Macrothink Institute™

International Journal of Management Innovation Systems
ISSN 1943-1384
2019, Vol. 3, No. 2

Resource Allocation and Management Innovation among Entrepreneurs in South Sudan: A Case Study of Small and Medium Enterprises in Juba City

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Received: August 2, 2019 Accepted: November 10, 2019 Published: November 25, 2019

doi:10.5296/ijmis.v3i2.15896 URL: http://dx.doi.org/10.5296/ijmis.v3i2.15896

Abstract

Management innovation among SMEs in South Sudan has been termed as low despite the high failure rate of the enterprises. This is despite the argument that management innovation enhances survival rate of enterprises and creates competitive advantage. This therefore triggered an investigation to find out if allocation of resources influences management innovation. The study population consisted of all the small and medium enterprises operating in Juba City which were 12,654 in total. The study adopted descriptive research design. A sample size of 96 SMEs was determined using Cochran formula. Primary data was collected using a self-administered questionnaire. The questionnaire was structured, having only closed-ended questions. The collected data was analysed through quantitative methods of descriptive and inferential statistics such as correlation and univariate regression model. The tool used was Statistical Package for Social Sciences version 24. The study established that

resource allocation has a positive and significant effect on management innovation of SMEs in Juba City. The recommendations of the study were that SMEs in Juba City should enhance their resource allocation practices such as encouraging innovative behavior to promote management innovation, measuring performance against subjective strategic criteria such as progress on product innovations and investing in technological resources such as IT infrastructure in order to enhance the rate of management innovation.

Keywords: Resource allocation, Management innovation, Juba City, South Sudan

1. Background of the Study

Most management innovations focus on just improving the existing practices and having modifications here and there without necessarily reinventing the will. Others however change the will and come up with new practices thus making the previous way obsolete completely. In the last 20 years, studies have focused on finding out how innovations have been used by firms to cope with the changing world. Studies have directed focus towards finding out how firms are managing management innovation for the last 20 years (O'Gorman, 2001). With a failure to come up with a suitable innovation, most businesses collapse in the process of trying to adopt.

It has been argued that only those firms that are able to construct resilient structures and innovations can withstand the changes in the environment and be able to survive in the long run when the market of competition is turbulent. Through innovations, sustainable competitive advantage is born (Chakravarthy, 2007). Prashantham (2008) argue that the corporate strategic management-intensive firms have a workforce with highly qualified and engaged in corporate strategy work. When managers of a firm are able to dedicate their human, physical, capabilities and financial resources to the strategic direction of the firm touching on innovation, then they are likely to have sustainable growth (Beaver & Price, 2004).

The concept of management innovation among SMEs has been reviewed globally. Salim and Sulaiman (2011) established that the Malaysian SMEs have allocated resources to embrace technological and market innovations as the critical factors of firm performance. In the case of Indian SMEs, Nurulhasanah, Zulnaidi, and Rafisah (2015) argued that the SMEs have adopted technological innovation in order to gain a competitive edge over rivals and perform better than their counterparts. In the Turkish context, Atalay, Anafarta, and Sarvan (2013) demonstrated that SMEs in Turkey have adopted that technological innovation (product and process innovation) in order to counter the increasing competition in the market of operation. As a result, they have realized a significant and positive impact on firm performance. A similar case is noted among the SMEs in Pakistan where Hassan et al. (2013*)* established that management innovation was high among manufacturing SMEs to cope with the emerging trends in the modern world.

Regionally, Makanyeza and Dzvuke (2015) indicated that in Zimbabwe, the SMEs are innovative in order to enhance their competitive edge and in that period they were innovating, their sustainable growth was also increasing significantly. In that line, organizational innovation was established to positively improve performance. Specifically, organizational and product innovation are critical. In Tanzania, Ndesaulwa and Kikula (2016) similarly established that SMEs had adopted management innovation in order to improve their performance. Taking a case of Kenya, Lily and Juma (2014) established the presence of strategic innovation among Commercial banks in Kenya. It was established that due to increasing competition among commercial banks, most of them had resorted to innovative strategy.

