

## SOCIAL MEDIA AND ENTREPRENEURSHIP DEVELOPMENT NEXUS IN BENUE STATE NIGERIA: EVIDENCE FROM A BINARY LOGISTIC REGRESSION MODEL

Margaret Oka Agbor<sup>1\*</sup>, Dr. Frank Lifu Lifu<sup>2</sup>, Joseph Eja-Osang<sup>3</sup>, Odey Christopher Lifu<sup>4</sup>

<sup>1</sup>*Department of Marketing, Faculty of Management Sciences, University of Cross River State, Ogoja Campus, Ogoja. Cross River State, Nigeria.*

<sup>2</sup>*Department of Business Administration, University of Cross River State*

<sup>3</sup>*Department of Marketing, Faculty of Management Sciences, University of Cross River State, Ogoja Campus, Ogoja. Cross River State, Nigeria.*

<sup>4</sup>*Hospitality and Tourism Management, University of Cross River State, Calabar, Nigeria.*

**\*Corresponding Author:**

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### Abstract

*This study carried out an analysis of social media and entrepreneurship development nexus in Benue State. The researcher used mainly primary data from a sample of three hundred entrepreneurs in Zone A, B & C in Benue State Nigeria. The primary data was obtained using a structured questionnaire. The data collected were analyzed using logit regression to establish the relationship between social media and entrepreneurship development while principal component analysis was used to identify the most important factors that affects the use of social media in entrepreneurship development. The result of the binary logistic regression analysis indicates that ( $X_1$ ) Social Media ( $\beta = 4.027$ ,  $p = 0.018$ ) added significantly to the model/prediction. This means that the logistic model was statistically significant at 5 percent level of significance. Increasing the use of social media was associated with an increased likelihood of entrepreneurship development in Benue State. The logistic regression model was statistically significant,  $\chi^2(1) = 178.366$ ,  $p < .05$  using values from the Omnibus Test of Model Coefficient. The model explained 62.20% (Nagelkerke  $R^2$ ) of the variance in post harvest losses of orange in the studied areas and correctly classified 75.0% of cases. Use of social media was 0.018 times more likely to bring about entrepreneurship development in the studied areas. It was concluded that social media have a positive and significant effect on entrepreneurship development in Benue State Nigeria. It was recommended among others that entrepreneurs in the study area should engage more qualified personnel who can create the right content needed to engage the diverse customers of the business. When this is done, the likelihood of the use of social media in bringing about entrepreneurship development in Benue State can be increased.*

**Keywords:** *Entrepreneurship, Social Media, Logit, PCA, Benue, Nigeria.*

## I INTRODUCTION

Novel phenomena frequently arise and disappear. But, occasionally something that has the potential to alter the corporate climate is brought to light. The business world is not impervious to potential effects. Such a phenomenon includes social media. Social media, also known as social networking and Web 2.0, refers to network communities as well as jointly created and shared media content. Social media users have the option of sharing their opinions and experiences. This encourages open dialogue, creativity, and knowledge sharing among users. Social media technologies include Facebook, WhatsApp, Instagram, Twitter, Skype, and discussion boards, for instance (Ahmad, Abu & Ahmad, 2019). Social media is a new phenomena that has altered the way businesses function. Companies can acquire access to resources that might otherwise be unavailable to them. It has also assisted firms in increasing their credibility, cultivating strategic connections, and increasing touch with customers and suppliers. It is critical for business owners and marketers to grasp how social media works as a communication and marketing tool and how it may help them grow their enterprises dramatically (Bakri, 2017).

Small businesses can use social media in the same manner that major corporations do because there are few barriers to using social networking technologies, and doing so requires fewer resources. According to Alalwan, Rana, Dwivedi & Algharabat, (2017), a company's adoption of the Internet can help it expand its clientele and market, which contributes to the company's growth plan. The development of new products or expanding a company's primary business through market penetration are both made possible by the internet. Gbadegeshin, Oyelere, Olaleye, Sanusi, Ukpabi, Olawumi & Adegbite (2018), continues by stating that connections made online can increase sales and present prospects for the development of new goods and services.

