

Technopreneurship and Clients Expansion: Lagos State Micro, Small and Medium Enterprises Experience

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ABSTRACT

Regardless of the context, micro, small and medium enterprises (MSMEs) continued to encounter challenges that threaten their performance in terms of expanding customer bases as such; this paper investigates the effect of technopreneurship dimensions on the client's expansion of selected MSMEs in Lagos State, Nigeria. A survey research design was adopted and the population was comprised of 7,017 owners/managers from 6 purposively selected MSMEs technology hubs. A sample size of 475 owners/managers was determined using simple random sampling techniques adopted for the study. A validated and structured questionnaire was adopted for data collection after Cronbach's alpha reliability coefficients were established. The findings revealed that the technopreneurship dimensions had a significant effect on client expansion with $Adj.R^2 = 0.424$; $F(5, 277) = 52.809$, $p < 0.05$. The study recommended strengthening technopreneurial activities for clients' growth within the business ecosystem.

KEYWORDS: capabilities, clients expansion, enterprises experience, innovativeness, learning, technology, technopreneurship

JEL CLASSIFICATION: M10, M13, M15, O31, O33

1. INTRODUCTION

Nigerian MSMEs are facing several challenges, such as very high foreign exchange rates, galloping recession and decline to low client expansion, which have affected their contribution to the economy at large (Yusuf, 2017). The report of PwC on MSME Survey (2020) identified that the pressure to reduce prices is one of the top economic issue affecting Nigerian MSMEs, coupled with rising inflation (19%), low rate client expansion, products and services patronage (16%), high interest rate (14%), and high exchange rate (14%). The second most disturbing problems facing SMEs in Nigeria was identified as the inability of MSMEs to expand their customers, which has adversely affected their firm's performance. Financial Quest (2018) reported preference for imported goods over locally made goods, even government agencies and departments do not patronize locally owned MSMEs, are some of the combined issues that have led to low rate of client expansion problems. Hence, many of

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them closed down within the first few years of operation, because no business can survive in the long run without enough customer expansion to cover operational costs.

PwC (2020) reports revealed that the overall performance of MSMEs in Nigeria has been adversely affected, establishing a negative impact on their cash flows, making it worse with reference to double digit interest rates or inflation. Approximately 50% of the MSMEs surveyed did not record growths above 20% between 2017 and 2020, despite their importance to economic development, numerous factors still impede their growth (PwC, 2020), the inability to create new business opportunities and new customers (Fowosire, Idris, & Opoola, 2017). In Nigeria, MSMEs contribute immensely to economic development and create about 80% of jobs in the economy (Ajibola, 2020). It is claimed that the MSMEs employment accounts for nearly 85% of jobs in the industrial sector, and contributes 49.78% of GDP in Nigeria (Abubakar & Hussaina, 2020). Regardless of the contributions of the MSMEs, evidence has shown that nearly four out of every five Nigerian MSMEs do not expand their customers base, and, thus, do not survive beyond 5 years from inception because of lack of innovativeness and low level of technopreneurship skills.

Similarly, Abubakar and Hussaina (2020) recognized that MSMEs in Nigeria continue to face numerous challenges making them perform below expectation. Banbadi (2017) established that 80% of micro and small businesses fail within the first five years of formation in Nigeria, a position that was earlier acknowledged by (Small and Medium Enterprises Development Agency of Nigeria, SMEDAN 2013). Equally, the United Nations Industrial development organization (UNIDO, 2017) confirmed that MSMEs survival in Nigeria is only 20%, 40% of the dreamers only get to start the proposed business venture, but not more than 20% actually survive. Then, it is not surprising that 50% of the MSMEs surveyed did not record growths above 20% between 2017 and 2020 in Nigeria and the inability to create new business opportunities and create new clients (Fowosire, Idris, & Opoola, 2017).

