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Babandi Ibrahim Gumel, Barjoyai Bin Bardai. Critical Success Factors (CSFs) of SMEs in Nigeria and the Mediating Impact of SMEDAN Initiative Between the CSFs and SMEs' Success. *International Journal of Business and Economics Research*, 2023, 12, 10.11648/j.ijber.20231203.11 . hal-04095612

**HAL Id: hal-04095612**

**<https://hal.science/hal-04095612v1>**

Submitted on 12 May 2023

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# Critical Success Factors (CSFs) of SMEs in Nigeria and the Mediating Impact of SMEDAN Initiative Between the CSFs and SMEs' Success

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## To cite this article:

Babandi Ibrahim Gumel, Barjoyai Bin Bardai. Critical Success Factors (CSFs) of SMEs in Nigeria and the Mediating Impact of SMEDAN Initiative Between the CSFs and SMEs' Success. *International Journal of Business and Economics Research*. Vol. 12, No. 3, 2023, pp. 68-86. doi: 10.11648/j.ijber.20231203.11

**Received:** April 5, 2023; **Accepted:** April 23, 2023; **Published:** May 10, 2023

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**Abstract:** The study is deduced from a Ph.D. thesis that investigated the critical success factors influencing SMEs in Jigawa State, Nigeria. Over twenty-one, critical success factors were identified in the literature review as influencing the success of SMEs across many locations and industries, and seven were considered important for this study. Studies confirmed the need to identify the CSFs that apply to SMEs of a location or industry. The federal government of Nigeria focused on developing entrepreneurship and SMEs to trigger socio-economic development, which resulted in many initiatives, including the establishment of SMEDAN to support the development of SMEs to reduce or eliminate their failure, as envisaged by many researchers. The objective was to discover the CSFs that influence the success of SMEs in Nigeria. The study using a mixed approach, considered the SMEs operating in Jigawa State, Nigeria, and selected a sample of four hundred respondents where 314 answered the self-administered survey questionnaire, and 15 owners/managers answered the semi-structured interview. The application of the SPSS statistical package revealed a higher educational level, prior work experience & management skills, adequate financial resources, and legal & regulatory compliance as influencing the success of SMEs of Jigawa State, Nigeria. Similarly, the SMEDAN initiative mediation between education level and finance resources: and the success of SMEs operating in Jigawa State is influencing their success. The CSFs of SMEs were considered information to be utilized by owners/managers to develop best business practice policies that will trigger socio-economic development by reducing unemployment and poverty in Nigeria. The paper positioned a CSFs model for SMEs operating in Jigawa State, Nigeria, and will serve as information that will be utilized to develop best business practices to mitigate SMEs' failures.

**Keywords:** Critical Success Factor (CSF), Small and Medium Enterprises, Socio-Economic Development (SED), SMEDAN, Entrepreneurial Factors, Enterprise Factors

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## 1. Introduction

Small Businesses play a role in the world economy through the economic development of nations [1]. Small businesses are considered one of the most critical sectors that grow nations through socioeconomic development [2]. SMEs create products and services that have value in economies [3] and help citizens acquire new skills [4]. SMEs create wealth for citizens and nations [1], igniting research and development

and eventually industrialization [5]. The most recognized contribution of SMEs to socioeconomic growth is providing employment opportunities to citizens of nations [2]. A study concluded that small businesses sustain the economic activities of nations [2]. SMEs' ability to generate employment triggers the quest to utilize them as the source of socioeconomic development [6]. Evidence emerged as to why researchers and policymakers recognized the importance of SMEs in employing citizens [7-11] Countries establish

institutions/agencies to support the growth and development of SMEs [7]. Despite the importance of SMEs to nations' socioeconomic development, SMEs failed in their early stage of formation [12]. There is a need for knowledge by owners/managers on the factors to use and develop policies for best business practices to mitigate SMEs' failure. Lussier (2005) found critical success factors as essential knowledge to use and develop best business practice policies to mitigate SMEs' failure. Researchers have recognized three categorizations of SMEs' CSFs: entrepreneurial, enterprise, and environmental factors [14-17]. Even with the categorization, particular CSFs for the SMEs model are meant for the Nigerian location. The literature review revealed six entrepreneurial factors influencing the success of SMEs across many locations and industries. There is a need to determine the critical success factors that influence the success of SMEs operating in Jigawa State, Nigeria: and the mediating impact of the SMEDAN initiative between the CSF and the success of the SMEs. The study aimed to position a model focusing on the critical success factors (CSFs), the mediating impact of the SMEDAN initiative, and Nigerian SMEs, particularly in Jigawa State, Nigeria. Identifying the CSFs influencing the success of SMEs operating in Jigawa State, Nigeria, will serve as knowledge for owners/managers to develop best business practice policies to reduce the failure of SMEs in Nigeria. Reducing the failure of SMEs in Nigeria will trigger socioeconomic development by employing citizens. This presentation is deduced from a thesis that revealed the findings in this paper.

### **1.1. Statement of Problem**

The Nigerian government focused on oil during the 1960s due to its boom. The quest for diversification of the economy made the Nigerian leadership use entrepreneurship and the small business sector for socioeconomic development in the 1970s. Despite the efforts to develop the economy with SMEs, there is evidence that SMEs fail during early development. There is a need for methods of reducing the failure of SMEs in Nigeria. Reducing the failure requires data to develop best business practice policies. CSFs of SMEs models served as data for reducing SMEs' failure worldwide [17]. CSFs of SME models have to be replicated in new locations or industries to become effective [18]. There are three categories of CSFs of SMEs; entrepreneurial, enterprise, and environmental factors [16]. The entrepreneurial factors are owners/managers factors influencing the success of SMEs; the enterprise factors concern the company, while the environment concerns the external factors affecting the success of SMEs. The essence was to use a mixed research method to reveal the CSFs influencing the success of SMEs operating in Jigawa State, Nigeria. Jigawa State, Nigeria, is one of the 36 States in Nigeria. Due to time and money limitations, the study is limited to Jigawa State, Nigeria. Generalization of the study might be possible if the study is replicated. The study revealed SMEs' critical success factors and SMEDAN mediation impacting SMEs' success to provide the information needed by the owners/managers to reduce the failure of SMEs and

improve success. If SMEs become successful, they will employ most citizens of the country and improve the nation's socioeconomic development.

### **1.2. The Objective of the Study**

The study aimed to identify critical success factors (CSFs) influencing the success of SMEs operating in Dutse, Nigeria. Researchers identified the Es CSFs (entrepreneurial, enterprise, and environmental factors), categorizing CSFs influencing SMEs' success [16]. The entrepreneurial factors concern the owners/managers of SMEs, and the enterprise factors concern the factors navigating the success or otherwise of the company. In contrast, the environmental factors concern the outside firm factors. Researchers identify many CSFs as influencing SMEs' success without concern for location or industry. Replicating the CSFs models to a specific location or industry will reveal the CSFs that influence SMEs' success in a particular location or industry. This study determined CSFs that influence the success of SMEs operating in Jigawa State, Nigeria, as it is deduced from dissertation research covering the location. The study will also reveal the mediating impact of the SMEDAN initiative between the identified seven critical success factors and the success of SMEs. The researcher studied the topic under the strict supervision of a University thesis supervisor for the award of a Ph.D.

### **1.3. Research Question**

The research question is, "What are the critical success factors (CSFs) influencing the success of SMEs operating in Jigawa State, Nigeria? The question was answered after reviewing the literature on critical success factors models and theories, articles on SMEs' success and challenges, and success vs. failure models of SMEs as secondary data. The researcher investigated those factors that impacted the success of SMEs operating in Jigawa State, Nigeria. The researcher deduced the CSFs influencing SMEs' success in Nigeria.