Social networking allows businesses to gain access to resources that might otherwise not be available to them (Gbadegeshin *et al.*, 2018). It can also aid the development of a firm's worthiness, increase the customer and supplier contacts, bring to light where resources and funding are available, promote innovation and help in the cultivation of strategic partnerships (Gingiss, 2019). Business owners rarely possess all the skills and knowledge needed to expand their enterprise, and finding people with the necessary skills, and getting them to contribute, is a vital aspect of their networking. The sky is the limit with social media.

Owing to of the flexibility of social networking tools, businesses can realize different benefits. These according to Papa, Santoro, Tirabeni & Monge (2018), are greater access to different audiences, improved customer service, improved products and services and adoption of favorable pricing practices. The 21st century has seen a shift in the way businesses market their products and services. Smith, Smith & Shaw (2017), reveal that companies are presently experiencing several new unanticipated events and the development of the Internet as a communication channel is almost certainly one of the most influential factors. The internet has brought about several new elements – it has made consumers more accessible, it has emerged with a completely new set of communication tools that make the process of exchanging information much easier and faster, and it has compelled companies to rethink how they are communicating with their customers (Wamba, 2018). Entrepreneurs, marketers and consumers are witness the appearance of virtual social media.

Social media is defined as electronically used subscribers' activities, exercises and practices linking millions of people happening through the web by means of sharing data, information, ideas and feeling. It engages customers to share information, interact and co-operate with one another to make web substance and utilize it. Social media as we know it today can be said to be an evolution traced back to the internet's roots since it retransforms the World Wide Web to what it was initially created for – a platform to aid information exchange between users (Cant, 2016). The origins of social media networking go back to the 1980s Bulletin Board Systems (BBS). These systems allowed users to log in to share software and data as well as send private messages and post to public message boards (Drummond, McGrath & O'Toole, 2018).

Social media sites (Social Network) are platforms that assistance in creating an online group of individuals with common goal who utilize a website to communicate with another other and offer data assets and so on. Social media sites as web based services that enable people to (1) build an open or semi-open profile inside a limited framework, (2) willfully choose a list of users with whom they share a connection, and (3) view and cross their connection list and those made by others inside the framework. The nature and terminology of these associations and connections may differ from site to site (Ahmad, et al., 2019). Ceptureanu, Ceptureanu, Cristescu & Dhesi, (2020), see Social Networks as websites which connect a great many users from everywhere throughout the world with same interests, perspectives and hobbies. YouTube, LinkedIn, Myspace, Twitter, WeChat, Facebook are examples of web-based social networking that are prominent among all levels of users.

An entrepreneur is defined as someone who finds and exploit opportunities, a maker who starts and spurs the procedure of progress (creator), starts better approaches for acting (innovator), acknowledges dangers, utilizes instinct, is ready, identifies business openings, production of new enterprise and investigates new business leadership. Entrepreneurship Development is a well-planned and precise improvement and advancement. It is a means of industrialization and an answer for unemployment issue for any nation. The goal of entrepreneurial advancement is to persuade a man for entrepreneurial vocation and to make him equipped for seeing and exploiting effectively open doors for business

undertakings (Prema, 2003). Similar view is expressed by US Department of State (2007), most financial experts and economist today concur that entrepreneurship is an essential element for invigorating economic growth and job opportunities in all societal levels. In the developing world successful small businesses are the essential ingredient of employment creation, pay improvement, and reduction of poverty.

The infusion of social media into entrepreneurship has tremendously increased the level of development recorded in entrepreneurial activity. This has also led to efficiency in the services rendered by these businesses. Social media infusion and the use of technology is a major tool that has advanced entrepreneurship development in many nations of the world including Nigeria. The infusion of social media into entrepreneurship has led to increased speed of marketing, contact and feedback from clients, improved accuracy and efficiency in business deliveries, reduced cost of doing and transacting businesses, created numerous jobs and holistically improved the profit margin of many entrepreneurial businesses (Abedi & Rahim, 2011).

Infusion of technology and social media into entrepreneurship has reduced the incidence of low feasibility for businesses and entrepreneurs, it has helped in bridging communication gap, it has led to increased and improved performance of businesses, it has created room to reach millions of customers and clients real time without distortions, technology has made it easily possible to birth entrepreneurship ideas, it has led to creation of new market and new market segments, it has improved the level of transparency in business dealings, it has led to knowledge based economy and social media through technology has also acted as a tool used by entrepreneurs and business owners to enhance, project and make their businesses known and acceptable to their clients and customers; creating tremendous stream of business activities and increasing revenue generation for the businesses (Obar, 2015).