Scholars' disposition has embraced entrepreneurship combined with technological capabilities to create and develop product and service in the form of innovations and mainstream entrepreneurial mind-set into quality, to generate wealth and attract new market (Wibawa, Widjanarko, Utomo & Wahyurini, 2020). In other instance, Mashingaidze (2016) viewed technopreneurship not as a product, but a process of synthesis in engineering the future of a person, an organization, a nation and or the world. Also, Koe et al. (2018) posit technopreneurship as a future trend in the era of the industrial revolution 4.0. Suradi, Yasin, and Rasul (2017) upshot the combination and re-engineering process in the future by combining the know-how in technology and entrepreneurial skills to create a new and versatile business model. Also, technopreneurship is the process of organisational creativity, streaming innovation to persistently find solutions to important corporate problems and implementing the solutions, in turn satisfying the economy or target, with emphasis on integrating technology with entrepreneurship (Fowosire et. al., 2017). Similarly, Otamiri and Ogwe (2019) advanced activities such as cybercafé business, computer/phone maintenance services, and computers/phones/accessories sales and repairs can all referred to as technopreneurship activities as such be seen as tool of solving social economic problems in the society.

Previous studies such as Okundaye, Fan and Dwyer (2019) evaluated information and communication technology in SME's with Supriyati, Iqbal, and Khotimah (2017) examining mentoring model for technopreneurship through neurocoaching, Musibau, Joshua, Anthony, Lawrence, and Adunola (2016) with gaps in knowledge in the areas of methodological,

geographical, context and construct gap. On the identified gap in knowledge, this study investigates the effect of technopreneurship dimensions on client expansion in Lagos State, Nigeria. The work is structured into the following after the introduction, literature review, methodology, analysis, and results presentation, discussion of finding, conclusion, and recommendation.

2. LITERATURE REVIEW

2.1 Technopreneurship

Technopreneurship has some characteristics that some previous studies agreed upon and considered as a skilled businessman in the field of technology possess, as well as the ability to innovate, create, dare, and enter into unexplored tech paths (Toral et al., 2020). It is also seen as an enthusiastic spirit, curious, without fear of failure, the ability to overcome internal fears, ability to use technology as a key of component of goods and services (Selvarani & Venusamy, 2015). Some of the importance of technopreneurships in today's world emerged from their contributions to development in the global economy. In addition, its impacts in the areas of globalisation, commercialisation of ideas, and economic activities, which in return depends on information technology. Technopreneurship has accelerated the spread of new ideas, ventures or organisations that have developed and advanced skills in different sectors and economies, and the continuous innovation, new technologies, and the integration of entrepreneurship with technology in order to keep its global competitive position and build an economic society based on technological knowledge Abass (2018). Different scholars have characterised the dimensions of technopreneurship into varied aspects, but this study investigates technopreneurship from the dimension of technopreneurship skills, learning, capability, self-efficacy, and innovativeness practice.

2.2 Client Expansion

Client expansion refers to the increase in the number of customers or people who patronise a business or product. According to Vroman and Reichheld (1996) customer retention refers to the ability of a company or product to retain its customers over some specified period, and high customer retention means customers of the product or business tend to return to, continue to buy. Saukkonen (2018) saw it as growth or expansion as a word carries a positive tone, human beings grow and mature, gaining new knowledge and resources, and so do organisations. Furthermore, client expansion is a process that increases the entrepreneurs value capability to welcome more market share to enhance entrepreneurial performance (Vroman, & Reichheld, 1996). Alireza, Mostafa and Kazem (2011) submitted that the clients should not remain merely as people buying goods or strategies to manage and retain them; today business environment has become open globally. According to Baumol (2002), client expansion requires a bold, imaginative deviator from established business methods and practices and constantly seeking the opportunity to commercialise new products, technologies, processes, and arrangements to more clients.

2.3 Technopreneurship dimensions and Client Expansion

Suleiman (2020) found that technopreneurship education in Nigerian universities is of paramount importance to the economic growth of the nation, specifically the evolving countries. Empirical evidence via the sequential mixed-method approach shows the link between technopreneurship education and business intention, with technopreneurship strategies increasing the rate of employment generation in Nigeria. Roopa (2018) pointed out that non-provision of infrastructure, growth opportunities and rate of employment generation were due to weak technopreneurs in the system. More than 60% of eight lakh engineers in

India remain unemployed in 2017 and forecasted that from 2018 onward, there will be a revolutionary change in skill development, innovations, and technology and it will create more employment opportunities in agri-business, retailing, connectivity, automobile, health technologies, food processing, logistics, robotics.

