

According to Amit (2009), there are two steps of planning is done in the entire project to meet the project objectives.

**In the first step of planning:** the whole workloads for different project are to be mapped and resources will be allocated as they have allocated so in their different projects. This will help us to know the current situation of multiple simultaneous projects within the company. Each project has been divided into necessary activities to perform to complete it as a whole. Resources are allotted to the activities of each project according to the data have been given by the company. Due to the limitations of resources and sharing of same resources in different projects, the expected date of deploying individual projects will be shifted. So, analysis would be done based on the data that provided and finally to make a conclusion that when all the projects would be completed by using their available shared resources.

**In the second step of planning:** current situation will be kept as it is and there will be addition of twelve projects of a regular workload. So, the company wants to know the effect of having all the projects if they consider of having one new project with a regular workload comes to their system in each month. It should be mentioned that the company will allot only the current resources they have for those new projects. So, in this case also there will be sharing of same resources which would shift the probable date of deploying for different projects. Finally, the analysis would be concluded that when all the projects would be deployed using their available shared resources and how the new projects affect their current state in terms of time and resources.

#### **2.4 Factors Affecting the Performance of Small and Medium Sized Construction Firms (SMSCFs)**

The important feature of SMSCFs in Nigeria to do with the organizational structure, due to its ownership status circling around a family which resulted to either running it as sole enterprise or partnership (Gushibet, 2011). Owing to this, most of the firm's organizational structure is pyramidal and as a result affects decision making and information dissemination in the firm. This has been a big challenge as decision that affect the growth of the firms are in most cases unilaterally taken by the owners of the firm. Ajagbeet al. (2012) suggested that for rapid growth and development, firms must adopt a functional structure that would encourage the involvement of personnel in decision making for rapid organizational growth. Ismail et al. (2012) added that other challenges facing SMCFs in includes limited access to funds from finance institutions and high interest rate, poor cooperation and/or linkages between SMCFs. In addition, Abdullah et al. (2011) maintained that larger firms doing better and cooperation with research institutions to gather knowledge for innovation, inadequate managerial skill due to inadequate employment of skilled labor. In addition to this, the absence of research and development (R&D), inadequate training and continuous professional development for firm's personnel, low level educational and technical knowledge, inadequate management of infrastructures among other factors, all constitute to the challenges of SMCFs in Nigeria.

Table 3: Factors Affecting Performance of SMCFs from Different sources

| SN | Factors that Hinder the Performance of SMCFs                                                  | Authors                                           |
|----|-----------------------------------------------------------------------------------------------|---------------------------------------------------|
| 1  | Changing client's demand and expectation.                                                     | Robinson et al., 2003.                            |
| 2  | Market condition.                                                                             |                                                   |
| 3  | Rapid changes in the development of advanced technology.                                      | Khairuddin, 2012.                                 |
| 4  | Democratization of information.                                                               |                                                   |
| 5  | Globalization.                                                                                |                                                   |
| 6  | Government pressure.                                                                          |                                                   |
| 7  | Lack of competencies and capabilities for sustenance in the face of increased competition.    | Faniran, 1999.                                    |
| 8  | Organizational structure                                                                      | Gunshibet, 2011; Ajagbeet al., 2012; Ofori, 2009. |
| 9  | Limited access to funds from finance institutions and high interest rate.                     | Ismail et al., 2012.                              |
| 10 | Limited access to policy makers weighs against the small and medium sized construction firms. |                                                   |

|    |                                                                                   |                                                                                                                                                                                                                                                              |
|----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11 | Limited capacity to market products abroad.                                       |                                                                                                                                                                                                                                                              |
| 12 | Fixed cost of complying with regulations.                                         |                                                                                                                                                                                                                                                              |
| 13 | Poor cooperation and/ or linkages between SMCs.                                   |                                                                                                                                                                                                                                                              |
| 14 | Inadequate managerial skill due to inadequate employment of skilled labour.       | Abdullah et al., 2011.                                                                                                                                                                                                                                       |
| 15 | Absence of research and development (R & D)                                       |                                                                                                                                                                                                                                                              |
| 16 | Inadequate training and continuous professional development for firm's personnel. |                                                                                                                                                                                                                                                              |
| 17 | Low level of education and technical knowledge.                                   |                                                                                                                                                                                                                                                              |
| 18 | Inadequate management of infrastructures.                                         |                                                                                                                                                                                                                                                              |
| 19 | High rate of employee turn-over.                                                  | Bilauet al., 2015.                                                                                                                                                                                                                                           |
| 20 | Inadequate government policy on R & D.                                            |                                                                                                                                                                                                                                                              |
| 21 | Competitive strategies.                                                           | Brink, Cant & Ligthelm, 2003.                                                                                                                                                                                                                                |
| 22 | Poor business location.                                                           |                                                                                                                                                                                                                                                              |
| 23 | Lack of marketing.                                                                |                                                                                                                                                                                                                                                              |
| 24 | Lack of appropriate technologies e.g., computers, etc.                            | Abor & Quartey, 2010                                                                                                                                                                                                                                         |
| 25 | Lack of regulatory constraints.                                                   |                                                                                                                                                                                                                                                              |
| 26 | Lack of managerial skills.                                                        | Olawale & Garwe, 2010                                                                                                                                                                                                                                        |
| 27 | Lack of access to global market.                                                  |                                                                                                                                                                                                                                                              |
| 28 | Economic environment.                                                             |                                                                                                                                                                                                                                                              |
| 29 | Lack of financial resources.                                                      |                                                                                                                                                                                                                                                              |
| 30 | Crime and corruption.                                                             |                                                                                                                                                                                                                                                              |
| 31 | Lack of skilled labour.                                                           |                                                                                                                                                                                                                                                              |
| 32 | Lack of supporting infrastructures such as water and electricity.                 |                                                                                                                                                                                                                                                              |
| 33 | High transaction cost                                                             | Allen, 2000; Benham & Benham, 2001; Chen, 2007; Ihua & Siyanbola, 2012; Ajagbe et al., 2012; Florian & Grigor, 2015;                                                                                                                                         |
| 34 | Firm's ownership status                                                           | Gushibet, 2011; Abor, 2008; Coleman & Cohn, 2000; Van Auken and Neeley, 1996; Hutchinson, 1999; Petty and Bygrave, 1993; Irwin & Scott, 2010; Cassar, 2004; Silver, 2000; Vos, Yeh, Carter, & Tagg, 2007; Coleman, 2007; Berggren, Olofsson, & Silver, 2000; |