Uses and Gratifications theory is the study of the gratifications or benefits that attract and hold audiences to various types of media and the types of content that satisfy their social and psychological needs (Ancu & Cozma, 2009). Whilst researchers traditionally tended to emphasis the effects of media exposure on audiences, Uses and Gratifications theory espouses the need to consider what people do with media (LaRose & Eastin, 2004; Ruggiero, 2000). This theory has been applied to a variety of mass media and media content, with the selection of media type evolving to match the dominant or emerging media of the day. As such, the internet constitutes newer media formats, with their own defining characteristics, which are ripe for examination under the theoretical lens of Uses and Gratifications theory (Park, Kee & Valenzuela, 2009).

Mah, Ghulam and Mariah (2010) examined Social Networking a Source for Developing Entrepreneurial Intentions Among Entrepreneurs: A Case of Multan. The universe for the present study consisted of all enterprises registered with Trade of Chamber and Commerce (Multan). A sample of 5 respondents was selected for interview through convenient sampling. Detailed interviews were conducted for data collection and analyzed by using critical analysis procedure. From the analysis it was found that social networking helps the entrepreneur in developing entrepreneurial intention through which peer group and family and educational institutions in general and universities in particular contribute a lot. Mass media found as a main source in providing the platform for entrepreneurship in the realm of networking.

Ambrose and Kinyua (2013) studied the effect of social media on the growth of SMEs in Nairobi. The study used descriptive research design and Questionnaires were administered on 246 SMEs in Nairobi, with the respondents being either the owners or managers. Cluster sampling was used to divide the population of interest and then simple random probability sampling technique was used to further identify the specific businesses to be used for the study. Both quantitative and qualitative data was collected and then analyzed using SPSS. The study established that social media tools offer greater market accessibility and CRM which in turn have a significant impact on the growth of SMEs. On the other hand, the pricing of products and innovativeness aspects offered by social media have had very little impact to cause any growth in the SMEs.

Mahwish, Wajahat, Shazia, Hummaira and Nadia, (2017) studied the relationship between social media and entrepreneurship growth in Lahore Pakistan. This study used regression analysis to investigate the impact of social media on entrepreneurial growth. The study clearly concluded that the companies of Lahore who are on social media are more popular among the masses as compare to those who are not using internet for the advertising purpose.

Ogunnaike and Kehinde (2013) examined the nature of relationship between social networking and business performance using selected entrepreneurs in Ota, Nigeria. The researcher used survey research method with structured questionnaire that was distributed among the sampled respondents. The findings of the study revealed that Facebook and twitter was the mostly visited social network by the entrepreneurs for business purposes. The result further revealed that electronic social network has significant effect on sales turnover. Physical social network such as trade associations was also found having a significant effect on business efficiency.

Abdus-Samad (2020) examined the factors affecting social media use by entrepreneurs and the impact of this use on the opportunity recognition process. The study was based on the Technological Organization-Environmental (TOE) and the Opportunity Recognition Frameworks. A mixed method study was conducted with data collected from a developed economy (Australia) and a developing country (Nigeria). An initial research model was developed based on the extant

review of literature on social media use and entrepreneur opportunity recognition. Firstly, qualitative data were collected via interviews with 14 entrepreneurs, which identified eight factors under four broad categories (technology, environment, individual and social media platform factors) that influence entrepreneur social media use. Also, five social media capabilities were identified (networking, searching, observing, experimenting, and social media data analytics) to drive entrepreneurial opportunity recognition. Comparing the qualitative data with themes developed from published literature, the initial research model was revised. In the second stage, a survey of 568 entrepreneurs was used to validate the model and its associated relationships. The analysis suggests that four general factors influence social media use; platform perception, absorptive capacity, platform abuse and external pressure. In addition, the use of social media was found to influence opportunity recognition through four of the five identified capabilities: searching, observing, experimenting, and data analytics. However, the findings indicate differences on how social media capability drives opportunity recognition amongst entrepreneur in Australia and Nigeria, which can be explained based on their individualist and collectivist culture respectively. Interestingly, the multi-group analysis revealed that the influence of social media capabilities on opportunity recognition might vary depending on the entrepreneur’s gender and the age of their business.