### **1.4. The Significance of the Study**

Reducing the failure of SMEs might result in small businesses' success. Small businesses' success will improve employment, reduce poverty, improve citizens' living standards, and spur nations' socioeconomic growth. The findings will provide information for small business owners/managers to develop policies that will serve as best business practices to reduce SMEs' failure.

## **2. Literature Review**

### **2.1. Introduction to Literature Review**

Some theories and models investigated factors influencing SMEs' success vs. failures in various countries and industries [15, 18, 19] Some models investigated SMEs' critical success factors (CSFs) across many nations and industries [16, 17]. The theories and models are intended to guide owners/managers of small businesses to identify the most

important factors that will spur their success [15]. After studying the models and theories and searching scientific databases, the researcher found many factors that impact SMEs' success. These include entrepreneurial, enterprise, and environmental factors [17, 16]. The investigation revealed six entrepreneurial CSFs impacting SMEs' success: prior work experience and management skills, educational level, age of owners/managers, gender, entrepreneurial orientation, and personality [15-17, 19]. Nine enterprise CSFs identified as impacting the success of SMEs across various locations and industries, including the size and age of a firm, the network of the business, customer relationship management, and human capital. Others include financial resources, market and product development, internationalization, strategic planning, and marketing. Seven business environmental CSFs were identified as influencing the success of SMEs across locations and industries, including technological influence, ecological factors, political, legal, economic, environmental, and sociocultural. The literature reviewed the twenty-one CSFs that impact SMEs' success across many locations and industries, enabling the researcher to compare and find similarities with the study's findings. The twenty on CSFs were classified into three categories, entrepreneurial factors, enterprise factors, and environmental factors.

## **2.2. Entrepreneurial Factors**

They concern the people managing the organization and those who own the firm. The factors more or less concern the owners and managers of the companies. A study identified prior work experience & management skills, personality, gender, entrepreneurial orientation, educational level, and age of owners as factors that concern the owners/managers of SMEs across locations and industries [17].

### **2.2.1. Prior Work Experience and Management Skills**

The prior work experience and management skills of owners/managers are components of human endeavor that propel an organization's performance [17], and influence SMEs' success [15]. A study of factors influencing family SMEs' success in India suggested that managers' experience helped develop new products and services [20]. Even though owners'/managers' experience improves start-ups, SMEs' profitability is separate from SMEs' profitability [21]. Researchers argued that experience influences the profitability of SMEs [22]. Some researchers stated that the owners'/managers' experience measures organizations' competencies and influences performance [22]. Therefore, owners/managers of SMEs should be focused on prior experience and management skills from two angles: owners/managers being serial entrepreneurs or employing experienced managers to spur growth and success.

### **2.2.2. Personality**

Define Personality means those personal attributes of owners/managers displayed during an organization's operations. Some studies show the role of personality traits in business performance [23]. A study found that personality

impacts firms' success, and owners'/managers' competence is an aspect of personality [24]. The cognitive characteristics of owners/managers are the personality traits that trigger SMEs' performance [25]. Entrepreneurial success positively relates to personality traits [26]. Owners/managers with openness to experience were found to be successful in their business operations [26]. Similarly, a study shows that managers' openness to experience improves their creative ability and that managers' ability to interact with others is influenced by self-confidence [27]. Another study confirmed that personality traits influence the decision to create a new venture [17], and another stressed that their personalities influence small business owners'/managers' innovative capacity [28]. Therefore, owners'/managers' personality influences small firms' success [29].

### **2.2.3. Gender**

Researchers have a tough stance, mainly where a venture's ownership consists of males and females [30]. A researcher discovered that the sales volume by successful women business owners is lower than that of male owners, making sales drive for income by women lower than that by men [31]. The age, mentoring, motivations, education, planning ability, and experience of women owners/managers positively impact SMEs' performance [32]. Similarly, the result of a study stated that the education of women owners of SMEs influences performance [33]. Another study found that SMEs started by women owners are usually successful, and the SMEs' location determines the firms' revenue [34]. Women have lower entrepreneurial intentions than men [35], while male owners are more concerned with SMEs' adoption of e-commerce than women [36], and there is no apparent difference between male and female processing of loan applications [37]. There is a 10% decrease in ROA when leadership role changes from men to female [38]. The decline in performance when women assume leadership roles does not affect women's high growth in entrepreneurship activities [39]. The gender of owners/managers of SMEs affects SMEs' performance and might be critical to their success. There is also the need to determine why there is a decline in performance when women assume a SMEs' leadership position.

### **2.2.4. Entrepreneurial Orientation**

The entrepreneurial orientation of owners/managers of SMEs refers to the factors that ignite the decision to venture into a new or existing market with either a new product or service or a product or service already in play [17]. The result of a study stated that the factors influencing entrepreneurial orientation include risk-taking abilities, productiveness, and innovativeness of SME owners/managers [40]. Another study found that entrepreneurial orientation is positive for business performance [41]. Similarly, it was found that SMEs' success positively related to the entrepreneurial orientation of owners/managers [42], and another study found entrepreneurial orientation to relate positively to total quality management [43]. A review of over 51 articles confirms that entrepreneurial orientation influences businesses' success [17],

and that entrepreneurial orientation improves businesses' competitiveness [44]. Therefore, entrepreneurial orientation is a critical success factor and needs to be studied to understand its impact on SMEs.

### **2.2.5. Education Level**

Studies suggested that the educational level of owners and managers of small businesses determines the level of success recorded [17]. The higher the educational level of owners/managers, the better the sustainability of SMEs [45]. Small businesses that people with enterprise education manage grow faster [46], and managers with financial management knowledge influence their venture's performance [47]. A study asserted that managers with higher levels of education transfer their knowledge across all levels of a firm in such a way that it improves the venture's performance [48]. Owners/managers with entrepreneurship education help small businesses succeed and grow passionately [49]. Thus, the educational level of owners/managers is a critical success factor for small businesses.

### **2.2.6. Age of Owners/Managers**

The age of owners/managers of small businesses varies among individuals. A study found success of small businesses is affected by the age of owners/managers [50]. A researcher found individuals between 25 and 44 years to be the best business starters [51], while a study argued that the higher the age of an entrepreneur, the higher the rate of opportunities available [52]. Also, a study found that the age of owners/managers influences the innovativeness of a small business but further disclosed that younger owners/managers are creative, which increases the level of success because of customers' preferences [53]. Therefore, the age of owners/managers of SMEs is a critical success factor.

## **2.3. Enterprise Factors**

A study identified nine enterprise factors that apply to SMEs across locations and industries [17]. These are factors that concern the firm and its operations. The factors include the age and size of the company. Customer relationship management, business network, and financial resources. Other factors include internationalization, human capital, market and product development, marketing, and strategic planning influence.

### **2.3.1. Age and Size of the Company**

The structure's composition for a company's functional areas determines the size of a firm. A study revealed that older companies are more productive with fewer profits and larger firms [54]. The size and age of a company moderate the performance of such a firm [55]. The firm age is negatively related to its performance, and the company's size is positively related to performance [56]. The size of a firm determines how to use cooperate tools, whereas compensation tools are used by larger corporations [57]. The size of a company determines how non-financial performance disclosure is effective when making an analysis [58]. The age and size of a firm do not determine the cost of debt or impact on the management of

earnings [59]. The bigger the size of a company, the higher the chances of influencing access to capital [60]. Larger firms have a sophisticated structure with heavy bureaucracies, positively affecting success [61]. A study found that a company's size and age affect its success, making it an SME's CSF [62].