Assefa and Taye (2008) in their survey conducted in 2008 on sampled SMEs in Ethiopia

indicated that about 45% of the enterprises sampled had made orders for the purchase of goods and services through the Internet. The study revealed that the adoption of ICTs in their business lead to a reduction in transaction costs, an improvement in customers' satisfaction and faster transactions. Onu et al. (2014) argued that information technology is critical in improving the productivity and growth of SMEs since it puts them in a scale that they can compete with MNCs. Through technology, SMEs are able to produce products cheaply which can compete with those from the developed economies brought in by the MNCs.

In South Sudan, the SMEs sector is still young and emerging from the adverse effects of many years of civil war which wrecked the entire country's physical infrastructure, social economic, socio-cultural and financial systems as well as displacing and impoverishing almost the entire population. Several types of SMEs institutions have arisen in South Sudan since the return of relative peace and stability after the signing of the Comprehensive Peace Agreement in 2005. Service providers range from companies limited by shares, companies limited by guarantees, non-profit organizations and SACCOs.

1.1 Statement of Problem

The management of internal and external changes in an organization is what makes them competitive ahead of others. These efforts may narrow down to the innovative efforts of the organization. Rapid diffusion of new technology leads to knowledge creation which can enable a firm to be competitive (Hitt, Ireland, & Lee, 2000). Management innovation is one of the strategies used by companies to enhance their competitiveness and enhance their sustainable growth.

Mintzberg (2003) argued that SMEs should have corporate strategy that aim to improve the systems put in place to counter threats in their environment of operation. Oke (2002) also agreed that when a firm commits to management innovation, its competitive advantage improves. The SMEs in South Sudan have endured mixed performance due to high competition (Omer, 2018). According to Omer (2018) up to 45% of the SMEs in South Sudan don't go beyond the 5th anniversary. Welsh, Memili, Kaciak, and Ahmed (2013) agreed that in South Sudan, adoption of innovation among SMEs is still in its infantry considering their poor performance. There was hence a need to find out the effect of resource allocation on management innovation among small and medium enterprises in South Sudan.

1.2 Objectives of the Study

The study to establish the relationship between resource allocation and management innovation among entrepreneurs in South Sudan taking a case of Small And Medium Enterprises in Juba City

2. Literature Review

2.1 Theoretical Review

This study is hinged on the Rogers Innovation Diffusion and the Resource-Based View Theory. Rogers Innovation Diffusion Theory was proposed by Rogers (1995). The theory is used to explain the how adoption of new innovation, idea or technology is made possible in

an organization. The theory indicated that up to five factors determine adoption of a new technology and they include its advantage over competitors, whether it's compatible, whether it's complex to use, whether it's possible to experiment the idea and whether its results are observable.

In regard to relative advantage, Rogers (1995) argued that a new idea should really be better than what it's perceived to. To adopt a new technology, a user must first see the need to use it and the advantage it would provide compared to if it was not there (Greenhalgh et al., 2004). A new idea or technology should also be compatible. This means that it should perfectly fit in the existing systems, values, cultures and structures of the organization (Greenhalgh et al., 2004). Furthermore, a new technology or idea should not be complex to implement. It should be easy to use and understand in order to encourage its adoption. Rogers (1995) further revealed that when the potential users of an innovation perceive it as hard to use, not understandable or not simple, the chances of its adoption are low (Greenhalgh et al., 2004).

A new idea should also be able to be experimented because there is a need for more time, resources and energy to be used in implementing. There is therefore a need to have a new idea which can be experimented and tried more easily. Another aspect of a new idea is that its results and outcomes should be able to be observed and visible and seen (Lundblad & Jennifer, 2003). The theory is relevant to the study in explaining the critical factors which would determine the adoption of management innovation. Some of the factors explained are its advantage and trialability that can help to explain the role of availability of resources in management innovation.