The use of social media by small businesses is an important but under-researched area. With the development and availability of internet tools the capacity of small businesses to grow significantly has become a very real possibility. Social Networking, incorporating internet technologies has been credited with the ability to increase social contacts, hasten business operations, the betterment of customer relations, facilitation of innovation and favorable pricing, and advantageous recruitment of highly competent staff. Although there are a lot of benefits about the internet and social media that can be utilized for entrepreneurship development, it is yet to be determined the extent of social media influence in entrepreneurship development. In Nigeria, many entrepreneurs and businesses are yet to fully adopt or embrace the use of technology and social media in their daily business operations. Many of these businesses only use technology in some areas of their business operations like accounting and inventory while only few can be said to have fully embraced the use of technology in almost every area of their business operations (Cao & Ali, 2018).

The businesses that refused to embrace the use of social media and technology will lose revenue in the short and long run and may also lose their clients or customers to other competitors. It’s therefore imperative to focus this study on the role played by social media on entrepreneurial development. Some researchers have argued that the low adoption of the use of social media by entrepreneurs is mainly due to the wrong believe that it does not contribute to business development. At the same time, some authors are of the opinion that low level of competence is at the heart of the non usage of social media in business operations. From the extant literature, studies have been conducted using social media and entrepreneurship development, but none of these studies used Benue State entrepreneurs as a case study. Therefore, this research fills the research gap by examining how social media influence entrepreneurship development in Benue State among users. The objective of this study is to examine the effect of social media on entrepreneurship development in Benue State Nigeria. The specific objectives of this study were to: i. examine the effect of social media on new enterprise formation in Benue State Nigeria. ii. Assess the factors that affect the use of social media in entrepreneurship development in Benue State Nigeria.

**II METHODOLOGY**

This study used survey research design. It is a procedures in quantitative research in which investigators administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviours, or characteristics of the population. Convenience sampling was used to sample available entrepreneurs who use social media in business operation in the study areas. This study was conducted in three geopolitical zones of the State, namely; Katsina Ala, Makurdi and Otukpo, all representing Zone, A, B & C. These Local Governments are chosen because they have large concentration of entrepreneurs who are into various enterprises. One hundred SMEs' operators in the study areas were selected for the study. This brings the total population of the study to three hundred respondents. The study was based on the primary data collected from the selected SMEs operators using a structured questionnaire. The data was analyzed using the Statistical Package for Social Science (SPSS) Version 26.0.

**Table: 1 KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.944
Approx. Chi-Square	103.669
Bartlett's Test of Sphericity df	105
Sig.	.018

A pre-test was conducted. The input variable factors used for this study were subjected to exploratory factor analysis to investigate whether the constructs as described in the literature fits the factors derived from the factor analysis. From Table 1, factor analysis indicates that the KMO (Kaiser-Meyer-Olkin) measure for the study’s variable items is 0.948 with Barlett’s Test of Sphericity (BTS) value to be 10 at a level of significance  $p = 0.041$ . Our KMO result in this analysis surpasses the threshold value of 0.50 as recommended by Hair, Anderson, Tatham, and Black (1995). Therefore, we are confident that our sample and data are adequate for this study.

**Table 2: Reliability of Instrument**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.976	.988	15

This is the consistency between independent measurements of the same phenomenon. It is the stability, dependability and predictability of a measuring instrument. It is also the accuracy or precision of a measuring instrument. To determine the reliability of the instrument from the result of the pre-test study carried out in the study area using one third of the sample, the Cronbach Alpha Coefficient test statistics was computed. Table 2 shows the reliability statistics which indicates that the overall Cronbach Alpha value is 0.850. Reliability Cronbach Alpha statistics of 0.70 is considered adequate and reliable for study. Hence, the variables of this study fall above the limit of a reliable instrument for this study.