### **2.3.2. Business Network**

Researchers described a business network as the capabilities of owners and managers to identify contacts that will develop businesses and be able to maintain them [62]. A study also describes the business network as interdependencies related to resources and activities between actors within an industry or environment [63]. The resources of a business network members are shared to achieve their objectives [64]. The strategic networks business network influences the performance of manufacturing firms [65]. Entrepreneurial firms that maintain their presence in an active business network maintain a competitive advantage [66]. Businesses that maintain alliances within a business network maintain increased access to skills, competencies, and resources [17]. A study confirmed that small businesses participating in business networks reduce operational costs resulting in increased growth [67]. Therefore, business networks remain a critical success factor for SMEs.

### **2.3.3. Customer Relationship Management**

Researchers described customer relationship management (CRM) as a system that facilitates information sharing between sales, customers, and operations management [68]. The most important function of customer relationship management is the company's culture to satisfy its customers by ensuring that superior products and services are provided and delivered at the right time [68]. The everlasting relationship between a firm and a customer, or customer loyalty, is created due to the provision of superior services and products [69]. The only way firms can reduce the cost of finding new customers or creating customer loyalty is when a firm maintains a closer relationship with customers [70]. 21st-century businesses are enabled by technology, including CRM, which provides a platform for sourcing information to manage effective customer relations, and the adoption of ICT facilitates effective CRM in small firms [71]. Customer loyalty stems from an effective CRM system, resulting in improved performance and profit [72]. Researchers found that SMEs' performance is improved with effective customer relationship management. Therefore, customer relationship management is critical for SMEs' success [73].

### **2.3.4. Financial Resources**

Small and medium organizations require adequate financial resources, or cash flow, for sustainable growth and success [74]. Despite the importance of financial resources to small firms, human capital remains the key factor in starting a business [75]. Researchers argued that even if there is adequate human capital to start a business, financial resources are necessary for the success of small businesses [76]. When firms have adequate financial resources, they must adhere to

the best financial management practices to ensure profitability because of reduced costs [77]. High financial management in small businesses improves performance and success [78]. A study concluded that adequate financial resources in small businesses influence their performance [79]. Therefore, financial resources are critical to SMEs' success.

### **2.3.5. Human Capital**

Human capital is considered the most critical in the entrepreneurship journey because entrepreneurship performance commences and improves with its adequacy [80]. A study describes human capital as people, skills, training, schooling, experiences, investments, and competencies that impact businesses positively toward success [80]. Similarly, it was confirmed that the managers' skills and experiences would maintain the competitive advantage of small businesses as human capital [81]. A business's competitive advantage level is influenced by the human capital and value-generating knowledge they have in SMEs [82]. Small businesses' efficiency is influenced by human capital adequacy [83]. Human capital adequacy influences the high degree of a firm's innovative capacity [84]. A study found that adequate human capital in SMEs influences performance and success [85]. Therefore, human capital is critical to the success of SMEs.

### **2.3.6. Internationalization**

Government policies are made to support companies' inward and outward internationalization [86]. The success of small business internationalization depends on adequate human capital and entrepreneurial orientation [87]. Small businesses utilize their presence in a business network to collect information to determine successful internationalization of activities [86]. The success of a small business in its domestic operations propels internationalization activities to succeed [88]. The use of technology by small businesses sped up their internationalization process, increasing their performance and success [89]. A study found that successful internationalization by small firms results in increased performance and success [90]. Therefore, internationalization is critical to the success of SMEs.

### **2.3.7. Market and Product Development**

A researcher states that when a firm is targeted to sell in a new market, it is referred to as market development [91]. At the same time, product development was defined as the "transformation of a market opportunity into a product available for sale" [92]. Competitive advantage is sustained when a company enters or takes a new product to an existing market [6]. Companies use business intelligence to collect information that will guide them to respond to the market's needs for new products or reach out to new markets [94]. A study affirmed that companies monitoring the business environment continue to respond to the market's needs, sustaining their competitive advantage [95]. The information collected from customers must be considered when developing new products that will add value to them [96]. The use of resources and capabilities by businesses to develop

products and markets results in improved SME performance and success [97]. Market and product development is critical to the success of SMEs.

### **2.3.8. Marketing**

There are many definitions of marketing, and scholars identify that of the American Marketing Association (AMA) and that of Philip Kotler [98]. AMA defines marketing as an "activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large" [98]. A study identifies marketing function as one of the most important to SMEs' survival because of their inability to access markets easily [99]. The effort of an SME to develop valuable products and services makes it competitive in a business environment [100]. Innovative marketing, such as entrepreneurial marketing, should replace traditional marketing in SMEs to remain competitive [101]. SMEs should adopt Internet marketing for improved market penetration [102] and, more importantly, incorporate mobile marketing technology into their marketing [103]. Like internet marketing, social media marketing has become a very effective strategy for SMEs to penetrate the market, improving their performance and success [104]. Therefore, marketing is critical to the success of SMEs.

### **2.3.9. Strategic Planning Influence**

Strategic planning is defined as: "Those activities for the determination in advance that actions and human and physical resources that are required to reach a goal; it includes identifying alternatives, analyzing each one, and selecting the best one" [105]; [106]. Researchers identified strategic planning as the efforts of managers to control future actions in an organization by making decisions in an integrated way within specified and formalized procedures [107]. Similarly, it was considered the efforts of managers and owners of small businesses to recognize innovative and value-adding opportunities and make sure they are converted into successful ventures as strategic planning actions [108]. There is a significant positive relationship between strategic planning and small business performance and success [109]. Therefore, strategic planning influence is critical to the success of SMEs.

## **2.4. Business Environment Factors**

Researchers stated that factors outside the firm might negatively or positively impact the success of small businesses [110]. Seven factors were identified as environmental factors that are critical to small businesses, including sociocultural, political, ecological, environmental, legal & regulatory, and technological influence [17]. The effectiveness and efficiency of small businesses are impacted by sociocultural, political, economic, and technological factors [17]. Since external factors impacts of performance of small businesses, they are critical to SMEs' success.

### **2.4.1. Economic Environment Factors**

The pattern of economic growth, foreign exchange rates, inflation rates, interest rates, and foreign direct investment are

the economic factors that impact the performance and success of businesses [111]. The local and national government economic policies influence the demand and supply of goods and services [112]. The growth of SMEs in Nigeria is influenced by a reduction in inflation rates, interest rates, and foreign exchange rates [113]. Governments control interest rates to improve access to finance by SMEs through reduced costs of borrowing [114]. The interest rate is the third most crucial challenge to small business development [115]. The pricing of goods and services is affected by the inflation rate [116]. Foreign direct investment influences SMEs' performance and efficiency [117]. SMEs' growth is positively affected by the economic growth of a nation [118]. Therefore, economic factors are critical to the success of SMEs.

#### **2.4.2. Political Environment Factors**

The decision of owners to start a new venture is influenced by social, economic, technological, and political factors [119]. The business environment is affected by the quality of political factors in an economy [119]. Similarly, the quality of the business environment is also influenced by the quality of the public bureaucracies [120]. A business obtains regulatory services efficiently and timely if it has a political connection [121]. The instability of emerging economies negatively affects the growth of small businesses [17]. Similarly, A study found that SMEs' efficiency, effectiveness, and growth are seriously negated when political uncertainty exists in an economy [122]. A study concluded that political and social uncertainty in the Niger Delta region of Nigeria negates the performance and growth of small businesses [123]. Crime, such as terrorism, negatively impacts the growth of SMEs through the implication of fear on the owners/managers and other stakeholders [124].