Source: Different Authors

## 2.5 Theoretical Review

The research adopted and pinned the study on efficiency and reinforcement theories as shown below.

### 2.5.1 Resource-Based Theory or Resource-Advantage Theory

The resource-based theory is also called the resource-based view or resource-advantage theory of a firm. Birger Wernerfelt proposed the theory in 1984, but Barney (1991) later refined it in his work titled "Firm resources and sustained

competitive advantage", published in 1991. The work is critical to the emergence of resource-based theory. The theory argues that firms are heterogeneous because they have different quantum of resources and can embrace divergent business strategies due to their dissimilar resource mix. The resource-based view draws managers' attention to internal resources like competencies, capacities, and assets firms have to develop a competitive advantage over their rivals. This competitive advantage can help firms maximize profit in the end. According to Barney (1991), traits of

resources that can birth competitive advantage are value, imperfect imitability, rarity and lack of substitutability. According to Dul and Neumann (2007), the competitive advantage implies that firms can outperform other firms by combining their human, technical and other resources.

The Research-Based Theory (RBT) is clear about the firm's competitive advantage and firms' performance as derived from its internal capabilities and assets (Barney & Arian, 2006).

It is also worthy of note that, competitive advantage according to Ramaswami et al. (2004) refers to the ability of a firm to use its unique resources to create offerings in terms of differentiated product, market sensing, customer and competitor responsiveness better than that of its competitors. For the fact that, the resource-based theory (RBT) highlighted that, an enterprise will gain a competitive advantage when it integrates different sets of unique resources and capabilities which in turn lead to the sustainability of its business.

### III. MATERIAL AND METHODS

The study was conducted in Gombe State quantitatively using descriptive survey research design on 125 small and medium sized construction firms (SMCFs) in the study area which was an adopted number of the target population used in a collaborative survey of some selected findings carried out by Small and Medium Enterprises

Development Agency of Nigeria and National Bureau of Statistics (SMEDAN & NBS, 2013) with its construction team.

The sample size for the research was determined to be 95 construction professionals (Architects, Builders, Engineers, Estate Surveyors/Valuers, Land Surveyors, Quantity Surveyors, Planners, and so on) based in Gombe State, Nigeria. Questionnaire instrument was used to sought information from the respondents of the study randomly selected for the study. The information collected primarily was analyzed using both descriptive (mean scores and ranking decisions) and inferential (Pearson Product Moment of correlation (r)) methods of data analysis. Statistical Package for Social Sciences (SPSS) was used as a tool for data analysis.

## IV. PRESENTATION OF DATA ANALYSES AND DISCUSSION OF RESULTS

### 4.1 Presentation of Data Analyses

#### 4.1.1 Questionnaire Response Rate (QRR)

The research recorded an overall questionnaire response rate of 68% out of 100% from the questionnaire administered a total of 100 questionnaires in the study area but the filled and returned questionnaires were 68 as shown in figure 3 below.

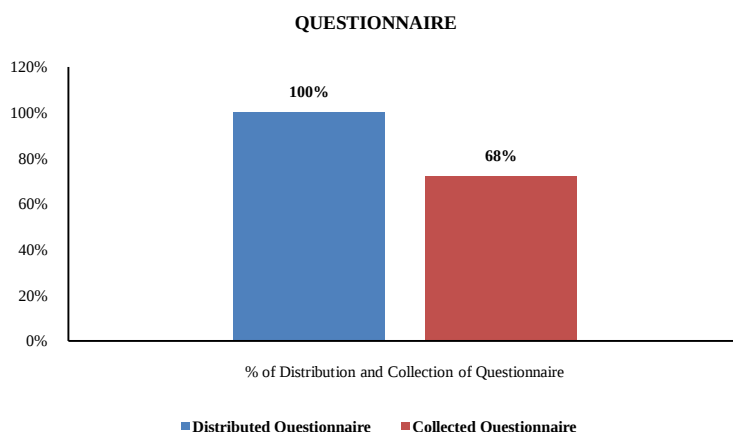


Figure 3: Respondents Response Rate

Source: Researcher (2016).