**Model Specification**

The model is specified in two forms; farmers factor, marketers factors. The implicit and the explicit relationship between the variables of the study is specified as shown below:

**Objective one:** Effect of social media on entrepreneurship development in Benue State Nigeria.

**A) Entrepreneurship development is proxied by new enterprise formation**

The implicit relationship between the dependent and independent variable of the study is shown below:

$$Y_1 = f(X_1) \tag{1}$$

$$NED = f(SOM)$$

Where,

- X<sub>1</sub> = Social Media
- Y<sub>1</sub> = Entrepreneurship development measured by new enterprises formation

In explicit form, the model can be represented in the form as shown below:

$$Y = \alpha_0 + \alpha_1 X_1 + U_t \tag{2}$$

Where,

- α<sub>0</sub> = Regression Constant
- α<sub>1</sub> = Coefficients of variable
- U<sub>t</sub> = Disturbance term

**Measurement of Variables**

- X<sub>1</sub> = Social Media (Social media had influence = 1, Otherwise = 2)
- Y<sub>1</sub> = Entrepreneurship development measured by new enterprises formation (1 if there is new enterprise formation, 2 otherwise).

**Objective two:** Factors that affect the use of social media in entrepreneurship development.

Principal Component Analysis was used to estimate objective two.

1. Illiteracy of Entrepreneur [ILE]
2. Lack of exposure [LOE]
3. Unwillingness of entrepreneur [UOE]
4. Economic challenge [ECC]
5. Social challenges [SOC]
6. Cultural challenge [CUC]
7. Lack of fund [LOF]
8. Wrong Business model [WBM]
9. Declining organic engagement [DOE]
10. Wrong social media platform [WSMP]
11. Knowledge of target audience [KTA]
12. Lack of qualified personnel [LQP]
13. Not meeting consumers expectation [NMCE]
14. Creating the right content [CRC]
15. Ineffective customer service [IECS]

$$SNR = \frac{P_{signal}}{P_{noise}}$$

Source: [gstatic.com](http://gstatic.com)



Where,  
 SNR = Signal to Noise Ratio  
 P = Probability

In principal component analysis, the signal is all the valid values for a variable ranging between its respective min and max values and the noise represented by the spread of the data points across the best fit line. This unexplained variation in the data is due to random factors. The objective of PCA is to maximize or increase this signal content and reduce the noise content in the data. Fifteen factors were subjected to factor analysis using principal component analysis and the result indicates the most important factor that affect the use of social media in entrepreneurship development.

**Techniques of Data Analysis**

Binary logistic regression was used to estimate the model of the specific objective one of the study. For objective two, principal component analysis was used to determine the most useful factors of social media that affect entrepreneurship development. The diagnostic test of Hosmer-Lemeshow test was performed and it is briefly described:

**Hosmer & Lemeshow Test**

The Hosmer-Lemeshow test is a statistical test for goodness of fit for the logistic regression model. The data are divided into approximately ten groups defined by increasing order of estimated risk. The observed and expected number of cases in each group is calculated and a Chi-squared statistic is calculated as follows:

$$\chi^2_{HL} = \sum_{g=1}^G \frac{(O_g - E_g)^2}{E_g(1 - E_g/n_g)}$$

with  $O_g$ ,  $E_g$  and  $n_g$  the observed events, expected events and number of observations for the  $g^{th}$  risk decile group, and  $G$  the number of groups. The test statistic follows a Chi-squared distribution with  $G-2$  degrees of freedom. A large value of Chi-squared (with small p-value < 0.05) indicates poor fit and small Chi-squared values (with larger p-value closer to 1) indicate a good logistic regression model fit.

**III RESULTS AND DISCUSSION**

This section presents the results of the logistic regression and its interpretation and discussion or the two models of the study. Various factors that affects post harvest of orange at farming and marketing levels were regressed to determine the effect of each of the factors on post harvest losses of orange fruit in the studied area.

**Analysis of specific objective one: Effect of social media on entrepreneurship development in Benue State Nigeria.**

**Table 3. Classification Table.**

Classification Table <sup>a,b</sup>					
	Observed	Predicted			Percentage Correct
		NED			
		1.00	2.00		
Step 0	NED	1.00	115	55	100.0
		2.00	96	24	.0
	Overall Percentage				78.9

a. Constant is included in the model.  
 b. The cut value is .500

Source: Author's computation, 2023

This Table presents the classification of the variables used for this study. As shown above, 78.9% of the cases was correctly classified.