In a similar study of Yuliana and Hendra (2020) it was found that the personality of students who have the entrepreneurial character in the development of entrepreneurship education and training in higher education is needed, to increasingly contribute to the number of employed persons after setting up their businesses, application of entrepreneurship education and training in higher education has a significant influence on the to create employment. Also, in the work of Roopa (2018) the focus was on technology start-ups and how to bring down under-employment among engineering students; it was found in the study that a revolutionary change in skill development, innovations, and technology and it will create more employment opportunities in agri-business, retailing, connectivity, automobile, health technologies, food processing, logistics, robotics, and many more. There, it was established that there is a relationship between the potential of technology start-ups bring down unemployment among engineering students and the ability to increase the employment density of students in India. Akinde and Fagbohunka (2020) established that there is a relationship between student's involvement in part-time trade learning and their chances of employment consideration situation in their country.

As a result, Turnbull, Slow, and Richmond (2019) found that innovating businesses are, on average, growing rapidly, as was seen in the high levels of turnover growth. However, depending on the type of innovation being undertaken, they are also increasing their employment, which will have an impact on firm outcomes. The study stated that for small businesses that are changing their firms' capabilities, there seems to be no substantial growth in the rate of employment, which has a negative influence and has caused a decreased enterprise outcome. Richter, Kraus, Brem, Durst and Giselbrect (2017) discussed digital entrepreneurship and found in its outcome a clear difference between the relevance of economic and social orientation. The latter appears to be in higher demand among customers than entrepreneurs. Earlier, Abiodun and Harry (2016) results revealed that the Nigerian Government needs to understand the resource needs of SMEs and must be willing to provide the needed resources to strengthen the SMEs. Oladejo (2018) results show statistically significant relationship between customer care strategies and customer retention, public image maintenance and customer care, respectively. Nuryakin (2018) investigated competitive advantage and product innovation with results showing that marketing capability had an insignificant effect on marketing performance.

2.4 Theoretical review

Theoretically, creative destruction theory as propounded by Joseph Schumpeter in 1942 remains vital in the association of technopreneurship with client's expansion. The creative destruction theory assumes that long-standing arrangements and assumptions must be destroyed to free up resources and energy to be deployed for innovation. This position treats economic actors and innovation as an organic and dynamic process for engineering market forces for wealth creation. Hence, equilibrium is no longer the end goal of market processes. Instead, dynamic entrepreneurs' innovations reshaping and replacing the old orders (Schumpeter, 1942). As such, the process inevitably results in losers and winners (Stam, 2018).

3. METHODOLOGY

The study exploited a survey research design. The study has a universal population comprising the technopreneurial MSMEs operating at twenty-eight (28) Technology hubs in Lagos State Nigeria with a total population of 7,017 MSMEs. The owners/managers at the technopreneurship firms are the units of study. The sample size was calculated as proportional based on the population size of the 6 selected hubs that form the sample frame. The sample size based on the Research Advisor Table was 365. Attrition was cushioned for through a 30% margin inclusion for possible missing and wrongly filled questionnaires. As such, 475 of the MSMEs were selected as the sample size for the study. This study adopts mixed sampling techniques comprising purposive and simple random sampling techniques. Purposive sampling helps the researchers to select the hubs based on their sectorial location as sued by scholars (Oyedele et al., 2019; Otamiri & Ogwe 2019; Nkereuwem, 2021). The sampling technique was considered appropriate for this study because the respondents were homogenous in nature and, in characteristic, random sampling helps researchers picking surveyed object to be considered through the homogeneity of samples that can be tested (Egwakhe et al., 2020; Musa, 2020; Tahir & Inuwa, 2019). The years of registration which are from the National official legal entity registration body for the country the (Corporate Affairs Commission), the growth of the business over five years, and other parameters were used to identify technology hubs that were qualified to be selected in the context of this work.