#### 4.1.2 Objective 1: To determine the factors of severe effect affecting the performance of small size construction firms (SSCFs) in Gombe State

This objective is assessed using a descriptive method of data analysis with a help of

mean score and ranking decision to reach a logical conclusion.

The study adapted a rating scale from a previous work of Bilau, Ajagbe, Bustani and Sani (2015), technique used in rating the answered questionnaire on the severe effect of the factors

affecting the effective performance of small and medium sized construction firms using severity

effect (SE) from the Likert Scale was as follows:

Table 4: Adapted Rating Scale for Decision Making

| Likert-Scale | Classification  | Rating Scale           |
|--------------|-----------------|------------------------|
| 1            | $1.0 \leq 1.49$ | Not Severe (NS)        |
| 2            | $1.5 \leq 2.49$ | Least Severe (LS)      |
| 3            | $2.5 \leq 3.49$ | Moderately Severe (MS) |
| 4            | $3.5 \leq 4.49$ | Severe (S)             |
| 5            | $4.5 \leq 5.0$  | Extremely Severe (ES)  |

Source: Bilauet al. (2015).

Table 5 below shows the factors of severe effect affecting the performance of small size construction firms (SSCFs) in Gombe State.

Inadequate management skill is determined and ranked the 1<sup>st</sup> severe factor with a mean score (X) of 3.9412. Absence of research and development (R & D) is determined and ranked the 2<sup>nd</sup> severe factor with X = 3.8824. Inadequate training and continuous professional development are determined and ranked the 2<sup>nd</sup> severe factor with X = 3.8824. Limited access to funds from finance institutions is determined and ranked the 2<sup>nd</sup> severe factor with X = 3.8824. Inadequate management of infrastructure is determined and ranked the 3<sup>rd</sup> severe factor with X = 3.8676. Low level of educational and technical knowledge is determined and ranked the 4<sup>th</sup> severe factor with X = 3.7206. High transaction cost is determined and ranked the 5<sup>th</sup> severe factor with X

= 3.6912. High interest rate is determined and ranked the 6<sup>th</sup> severe factor with X = 3.5735.

While, fixed cost of complying with regulations is determined and ranked the 7<sup>th</sup> moderate severe factor with X = 3.4706. Limited capacity to market products abroad is determined and ranked the 8<sup>th</sup> moderate severe factor with X = 3.3235. Lack of access to global market is determined and ranked the 9<sup>th</sup> moderate severe factor with X = 3.3088. Poor cooperation between the construction firms is determined and ranked the 10<sup>th</sup> moderate severe factor with X = 3.2941. Firm's ownership status is determined and ranked the 11<sup>th</sup> severe factor with X = 3.2500. Organizational structure is determined and ranked the 12<sup>th</sup> moderate severe factor with X = 3.2353. Limited access to policies is determined and ranked the 13<sup>th</sup> moderate severe factor with X = 3.588. Competitive strategies are determined and ranked the 14<sup>th</sup> moderate severe factor with X = 3.0000.

Table 5: Factors of severe effect affecting performance of small size construction firms (SSCFs)

| Severe Effect of the Factors on SSCFs                       | Small Size Construction Firms (SSCF) |      |          |
|-------------------------------------------------------------|--------------------------------------|------|----------|
|                                                             | Mean                                 | Rnkg | Decision |
| Inadequate management skills                                | 3.9412                               | 1    | S        |
| Absence of research and development (R & D)                 | 3.8824                               | 2    | S        |
| Inadequate training and continuous professional development | 3.8824                               | 2    | S        |
| Limited access to funds from finance institutions           | 3.8824                               | 2    | S        |
| Inadequate management of infrastructure                     | 3.8676                               | 3    | S        |
| Low level of educational and technical knowledge            | 3.7206                               | 4    | S        |
| High transaction cost                                       | 3.6912                               | 5    | S        |
| High interest rate                                          | 3.5735                               | 6    | S        |
| Fixed cost of complying with regulations                    | 3.4706                               | 7    | MS       |
| Limited capacity to market products abroad                  | 3.3235                               | 8    | MS       |
| Lack of access to global market                             | 3.3088                               | 9    | MS       |
| Poor cooperation between the construction firms             | 3.2941                               | 10   | MS       |
| Firm's ownership status                                     | 3.2500                               | 11   | MS       |
| Organizational structure                                    | 3.2353                               | 12   | MS       |
| Limited access to policies                                  | 3.0588                               | 13   | MS       |
| Competitive strategies                                      | 3.0000                               | 14   | MS       |

Source: Researcher (2016). MS = Moderately Severe; S = Severe.

#### 4.1.3 Objective 2: To assess the factors of severe effect affecting the performance of medium size construction firms (MSCFs) in Gombe State

This objective is assessed using a descriptive method of data analysis with a help of mean score and ranking decision to reach a logical conclusion.

Table 6 below shows the factors of severe effect affecting the performance of medium size construction firms (MSCFs) in Gombe State.

