EFFECTS OF INFRASTRUCTURE ON GROWTH OF SMALL AND MEDIUM ENTERPRISES IN KENYA: A CASE OF CLOTHING AND TEXTILE BUSINESSES IN NAIROBI CENTRAL BUSINESS DISTRICT

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ABSTRACT

According to KNBS (2016), there are 7.5 Million SMEs employing close to 14.9 million Kenyans and have contributed 28.8% to Kenya’s GDP. While they have continued to provide many jobs and boosted the country’s GDP, SMEs have continued to face a myriad of challenges that have persistently hampered their growth. The specific objectives of this study was to determine the effects of infrastructure on growth of SMEs in clothing and textile businesses in Nairobi County CBD. The study was guided by four theories namely, the knowledge-based theory, institutional theory, market-based view and Firm Growth Theory. The study adopted descriptive research design to help answer the research questions. The target population for the study was the licensed SMEs operating clothing and textile businesses within Nairobi County CBD. The study conducted a census of the entire target population of 400 licensed SMEs running textile and clothing businesses within the Central Business District in Nairobi City thus no sampling was done. For the purpose of this research, primary data was used and was collected using a structured questionnaire administered in a drop and pick method targeting owners and or managers of the businesses. The gathered data was analysed using multiple regression analysis. The findings were then shown through tables, charts and graphs. The respondents’ overall opinions were that infrastructure has insignificantly affected the growth of SMEs in the textile and clothing businesses in Nairobi County CBD. The study concluded that the independent variable, that is infrastructure, has contributed differently to the growth of textile and clothing businesses in Nairobi County CBD. The study recommends that both the National government and County government of Nairobi should aim at providing the right infrastructure such as access roads and telecommunication as well as power and water supply as a way of promoting the growth of SMEs in the clothing and textile industry in Kenya.

Key Words: infrastructure, growth, small and medium enterprises, clothing and textile businesses, Nairobi Central Business District, Kenya

INTRODUCTION

Many countries worldwide run SMEs that are accepted as engines for economic growth while promoting both equitable growth and development. It has been found that SMEs’ have played an essential role in the economic development of any country in developed as well as developing economies. SMEs have been critical in employment creation, poverty alleviation and industrialisation. In Africa, for example, 80% of all employment opportunities are created by SMEs and thus increasing population with disposable income to create demand and drive the economy. African countries are therefore making significant strides towards developing a competitive and vibrant SME sector. However, the biggest challenge which some SMEs face is being able to sustain their performance, and hence succeed and survive (Biswas, 2014).
The Kenyan government acknowledges the importance of a vibrant well-developed SME sector. In its Vision 2030 issued in 2007, the Kenyan government highlights the need to support the large informal sector in the country in order to effectively address productivity, employment, income and public revenue. Further, strengthening micro and small enterprises not only addresses gender issues and regional disparities, it also fosters inclusive growth eliminating the striking socio-economic imbalances (Kimani, 2016). The main barriers to growth and sustainability include financial constraints, illiteracy among entrepreneurs and lack of proper infrastructure to support business growth. (Maritz, 2016).

The Deloitte Kenya Economic Outlook 2016 noted that Kenyan SMEs are highly hampered by lack of adequate capital, limited access to market, poor infrastructure, inadequate knowledge and skills and rapid changes in technology. Government attempts to address these problems includes enforcing legislation on local content for public projects, establishing ‘Buy Kenya, Build Kenya’ policies in public procurement, research and development support and increased contributions to funds such as the Uwezo. The Kenyan government is also promoting small and medium scale manufacturing firms and plans to develop SME parks (Maritz, 2016).

The clothing industry is vast and one of the most powerful industries in the world due to its size. Its value is trillions of dollars and it employs millions of people across the globe (HIVOS, 2015). The Textile and Clothing (T&C) sector has also been identified in the Kenya’s Vision 2030 as a pathway to industrialization as it possesses incredible economic potential. Therefore, the power of clothing industry should not be underestimated. Just like other SMEs running in the Kenya, however, clothing enterprises have continued to face a number of challenges which has limited the realisation of their potential of being sources of growth and employment (Abele, 2014). It is observed that while some of the businesses have performed well for over a long period of time, probably over ten years and have gone through a whole business cycle and survived, others perform poorly and eventually pull out of business and close shops. This state of affairs has necessitated the carrying of this study to assess the effects of market related factors on growth of SMEs running the clothing and textile segment of SMEs in Nairobi County CBD.