The instrument for data collection was an adapted and validated questionnaire harvested from scholars; technopreneurship skills (Chew, Hoe, Kim & Kiaw, 2016), technopreneurship learning (Kura, 2017), technopreneurship capability (Singhry, 2019), technopreneurship self-efficacy (Otamiri & Ogwu, 2020), technopreneurship innovativeness (Isaga, 2012) and client expansion (Kord, Vazifeh, Salarzahi, Joyami & Biuki, 2018). The Kaiser-Meyer-Olkin (KMO) measure of sampling Adequacy was employed. The Kaiser- Meyer- Olkin (KMO) measure results are technopreneurship skills (0.676), learning (0.730), capability (0.772), self-efficacy (0.631), innovativeness (0.648), and client expansion (0.807). The reliability was established through Cronbach's alpha was computed with results; technopreneurship skills (0.736), learning (0.814), capability (0.863), self-efficacy (0.808), innovativeness (0.831) and client expansion (0.841). The ranges of the results for the variables attained met the recommended threshold; implied that they were all above the recommended criterion of 0.7 according to Nunnally and Bernstein (1994).

With validity and reliability established, the constructs for the dependent and independent variables were factored into an econometric equation (operationalised) for the analysis. The collected data from 475 respondents were numerically coded to aid pre-diagnostic test and statistical analysis. Multiple regression analysis was applied in determining the interface technopreneurship dimensions and client expansion. The data analysis was generated as per the regression model derived from the simple linear equation that client expansion (Y) is a function of technopreneurship dimensions.

$Y =$ Client Expansion (CE)

$X =$ Technopreneurship (TECHP)

$x_1, x_2, x_3, x_4, x_5 =$ Sub-variables of Independent Variables

$CE = f(x_1, x_2, x_3, x_4, x_5)^n$.

Hence,

$CE = \beta_0 + \beta_1 TS + \beta_2 TL + \beta_3 TC + \beta_4 TSE + \beta_5 TI + e$

- x_1 - Technopreneurship Skill (TS)
- x_2 - Technopreneurship Learning (TL)
- x_3 - Technopreneurship capability (TC)
- x_4 - Technopreneurship self-efficacy (TSE)
- x_5 - Technopreneurship Innovativeness (TI)
- Y = Client expansion (CE)

The ethical principles guiding academic works were respected with reference to ssecrecy and confidentiality in data collection process. The research instrument was be administered to only the eligible respondents (MSMEs Owners/manager) without any undue influence, and the data collected were solely used for academic purpose towards contributing and expanding knowledge. Authors were duly acknowledged to prevent plagiarised.

The hypothesis of this study is to investigate whether technopreneurship dimensions have a significant effect on client expansion among MSMEs in Lagos State.

4. RESULTS, TABLES AND INTERPRETATION

4.1 Results

Of the total of 475 copies of the questionnaire distributed, 282 copies were correctly completed and others had missing items/not returned. The responses were rated as; 1: very low, 2: low, 3: moderately low, 4: moderately high, 5: high, and 6 very high. The scores of the respondents formed the basis for the analysis. Using the multiple regression method of analysis, the core assumption was tested. The independent variable was technopreneurship dimensions and the dependent variable was clients’ expansion. In the analysis, data for technopreneurship dimensions were created by adding together responses on the items under the various technopreneural dimensions to generate independent scores for each dimension. For clients expansion, responses were added together to create index of clients expansion. The index of clients’ expansion (as dependent variable) was thereafter regressed against the scores of technopreneurship dimensions. The results of the analysis and the parameter estimates obtained are presented in Table 1.

Table 1 shows the result of the multiple regression analysis of the effect of technopreneurship dimensions on client expansion among MSMEs in Lagos State, Nigeria. The result of the analysis revealed that technopreneurship Skills ($\beta = 0.234, t = 3.586, p < 0.05$), technopreneurship learning ($\beta = 0.149, t = 2.304, p < 0.05$), technopreneurship capability ($\beta = 0.230, t = 2.883, p < 0.05$), technopreneurship innovativeness practices ($\beta = 0.391, t = 5.278, p < 0.05$) and technopreneurship self-efficacy ($\beta = 0.371, t = 4.336, p < 0.05$) had significant effect on client expansion of selected (MSMEs) in Lagos State, Nigeria. The results showed that all the independent variables had a significant effect on the dependent variable. This implies that technopreneurship dimensions are significant determinants of client expansion among the surveyed MSMEs in Lagos State.