Inadequate training and continuous professional development are assessed and ranked the 1<sup>st</sup> severe factor with  $X = 3.8088$ . Absence of research and development (R & D) is assessed and ranked the 2<sup>nd</sup> severe factor with  $X = 3.7353$ . Low level of educational and technical knowledge is assessed and ranked the 3<sup>rd</sup> severe factor with  $X = 3.7059$ . Limited access to funds from finance institutions is assessed and ranked the 4<sup>th</sup> severe factor with  $X = 3.6765$ . High interest rate is assessed and ranked the 5<sup>th</sup> severe factor with  $X = 3.6324$ . Inadequate management skill is assessed and ranked the 5<sup>th</sup> severe factor with  $X = 3.6324$ .

Limited capacity to market products abroad is assessed and ranked the 6<sup>th</sup> severe factor with  $X = 3.5441$ . High transaction costs are assessed and ranked the 7<sup>th</sup> severe factor with  $X = 3.5147$ .

While, Inadequate management of infrastructure is assessed and ranked the 8<sup>th</sup> moderate severe factor with  $X = 3.4853$ . Lack of access to global market is assessed and ranked the 9<sup>th</sup> moderate severe factor with  $X = 3.3676$ . Fixed cost of complying with regulations is assessed and ranked the 9<sup>th</sup> moderate severe factor with  $X = 3.3676$ . Poor cooperation between the construction firms is assessed and ranked the 10<sup>th</sup> moderate severe factor with  $X = 3.3235$ . Competitive strategies are assessed and ranked the 11<sup>th</sup> moderate severe factor with  $X = 3.1765$ . Firm's ownership status is assessed and ranked the 12<sup>th</sup> moderate severe factor with  $X = 3.1176$ . Organizational structure is assessed and ranked the 13<sup>th</sup> moderate severe factor with  $X = 3.0882$ . Limited access to policies is assessed and ranked the 14<sup>th</sup> moderate severe factor with  $X = 3.0588$ .

Table 6: Factors severe effect affecting performance of medium sized construction firms (MSCFs)

| Severe effect of the factors on MSCFs                        | Medium Sized Construction Firms (MSCF) |      |          |
|--------------------------------------------------------------|----------------------------------------|------|----------|
|                                                              | Mean                                   | Rnkg | Decision |
| Inadequate training and continuous professional development. | 3.8088                                 | 1    | S        |
| Absence of research and development (R & D).                 | 3.7353                                 | 2    | S        |
| Low level of educational and technical knowledge.            | 3.7059                                 | 3    | S        |
| Limited access to funds from finance institutions.           | 3.6765                                 | 4    | S        |
| High interest rate.                                          | 3.6324                                 | 5    | S        |
| Inadequate management skills.                                | 3.6324                                 | 5    | S        |
| Limited capacity to market products abroad.                  | 3.5441                                 | 6    | S        |
| High transaction cost.                                       | 3.5147                                 | 7    | S        |
| Inadequate management of infrastructure.                     | 3.4853                                 | 8    | MS       |
| Lack of access to global market.                             | 3.3676                                 | 9    | MS       |
| Fixed cost of complying with regulations.                    | 3.3676                                 | 9    | MS       |
| Poor cooperation between the construction firms.             | 3.3235                                 | 10   | MS       |
| Competitive strategies.                                      | 3.1765                                 | 11   | MS       |
| Firm's ownership status.                                     | 3.1176                                 | 12   | MS       |
| Organizational structure.                                    | 3.0882                                 | 13   | MS       |
| Limited access to policies.                                  | 3.0588                                 | 14   | MS       |

Source: Researcher (2016). MS = Moderately Severe; S = Severe

#### 4.1.4 Objective 3: To evaluate the relationship of the factors of severe effect affecting performance of the small size and medium size construction firms in Gombe State

To evaluate this objective, an inferential statistical method called Pearson correlation analysis between two variables was employed.

Coefficient of correlation (r), measures the strength and direction of the linear relationship between two variables (Field, 2018). The values of r range from -1 (perfect negative correlation) to 1 (perfect positive correlation), with 0 indicating no correlation. It also measures the extent to which two variables move together.

Daniel, Yusuf and Adullahi (2025), interpret correlation coefficient as:  $0.7 \leq \alpha \leq 1$  = Very strong correlation;  $0.5 \leq \alpha \leq 0.7$  = Strong correlation;  $0.3 \leq \alpha \leq 0.5$  = moderately correlation;  $0 \leq \alpha \leq 0.3$  = Weak correlation.

Table 7 shows the relationship between the severe effect of the factors affecting performance of the small size and medium size construction firms in Gombe State.

Table 7 shows the values of the statistical analysis with correlation coefficient (r) = 0.811 at a significance level (p-value) = 0.0007 ( $p < 0.01$ ) with the sample size (N) = 68 that provides sufficient statistical power to support the findings.

Therefore, the analysis indicates a very strong positive correlation (r) = 0.811 that is a significant relationship between the severe effects of factors affecting performance in small and medium-sized construction firms. Hence, this suggests that as the severity of factors affecting performance increases in small firms, it also tends to increase in medium-sized firms. The correlation is highly significant ( $p = 0.0007 < 0.01$ ), thus, this buttressed that the relationship is unlikely to be due to chance ( $r = 81.1\%$ ,  $N = 68$ ,  $p = 0.0007 < 0.01$ ).