#### **2.4.3. Sociocultural Environment Factors**

According to a study, societies, and communities in which domestic and international businesses operate are impacted by sociocultural activities navigated by sociocultural factors such as beliefs, perceptions, attitudes, behaviors, and values mostly influenced by varying demographics [125]. A study found that the decision of owners to establish a new business is impacted by sociocultural factors [126]. The establishment of SMEs and their growth is impacted by societal factors [127]. An SME operating in a culturally diverse workforce business environment can take risks and proactive actions in its operations [128]. The total quality management of organizations in Nigeria is impacted by the culture in that organization and influences its performance [129]. Researchers found sociocultural factors influencing the performance of SMEs. Therefore, sociocultural factors are critical to the success of SMEs [130].

#### **2.4.4. Ecological and Environment Factors**

Ecological and environmental issues such as climate change and the need to reduce emissions are impacting businesses across the globe [111]. Because businesses are likely to impact the lives of the societies and communities that host them negatively, they face social and community

responsibilities [17]. A study stated that businesses have to take responsibility for subduing the negative societal and community impacts of their operations to improve performance [131]. Corporate social responsibility by companies is believed to be one factor that influences customers to be loyal, thereby improving their profits and competitive advantage through added brand recognition [132]. Researchers found businesses that complied with regulations to have improved brand recognition [112]. Many ecological and environmental factors negatively impact big and small businesses' performances [17]. Climate change negatively impacts small and big firms because of rains, hurricanes, wildfires, storms, and droughts [133]. The impacts of climate change cause economic issues such as inflation which affects businesses [133]. Therefore, ecological and environmental factors are critical to the success of SMEs.

#### **2.4.5. Legal and Regulatory Environment**

Nations set laws, rules, and regulations and vest such frameworks in institutions with the powers to ensure compliance; all are referred to as the legal and regulatory environment [134]. The reasons for activating the legal and regulatory environment by nations are to ensure that practices that are not needed are curved out, and issues that will make a business flourish are encouraged [135]. The most contending issues within the legal and regulatory environment include financial reporting, taxation, trading, guides on-premises, money laundering, health, safety, employment, transportation, data, and intellectual property protection issues [135]. Government institutions guide and administer the laws, rules, and regulations to ensure compliance [136]. SMEDAN initiative is a Nigerian agency set up by the government to guide SMEs to flourish because of their importance in economic development [119]. A qualitative legal and regulatory environment improves SMEs' performance, leading to their success [138]. Therefore, the legal and regulatory environment is critical to the success of SMEs.

#### **2.4.6. Technological Influence**

There are two ways in which technology influences businesses: input and output [135]. A researcher stated that the business environment has transformed in the 21st century using information technology, where data is mined and used in all operations to improve efficiency and effectiveness of performance [139]. The world wide web has brought the world closer, where transactions happen across borders seemingly and in real-time, abolishing borders, languages, and travel time and expenses [139]. Technology has transformed how businesses are done globally, increasing speed, effectiveness, and efficiency [140]. The advances influence modern entrepreneurship in technology [141]. Public relations, supply chains, manufacturing processes, and customer relations are functional areas in small and big businesses where technology transforms and becomes more effective [139]. Small and large businesses use technology to improve performance [139]. Therefore, technology influence is critical to the success of SMEs.

### 2.5. SMEDAN Initiative

SMEDAN is an acronym of the federal government of Nigeria institution Small and Medium Enterprises Development Agency of Nigeria. The agency was established by an act of parliament of 2003 meant to support and develop the SME sector of the Nigerian economy. Because SMEs are important in developing a nation's economy, the federal government of Nigeria created SMEDAN to support and develop them [142]. SMEDAN links SMEs, government, private sector, and non-government organizations [143]. Part of the services rendered to SMEs by SMEDAN includes financial services, access to education and training, conditional grants and palliatives, and general support and guidance for SMEs to flourish [144]. A researcher stated that SMEDAN makes SMEs flourish through support and guidance and helps the Nigerian economy to become innovative and employ citizens [145]. Though there are identified challenges with the work that SMEDAN is doing, and they have to improve SMEs where they reduce unemployment and improve entrepreneurship performance [146].

### 2.6. Summary

Scholarly databases were searched, where the thesis, books, articles, and websites were reviewed. Credible content from published sources was included in the literature review. The literature review established that many critical success factor models were developed in many locations and industries. Early studies used qualitative data to identify SMEs' success versus failure factors. Later scholars focus on identifying SMEs' critical success factors (CSFs). On all two occasions, it was established that CSFs models in one location or industry vary from that of another location or industry. Thus, the first gap was identified in the review. The study is pinned on the thesis of Lampadarious (2015), which investigated the CSFs of SMEs in the UK chemical industries. Twenty-one CSFs were reviewed to understand how critical they are to the success of SMEs across locations and industries. Based on the reviewed CSFs, seven CSFs were selected for this study: prior work experience & management skills, education level, finance resources, marketing, strategic planning, legal & regulatory framework, and technological influence. The SMEDAN initiative was reviewed to understand its importance in SME development in Nigeria because it is the mediating variable of the study. The review also revealed that earlier CSFs models did not consider the institutional regulatory initiative as a factor, creating the second gap identified in the review. Introducing the SMEDAN initiative as a mediating variable will serve as a new approach to including the impact of government intervention initiatives in determining the impact of CSFs on the success of SMEs. Ultimately, using the seven factors, the study will deduce the CSFs that impact SMEs in Nigeria and determine how the SMEDAN initiative mediates the relationship between CSFs

and SMEs' success. The objective is to position a CSFs model for Jigawa State, Nigeria, that will serve as information for SME owners and managers to use in developing a best business practice to develop the Nigerian SMEs sector to reduce unemployment and poverty, thereby improving the economy of the country.

## 3. Methodology of the Study

### 3.1. Introduction to Methodology

The main problem identified for this study is the failure of SMEs in Nigeria within the first five years [147]. The study was intended to investigate and find information that SMEs can utilize and develop a best business practice to mitigate their failure in Nigeria [14]. Since the secondary data in the literature review pointed to the fact that CSFs models must be replicated in new locations or industries, the conceptual framework of Lampadarious's CSFs model that investigated the SMEs in the chemical industries of the UK was adopted for the study [17]. In the literature review, twenty-one CSFs were identified, and seven were selected, as illustrated in the study's conceptual framework. The intention is to deduce from the seven CSFs, identify the influence success of SMEs of Jigawa State, Nigeria, and identify which of the CSFs impacts success if the SMEDAN initiative mediates between their relationships. The study adopted the mixed research method to deduce from the seven CSFs and find out which influences the success of SMEs in Jigawa State, Nigeria. The details of the CSFs identified for the study and the study's hypothesis are now presented.

### 3.2. Conceptual Framework of the Study

SMEs' success will impact socioeconomic development and is considered the model's dependent variable. Based on the literature review, 21 CSFs were identified, and seven were selected based on their importance in previous CSFs models. The seven CSFs were the independent variables categorized as entrepreneurial, enterprise, and environmental factors. Figure 1 shows the conceptual framework of relationships between the seven CSFs and the success of SMEs. The SMEDAN initiative was introduced as the mediating variable to test if it impacts the success and development of SMEs in Nigeria. The essence of this study is to determine the influence of each of the seven factors on the success of SMEs operating in Jigawa State, Nigeria. The study used a mixed research approach to collect primary data through structured depth interviews and survey questionnaires with knowledgeable owners and managers in the SME sector to determine the most important CSFs of SMEs in Nigeria.