Table 1. Results of Technopreneurship Dimensionson and Clients expansion

N	Model	B	T	Sig.	ANOVA (Sig.)	R	Adj R ²	F (5, 277)
	(Constant)	1.567	1.009	0.314				
	Technopreneurship Skills	0.234	3.586	0.000				

N	Model	B	T	Sig.	ANOVA (Sig.)	R	Adj R ²	F (5, 277)
282	Technopreneurship Learning	0.149	2.304	0.022	0.000	0.658	0.424	52.809
	Technopreneurship Capability	0.230	2.883	0.004				
	Technopreneurship self-efficacy	0.371	4.336	0.000				
	Technopreneurship innovativenesspractice	0.391	5.278	0.000				
Predictors: (Constant), Technopreneurship Skill, Technopreneurship Innovativeness Practice, Technopreneurship Self-Efficacy, Technopreneurship Learning, Technopreneurship Capability								
Dependent Variable: Client Expansion								

Source: Researcher’s Field Survey, 2022

4.2 Interpretation

The *R* value of 0.658 re-affirms the significant effect of technopreneurship dimensions on clients’ expansion and it indicates that technopreneurship dimensions had moderate positive relationship with client expansion. The coefficient of multiple determination Adj. *R*² = 0.424 indicates that about 42.4% variation that occurs in the client expansion can be accounted for by the technopreneurship dimensions, while the remaining 57.6% changes that occur was accounted for by other variables not captured in the model. Based on the results of the regression analysis, the predictive regression model was estimated in the equation below as follows:

4.3 Equations

$$CE = 1.567 + 0.234TS + 0.149TL + 0.230TC + 0.371TS + 0.391TIP + U_i$$

Where: CE = Client Expansion

- TS = Technopreneurship Skills
- TL = Technopreneurship Learning
- TC = Technopreneurship Capability
- TS = Technopreneurship Self-Efficacy
- TI = Technopreneurship Innovativeness Practice

The predictive regression model show when technopreneurship sub-variables (technopreneurship skill, technopreneurship innovativeness practice, technopreneurship self-efficacy, technopreneurship learning, technopreneurship capability) are held constant, the client expansion of MSMEs in Lagos State, Nigeria would be 1.567. The results further indicated that holding other factors constant, a unit increase in technopreneurship skill would increase client expansion by 0.234 units. Similarly, a unit increase in technopreneurship innovativeness practices, self-efficacy, learning, capability and skills expansion would increase client by 0.391, 0.371, 0.230, 0.149, and 0.230 respectively. This implies that an increase in technopreneurship dimensions would result in an increase in client expansion of selected MSMEs. Also, the *F*-statistics (5, 277) = 52.809 at *p* = 0.000 (*p*<0.05) indicating, that the overall model was significant in predicting the effect of technopreneurship dimensions on client s expansion. This implies that there is a regression relationship between the dependent variable and the independent variables. The result suggests that such MSMEs should pay more attention towards developing the component of technopreneurship especially

technopreneurship learning, technopreneurship capability, and technopreneurship innovativeness practice to increase client expansion. In terms of the relative effect, technopreneurship innovativeness practice (0.391) had the highest effect, self-efficacy (0.371), skills (0.234), capability (0.230), and learning (0.149) in that order. Therefore, the relative effect suggests that innovation and self-efficacy are inevitable in the quest to expand the client base among the surveyed respondents.

4.4 Discussion

The tested assumption revealed that technopreneurship dimensions have significant effect on client expansion. This finding provides implications conceptually, empirically, and theoretically. From a conceptual perspective, the definitions and clarifications of the concepts of the study provide a good conceptual outlook on the study. Empirically, the findings from this study is in agreement with the study of Richter, Kraus, Brem, Durst and Giselbrect (2017) that affirmed that technopreneurship had significant effect on business expansion. Nuryakin (2018) also corroborated that technopreneurship had a significant effect on firms' expansion. Furthermore, Adeyeye, Oni, Olatunle, and Obafunmi (2017) demonstrated that technical skills acquired by entrepreneur's in information technology and services provided by employees, brought about better service delivery which is a fulcrum for client expansion in their businesses. In addition, Ibidunni et al. (2017) affirmed that entrepreneurial firms should consciously develop the ability to be sensitive to the environment and the ability to recognise opportunities in the market place.