**Table 4. Model Summary.**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	217.122 <sup>a</sup>	.457	.616

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Source: Author's computation, 2023

Table 4 contains the Cox & Snell R Square and Nagelkerke R Square values, which are both methods of calculating the explained variation. Therefore, the explained variation in the dependent variable based on our model ranges from 46.7% to 61.6%. Since Nagelkerke  $R^2$  is a modification of Cox & Snell  $R^2$ , we are using the Nagelkerke  $R^2$  value of 61.6% as the explained variation.

**Table 5: Hosmer and Lemeshow Test**

Step	Chi-square	df	Sig.
1	3.643	3	.342

Source: Author's computation, 2023

The Hosmer and Lemeshow test is also a test of Model fit. The Hosmer-Lemeshow statistic indicates a poor fit if the significance value is less than 0.05. As shown by the result of the study, the model adequately fits the data as the probability value of the estimate is 0.342 which is higher than the critical value of 0.05. Hence, there is no difference between the observed and predicted model.

**Table 7: Omnibus Tests of Model Coefficients**

	Chi-square	df	Sig.
Step	178.366	1	.000
Step 1 Block	178.366	1	.000
Model	178.366	1	.000

Source: Author's computation, 2023

The logistic regression model was statistically significant,  $\chi^2(1) = 178.366, p < .05$  using values from the Omnibus Test of Model Coefficient Table.

**Variables in the Equation**

The "Variables in the Equation" table shows the contribution of each independent variable to the model and its statistical significance. This table is shown below:

**Table 8: Variables in the Equation.**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup> SOM	4.027	.399	101.695	1	.000	.018	.008	.039
Constant	5.303	.532	99.261	1	.000	200.863		

a. Variable(s) entered on step 1: SOM.

Source: Author's computation, 2023

As shown from the result of the binary logistic regression, (X<sub>1</sub>) Social Media ( $p = .018$ ) added significantly to the model/prediction. This means that the logistic model was statistically significant at 5 percent level of significance. Increasing the use of social media was associated with an increased likelihood of entrepreneurship development in Benue State. The logistic regression model was statistically significant,  $\chi^2(6) = 11.067, p < .05$  using values from the Omnibus Test of Model Coefficient Table 8. The model explained 62.20% (Nagelkerke R<sup>2</sup>) of the variance in post harvest losses of orange in the studied areas and correctly classified 75.0% of cases. Use of social media was 0.018 times more likely to bring about entrepreneurship development in the studied areas. This finding is in tandem with those of Mah, Ghulam and Mariah (2010), Ambrose and Kinyua (2013), Mahwish, *et al.*, (2017) who found that social media, have significant contributions in the areas of marketing, instant feedback from customers and client and greater market accessibility.

**Objective two:** Factors that affect the use of social media in entrepreneurship development.

Principal Component Analysis was used to estimate objective two.

**Table 9: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.751	18.339	18.339	2.751	18.339	18.339
2	2.080	13.867	32.206	2.080	13.867	32.206
3	2.013	13.423	45.628	2.013	13.423	45.628
4	1.607	10.712	56.340	1.607	10.712	56.340
5	1.502	10.014	66.355	1.502	10.014	66.355
6	1.113	7.418	73.773	1.113	7.418	73.773
7	.883	5.883	79.656			
8	.820	5.469	85.125			
9	.572	3.816	88.941			
10	.374	2.494	91.435			
11	.354	2.357	93.792			
12	.325	2.168	95.960			
13	.301	2.008	97.968			
14	.209	1.394	99.362			
15	.096	.638	100.000			

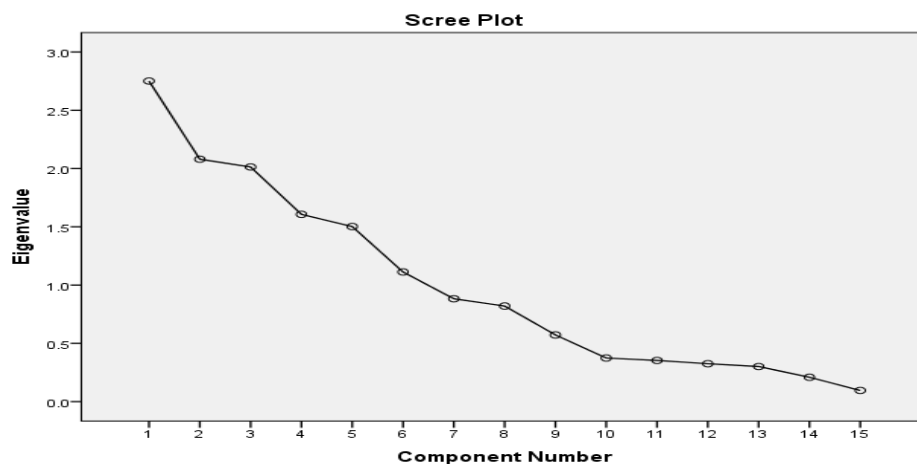
Extraction Method: Principal Component Analysis.