Table 7: Relationship between the factors of severe effect affecting performance of the small size and medium size construction firms in Gombe State

|                                                                                                     |                     | SEPSSCFs | SEPMSCFs |
|-----------------------------------------------------------------------------------------------------|---------------------|----------|----------|
| Severe effect of the factors affecting performance of the small size construction firms (SEPSSCFs)  | Pearson Correlation | 1        | .811**   |
|                                                                                                     | Sig. (2-tailed)     |          | .0007    |
|                                                                                                     | N                   | 68       |          |
| Severe effect of the factors affecting performance of the medium size construction firms (SEPMSCFs) | Pearson Correlation | .811**   | 1        |
|                                                                                                     | Sig. (2-tailed)     | .0007    |          |
|                                                                                                     | N                   |          | 68       |

\*\*Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS version 23 (Output).

## 4.2 Discussion of Results

### 4.2.1 Objective 1: Factors of severe effect of the factors affecting the performance of small size construction firms (SSCFs) in Gombe State

Table 5 above revealed the five most factors of severe effect affecting the performance of small size construction firms (SSCFs) in Gombe State to be: inadequate management skill ( $X = 3.9412$ ), absence of research and development (R & D) ( $X = 3.8824$ ) and inadequate training and continuous professional development ( $X = 3.8824$ ), limited access to funds from finance institutions ( $X = 3.8824$ ), inadequate management of infrastructure ( $X = 3.8676$ ), low level of educational

and technical knowledge ( $X = 3.7206$ ), and high transaction cost ( $X = 3.6912$ ).

This objective outcome corroborates with the result of Florian and Grigor (2015), Bilauet al. (2015), Ihua and Siyanbola (2012) and Olawale and Garwe (2010) that is very obvious that when the management lack managerial skills it results in reducing the management capacity, low levels of innovations and the firm will be at a high risk of failure. As well as the cost of doing business is tremendously high though depending on the nature of business, and in addition, fluctuations in the country's currency, naira on the high side, impacts

upon the costs of raw materials and the general operating costs.

#### **4.2.2 Objective 2: Factors of severe effect of the factors affecting the performance of medium size construction firms (MSCFs) in Gombe State**

Table 6 above revealed the five most factors of severe effect affecting the performance of medium size construction firms (MSCFs) in Gombe State to be: inadequate training and continuous professional development ( $X = 3.8088$ ), absence of research and development (R & D) ( $X = 3.7353$ ), low level of educational and technical knowledge ( $X = 3.7059$ ), limited access to funds from finance institutions ( $X = 3.6765$ ), and high interest rate ( $X = 3.6324$ ) and inadequate management skill ( $X = 3.6324$ ).

This objective outcome corroborates with the result of Bilauet al. (2015), Eniola et al. (2015), Ismail et al. (2012), FinScope (2010) and Olawale and Garwe (2010) as investment in research and development (R&D) help to equip the firms in seeking and acquiring potentially new and valuable information and/or knowledge that when integrated into the firm would enhance the firm's performance in process and product development

#### **4.1.3 Objective 3: Relationship of the factors of severe effect affecting performance of SSCFs and MSCFs in Gombe State**

Table 7 revealed that, there is positive strong significant relationship between the factors of severe effects affecting performance in small and medium-sized construction firms (SMCFs) as the severity of factors affecting performance increases in small firms, it also tends to increase in medium-sized firms ( $r = 81.1\%$ ,  $N = 68$ ,  $p = 0.0007 < 0.01$ ).

This objective outcome corroborates with the earlier assertion that ads SMEs comprised of about 70–90% of the business establishment in the manufacturing sector in Nigeria, potential of SMEs is to serve as an engine for wealth creation, employment generation, entrepreneurial skills development, and sustainable economic development but the factors of severe effects affecting SMCFs needs to be curtailed (Eniola & Ektebang, 2014).

## **V. CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Conclusions**

The research concluded based on the findings as follows:

- i. Inadequate management skill, absence of research and development (R & D), and

inadequate training and continuous professional development, limited access to funds from finance institutions, inadequate management of infrastructure, low level of educational and technical knowledge, and high transaction cost are the most factors of severe effect affecting the performance of severe size construction firms (SSCFs) in Gombe State.

- ii. Inadequate training and continuous professional development, absence of research and development (R & D), low level of educational and technical knowledge, limited access to funds from finance institutions, and high interest rate and inadequate management skill are the most factors of severe effect affecting the performance of severe size construction firms (SSCFs) in Gombe State.
- iii. There is positive strong significant relationship between the factors of severe effects affecting performance in small and medium-sized construction firms as the severity of factors affecting performance increases in small firms, it also tends to increase in medium-sized firms ( $r = 81.1\%$ ,  $N = 68$ ,  $p = 0.0007 < 0.01$ ).

### **5.2 Recommendations**

The recommendations deduced from the conclusion as follows:

- i. Management of SSCFs should attend to the necessary skills required for effective delivery of construction business through employing personnel with sound educational and technical know-how that can ensure more chances of accessing more funds for their construction businesses and to increase productivity and performance of the firm.
- ii. The management of MSCFs should engage in proper training and continuous professional development by allocating more funds to research and development (R & D) to have more equipped personnel to compete with the ever-increasing challenges in the construction circle.
- iii. SMCFs should adopt a functional structure that would encourage the involvement of personnel in decision making for rapid organisational growth.