STATEMENT OF THE PROBLEM

While they continue to create numerous jobs and boost the country’s GDP, SMEs face a myriad of challenges that always hamper their growth. SMEs are hindered by inadequate capital, limited market access, poor infrastructure, inadequate knowledge and skills, rapid changes in technology, corruption and other unfavourable regulatory environments (Deloitte, 2016). Due to constraints internal to the firm, SMEs are disproportionately affected by market failures and barriers and inefficiencies in the business environment and policy sphere. SMEs’ contributions also depend on their access to strategic resources, such as skills, knowledge networks, and finance, and on public investments in areas such as education and training, innovation and infrastructure. Furthermore, for a large number of SMEs, a conducive environment for the transfer of business ownership or management represents an important condition for ensuring business viability over time, with implications for jobs,
investment and growth (OECD, 2017). A study by Kamunge (2014) established that SMEs face competition from other SMEs and large corporations, poor planning, lack of capital and inefficient management skills have been reported as the main impediments to growth and sustainability of SMEs. Despite the high failure rate by SMEs in Kenya, their significant role in promoting inclusive and sustainable economic growth, providing employment, promoting industrialisation and innovation, and reducing income inequalities; cannot be overlooked (Mbogo, 2011). Despite the many research studies that have been undertaken to explore on the factors affecting the growth of the SMEs as a sector, statistics have proved that many do not survive up to their fourth birthday. Therefore, given the importance of the small businesses to the Kenyan economy, constant investigations are necessary in order to give insight to the areas that require improvement on the part of various stakeholders involved in this sector. This research study was conducted to help identify any gaps in relation to market related factors and recommendations made to ensure survival of this industry as it would play a great role in employment of the many jobless Kenyans as well as address the high levels of poverty and inequality in Nairobi County. The factor explored was infrastructure.

GENERAL OBJECTIVE

To determine the effects of infrastructure on growth of SMEs in clothing and textile businesses within Nairobi City

THEORETICAL REVIEW

The Knowledge Based Theory

This was originally introduced by Penrose (1959) and was later expanded by Barney (1991) and Conner (1991). Knowledge-based theory underlines the significance of knowledge in increasing productivity of the SMES and the economy. Therefore, SMEs with highly educated and skilled manpower have a higher chance of performance than those without. This is because well-educated and trained employees are quick at learning and applying new skills and proactive to develop efficiency, productivity and innovation. According to the knowledge-based theory, there are two types of learning explorative learning - obtained from inside the SME and exploitative learning- external to the SME and therefore must be acquired. Learning by experience integrated with education can enable an entrepreneur to successfully run a business (Middleton, 2010).

A well-trained entrepreneur can easily make the right decisions in regards to which markets, products and prices. These decisions are key differentiators between performing and non-performing SME. Education and training equips the entrepreneur with skills on planning and management of a business (Njoroge & Gathungu, 2013). Experience acquired either internally or externally also has a critical role to play of performance of an SME. Through experience, entrepreneurs develop important skills such as innovation, customer relation and financial management. The entrepreneur can then pursue profit making businesses and abandon those ventures that have little returns (Kisaka, 2014)
This theory supports this study’s objective to determine the relationship between entrepreneurial competence and growth of SMEs in Nairobi County CBD. Knowledge and skills gained either from education or experience can help an entrepreneur run a business sustainably.