The Resource-Based Theory was proposed by Penrose in 1959 and built more by Wernefelt. The theory argues that availability of resources which cannot be imitated, copied and which are unique are what places a firm in a steering will of achieving competitive advantage. These resources are called strategic resources. The idea behind the theory is that a firm can be able to gain competitive advantage and perform better with high profits if they have strategic valuable resources. The resources need to be heterogeneous in form and mobile as well as inimitable and unsubstituable to avoid copying by competitors. The theory supports strategic monitoring of resources in key areas so as to be able to achieve the desired results that can improve competitive advantage. The theory is relevant in explaining the role of unique resources in the organization in enabling a firm to achieve competitive advantage. The theory posits that a firm can achieve competitive edge over rival firms through possession of unique resources such as innovation.

2.2 Resource Allocation

Klingebiel and Rammer (2011) conducted a study to interrogate how allocation of resources was related to the efforts in innovation among firms in the European context. The study conducted a survey of the firms in Europe and adopted a descriptive survey. Through inferential statistics, the study indicated that a firm's resource allocation strategy affected its innovation strategy. When a firm decides to allocate resources to a broader range of innovation projects, its performance improved as shown by higher sales values. Heimonen (2012) also interrogated what factors were critical in spurring innovations in Europe. The

study adopted a theoretical and statistical method in achieving the objectives. Focusing on Finland, the study observed SMEs over a period of time through a longitudinal research. The study also focused across various industries and used a binary logistics model to find the odds of having more financial pressures given the increasing innovative practices of a firm. It was revealed that indeed innovative activities increased the financing pressures in a firm and that when funded, firms increased their innovative ideas.

Hardie and Newell (2011) focused their study on the context of Australia to establish what factors were essential for technical innovation to take shape among SMEs. The study focused on a number of Australian firms in the manufacturing sector but still classified as SMEs. It was revealed through correlation and regressions that when a firm has resources, it performs better in terms of innovation as compared to those firms that don't have access to resources. The study revealed critical differences between firms which had access to resources against those that did not. Gikungu (2016) conducted a study to determine the determinants of innovation among small and medium-sized enterprises in Nyeri Town, Kenya. The study conducted a survey of the entire SMEs in the town of Nyeri. The target population was five hundred and twenty one (521) SMEs in Nyeri town. A structured questionnaire was adopted to collect primary data on the entire target population. The study also used open ended questions to seek more answers on the topic of interrogation. The data analysis procedure was both quantitative and qualitative research methods such as descriptive statistics and inferential statistics. The study using regression analysis indicated that resource availability was statistically significant in influencing innovation among SMEs.

Mutiso, Ngugi, and Senaji (2016) also interrogated the role of resource allocation on promotion of Intrepreneurship in SMEs in Kenya. The target population was SMEs in Kenya. A structured questionnaire was adopted to collect primary data on the entire target population. The study also used open ended questions to seek more answers on the topic of interrogation. The data analysis procedure was both quantitative and qualitative research methods such as descriptive statistics and inferential statistics. The scatter plots for linearity indicated that allocation of resources portrayed a linear line against intrepreneurship with a high R-square to imply that there was a high positive effect of allocation of resources on intrepreneurship.

2.3 Management Innovation

According to Bigliardi (2013) innovation refers to the transmission of new knowledge in enhancing the existing processes, products or services. It is the end result of a new idea, creativity or experimental process. It has been documented that through innovation, a firm is able to enhance its survival chances since it allows for a close linkage with changing environmental factors (Lumpkin & Bigliardi, 2013). Those firms that are not able to innovate, have lower chances of competitive advantage and survival (Marques & Ferreira, 2009).

Bigliardi, (2013) interrogated how innovation can be used a means to attainment of competitive advantage in European firms. The study was a survey of the firms with structural modeling being adopted as a means of analysis. It was established that the increase in the innovation level increased financial performance and its competitiveness. Koellinger, (2008) similarly interrogated adoption of innovation among firms in the European union. The study

made use of both quantitative and qualitative and found that innovative activity is not necessarily associated with higher profitability. These findings provide a major diversion but it presents contextual knowledge gaps that this study sought to fill. A new insight was indicated in the findings of a study by Egbetokun, et al. (2008) which interrogated innovativeness among SMEs in European settings. The study indicated that incremental innovation is positively related to performance particularly on product quality.