Key:

1. Illiteracy of Entrepreneur [ILE]
2. Lack of exposure [LOE]
3. Unwillingness of entrepreneur [UOE]
4. Economic challenge [ECC],
5. Social challenges [SOC],
6. Cultural challenge [CUC]
7. Lack of fund [LOF],
8. Wrong Business model [WBM],
9. Declining organic engagement [DOE],
10. Wrong social media platform [WSMP],
11. Knowledge of target audience [KTA]
12. Lack of qualified personnel [LQP],
13. Not meeting consumers expectation [NMCE]
14. Creating the right content [CRC],
15. Ineffective customer service [IECS]

The result of the principal component analysis indicate which of the construct is useful in the predicting which of the factors are important in explaining the factors that affect the use of social media in entrepreneurship development most in the study area. The total variance explained in the above table shows how the variance is divided among the 15 possible factors. Six factors have eigenvalues (a measure of explained variance) greater than 1.0, which is a common criterion for a factor to be useful. When the Eigenvalue is less than 1.0 the factor explains less information than a single item would have explained. Table 4 shows that the Eigenvalues are 2.751, 2.080, 2.013, 1.607, 1.502 and 1.113 are all greater than 1. As shown in Table 4 on the rotated sum of squared loadings section, six components i.e., component 1, 2, 3, 4, 5 and 6 accounts for 73.773% of the variance of the whole variables of the study. This shows that these constructs are the most significant factors that affects the use of social media in entrepreneurship development most in the study area instrument. This finding of this study is in line with that of Abdus-Samad (2020) who found that similar factors were responsible for the role played by social media in entrepreneurship.

Figure 1: Scree Plot



The Scree Plot shows the initial Eigenvalues. Note that both the scree plot and the eigenvalues support the conclusion that these fifteen constructs can be reduced to six components. The second component is very poorly defined, relating only to one variable. The Scree plot shows that after the first six components, differences between the eigenvalues decline sharply (the curve flattens), and they are less than 1.0. This again supports a six component solution.

**IV Conclusions**

The researcher examined the effect of social media on entrepreneurship development in Benue State Nigeria. From extant literature, social media has been found to be an excellent, cost effective way of acquiring new customers, creating and building brand awareness, expanding the business virtually and also means of retaining more customers. Social media groups also provide useful feedbacks to the businesses, valuable insights and opportunities for the businesses to also learn from their existing or would be new customers. This feedbacks from their existing or would be customers can help the company in advancing the company’s brands, marketing effort and reduction in advert cost. The infusion social media in entrepreneurial activities have led to increased speed, reduced physical means of storing data by businesses, reduced administrative corruption, improved accuracy and efficiency in business deliveries, reduced cost of doing and transacting businesses, created numerous jobs and holistically improved the profit margin of many entrepreneurial businesses. The researcher therefore conclude that social media have a positive and significant effect on entrepreneurship development in Benue State Nigeria. Based on the results of the study, the following recommendations are made:

- i. Entrepreneurs in the study area should engage more qualified personnel who can create the right content needed to engage the diverse customers of the business. When this is done, the likelihood of the use of social media in bringing about entrepreneurship development in Benue State can be increased.
- ii. It is recommended that the factors such as illiteracy of entrepreneur, lack of exposure by entrepreneurs, the unwillingness of entrepreneur to use social media, economic, social and cultural challenges faced by entrepreneurs which have been identified as the most important factors that affects entrepreneurship development in Benue State should be given serious attention by policymakers and stakeholders. The ability to resolve these challenges will boost the use of social media in entrepreneurship development in Benue State.



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