**Institutional Theory**

Simpson & Weiner (1989) defined the institutional theory as an approach that explains the influence of an organization’s environment on its structures. This theory appreciates the integration of institutional players in an environment of formal and informal rules. This theory is based on the observation that organizational activities and processes are propelled by some people who want to rationally explain their actions. In this view, organizational players will tend to explain the implementation of strategies by linking them to standards and social contexts that the players see as acceptable and reasonable (Dacin, Oliver et al., 2007). Companies will make efforts to adhere to the certain standards by adopting strategy implementation that validates them as part of the organizational field. Basically, the traditional institutional theory brings out the fact that the organizational fields become more organized due to the strong influences among organizations. The acceptance of a system such as strategy implementation will depend on the degree to which it is institutionalized by law. Legitimacy concerns make organizations to embrace practices that “conform to the mandate of the institutional environment” (Kraatz and Zajac, 2006).

This theory appreciates the role of all stakeholders in an industry including competitors and regulatory bodies. Entrepreneurial competence thus comes in handy in maneuvering this environment.

**Market Based View**

The market-based view (MBV), also referred to as market positioning view developed by Mason (1939) and later enhanced by Bain (1956) highlight the responsibilities of the market conditions in formulating strategies for the firm. The Market-Based View (MBV) of strategy postulates that industry facets and the direction of the external market are the key indicators of firm performance. According to the SCP paradigm, the industry components like the number of buyers and sellers, entry/exit barriers, and competitor’s cost structures; influence the performance and strategies of participating firms in that industry. In addition, activities such as pricing and product strategies, investments in research and advertising, and distribution strategies; further impacts the performance of companies in the industry. Therefore, the SCP paradigm describes the disparities in the performance of businesses between various organizations mainly through the structure of their industries, an element that is outside the organization itself.

Competitive strategy is putting the firm in its markets. It can also be referred to as market positioning view or the market-based view (MBV). This is different to the resource-based view (RBV) which looks at the on the unique resources and skills the firm need to have in order gain a competitive advantage. Strategic position is the special set of activities that
differentiate the firm from its rivals. It can be viewed as the manner in which an organization performs the same venture as other firms but in very distinctive methods. Therefore, how the firm performs and makes profits depends on structural and competitive elements in the line of business in which it operates (Schendel 1994).

The Market Based Theory acknowledges that businesses do not exist inside vacuums, thus there are external factors that affect the performance of a firm. It therefore supports this research as it links strategic positioning through infrastructure and strategic product pricing to performance of the SMEs.

**Firm Growth Theory**

This theory by Churchill and Lewis emphasizes that the growth and productivity of any business, large or small, are likely to follow an expected pattern that is represented by consecutive progressive phases (Perenyi, 2008). This growth model is made up of five stages; existence, survival, success, take-off and resource maturity. In the existence stage, the most important factor was to get customers and as a result, the formal system does not exist or is only available in limited extent. In addition, the structure of the business is flat, requiring managers/owners to adopt a management style characterized by direct oversight of workers. As the organization progresses to the survival stage, it starts to use the formal system and its structure introduces more levels. The managers/owners start to assign specific roles to employees.

At the success stage, the owners/managers can decide either to retain the business in its current state of performance and operation or introduce an expansion plan. The move to expand the business will entirely depend on the motivation of all employees, more business opportunities and availability of resources, business opportunities, recognition, resources as well as owner/manager’s motivation themselves. During the success stage, the organization employs the use of important systems such as finance, marketing and operations.

In the take-off stage, the management/owner is tasked with critical issues such as determining the rate of growth, performance and financing of the desired growth. The owners/managers delegate more work for the organization to perform more effectively. The final resource maturity stage focuses on proper management of business. The owners/managers are mostly concerned with proper management of finances, maintaining their relationship with other businesses and responding to changes in the customers’ needs and entrepreneurial practices. At this point, the organization is using well established systems. Since the firm growth theory by Churchill and Lewis explains the growth and expansion process, the theory therefore is rightfully linked to growth of SMEs in Nairobi County CBD. It provides a framework of how SMEs grow from inception to maturity.
EMPIRICAL REVIEW

Infrastructure and Growth

Infrastructure is one of the key components of production and economic development. Fluctuations in the quality of infrastructure used in the production processes will affect in a great deal the performance of an organisation in terms of quantity of output, income, profits and job creation in the economy. Even though the presence and quality of infrastructure directly affecting economic development, the availability of proper infrastructure in most countries in Sub-Saharan Africa is still limited (Obokoh & Goldman, 2016). Lack of proper infrastructure in developing countries has affected the abilities of SMEs to fairly compete in the global market.