2.4 Technological Innovation

A lot of researches had been carried out and it seems obvious that there exists a physically powerful association connecting technological innovation and the expansion of SMEs taken place in organizations based in dissimilar industries. Coad and Rao (2008) interrogate the connection involving originality and the expansion of sales for firms in soaring tech sectors. Coad and Rao (2008) noted that innovation vital tool for causing firms' growth very fast. If there is any on- going flourishing innovation, the share of innovated new products may seem to enlarge in the full amount of sales of the firm and when this occurs, firms will be able to attain growth in their sales income, investment and employment which would all increase in order to achieve growth of firm size.

Technological innovation is a major factor in a firm's competitiveness. Technological innovation is inescapable for firms that wish to develop and preserve a competitive gain and gain in terms of entry in to new markets (Becheikh et al., 2016). In the midst of firms of diverse sizes, SMEs are by and large additional, once they get used to themselves better, and are superior placed to build up and put into practice fresh thoughts. The plasticity of SMEs, their uncomplicated organizational makeup, their stumpy risk and accessibility are the indispensable attributes enhancing them to be innovative.

As a result, SMEs All over industries have the latent innovation probability. Through experimental study one may come up with fresh and resourceful thoughts about products and processes. A number of researchers examine that escalating returns of organization is due to a revolution in technology (Parida, Pesämaa, Wincent, & Westerberg, 2017). Technology is significant to sustain and encourage SMEs improvement as it is approachable to local economies and results in unique goods and services. Initiatives to sustain home-grown technology should consequently aim to bond SMEs with technology experts in order to make an enabling environment that develops technology aptitude.

2.5 Product Innovation

Shan, Song, and Ju (2016) defined product innovation as the prologue of a new product; one in which the customers are not yet well-known with. It is a new worth of a good. Product innovation also to the highest degree influences enterprises nowadays. Product innovation is the foreword of new functions, improved performance or the adding together of innovative attributes into the accessible goods (Baker, Grinstein, & Harmancioglu, 2016). Small and medium enterprises come across unchangeable complicatedness on or after important clients to reduce prices and concur to lessen margins on sales. Small and medium enterprises are thereby looking for profits growth from new goods and services.

Baker, Grinstein, and Harmancioglu (2016) consequently recommended that companies must present consumers new goods and services to consent to for a more well-organized and valuable employ of goods that they presently sell. Though merely a minute proportion of small and medium enterprises employ in innovative behaviour, those that do so emerge to have an advanced yield for their endevour particularly in number of innovative patents that are issued.

Recommendations were made that small and medium enterprise should trail product innovation strategies in up-and-coming markets. Lee, Hallak, and Sardeshmukh (2016) argued that small and medium enterprises over and over again carry out new product development course less absolutely or methodologically compared to the bigger companies. It was confirmed that corporations must be able to become accustomed to and progress if they wish to continue to exist. This is because competitors will come to the market and initiate new goods that will transform the foundation of competition. The ability to transform and acclimatize consequently is exceedingly major to the continued existence of any enterprises.

2.6 Process Innovation

Process innovation entails introduction of new and fresh ideas in as far as the production process is concerned (Shan, Song, & Ju, 2016). It is very vital in as far as the accomplishment of an enterprise is concerned and it is the one which improves the overall performance of an organization. Castillejo (2008) argued that due to the rapid changes in the environment of operation, SMEs will need to have very rapid innovative ideas in order to be able to cope.

While interrogating innovative practices among SMEs in Korea, Lee, Hallak, and Sardeshmukh (2016) adopted a structured questionnaire was adopted to collect primary data on the entire target population. The study also used open ended questions to seek more answers on the topic of interrogation. The data analysis procedure was both quantitative and qualitative research methods such as descriptive statistics and inferential statistics. It was established that SMEs in that region have highly invested in improving their processes in order to cut costs significantly and enhance efficiency massively. The study created a positive link between process innovation and competitive advantage in the ever increasing intense and competitive environment.