### 3.3. Hypotheses

Fifteen hypotheses were developed for the study, outlined as H1 to H15 in the study's conceptual framework. The summary of the hypothesis is in Table 1 below.



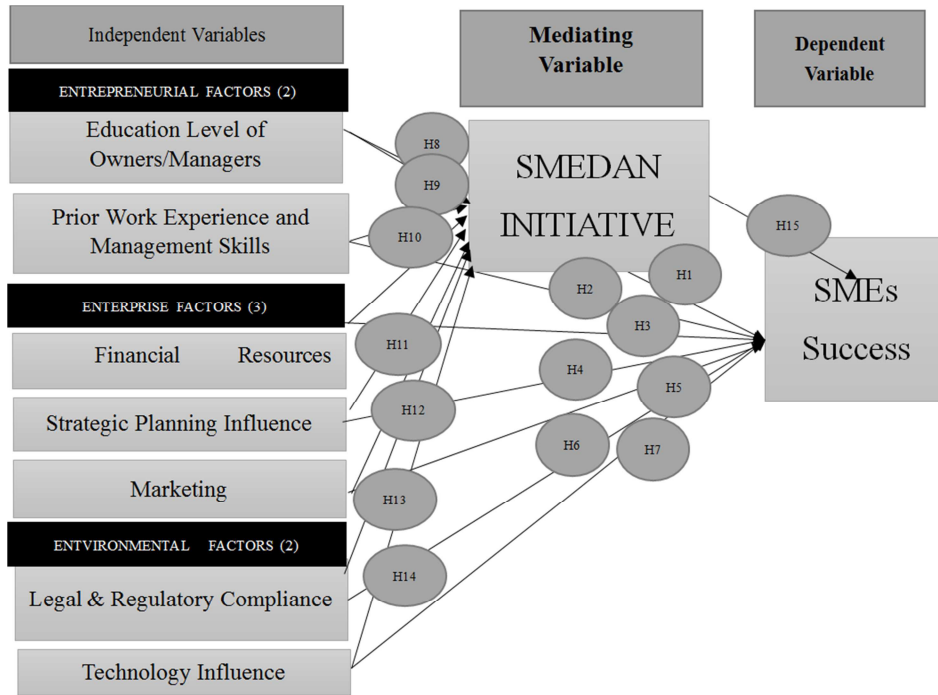


Figure 1. Conceptual Framework indicating the variables and their relationships (15) with hypotheses (15).

Table 1. Summary of Hypotheses.

Independent Variable	Hypothesis
Education Level	H1: Higher education level of owners/managers significantly influences the success of SMEs operating in Jigawa State, Nigeria.
Prior Work Experience and Management Skills	H2: Prior work experience and management skills of owners/managers significantly influence the success of SMEs operating in Jigawa State, Nigeria.
Financial Resources	H3: Adequate financial resources significantly influence the success of SMEs operating in Jigawa State, Nigeria.
Strategic Planning	H4: Implementation of strategic planning significantly influences the success of SMEs operating in Jigawa State, Nigeria.
Marketing	H5: Implementation of marketing strategies significantly influences the success of SMEs operating in Jigawa State, Nigeria.
Legal and Regulatory	H6: Conforming to the legal and regulatory framework significantly influences the success of SMEs operating in Jigawa State, Nigeria.
Technology Influence	H7: Technology adoption significantly influences the success of SMEs operating in Jigawa State, Nigeria
SMEDAN initiative	H8 – SMEDAN initiative mediate the relationship between education level and the success of SMEs operating in Jigawa State, Nigeria.
	H9 – SMEDAN initiative mediate the relationship between prior work experience and the success of SMEs in Jigawa State, Nigeria
	H10 – SMEDAN initiative mediate the relationship between financial resources and the success of SMEs operating in Jigawa State, Nigeria.
	H11–SMEDAN initiative mediate the relationship between strategic planning and the success of SMEs operating in Jigawa State, Nigeria.
	H12–SMEDAN initiative mediate the relationship between marketing skill and the success of SMEs operating in Jigawa State, Nigeria.
	H13- SMEDAN initiative mediate the relationship between legal and regulatory factors and SMEs' success in Jigawa State, Nigeria.
	H14 - SMEDAN initiative mediate the relationship between the adoption of technology and the success of SMEs operating in Jigawa State, Nigeria.
	H15 - SMEDAN initiative significantly affects the success of SMEs.

3.4. Research Method and Design

The study was based on the positivist philosophy that it should be like a study of natural sciences [148]. The positivist approach measure after identification and then evaluate and explain relationships. The mixed research method used in the study combined two methods and investigated the relationships between variables [17]. The quantitative part of the study revealed findings using

measurable ideas that were converted into numerical data where relationships were tested and proven [149]. The qualitative part of the study was used to enrich the quantitative findings. The study adopted the deductive approach, where ideas emanated from general to much more particular [150]. Using mixed data, the study positioned a CSFs model by deducing general information to arrive at specific factors that influenced the success of SMEs in Jigawa State, Nigeria.

### 3.5. Population, Sample, and Participants

The sample selected represents the whole population, the SMEs operating in Jigawa State, Nigeria [151]. The list of SMEs in the register of SMEDAN obtained by the researcher was considered the population list. The target population was the owners and managers of SMEs operating in Jigawa State, Nigeria, whom SMEDAN registered. SMEs that SMEDAN did not register are regarded as informal and not considered

in the study because access to information about them is near impossible. Therefore, the study's findings might be limited to registered SMEs, and its application might require the replication of the study on informal SMEs. A researcher argued that SME owners and managers are the most knowledgeable to suggest operations and information about them: the study adopted the owners/managers of SMEs as target respondents [17].

**Table 2.** Number of successful SMEs as of 2017.

Business Nature	Percentage of the MSME Sector	Number of Businesses in the Segment
Micro, Small, and Medium Enterprises (MSMEs)	100%	41,543,028
Micro-Enterprise (MEs)	98.80%	41,469,947
Small Enterprises (SEs)	0.17%	71,288
Medium Enterprises (MSMEs)	0.03%	1,793
Small and Medium Enterprises (SMEs)	0.20%	73,081
Jigawa State	3.24%	2,370

Source: SMEDAN & NBS (2017).

Two samples were selected for the mixed study. The quantitative study sample was selected scientifically using a formula: 95% confidence level, and 95% certainty was chosen when determining the sample. Using the formula  $Sample\ size = z^2(P)(1-P) / E^2$  where the z score is 1.96 with a margin of error of  $\pm 5\%$ , the sample size arrived at 384. Due to the possibility of non-returned questionnaires, the sample was increased to 400 owners/managers to increase sample accuracy [152]. The sample was selected from the population list through the systematic random sampling method, which is cost-effective, and every element can be selected, reducing bias [153].

**Table 3.** Determination of Sample size provided by Cooper and Schindler (2017).

Description	Sign in Formula	Value for the study
Population	N	Unknown
Margin of Error	E	$\pm 5\%$ (0.05)
Confidence interval	C	95%
Z score of 95%	Z	1.96
Standard Deviation	P	50% (0.5)
Sample Size	$z^2(P)(1-P) / E^2$	384

The sample size of the qualitative method was selected through a purposeful technique where fifteen owners/managers of SMEs with high knowledge levels were selected.