Infrastructure is the totality of fundamental physical facilities upon which all other ranging from economic, social and political activities significantly depend on. Infrastructure are those services without which primary, secondary, and tertiary production cannot work and function and that will lead to negative SMEs performance. In a study carried out by Rao and Srinivasu (2013) opined that infrastructure in general, is a set of facilities through which products and services are produced to the citizens and the infrastructure installation does not produce goods and services directly but provides inputs for all other economic, social and political activities. Nkechi et al., (2012) opined that it is a universal belief that infrastructural facilities aid the development of the mind, body and assist productivity in any environment and at the same time increase SMEs performance effectively and efficiently. Infrastructure includes structures such as roads, railways, port facilities, power facilities and telecommunications networks, educational institutions, hospitals, justice facilities and community facilities.

Nganga, Onyango and Kerre (2011) explored the factors essential for the active participation of small manufacturing enterprises in contributing towards sustainable industrial development. Data was obtained from wood based enterprises owner/managers (284) who were sampled from three Districts; Kericho, Nakuru and Uasin Gishu all in the Rift valley province of Kenya using multistage sampling strategy. Data was collected by use of questionnaires, observation and documentary analysis. The study found that the infrastructure accessed by wood industries in Western Kenya is poor, the technology employed low, the wood enterprise growth poor and collective efficiency also poor. The relationship between infrastructure and technology development is significantly linear, between infrastructure development and wood enterprise growth and between technology development and wood enterprise growth is also linear. However, the relationship between collective efficiency and wood enterprises growth is logarithmic. The study revealed the need for industrial development paradigm shift to a focus on small manufacturing enterprise’s infrastructure and technological development planning based on the collective efficiency paradigm that should anchor sustainable industrial development.

Obokoh and Goldman (2016) Orientation investigates the situation facing SME’s in Nigeria, who have to function in an environment with depleted infrastructure. Research purpose was to examine the effects of infrastructure deficiency on the performance of manufacturing small
and medium sized enterprises in Nigeria. A longitudinal approach was followed, where a survey was conducted amongst 500 SME’s in Nigeria. To complement this, semi-structured interviews were conducted in 2007 and 2011 respectively. The results showed that deficiency in infrastructure negatively impacts the profitability and performance of SMEs, due to the high cost incurred by SMEs in the self-provision of infrastructure and distribution of finished goods. Furthermore, despite the successful privatisation of electricity production in November 2013, there is still no significant improvement in the power supply in Nigeria. The study uncovered the practical realities of the challenges faced by SME’s operating in an environment with insufficient infrastructure, which is typical of much of the developing world.

Abdullahi, Ghazali, Awang, Tahir and Azman (2015) examined the effect of finance, infrastructure, and training on the performance of SMEs in Nigeria. This study used Kano State as a case study, and descriptive survey research design was used in this study. Sample size of 310 SMEs was drawn through simple random sampling out of the population of 1530 registered SMEs in Kano State, Nigeria. Primary data was employed in this study, and the data was collected through administering of close-ended structured questionnaires, but only 299 respondents respond to the questionnaires that were used for this study analysis. Statistical Package for Social Science (SPSS) software was used to analyze the respondent’s profile while Structural Equation Modeling (SEM) through Analysis of Moment Structure (AMOS) software was used to test the hypotheses of this study. The findings indicate that finance, infrastructure, and training have a positive and significant effect on the performance of SMEs in Nigeria. This suggests that there is a dire need for finance, infrastructure, and training to be given adequate concentration as they serve as the engine of boosting the performance of SMEs in Nigeria.

According to an investigative journal by Gaal and Afrah (2017), infrastructure is a key element of poverty alleviation. The purpose of this study was to investigate lack of infrastructure: the impact on economic development as a case of Benadir region and Hir-shabelle in Somalia. A survey research method was adopted to examine the impact of lack of infrastructure on economic development. The data were collected through questionnaires filled by the respondents equally. The results of the questionnaire were analyzed by using SPSS version 16.0. The results showed that lack of infrastructure brings poor standards of living, economic deficit and improves poverty.