Ogembo and Mason (2012) on the other hand interrogated the role of process innovation in enhancing competitive edge among the firms in the Kenyan apparel industry. The study also used open ended questions to seek more answers on the topic of interrogation. The data analysis procedure was both quantitative and qualitative research methods such as descriptive statistics and inferential statistics. The study seconded that adoption of process innovation was the panacea to achieving sustainability among the investigated firms. The study established low cases of innovation and some of the cited reasons range from financial resources unavailability, lack of creativity and technical skills among the employees, lack of a conductive base for creativity, low exposure, lack of top management support for innovative activities, low risk taking behaviour and low strategic choices rate.

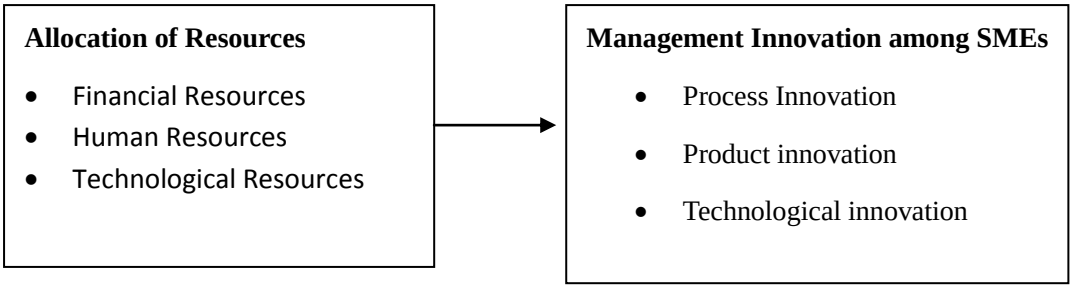

Figure 1. Conceptual framework

3. Research Methodology

This study used descriptive research design. The study focused on all the licensed SMEs in Juba city of South Sudan which totals to 12,654 according to the report by the City Council records. Stratified random sampling was adopted by the study to determine the SMEs to participate in the study. This was suitable since the SMEs were heterogeneous hence they were stratified according to their sector. After stratification, random sampling was used to determine the respondents which eliminate bias according to Kumar (2015). To determine the sample size, the study adopted a formula which has been seconded by scholars such as Kumar (2015); Smith (2015) and Garg and Kothari (2014). This study therefore adopted Cochran's formula to determine the sample size of 96 SMEs as shown below;

$$n = \frac{Z^2 pq}{e^2}$$

Where: n is the sample size when the population is more than 10,000, p is the proportion of desired characteristics set at 50% in this study, q is the missing characteristics, Z is the normal distribution score based on the SL and e is the error term set at 10% in this study.

Substituting the values gives the values below:

$$n = \frac{1.96^2(0.5)\ (0.5)}{0.1^2}$$

$$= 96$$

This study applied structured questionnaires to gather information relevant in producing the desired result as herein. A pilot study was also conducted on a set of 10 questionnaires to determine the reliability of the instrument before use. A Cronbach Alpha value above 0.7 was considered reliable. The collected data was analysed using the SPSS version 24 tool. The type of statistics established were descriptive statistics such as means and standard deviation as well as inferential statistics such as correlation and univariate regression. The following regression model was adopted:

$$Y = \beta_0 + \beta_1 X_1 + \mathcal{E}$$

Where: Y = Management Innovation among SMEs, X_1 = Resource Allocation, Ɛ = error term, β_0 = Constant and β_1, = Regression coefficient.

4. Research Findings and Discussion

A total of 96 questionnaires were issued out to the SMEs randomly selected in Juba City of South Sudan out of which a total of 50 SMEs responded to the questionnaire to give a response rate of 52%. This response rate is consistent with Kumar (2015) who agreed that a response rate above 50% is suitable for an academic study.

4.1 Reliability Test Results

The study tested for the reliability of the research instrument using internal consistency measures. Cronbach Alpha coefficient was adopted and the threshold was 0.7. The findings are indicated in Table 1. The results in indicate that resource allocation had a Cronbach Alpha value of 0.783 and Management Innovation had a value of 0.784. All these are above the cutoff value of 0.7 meaning that the data was reliable to be used for analysis.