### **REFERENCES**

- [1]. Abdullah, A., Bilau, A. A., Enebuma, W. I., Ajagbe, A. M. and Ali, N. K. (2012). Evaluation of job satisfaction and performance of employees in small and

- medium sized construction firms in Nigeria. International Conference of Construction and Project Management. 16<sup>th</sup> – 18<sup>th</sup> Sept. 2011. Singapore. Proceedings of the International Association of Computer Science and Information Technology, (IACSIT): Pp. 225.
- [2]. Abor, J. (2008). Determinants of the Capital Structure of Ghanaian firms. African Economic Research Consortium.
- [3]. Abor, J. and Quartey, P. (2010). Issues in SME development in Ghana and South Africa. International Research Journal of Finance and Economics, 39, 218-228.
- [4]. Ajagbe, A. M. and Ismail, K. (2014). Factors Influencing Venture Capital Assessment of High Growth Companies in Malaysia. International Journal of Entrepreneurship and Small Business, 21(4): 457 – 494.
- [5]. Ajagbe, A. M., Ismail, K., Aslan, A. S. and Choi, S. L. (2012). Investment in Technology Based Small and Medium Sized Firms in Malaysia: Roles for Commercial Banks. International Journal of Research in Management and Technology, 2(2): 147-153.
- [6]. Ali, M., Ali, N. A. & Adnan, R. (2011). Determinants of Business Success (An Exploratory Study). International Journal of Human Resource Studies. 1(1) 98-110. DOI: 10.5296/ijhrs.v1i1.919
- [7]. Alinaitwe, H., Apolot, R. & Tindiwensi, D. (2013). Investigation into the causes of delays and cost overruns in Uganda's public-sector construction projects. Journal of Construction in Developing Countries. 18(2). 33 – 43.
- [8]. Allen D. W. (2000). "Transaction Costs", in Boudewijn Bouckaert and Gerrit De Geest, eds. The Encyclopedia of Law and Economics, Cheltenham, Edward Elgar, pp. 893-926.
- [9]. Alzahrani, J. I. & Emsley, M. W. (2013). The impact of contractors' attributes on construction project success: A post construction evaluation. International Journal of Project Management. 31 (2013) 313–322. doi:10.1016/j.ijproman.2012.06.006
- [10]. Amit, S. (2009). Improving the effectiveness and efficiency of project management technique for IT product / services development. ActionWave.
- [11]. Anna, L. S. L. (2008). Securing Financial Resources for Small and medium Contracting Firms in Malaysia, MSc Thesis. Universiti Sains Malaysia (USM).
- [12]. Aris, N. (2006). SMEs: Building Blocks for Economic Growth. National Statistics Conference, Malaysia, 4-6, September.
- [13]. Bamidele, M. and Iyagba, R. (2015). Comparative Study of Problems Facing Small Building Contractors in Nigeria and South Africa. Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 6(2):101-109.
- [14]. Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.
- [15]. Barney, J. B. & Arikan, A. M. (2006). The Resource-based View: Origins and Implications (J. S. Hitt, A. Freeman, A. R. Harrison, Ed.).
- [16]. Benham, A. and Benham, L. (2001), "The cost of Exchange", Roland Coase Institute Working Papers, No. 1.
- [17]. Berggren, B., Olofsson, C. and Silver, L. (2000). Control Aversion and the Search for External Financing in Swedish SMEs. Small Business Economics, 15(3), 233-242. <http://dx.doi.org/10.1023/A:1008153428618>
- [18]. Bilau, A. A. (2011). The Development of Small and Medium Sized Construction Firms in Nigeria Using Absorptive Capacity. Being an MSc. Thesis Submitted to the Graduate School of Faculty of Civil Engineering, Universiti Teknologi Malaysia.
- [19]. Bilau, A. A., Ajagbe, M. A., Bustani, A. S., and Sholanke, A. B. (2015). Review of Absorptive Capacity in Small and Medium Sized Construction Firms in Nigeria. Developing Country Studies. 5(16). 2015.
- [20]. Brink, A., Cant, M. and Ligthelm, C. (2003). Problems experienced by small businesses in South Africa. [Online] Available: <http://www.ftms.edu.my/pdf/Download/UndergraduateStudent/BusinessEconomics/Problems%20Experienced%20by%20Small%20Businesses%20in%20South%20Africa.pdf> Accessed: 10 July 2014.
- [21]. Cassar, G. (2004). The Financing of Business Start-Ups. Journal of Business Venturing, 19(2), 261-283.