### 3.6. Data Collection

Two methods were used to collect data from owners/managers of SMEs operating in Jigawa State, Nigeria. The quantitative approach used the self-administered questionnaire to collect data. The questionnaire was designed using a Likert scale, and owners and managers were asked to select from five scales for each question. The answers were represented with numerals ranging from one to five. The number starts from 1-very unimportant, 2- unimportant, 3-neutral, 4-important, to 5-very important. Using the numerical, the data was collected and analyzed with the SPSS

statistical software. Using the semi-structured questionnaire, qualitative data was collected and analyzed. The quantitative data was enriched with data collected from the fifteen interview respondents. A pilot study was conducted before the research to discover whether the instruments had any inadequacies [152]. The questionnaires were proved to be well arranged and answered the questions as envisaged.

### 3.7. Data Analysis

Like the data collection, two methods were used to analyze the data. The quantitative data were analyzed using the SPSS statistical package because it is the software that is frequently used to analyze data in social sciences, behavioral sciences, and management sciences research [151]. The non-parametric method of data analysis was employed because the data collected in the quantitative part has no numerical value rather a ranking over a set of points on an ordinal scale [153]. The ordinal scale does not measure the amount of difference but rather the degree of difference.

The owner's/managers' and companies' demographic data were analyzed using descriptive statistics, while the data on the CSFs and mediating variables were analyzed using ordinal regression analysis because it was confirmed to be an effective way of analysis in entrepreneurial research [17]. The regressed information showed whether to accept any of the fifteen hypotheses. If a hypothesis is accepted, the CSFs influence the success of SMEs operating in Jigawa State, Nigeria. The qualitative data were analyzed using the content analysis method, revealing themes that help enrich the findings, make recommendations, and arrive at conclusions.

## 4. Findings of The Study

### 4.1. The Findings

The findings from the descriptive statistical analysis of the owners/managers and companies' demographics showed the characteristics of the participants and the firms under

investigation. The data showed that most participants are males, most of them between 18 years and 60 years. Most respondents are holders of bachelor's degrees and mostly manage companies. The respondents are either sales managers or administrative managers or work as technical managers in the companies. The respondents considered their responsibility as meeting the set objective of their firms. It was also revealed that people who worked in SMEs for 6-10 years contributed to the success of their firms. The study revealed that persons with moderate experience contributed to the success of SMEs. Persons with experience in the private sector contributed most to the success of SMEs. The study revealed that most successful SMEs operated for three or more years.

Cronbach's Alpha which measured the internal consistency of the variables, revealed a 0.853 value surpassing the minimum acceptable value of .7. Therefore, the internal consistency of the instrument and the fifteen independent variables is acceptable. After running the factor analysis to test the validity of the instrument, a 0.004 correlation matrix was indicated, which is acceptable based on the thumb rule of more than .0001. The KMO and Bartlett's test presented a 0.835 significant result which showed that the variables are statistically significant,

indicating sampling adequacy in the study.

Table 4. Reliability Statistics.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
.853	.857	15

Table 5. KMO and Bartlett's Test Results.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.835
Bartlett's Test of Sphericity	Approx. Chi-Square	1736.450
	Df	105
	Sig.	<.001

The principal component analysis extraction method shows that three components are better explained, with a total variance of 55.89%. This indicated that 55.89% of the variance was explained by prior work experience, education, and financial resources. The scree plot also indicated four factors having an Eigenvalue of one and above prior work experience, education level, financial resources, and strategic planning. The scree plot is presented in Figure 2, where the Eigenvalue is plotted against components. The twelve factors share the remaining variance explanation.

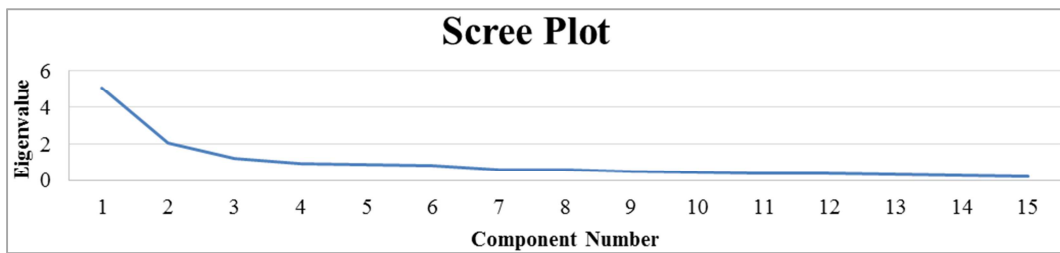


Figure 2. Scree Plot.

Using the ordinal regression analysis, the significance of the CSFs was tested and presented in Table 6. The critical success factors analysis revealed the relationships between the CSFs' and SMEs' success and the mediating impact of the SMEDAN

initiative between the CSFs and SMEs' success. The significance of the impact highlighted the acceptance of the hypothesis, as presented in Table 6. Accepting the hypothesis indicated that the CSF is influencing the success of SMEs.

Table 6. Hypothesis Determination.

SN	Hypothesis/Independent Variables/CSFs	Standardized Coefficients Beta	Significance	Remarks
1.	H1 – Education Level Impact on SMEs' success	.144	.026	Accept
2.	H2 - Prior work experience & Management Skills impact SMEs' success	.054	.042	Accept
3.	H3 – Finance Resource Impact on SMEs' success	.055	.030	Accept
4.	H4 – Strategic Planning Impact on SMEs' success	.077	.287	Reject
5.	H5 – Marketing impact on SMEs' success	.076	.289	Reject
6.	H6 – Legal & Regulatory Impact on SMEs' success	.208	.002	Accept
7.	H7 – Technology Influence Impact on SMEs' success	.045	.499	Reject
8.	H8 – SMEDAN mediating Education level impact on SMEs' success	.017	.006	Accept
9.	H9 – SMEDAN mediating Prior work Experience impact on SMEs' Success	.034	.586	Reject
10.	H10 – SMEDAN mediating finance resource impact on SMEs' success	.049	.024	Accept
11.	H11 – SMEDAN mediating strategic planning impact on SMEs' success	.029	.714	Reject
12.	H12 – SMEDAN mediating marketing impact on SMEs' success	.026	.725	Reject
13.	H13 – SMEDAN mediating legal and regulatory impact on SMEs' success	.103	.172	Reject
14.	H14 - SMEDAN mediating technology influence impact on SMEs' success	-.015	.824	Reject
15.	H15 - SMEDAN impacting SMEs' success.	.069	.299	Reject

Based on the regression analysis, four hypotheses were accepted from the seven CSFs proposed for the study, H1, H2,

H3, and H6, namely prior work experience, education level, finance resources, and legal & regulatory framework proven

to have a direct impact on SMEs' success. Four CSFs influence the success of SMEs. Similarly, the SMEDAN initiative impacts the relationship between two CSFs and the SMEs' success: education level and finance resources.

The Kruskal-Wallis non-parametric ranking was used on the seven CSFs and the eight mediating impacts to rank and determine the importance of each to the success of SMEs. The Kolmogorov-Smirnov test indicated the need to use a non-parametric test on the independent variables, thus using Kruskal-Willi's test to rank the variables, equivalent to the one-way ANOVA. The SPSS statistical package was used and

found the H values where the higher the H value, the more the importance of the variables to the success of the SMEs operating in Jigawa State, Nigeria. Table 7 shows the results of the Kruskal-Wallis test and their ranking based on the importance of the CSFs to SMEs' success. The ranking was made based on the regression analysis findings, where the four CSFs influencing the success of SMEs were ranked first. The CSFs not influencing success ranked second, the two mediating impacts that influence success ranked third, and the six mediating impacts that do not influence success.