Table 1. Reliability test results

Variable	Cronbach Coefficient	Number of Items	Conclusion
Resource Allocation	0.783	5	Reliable
Management Innovation	0.784	5	Reliable

4.2 Respondent's Background Information

This sub-section presented findings on the general characteristics of the respondents with regard to their gender, age, work experience and educational level. The results are indicated in Table 2. The results indicate that the majority the SMEs owners in Juba City are Male (68%). However, more than a third are female which indicates that there was representativeness in the gender distribution among SMEs owners in Juba. It was also established that majority of SMEs owners in Juba city in South Sudan are aged between 31 – 40 years (46%) and those aged above 40 years were 34%. This demonstrates that majority of the business owners are aged above 30 years implying that businesses were not preferred by the youth who preferred employment.

It was also established that majority of the respondents had a primary level of education (36%) and secondary level of education (34%) as their highest levels. This implies that those highly educated did not prefer to run businesses in Juba City but opted for employment. The attitude of running business was poor among those with very high education qualifications such as tertiary levels.

It was further indicated that a high number of the respondents, 36%, had a work experience below 5 years followed by a period between 5 and 10 years. This implies that most of the businesses had not operated for over 10 years meaning that they were new. This can be attributed to high failure rate which makes most SMEs to fail before hitting 5th anniversary.

Table 2. Respondent's background information

Demographic Characteristics	Category	Frequency	Percentages
Gender	Male	34	68
	Female	16	32
Age Bracket	Less than 18 Years	3	6
	18 – 30 Years	7	14
	31 – 40 Years	23	46
	Over 40 Years	17	34
Highest Education Level	Primary	18	36
	Secondary	17	34
	Tertiary	15	30
Work Experience	Below 5 Years	18	36
	5 – 10 Years	12	24
	10 – 20 Years	13	26
	Over 20 Years	7	14

4.3 Descriptive Analysis

The study used mean as well as standard deviation descriptive statistics to capture the responses that were framed on an ordinal scale of 5 from strongly disagree to strongly agree. The respondents were asked to rate statements on resource allocation and the results are given in Table 3.

Table 3. Descriptive statistics of resource allocation

Statement	Mean	Std Dev
The organization encourages innovative behavior to promote management innovation	3.88	1.39
The organization measures performance against subjective strategic criteria such as progress on product innovations	4.87	0.98
The organization constantly come up with new methods of production that are cost effective	3.34	1.14
The organization allocates financial resources towards innovative activities such as research and development	3.08	1.37
The organization has invested in technological resources such as IT infrastructure to enhance innovation	3.50	1.34
Average	**3.73**	**1.24**

The results indicated that the respondents agreed that their organization encourages and innovative behavior to promote management innovation (Mean = 3.88), measures

performance against subjective strategic criteria such as progress on product innovations (Mean = 4.87) and has invested in technological resources such as IT infrastructure to enhance innovation (Mean = 3.50). The findings also indicated that the respondents neither agreed nor disagreed that their organization constantly come up with new methods of production that are cost effective (Mean = 3.34) and allocates financial resources towards innovative activities such as research and development (Mean = 3.08). On average, the respondents agreed that there is resource allocation for management innovation activities (Average Mean = 3.73). The responses had a small variation as shown by a small standard deviation of 1.24. The findings are consistent with Mutiso, Ngugi, and Senaji (2016) who argued that organizations allocate resources to improve their management innovation.

The respondents were also asked to rate statements on management innovation and Table 4 presented the results. The results showed that the respondents agreed that their organization has come up with new products to counter market threats (Mean = 3.80) as well as come up with new services to counter market threats (Mean = 3.98). The respondents were however neutral on whether their organizations have come up with new organizational systems to counter market threats (Mean = 3.30) as well as new methods of production and operations to counter market threats (Mean = 3.26). On average the respondents agreed that the SMEs in Juba city have adopted management innovation (Average Mean = 3.59). Hoang (2010) also revealed that in the modern era, SMEs have adopted management innovations ranging from product, process and organizational innovations in order to cope with the increasing competitive environment.