Ikupolai et al. (2017) and Ibidunni et al. (2017) revealed that entrepreneurial competencies such as tech-skills, tech efficacy and innovativeness have positive relationship on the firms' profitability, customer base, organisational effectiveness, sales growth, and client expansion. In another study by Abdul Rahman et al. (2016) it was affirmed that social networking as part of online marketing is more powerful and diverse due to its ability to reach customers regardless of geographical locations. As such, technological innovation is significant to SME client expansion mostly online. The literature review of past studies is limited in scope; therefore, the author suggested that generalisation of findings cannot be guaranteed. Where one of the studies pointed out technopreneurship skills effect on business growth and client expansion as a key influence for business performance, the other differs as it states that even with the technopreneurship skills, the ability to understand the environment is importance to achieving. Theoretically, these research findings fell in line with the Creative destruction theory propounded by Joseph Schumpeter in 1942. The Creative destruction theory validates the finding above and supports the variables of technopreneurship dimensions (technopreneurship skill, technopreneurship learning, technopreneurship capability, and technopreneurship self-efficacy and technopreneurship innovation) and client's expansion. The Creative destruction theory assumes that long-standing arrangements and assumptions must be destroyed to free up resources and energy to be deployed for innovation.

5. CONCLUSIONS

With the findings, the work revealed that technopreneurship dimensions had effect on client expansion of selected MSMEs in Lagos State Nigeria, as all the dimensions had positive and significant effect on client expansion. More so, technopreneurship innovativeness practice was the best individual predictor of client expansion of selected MSMEs in Lagos State Nigeria.

Recommendations

Based on the conclusion of this study, the MSMEs should develop technopreneurship skill, technopreneurship learning, technopreneurship capability, and technopreneurship self-efficacy and technopreneurship innovation to improve client expansion. Nevertheless, emphasis should be placed on innovation and self-efficacy in order to sustain, grow, and client expand business. In light of the study, future research should focus on another sector of the economy, replicate it in a different geopolitical area of Nigeria, and infuse moderators to determine the interactive effect.

Limitations of the research

The study faced certain flaws that hampered the presentation, interpretation, and generalisation of the findings, serving as the foundation for future research recommendations. Some of the limitations identified in the study include: Due to the dynamic structure of the Micro Small and Medium Industry, some micro small and medium scale enterprises were unable to provide the necessary information on the study variables, and some MSMEs were very hostile to any survey on their entrepreneurial outcome, making it difficult to get officials to fill out the research instrument. Before permission was obtained, the researcher and research assistants had to make multiple calls and return to several of the firms. Access to certain information and data was also restricted. Possible explanations include a fear of disclosing the knowledge to competitors in the same business. As a result, aggregate data on the indicated factors were analysed and used in the study. Furthermore, data was gathered from MSMEs owners, managers, and workers in Lagos State. As a result, generalising the findings must be done with caution, and the findings may not be applicable to other organisations in another industry within Lagos State, Nigeria.