*Table 7. Kruskal-Wallis Test Rank.*

<b>Critical Success Factors (CSFs) Found to be Influencing SMEs Success Importance Rank</b>			
<b>Rank</b>	<b>CSFs/Independent Variable</b>	<b>Kruskal-Wallis H</b>	<b>Median Rank</b>
1.	Finance Resources	27.399	
2.	Legal & Regulatory	12.530	4.0000
3.	Education Level	4.469	4.0000
4.	Prior Work Experience	1.657	4.0000
Critical Success Factors (CSFs) found to be NOT influencing SMEs' Success Importance Rank			
1.	Technological Influence	3.635	4.0000
2.	Strategic Planning	2.347	4.0000
3.	Marketing	0.155	5.0000
Mediating between CSFs and SMEs' Success			
1.	Mediating Finance Resources	14.351	5.0000
2.	Mediating Education Level	9.267	4.0000
Mediating between CSFs and SMEs' Success that was NOT Influencing Success			
1.	Mediating Legal Regulatory	27.033	4.0000
2.	SMEDAN Initiative Impact	15.513	4.0000
3.	Mediating Technology Influence	7.505	4.0000
4.	Mediating Strategic Planning	1.076	4.0000
5.	Mediating Prior Work Experience	0.913	4.0000
6.	Mediating Marketing	0.616	4.0000

The Mann-Whitney U testing was used to identify the variance between the demographics that participated in the survey by further analyzing the CSFs. Mann-Whitney U testing tests the null hypothesis that two populations remain the same on an alternative hypothesis. The essence is to compare the CSFs against parts of the population, such as the gender of the owners, and determine if differences exist between the two categories of gender. All other demographic characteristics are used to compare the differences between the various categories of demographics and the CSFs. After running the Mann-Whitney U test on SPSS, the results of the evaluation show no statistically significant differences when compared with the demographics of the owner and company (age, gender, position in the firm, education level, current employer, number of SMEs worked for, business ventures, time in current position, age and size of the firm, export sales, and turn over). The Mann-Whitney U test result indicated an above 0.05 significance level for all the groups, indicating that respondents' opinions are the same regardless of demographic differences.

The critical success factors' relationship was investigated using Spearman's rank correlation coefficient or Spearman's rho. The Spearman rho was also used to determine the relationship between the impact of the SMEDAN initiative mediation and the SMEs' success. Therefore, the CSFs and the mediation impact were considered the independent variables

for the investigation. The correlation coefficient is determined within a strength from -1.00 to +1.00. A perfect correlation is considered 1.00, a no relationship is 0.00, and an exact opposite relationship is -1.00. The results show either low or moderate correlations between all the CSFs and most mediating impact variables, suggesting no multicollinearity between the CSFs or the mediating impacts. It is because the correlation coefficients of the relationships lie between 0.00 to 0.499.

The result of Spearman's rank correlation coefficient shows two strong correlation coefficients, which were between the mediating impact variables. The two incidents of stronger relationships are between the mediating impact of marketing and the mediating impact of strategic planning and the mediating impact of legal and regulatory, and general SMEDAN initiatives. The correlation coefficient between the marketing and strategic planning impact shows that strategic planning helps implement impactful SMEs marketing. Similarly, researchers suggested that the SMEDAN initiative strives to ensure SMEs comply with the adaptation of legal and regulatory frameworks. Therefore, the stronger relationship between the general SMEDAN initiative impact and legal and regulation suggested that the support SMEDAN provides to the SME's formalization from non-formal to formal ventures in Nigeria. The mediating impacts of each of the seven CSFs have a moderate correlation coefficient

relationship with the mediating impacts of the independent variables, suggesting that there is a moderate relationship between the CSFs and the impact of the SMEDAN initiative on the influencing the success of SMEs or rather SMEDAN initiative catalytic impact of each of the CSFs on SMEs success. Similarly, there is a higher moderate relationship between marketing and strategic planning CSFs, suggesting that despite the mediating impacts of the two variables, the CSFs of Strategic planning and marketing have a higher moderate relationship. Therefore, respondents suggest that strategic planning of marketing tools triggers the successful implementation of marketing in SMEs. There is also a moderate relationship between technological influence and legal & regulatory influence, being the two external environment CSFs in the model: suggesting a near stronger relationship between the two environmental factors.

The result of the qualitative interview suggested the following challenges facing SMEs in Nigeria bureaucratic bottlenecks in the formalization process, inadequate access to formal financing, increased inflow of international competition, infrastructural inadequacies, insecurity challenges, and economic challenges of the COVID-19 pandemic. The significant infrastructural inadequacies identified by SME owners/managers as challenges facing SMEs operating in Jigawa State, Nigeria, include frequent power outages, lack of good roads, and lack of broadband internet access. The issue of Boko Haram, Banditry, Kidnapping, and Armed Robbery was highlighted as the most pressing challenge negating the country's progress and, to some extent, affecting SMEs'

performance in Jigawa State, Nigeria. Such security challenges have hindered the movement of people and commodities, making SMEs' operations difficult to some extent and causing much loss because of fear of traveling to specific locations due to the operations of such insurgents and bandits. Find in Figure 3 the details of the theoretical contribution of the study. That it was revealed that entrepreneurial factors, education level, and prior work experience are critical success factors that influence the success of SMEs operating in Jigawa State, Nigeria, as enterprise factor finance resources is a critical success factor influencing the success of SMEs operating in Jigawa State, Nigeria; as environment factor, conforming to legal and regulatory framework is a critical success factor influencing the success of SMEs operating in Jigawa State, Nigeria. Further, in theory, considering the SMEDAN initiative as a mediator that supports SMEs in their development revealed education level and financial resources to influence the success of SMEs operating in Jigawa State, Nigeria.

The study will contribute to entrepreneurs by identifying SMEs' CSFs and working on them to achieve success, understanding the challenges of SMEs to prepare on how to overcome them, and utilizing some of the recommendations to ensure success and avoid failure, especially in a start-up. Entrepreneurs will prepare and take appropriate action to deal with success factors, challenges, and recommendations for their ventures' success and avoidance of failure. Entrepreneurs might prepare to secure managers with high education levels & prior experience, acquire adequate financial resources, and conform with legal & regulatory frameworks to ensure success.

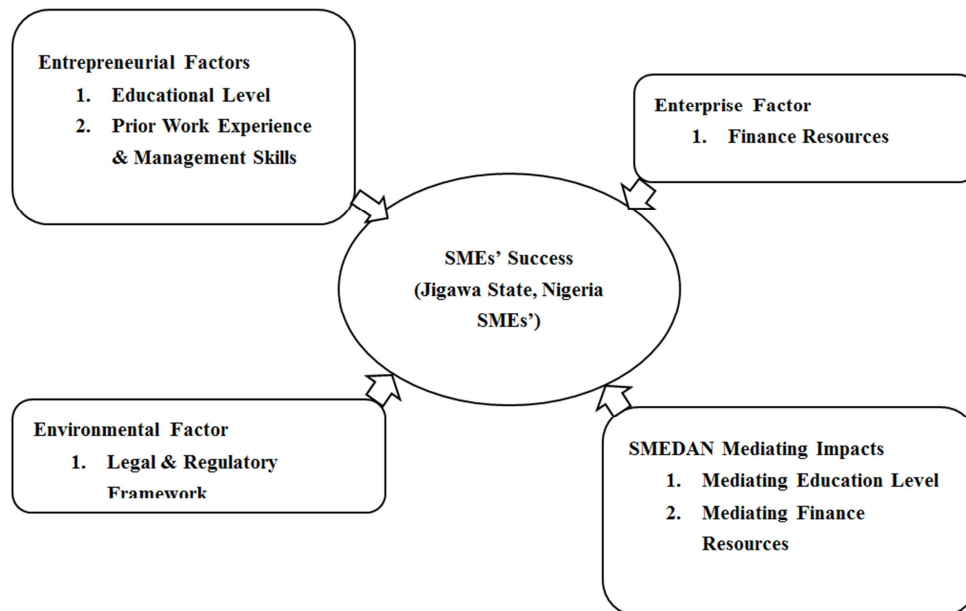


Figure 3. Theoretical Contribution.