- [http://dx.doi.org/10.1016/S0883-9026\(03\)00029-6](http://dx.doi.org/10.1016/S0883-9026(03)00029-6)
- [22]. Chen, P. (2007). Complexity of Transaction Costs and Evolution of Corporate Governance. *The Kyoto Economic Review*, vol. 76, No 2, Pp. 139 – 153.
- [23]. Clements, J. P. &Gido, J. (2015). *Effective Project Management*. 6<sup>th</sup> ed. Boston: Cengage Learning.
- [24]. Coleman, S. and Cohn, R. (2000). Small Firms' Use of Financial Leverage: Evidence from the 1993 National Survey of Small Business Finances. *Journal of Business and Entrepreneurship*, 12(3), 81.
- [25]. Daniel, C. O., Yusuf, J. G. &Adullahi, M. (2025). Influence of Project Manager's Leadership Competencies on Construction Projects' Performance. *International Journal of Research and Scientific Innovation (IJRSI)*, XII(III). 401-416. Doi: <https://doi.org/10.51244/IJRSI.2025.1203.0027>
- [26]. Dawson, C. (15 Jan, 2014). The Project Life Cycle 'In: Turner, R.J. Ed(s). *Gower Handbook of Project Management*. England: Gower House. 527 – 546.
- [27]. Dul, J. & Neumann, W. P. (2007). The Strategic Business Value of Ergonomics. In: R. N. Pikaar, E. A. P. Koningsveld& P. J. M. Settels (Eds.). *Meeting Diversity in Ergonomics* (2nd ed., pp.17-27). Elsevier Science Ltd. <https://doi.org/10.1016/B978-008045373-6/50003-9>
- [28]. Durdyev, S. & Ismail, S. (2017). The build-operate-transfer model as an infrastructure privatisation strategy for Turkmenistan. *Utilities Policy*, 48, 195-200. <https://doi.org/10.1016/j.jup.2016.12.002>
- [29]. Faniran, O. (1999). The Role of Construction Project Planning in Improving Project Delivery in Developing Countries: Case Study of the Nigerian Construction Industry. Deakin University, Australia.
- [30]. Federation of Construction Industry circular (FOCI, 2001). No. 23. dated 17<sup>th</sup> October 2001. Pp. 1 – 2. The circular conveyed the new conditions of service for junior employees in construction industry.
- [31]. FinScope (2010). South Africa Small Business Survey 2010. Finmark Trust. [Online] Available: <http://www.finmark.org.za/blog/publication/finscope-south-africa-small-business-survey-2010-report/> Accessed: 1 August 2014.
- [32]. Florian, M. and Grigor, D. (2015). Transaction Costs in Constructing Small and Medium Hydro Power Plants in Albania. *European Journal of Sustainable Development* (2015), 4(2). 323 – 328.
- [33]. Greasly, M. N. (2005). Employee perception of empowerment, employee relations, 27(4). 354 – 368.
- [34]. Gushibert, S. (2011). Building Small and Medium Scale Enterprise: A Strategy for Economic Development in Nigeria. *Jos Journal of Economics*, 4(1). 130 – 152.
- [35]. Hamma-Adama, M. (2017). Causes of Building Failure and Collapse in Nigeria: Professionals' View. *American Journal of Engineering Research (AJER)*, 6(12). 289-300.
- [36]. Hazır, Ö. (2015). A review of analytical models, approaches and decision support tools in project monitoring and control. *International Journal of Project Management*. 33(4). 808- 815.
- [37]. Hutchinson, P. (1999). Small Enterprise: Finance, Ownership and Control. *International Journal of Management Reviews*, 1(3), 343-365. <http://dx.doi.org/10.1111/1468-2370.00018>
- [38]. Idoro, G. I. (2011). Comparing Occupational Health and Safety Management Efforts and Performance of Nigerian Construction Contractors. *Journal of Construction in Developing Countries*.
- [39]. Idoro, G. I., and Akande- Subar, L. O. (2008). Clients' Assessment of the Quality Performance of Indigenous and Expatriate Construction Contractors in Nigeria. A paper presented at COBRA: The Construction & Building Research Conference of the RICS. Held on 4-5 Sept. 2008, at the Dublin Institute of Technology: RICS.
- [40]. Inuwa, I. I., Iro, A. I., and Dantong, J. S. (2013). Construction Work Items Unit Rate Model for Building Contractors Project Pricing in Nigeria. *Journal of*