**Growth of Small and Medium Enterprises**

Sarwoko and Frisdiyantara (2016) researched on individual factors, organizational factors, and environment factors in the district of Malang while using a sample of 52 owners/managers of SMEs, that were taken by purposive sampling and analysed using Path Analysis techniques. The results showed that individual factors directly affect the growth of the business, as well as an indirect effect through organizational factors. So, the individual factors influence the growth of SMEs. Due to individual factors which reflected the business experience and the motivation of the owners/managers to their employees, they were able to manage the
organization to make them more effective so as to compete, and the effects are on the achievement of business growth. Environmental factors provide the greatest impact in achieving the growth of SMEs, meaning that the ability of owner/managers to produce competitive products, leverage technology, and diversify their products will determine the growth of SMEs.

Bouazza, Ardjouman and Abada (2015) analysed the factors influencing the growth rate of small and medium-sized enterprises (SMEs) in Algeria. The research revealed that the growth of SMEs in Algeria was hampered by several interrelated factors, which included business environmental factors that were beyond the SMEs’ control and internal factors of the SMEs. The external factors included the legal and regulatory framework, access to external financing, and human resources capacities. The internal factors comprised of entrepreneurial characteristics, management capacities, marketing skills, and technological capacities.

Muchai (2016) conducted a study whose purpose was to determine the challenges that prevented the growth and development of small and medium enterprises. Key findings in this study were that entrepreneurs were faced with barriers which prevented them from effectively managing the SMEs towards growth and development. Barriers presented were; lack of access to financial institutions for funding, incompetent workforce, limited managerial skills, high operating costs, stiff and unfair competition, and unfavourable government policies especially those that were concerned with business legislation and taxation.

RESEARCH METHODOLOGY

Research Design

A research design is the procedure to be adopted by a study to answer specific questions developed by the researcher. The design adopted by this research was the descriptive survey design. This design involves gathering information about the characteristics, actions or opinions of a large group of people. This design is suitable as it will bring out information on attitudes that would be difficult to measure using observational techniques. It allows for answering the questions; who, what and how. This design also allows the researcher to collect both primary and secondary data (Gure, 2018).

Target Population

This refers to a group of people or objects the researcher requires in order to generalize the results of the research (Borg & Gall, 1989). There are a total of 268,100 SMES in Nairobi County CBD (KNBS, 2016). The target population for this research was 400 licenced SMEs running textile and clothing businesses within Nairobi City. This study conducted a census of the entire target population of 400 licenced SMEs running textile and clothing businesses within Nairobi County CBD thus no sampling was done (Yellow Pages Kenya Business Directory, 2017).
Data Collection Instrument

The data collection instrument of choice for this study was a structured questionnaire administered in a drop and pick method. The questionnaire adopted the Likert scale structure. The study adopted this particular research instrument as it is the most appropriate data collection tool because of its practical nature. The questionnaire captured information that would not be captured through observation such as opinions, feelings and perceptions. In addition, questionnaires collected large amounts of information from a huge number of individuals in the field within a short period of time and in a comparatively cost effective way. Questionnaires were administered with the help of a research assistant. The questionnaire for the study was divided into five main sections. Section one gathered demographic data relating to gender, age, education level and job position of the respondent. The second section collected information involving the first specific objective on infrastructure. The last section of the questionnaire collected data on growth of the business. The respondents were to mark where appropriate in the questionnaires based on their level of agreement or disagreement with the variables of the study. Approximately 400 questionnaires were issued to the SMEs operating the clothing and textile businesses in Nairobi County CBD.