Table 4. Descriptive statistics of management innovation

Statement	**Mean**	**Std Dev**
The organization has come up with new products to counter market threats	3.80	1.44
The organization has come up with new services to counter market threats	3.98	1.41
The organization has come up with new organizational systems to counter market threats	3.30	1.37
The organization has come up with new methods of production and operations to counter market threats	3.26	1.43
Average	**3.59**	**1.41**

4.4 Correlation Analysis

The association between resource allocation and management innovation was established through correlation analysis. The results were shown in Table 5.

Table 5. Correlation analysis

		Resource Allocation	Management innovation
Resource Allocation	Pearson Correlation	1	
Management innovation	Pearson Correlation	.393**	1
	Sig. (2-tailed)	0.005	
	N	50	50
** Correlation is significant at the 0.01 level (2-tailed).			

The results indicated that resource allocation has a positive and significant correlation with management innovation of SMEs in Juba City, South Sudan (r = 0.393, Sig = 0.005, < .05). This implies that an increase in resources allocation leads to a significant increase in management innovation among SMEs. The findings of the study are consistent with the findings of Klingebiel and Rammer (2011) who revealed that the choice of resource allocation strategy affects innovation performance. The findings are also consistent with Heimonen (2012) who established that research and innovation funding increased innovation activities in an organization.

4.5 Regression Analysis

To determine the effect of resource allocation on management innovation of SMEs, the study carried out a univariate linear regression analysis. The following regression model was adopted:

$$Y = \beta_0 + \beta_1 X_1 + \mathcal{E}$$

Where: Y = Management Innovation among SMEs, X_1 = Resource Allocation, Ɛ = error term, β_0 = Constant and β_1, = Regression coefficient. The results for model summary are presented in Table 6.

Table 6. Model summary

R	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
.393	0.154	0.137	1.037897
a Predictors: (Constant), Resource Allocation			

The findings indicate that Resource Allocation can be used to account for up to 15.4% of the variation in management innovation among SMEs in Juba City. The remaining variation in management innovation among SMEs in Juba City is explained by other factors other than resource allocation. The regression results also showed that the regression model was fit (significance). Analysis of Variance (ANOVA) was used and the findings as presented in Table 7.

Table 7. ANOVA

ANOVA	Sum of Squares	df	Mean Square	F	Sig.
Regression	9.43	1	9.43	8.754	.005
Residual	51.707	48	1.077		
Total	61.137	49			
Dependent Variable: Management Innovation					
Predictors: (Constant), Resource Allocation					

The results indicate that the model linking resource allocation to management innovation among SMEs in Juba city was fit (Sig = 0.05, < 0.05). This means that the model was a good fit. The study also established the model coefficients to indicate the nature, magnitude and significance of the relationship between the variables as shown in Table 8.

Table 8. Model coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.727	0.946		0.769	0.446
Resource Allocation	0.735	0.249	0.393	2.959	0.005
Dependent Variable: Management innovation					

The results in Table 8 indicate that resource allocation has a positive and significant effect on management innovation among SMEs in Juba City (B = 0.735, Sig = 0.005, < 0.05). This implies that a unit increase in resource allocation leads to an increase in management innovation by 0.735 units. The findings are consistent with the findings of a study by Gikungu (2016) which established that in the Kenyan Nyeri town, resource allocation was one of the significant determinants of innovative activities among SMEs.

5. Conclusion

The study concludes that resource allocation has a positive and significant effect on management innovation of SMEs in Juba City, South Sudan which implies that an increase in resources allocation (financial resources, physical resources, human resources and capabilities resources) leads to a significant increase in management innovation among SMEs.

6. Recommendations

Based on the findings that resource allocation has a positive effect on management innovation among SMEs in Juba city, South Sudan the study recommends SMEs to enhance their resource allocation practices. Some of the practices are encouraging innovative behavior to promote management innovation, measuring performance against subjective strategic

criteria such as progress on product innovations, investing in technological resources such as IT infrastructure to enhance innovation, coming up with new methods of production that are cost effective and allocating financial resources towards innovative activities such as research and development.

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