REFERENCES

- Abbas, A. A. (2018). The bright future of technopreneurship. *International Journal of Scientific & Engineering Research*, 9(12), 563-566. <https://orcid.org/0000-0001-6860-2583>
- Abiodun, E. A., & Harry, E. (2016). Performance of SME firm in Nigeria: Malaysia experience. *Journal of Management and Science*, 6(1), 113-134. <https://doi.org/10.26524/jms.2016.11>
- Ajibola, E. (2020). *Nigeria small and medium enterprise sustainability strategies*. Walden Dissertations and Doctoral Studies Collection at Scholar Works.
- Abubakar, J. B., & Hussaina, D. A. (2020). Innovation and SMEs performance in Nigeria: A proposed framework. *International Journal of Scientific Research in Science and Technology*, 7(6), 396-400. <https://doi.org/10.32628/IJSRST207664>
- Abdul Rahman, N., Yaacob, Z., & Mat Radzi, R. (2016). The challenges among Malaysian SME: A theoretical perspective. *World Journal of Social Sciences*, 6(3), 124-132
- Alireza, F., Mostafa, M. T., & Kazem, M. (2011). Customer relationship management in small-medium enterprises: The case of science and technology parks of Iran. *African Journal of Business Management*, 5(15), 6159-6167, <https://doi.org/10.5897/AJBM10.695> ISSN: 1993-8233
- Akinde, S. I., & Fagbohunka, A. (2020). Youth, parental-determined strategy towards tackling perennial unemployment in Nigeria as device for a safe future. *Journal of Education, Society and Behavioural Science*, 33(5), 13-25. <https://doi.org/10.9734/jesbs/2020/v33i530221>
- Baumol, W. (2022). Entrepreneurship, innovation and growth: The David-Goliath symbiosis. *Journal of Entrepreneurial Finance*, 7(2), 1-10.

- Chew, L. M., Hoe, L. S., Kim, T. C., & Yee Kiaw, L. W. (2016). Self-perceived entrepreneurship skills for undergraduates of private university in Malaysia. *American Journal of Applied Sciences*, 13(6), 715-725. <https://doi.org/10.3844/ajassp.2016.715.725>
- Egwakhe, A. J., Amos, N. B., & Nicodemus, T. (2020). Can technology transfer stimulate labour productivity: Experience from Nigeria automobile sector. *International Journal of Business and Management*, 15(4), 1-10
- Financial Quest (2018). *The challenges of small and medium enterprises (SMEs) in Nigeria-Financial quest*. FBNQuest FI-FX Daily Watch 17 April 2018 Challenges facing MSMEs in Nigeria
- Fowosire, R. A., Idris, O. Y., & Opoola, E. (2017). Technopreneurship and manpower development of selected small business enterprises in Lagos State, Nigeria. *LASU Journal of Management Sciences*, 5(3), 10-17
- Ibidunni, A. S., Olokundun, A. M., Oke, A. O., & Nwaomonoh, I. C. (2017). Enhancing the performance of agro-based SMES: The role of entrepreneurship competencies. *Covenant Journal of Entrepreneurship*, 1(1). 44-51
- Ikupolati, A. O., Adeyeye, M. M., Oni, E. O., Olatunle, M. A., & Obafunmi, M. O. (2017). Entrepreneurs' managerial skills as determinants for growth of small and medium enterprises (SMEs) in Nigeria. *Journal of Small Business and Entrepreneurship Development*, 5(1), 1-6. <https://doi.org/10.15640/jsbed.v5n1a1>
- Koe, W. L., Alias, N. E., Ismail, S., & Mahphoth, M. H. (2018). A suggested model for studying technopreneurial intention in Malaysia. *KnE Social Sciences*, 788-796. <https://doi.org/10.18502/kss.v3i10.3172>
- Kura, K. M., Abubakar, R. A., & Abubakar, S. (2017). Entrepreneurial learning and organisational performance: Test of the mediating effects of innovativeness among small and medium enterprises. *Journal of Technology Management and Technopreneurship*, 5(1), 51-73. <https://doi.org/10.3390/su14095081>
- Mashingaidze, S. (2016). Technopreneurship (entreprenology) as the Holy Grail of SMEs growth: A historical analysis. *Environmental Economics*, 7(3), 67-74, [http://dx.doi.org/10.21511/ee.07\(3\).2016.08](http://dx.doi.org/10.21511/ee.07(3).2016.08)
- Musibau, A. A., Joshua, O. O., Anthony, A. U., Lawrence, U. O., & Adunola, O. O. (2016). Technology based entrepreneurship financing. Lessons for Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(1), 150-163
- Musa, S.O. (2020). Informal sector's income distribution, living condition and poverty nexus in Lagos State, Nigeria. *Renaissance University Journal of Management and Social Sciences*, 6(1), 1-11
- National-Survey-on-Micro-Small-and-Medium-Enterprises-msm; <https://smedan.gov.ng/the-2021>
- Nunnally, J. C., & Bernstein, I. H. (1994). *The assessment of reliability, psychometric theory* (3rd ed.). New York, NY: McGraw-Hill, Inc.
- Nuryakin, N. (2018). Exploring SMEs marketing performance through networking capacity and relational capability. *Journal of Asian Pacific Management and Business Application*, 9(2), 137-150
- Otamiri, S., & Ogwe, C. G. (2019). Technopreneurship and youth empowerment in Rivers State, Nigeria. *Journal of Research in Business and Management*, 8(5), 23-32
- Okundaye, K., Fan, S. K., & Dwyer, R. J. (2019). Impact of information and communication technology in Nigerian small-to medium-sized enterprises. *Journal of Economics, Finance and Administrative Science*, 24(47), 29-46, <https://doi.org/10.1108/JEFAS-08-2018-0086>
- Oladejo, D. A. (2018). Customer relationship management and micro, small and medium enterprises (MSMEs) growth in South West, Nigeria. *Scholedge International Journal of Management & Development*, 5(5), 48-58, <https://dx.doi.org/10.19085/journal.sijmd050501>