Data Analysis

After collecting the questionnaires from the respondents, the data was examined and checked for completeness and comprehensibility. The responses were classified, coded and tabulated to analyse quantitative data using the Statistical Package for Social Science (SPSS). Descriptive statistics were presented using tables and figures. Correlation analysis was used to determine the strength of the relationship between strategic marketing factors and the growth of SMEs. Coefficient analysis was used to assess the statistical effect of independent variables on the dependent variable. Simple linear regression and multiple regression analysis were used to establish the existence, nature and strength of the relationships between critical independent variables and dependent variable. The regression model took into account the growth of SMEs in the clothing and textile businesses in Nairobi County CBD as the dependent variable while the independent variables were infrastructure, entrepreneurial competency and product pricing. The regression model adopted in this study is as follows;

\[ Y = \alpha + \beta_1 I + \varepsilon \]

Where: \( Y \) = Growth; \( \alpha \) = Constant; \( \beta_1 \) = Beta Coefficients; \( I \) = Infrastructure; \( \varepsilon \) = error term

RESEARCH RESULTS

Correlation refers to an existing statistical relationship between two variables. A strong association between the variables is represented by a high correlation while a weak relationship between the two variables is marked by a weak or low correlation. A weak correlation means that the variables are not related in any way. Correlations can be positive or negative. In positive correlation, the increase in value of one variable increases the value of
the other variable while in a negative correlation; an increase in the value of one variable reduces the value of the other variable. Correlation ranges from +1 to -1. Correlation value of -1.00 indicates a perfect negative correlation while a value of +1.00 represents a perfect positive correlation. A correlation value of 0.00 means that there is no relationship between the two variables being tested. The study used a Pearson R correlation coefficient to determine how the variables relate to each other.

Pearson correlation analysis was performed to determine the relationship between infrastructure, entrepreneurial competencies, pricing strategy and the growth of the SMEs in terms of sales, profit, stock and capital.

**Table 1: Bivariate Correlation Analysis**

<table>
<thead>
<tr>
<th>Availability of infrastructure</th>
<th>SME growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>SME growth</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

The Pearson correlation results in Table 1 above shows a significant correlation between the independent variables and the dependent variable. The growth of SMEs has significant, positive correlation with infrastructure (r=0.197, p value=0.001). This means that an increase in infrastructure will increase the growth of SMEs. These results agree with Mohammed and Bashir (2013) argument that infrastructural faciliti- es such as transportation networks, pipe borne water, electricity, security, telecommunication, encourages the establishment, operations and growth of SMEs. The findings also agree with Obokoh, and Goldman (2016) observation that the growth, performance, and profitability of SMEs in Nigeria are negatively affected by the deficiency in infrastructure due to the high cost incurred by SMEs in the self-provision of infrastructure and distribution of finished goods.

Regression analysis was used to determine how each of the independent variables (infrastructure, entrepreneurial competencies and product pricing) affects the growth of growth of SMEs in the clothing and textile industry in Nairobi County CBD. The findings in table 2 present the model summary for the multiple regression analysis.

**Table 2: Model Summary for Market Related Factors**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.381a</td>
<td>.145</td>
<td>.137</td>
<td>.65087</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Infrastructure

The findings in table 2, gives an R value of 0.381. This means that the dependent and independent variables have a weak positive relationship. The findings also give an R square value of 0.145. This means that infrastructure accounts for 14.5% in the variability in the growth of SMEs in the clothing and textile industry in Nairobi County CBD. This indicates
that other factors not investigated under this study contribute to 85.5% in variability for the growth of these SMEs in the clothing and textile industry in Nairobi County CBD.

Analysis of Variance (ANOVA) was used to determine the fitness of the model in determining the effects of the independent variables on the dependent variable. Table 3 below presents the result of the ANOVA.

**Table 3: ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>21.345</td>
<td>3</td>
<td>7.115</td>
<td>16.796</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>125.394</td>
<td>296</td>
<td>.424</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>146.739</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: SME growth  
b. Predictors: (Constant), Infrastructure

In view of the results in Table 3, the F critical has a value of 16.769 at 5% level of significance with a p value of 0.000. Since the p value is less than 0.05, the results indicates that the overall model is statistically significant in predicting the effects of infrastructure on the growth of SMEs in the clothing and textile industry in Nairobi County CBD. Therefore, the overall model is a good fit.

Table 4 presents the results of the coefficients of determination of the market factors for SMEs’ growth from the multiple regression analysis.