4.2. Limitations of the Study

Owners/managers ranked the SMEs based on their opinions that their firms are successfully compared to those in the same industry. The opinion of owners/managers was also obtained

as responses to the CSFs of SMEs' importance to SMEs' success. The opinions of owners/managers regarding how they perceived the intervention of the SMEDAN initiative between the CSFs and SMEs' success was also obtained as mediating impacts of the study. The opinions of owners/managers utilized as data for dependent, independent,

and mediating variables might produce a biased result because there is no guarantee that the owners/managers were telling the truth; it was challenging to confirm that. Using the SPSS statistical package reduces the level of bias envisaged due to utilizing opinion data for the study.

The study utilizes the information from SMEDAN on the successful SMEs operating in Jigawa State, Nigeria. The list was that of registered SMEs in Jigawa State. Many SMEs operating in Jigawa State, Nigeria, were not registered by SMEDAN, and some were successful firms. Failure to allow non-formal SMEs to participate in the study might distort the random sampling; using the scientific method to determine the sample and identify the participants might have reduced the bias that would affect the study. It was also identified that the registration of SMEs is an ongoing endeavor; thus, firms that registered after the list was collected for the study do not get a fair chance of participation.

The literature review revealed more than 21 CSFs for SMEs, and each might influence the success of SMEs operating in Jigawa State, Nigeria. Only seven were selected based on other models' findings for utilization as independent variables for the study. The limitation of CSFs to seven for the study was due to funding and time limitations. If the 21 CSFs were to be used as general CSFs for the study to identify those influencing the success of the SMEs operating in Jigawa State, Nigeria, the time and funding slated for the study would not be sufficient for the completion of the study. The study needs to be undertaken for other CSFs not included to ensure no stone is left unturned to determine CSFs of SMEs operating in Jigawa State, Nigeria.

The study was also limited to Jigawa State, Nigeria, one of the 36 states in Nigeria, ignoring the rest of the States due to the time and funding factor to conduct an authentic study across Nigeria. Although the study incorporates all types of SMEs in Jigawa State, it must be replicated to be valid in other states and locations/countries. The study used the mixed methods approach to collect and analyze data, which required mixing the information to produce the findings. Mixing qualitative and quantitative information during analysis becomes challenging, and issues might emerge due to human error. However, the research was focused, and information was mixed to minimize errors, if not eliminated, during the analysis. In particular, the content analysis employed for the qualitative part of the study where the researcher based his action of trusting the respondents based on their goodwill.

## 5. Recommendations

The following are some of the recommendations for practice and research in the future.

- 1) The seven CSFs outlined for the study were based on the frequency of appearance of the CSFs as findings in other models. Future studies must fill in the gap of other scientifically recognized CSFs of SMEs to determine if they influence SMEs' success in Jigawa State, Nigeria.
- 2) The study used the opinions of owners/managers about SMEs' success level or performance level by relating their firms with other SMEs in the same industry. Such performance measures are subjective. Future studies should focus on using objective measures of the performance level of SMEs using financial data; However, it might be difficult, but it is important to focus on how best to extract the financial data from SMEs to measure their performances CSFs determination.
- 3) There are sixty-six States in Nigeria, and the study was conducted in only one State, Jigawa, Nigeria. Based on the findings of many entrepreneurship researchers, CSFs of SME models are specific to a location or industry. The study must be replicated in the other States of Nigeria to determine those critical factors to the success of SMEs in such States. The study can also be considered for replication across Nigeria by recruiting respondents from the thirty-six States to generalize the findings.
- 4) Though extracting information from owners/managers of failed SMEs might be difficult, there is a need to focus on developing a critical success factors (CSFs) model and critical failure factors (CFF). Determining the CSFs and CFF will enable owners/managers first to consider the CSFs and improve performances for success and consider CFF and avoid SME failure.
- 5) . The study literature review revealed many successful informal SMEs operating in Jigawa State, Nigeria, unrecognized by SMEDAN, making the study lopsided for registered SMEs in the state. There is a need to consider future studies covering successful informal SMEs operating in Jigawa State, Nigeria.
- 6) Managers must consider cost-benefit analysis to determine the best option to implement the higher education level critical success factor to improve success or trigger success as a start-up new entrepreneur. SME owners/managers must invest in the education of their managers to trigger the higher education level critical success factor in their firms.
- 7) SMEs might invest in training their employees to acquire relevant entrepreneurship and management skills and experience; they must develop motivational packages to retain them for utilization in future expansions. SMEs must compare the cost of training and staff retention with the cost of recruiting ready-made experienced managers when implementing the decision.
- 8) Most bureaucratic bottlenecks experienced when applying for institutional financing by SMEs are minimized or even eliminated when formalized. The inadequate institutional financing experienced by SMEs can be turned into adequate financing for SMEs when they formalize their operations. Therefore, SMEDAN should strive to ensure informal SMEs are formalized to increase their access to finance, increasing their success.
- 9) The study recommends that the federal government streamline the bottlenecks, which will trigger owners/managers of SMEs to conform with the legal



and regulatory frameworks. By conforming to the legal and regulatory frameworks, SMEs' access to support from the federal government and its agencies will be improved.

- 10) There is a need for SMEDAN to pursue programs that might improve their impact on other CSFs that impact SMEs' success to improve the overall development of entrepreneurship and SMEs operating in Jigawa State, Nigeria.

## 6. Conclusion

The study investigated the critical success factors influencing SMEs' success in Jigawa State, Nigeria, by considering the impact of the SMEDAN initiative when it mediates between the CSFs and the success of the SMEs. The literature review revealed more than twenty-one CSFs that influence the success of SMEs globally. Seven were identified for the study based on the frequency of appearance in the previous models. Using the opinions of owners/managers of SMEs as information on the identified seven CSFs as the independent variable, it was established that four of the seven critical success factors influenced SMEs' success in Jigawa State, Nigeria. The four CSFs identified as influencing the success of SMEs as categorized in the conceptual model of the study include education level and prior work experience & management skills (entrepreneurship factors), finance resources (enterprise factor), and conforming to legal & regulatory framework (environment factor). When the SMEDAN initiative was considered a catalyst of SMEs' success, its impact on the CSFs and SMEs' success was established among two situations: impact when SMEDAN mediates between education level and SMEs success; and impact when SMEDAN initiative mediates between finance resources and SMEs success. The impact of SMEDAN initiative mediation between education level and SMEs success was determined to be due to the rigorous on-the-job training conducted for SME owners/managers to support their development.

It is proven that the influence of CSFs to influence the success of SMEs varies with location. The impact of the SMEDAN initiative as a support program of the federal government of Nigeria for SMEs and entrepreneurship development is moderate because it impacts only two of the seven variables utilized for the study. Therefore, the impact of the SMEDAN initiative between the CSFs and the success of SMEs operating in Jigawa State, Nigeria, is minimal. The desire for the federal government of Nigeria to trigger socio-economic development through entrepreneurship and SMEs using the SMEDAN initiative is possible by improving efforts to spur the impact of other CSFs on SMEs' success in Jigawa State, Nigeria and other States in the country. Similarly, the mediating impact of the SMEDAN initiative between finance resources and SMEs' success was determined to be due to several guidance and support given to SMEs when pursuing institutional financing.

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