- Engineering and Applied Sciences. 5(1): 95 – 103.
- [41]. Irwin, D. and Scott, J. M. (2010). Barriers Faced by SMEs in Raising Bank Finance. *International Journal of Entrepreneurial Behaviour and Research*, 16(3), 245-259. <http://dx.doi.org/10.1108/13552551011042816>
- [42]. Ismail, K., Tengku-Azhar, N. T., Yong, Y. C., Aslan, A. S., Omar, W., Majid, I. W. and Ajagbe, A. M. (2012). Problems on Commercialization of Genetically Modified Crops in Malaysia. *Elsevier Procedia-Social and Behavioral Sciences*, 40: Pp. 353 – 357.
- [43]. Kamal, E. M. and Flanagan, R. (2014). 'Model of Absorptive Capacity and Implementation of New Technology for Rural Construction SMEs', *Australasian Journal of Construction Economics and Building Conference Series*, 2(2): 19-26.
- [44]. Khairuddin, H. (2010). Revisiting the Role of Small and Medium-Sized Enterprises in the Malaysian Economy. *Universiti Utara Malaysia*. [www.resources.mim.edu.my](http://www.resources.mim.edu.my)
- [45]. Kulemeka, P. J., Kululanga, G. and Morton, D. (2015). Critical Factors Inhibiting Performance of Small- And Medium-Scale Contractors in Sub-Saharan Region: A Case For Malawi. *Journal of Construction Engineering*. Volume 2015 (2015), article id 927614, 17 pages. <http://dx.doi.org/10.1155/2015/927614>
- [46]. Manolescu, G. & Geamănu, M. (2010). Dimensions of the Company's Efficiency. 79-85. *Editura Fundatiei Romania de Maine* [ojs.anale.spiruharet.ro/article/502](http://ojs.anale.spiruharet.ro/article/502)
- [47]. Odediran, S. J., Adeyinka, B. F., Opatunji, O. A., and Morakinyo, K. O. (2012). Business Structure of Indigenous Firms in the Nigerian Construction Industry. *International Journal of Business Research and Management (ijbrm)*, 3(5): 255 – 264.
- [48]. Ofori, G. (2009). Small and Medium Sized Construction Enterprise Development. *Construction for Development (ISIZA)*. 1<sup>st</sup> Quarter.
- [49]. Omonori, A. A. & Lawal, A. F. (2015). Understanding Customers' Satisfaction in Construction Industry in Nigeria. *International Journal of Management Technology*. 3(1). 29-38.
- [50]. Petty, J. and Bygrave, W. (1993). What Does Finance Have to Say to the Entrepreneur. *The Journal of Small Business Finance*, 2(2), 125-137.
- [51]. Project Management Institute (PMI, 2013). *A Guide to the Project Management Body of Knowledge-Fifth Edition*. Pennsylvania: Project Management Institute Inc.
- [52]. Radiah, A., Mohd, R. & Ab. Azid, H. J. (2009). Success Factors for Small Rural Entrepreneurs under the One-District-One-Industry Programme in Malaysia. *Journal of Contemporary Management Research*, 5(2). 147-162.
- [53]. Robb, L. (2014). Project proposal and initiation. In Turner: R.J. ed(s). *Gower Handbook of Project Management*. England: Gower House. 569 – 584.
- [54]. Robinson, H. S., Carillo, P. M., Anumba, C. J. and Ghassani, A. M. (2003). Business Improvement through Innovation in Construction Firms: The 'Excellence' Approach. 10<sup>th</sup> Symposium of Construction Innovation and Global Competitiveness.
- [55]. Rogoff, E. G., Lee, M. S. & Suh, D. C. (2004). Who done it? Attributions by entrepreneurs and experts of the factors that cause and impede small business success. *Journal of Small Business Management*, 42 (4), 364-376.
- [56]. Sami, K. (2009). Concepts and attributes of customer satisfaction in construction, *Helsinki University of Technology*.
- [57]. Serrador, P. & Turner, J. R. (2015). The Relationship Between Project Success and Project Efficiency. *Project Management Journal*. 46(1). 30–39. DOI: 10.1002/pmj.21468
- [58]. Shenhar, A. J. & Dvir, D. (2007). *Reinventing Project Management: The Diamond Approach to Successful Growth and Innovation*, Harvard Business School Press, Boston, MA.
- [59]. Silva, G. A. S. K., Warnakulasuriya, B. N. F. & Arachchige, B. J. H. (2016). Criteria for Construction Project Success: A Literature Review. 13<sup>th</sup> International Conference on Business Management. 697-717. <https://www.researchgate.net/publication/314949396>

- 
- [60]. SMEDAN and National Bureau of Statistics Collaborative Survey: Selected Findings (2013)
- [61]. Thwala, W. D., Ajagbe, M. A., Enegbuna, W. I., Bilau, A. A. and Long, C. S. (2012). Sudanese Small and Medium Sized Construction Firms: An Empirical Survey of Job Turnover. *Journal of Basic and Applied Scientific Research*. 2(8)7414-7420.
- [62]. Ugwudioha, M. O. (2004). Compensation System in Nigerian Construction Firm "Piccolo-Brunelli Engineering Ltd". A Dissertation Submitted In Partial Fulfilment of the Requirements for the Award of Doctor of Philosophy in Management. St. Clements University. June 2004.
- [63]. Usman, N. A., Inuwa, I. I., Iro, A. I., and Dantong, J. S. (2012). Training of Contractors Craftsmen for Productivity Improvement in the Nigerian Construction Industry. *Journal of Engineering and Applied Sciences*, 4:1-12.
- [64]. Van Auken, H. E. and Neeley, I. (1996). Evidence of Bootstrap Financing Among Small Start-Up Firms. *Journal of Entrepreneurial and Small Business Finance*, 5(3), 235.
- [65]. Verzuh, E. (2015). *The Fast Forward MBA in Project Management*. 5<sup>th</sup> ed. New Jersey: John Wiley & Sons, Inc.
- [66]. Vos, E., Yeh, A. J., Carter, S. and Tagg, S. (2007). The Happy Story of Small Business Financing. *Journal of Banking and Finance*, 31(9), 2648-2672. <http://dx.doi.org/10.1016/j.jbankfin.2006.09.011>
- [67]. Wibowo, A. (2009). The Contribution of the Construction Industry to the Economy of Indonesia: A Systematic Approach. Paper Presentation at the National Skills Academy, Indonesia.
- [68]. Wu, J. and Guo, J. (2008). Specialization of Small to Medium-Sized Construction Enterprises. School of Economics and Management, Beijing Jiaotong University, P. R. China.
- [69]. Youcef, J.-T. Z. & Nils, O. E. O. (2017). Defining project efficiency, effectiveness and efficacy. *International Journal of Managing Projects in Business*. 10(3). 621-641, <https://doi.org/10.1108/IJMPB-10-2016-0085>