**Table 4: Coefficients of Determination**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.485</td>
<td>.293</td>
<td>5.064</td>
<td>.000</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>.068</td>
<td>.041</td>
<td>.097</td>
<td></td>
</tr>
</tbody>
</table>

The research adopted the regression formula to establish a link between the outcomes of the independent variables and the dependent variable. The regression formula adopted for the combined study variables is:

\[ Y = \alpha + \beta_1 I + \varepsilon \]

Where:  
- Y = Dependent variable (SME growth); \( \alpha = \text{Constant} \); \( \beta_1 = \text{Beta Coefficients} \);  
- I = Infrastructure; \( \varepsilon \) is the error or stochastic term not correlated with any of the X variables.

From the findings in table 4 we can extract the regression equation as:

\[ \text{SME Growth} = 1.485 + 0.68I \]
From the above regression model, taking infrastructure, the growth of SMEs in the clothing and textile industry in Nairobi County CBD performance will be 1.485. The findings also shows that taking all other independent variables at constant, a unit increase in infrastructure, will lead to a 0.681 unit increase in the growth of SMEs in the clothing and textile industry in Nairobi County CBD with a p value of .100.

Infrastructure refers to all the technical structures that support a society, such as roads, bridges, water supply, sewers, power supply and telecommunications. Infrastructure is one of the key components that influence the growth of SMEs. The findings from the study have revealed that infrastructure has a significant positive effect on the growth of SMEs. A lot of studies have examined the effects of infrastructure on the performance of SMEs in various sectors of the economy. (Akinson, 2018) emphasized that basic infrastructure such as power, education, water, roads, and transportation is the least requirement for SMEs to flourish. He argued that infrastructural facilities provided by government can promote the growth of SMEs by facilitating the acquisition of all the necessary inputs that assist and promote investment and growth of the SMEs.

Some of the infrastructural input that County government of Nairobi should provide to promote the growth of SMEs are, increasing communication facilities such as internet and telephone services, providing and expanding electricity, expanding water schemes and constructing industrial estates. The provision of these inputs can help SMEs to quickly move their goods, expand the market for their products and reduce the investment cost. Majority of the respondents from the study indicated that telecommunication (70.4%) and road networks (61.7%) have positive influence on the growth of SMEs in terms of sale, stock and capital. The above study findings agree with the findings of Nganga, Onyango, and Kerre (2011) in Kenya which showed that telecommunication related factors have positive relationship with the growth of SMEs.

Telecommunication on the other hand helps SMEs to increase efficiency, reduce cost, broaden their markets, and enhance product design and delivery. Lack of telecommunication infrastructure leads to reduced productivity of SMEs. Good transport network improves distribution of goods, reduces delivery time of stocks and reduces transportation cost. Good road networks and telecommunication open up new markets for SMEs. Ben, Faboyede, and Fakile (2013) observed that inadequate infrastructural base coupled with the decay or deplorable conditions of the available ones has posed horrifying obstacles to the performance of SMEs.

CONCLUSION

The study drew its conclusions from the information collected from the respondents and based on the major findings of the study in relation to Infrastructure and SMEs Growth, majority of the respondents are of the view that availability of road networks and provision of telecommunication services have helped to grow their businesses. The regression coefficient of infrastructure was 0.068 and a p value of 0.100. Therefore, the study concluded that
infrastructure has a positive but insignificant effect on the growth of SMEs in the clothing and textile industry in Nairobi County CBD.

**RECOMMENDATIONS**

The study found out that the infrastructural related factors: road and telecommunication networks somehow contribute to the growth of SMEs in the clothing and textile industry in Nairobi County CBD. The recommendations of the study is that the National government and County governments should aim at improving infrastructure such as roads and telecommunication as well as power supply and water as a way of promoting the growth of SMEs in the clothing and textile industry in Kenya. The National and County governments can exploit opportunities available in telecommunications by investing in modern telecommunication technologies such as Wi-Fi hotspots to open up and expand business opportunities for SMEs as they venture more on online marketing. This would increase businesses as well as saving time for would be buyers who jump from shop to shop looking for items and resulting to congesting of towns.

**REFERENCES**