- Oyedele, O. O., Kowo, S. A., & Oyero, M. A. (2019). Impact of technopreneurship on business performance. *Journal of Economics and Management Research*, 8, 56-70
- PwC Nigerian MSME National Survey report (2020); <https://www.pwc.com/ng/en/assets/pdf/pwc-msme-survey-2020-final.pdf>
- Richter, C., Kraus, S., Brem, A., Durst, S., & Giselsbrecht, C. (2017). Digital entrepreneurship: Innovative business models for the sharing economy. *Creativity and Innovation Management*, 26(3), 300–310. <http://doi:10.1111/caim.12227>.
- Roopa. R. R. (2018). Potential of technology startups to bring down under-employment among engineering students. *Ushus-Journal of Business Management*, 17(1), 15-31, <https://doi.org/10.12725/ujbm.42.2>
- Suradi, S., Yasin, R. M., & Rasul, M. S. (2017). Increasing technopreneurs for a developing nation: The Majelis Amanah Rakyat (Mara) experience. *Journal of Technical Education and Training (JTET)*, 9(1), 73 - 86
- Selvarani, A., & Venusamy, K., (2015). A study of technopreneurship in small and medium industry. Technopreneurship as a firm strategy: links to innovation, creation and performance. *Journal Impact Factor*, 6(1), 401-408
- Supriyati, E., Iqbal, M., & Khotimah, T. (2017). Mentoring model for technopreneurship through neurocoaching to grow up technopreneurship intention of students at Muria Kudus University. *International Journal of Technology and Business*, 1(2), 70-75
- Stam, F. C., (2018). *Enabling creative destruction: An entrepreneurial ecosystem approach to industrial policy*. Working Papers 18-05, Utrecht School of Economics
- Singhry, H. B. (2015). Effect of supply chain technology, supply chain collaboration and innovation capability on supply chain performance of manufacturing companies. *Journal of Business Studies Quarterly*, 7(2), 258-273
- Tahir, F. U., & Inuwa, F. A. (2019). Empirical investigation of the factors affecting micro, small and medium scale enterprises performance in Borno State, Nigeria. *International Business Research*, 12(4), 1913-9004. <https://doi.org/10.5539/ibr.v12n4p30>
- Wibawa, T., Widjanarko, H., Utomo, H. S., Suratna, S., & Wahyurini, E. (2020). Technopreneurship based product innovation: A case study on small entrepreneur. *In Proceeding of LPPM UPN "Veteran" Yogyakarta Conference Series 2020–Engineering and Science Series*, 1(1), 439-444. <https://doi.org/10.31098/ess.v1i1.137>
- Yuliana, & Hidayat, H. (2020). How is the student's personality in implementing science and technology for entrepreneurship learning with a production-based learning approach in higher education? *Journal of Engineering and Applied Sciences*, 15(1), 213-219. <http://dx.doi.org/10.36478/jeasci.2020.213.219>
- Yusuf, E. (2017). Influence of entrepreneurship education, technology and globalisation on performance of SMEs in Nigeria. *African Journal of Business Management*, 11(15), 367-374.