

Capacity Building and Innovative Entrepreneurship Ecosystem in Akwa Ibom, Nigeria

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Abstract:- This study emphasizes the role of capacity building in the state-of-the-art entrepreneurship ecosystem in Nigeria. The prime research data for this study were obtained from El-Kanis Agros Ltd through the administration of questionnaires. A simple random sampling technique was adopted for selecting 132 respondents from the workers and trainees of the organization. Simple percentages and linear multiple regression were employed for data analysis to evaluate empirically the impact of training and empowerment as well as the influence of digital technology on the entrepreneurship ecosystem. The findings revealed that training and development have a statistically significant effect on the entrepreneurship ecosystem in Nigeria at a p-value of 0.002. Also, the research proposition which says no significant influence of digital technology on entrepreneurship in Nigeria was rejected as the analysis shows a significant outcome at a P-value of 0.033. we concluded that the application of skills, talents, and technical knowledge favored the emergence of sustainable development and the creation of entrepreneurship ecosystems in Nigeria. Moreover, capacity building can engineer the generation of new companies that would help business stakeholders advance answers to ecological and societal issues. We recommended that since learning has an impression on the entrepreneurs that are recognized by the studied population, entrepreneurship ecosystem hubs where people articulate and share ideas should be established all over the state.

Keywords:- Digital Technology, Ecosystem, Entrepreneurship, Innovation, Organization, Training and Development.

I. INTRODUCTION

In the 21st-century market and technology-driven economic age, innovative entrepreneurship is paramount for the progress and expansion of capital and human factors needed for sustainable development. This growth is connected with the country's readiness and ability to equip, build up, and retrain its entrepreneurs. A survey by some scholars shows that developed countries used entrepreneurship and capacity building to grow their economies. This has been translated into the development of small and medium-scale enterprises (SMEs) as the driver of the developed economy. In this framework, entrepreneurship

is a factor that favors the search for prospects and inventions that will positively impact the countries' economy (Urbano and Alvarez (2014). A satisfactory combination of precise settings of the entrepreneur, a favorable business environment, also the needed structure are required. More so, favorable political and regulated environments encourage entrepreneurs to start new ventures, especially where these factors have been weak (Amorós, et al, 2019).

The participation of numerous major participants in the innovation ecosystem (government institutions, industry actors, financial institutions, etc.) is required to achieve this growth. Access to information, human capital training through research institutes, access to funds, and market, customer, and supplier prospects all have an impact on the emergence of new businesses. In agreement with the words of Van Stel and Suddle (2008), Nigeria urgently needs to introduce a curriculum that makes entrepreneurship compulsory in our educational programs, from secondary school to higher education, to nurture creativity, and groundbreaking talents, and create opportunities that would be used to establish a knowledge economy and systems. Without a doubt, one of the most significant challenges plaguing Nigerian small and medium-sized firms is a lack of entrepreneurial capacity building. This has limited their expansion potential and, to a significant extent, their economic influence.

Entrepreneurial capacity building entails combining all four main strategic areas - operational, managerial, financial management, and personal capability - to create the ingredients for significant entrepreneurial success. Experts believe that for an entrepreneur to be successful, he or she must develop capability. Though Nigeria's Ministry of Education has introduced entrepreneurship into its curriculum, that is not enough without the mix of innovation assessment facilities and empowerment of creative ideas. Godwin & Simon (2021) and Njoku et al. (2014) suggested the need for businesses, countries, and communities to develop entrepreneurship activity and behavior because if domestic and regional businesses (Micro, small, and medium enterprises) become entrepreneurial, there will be favorable global competition and increase in gross domestic product, GDP for a developing economy. This will subsequently contribute to socioeconomic development. Thus, the entrepreneurship ecosystem needs adequate consideration to become useful to businesses (Yoruk et al., 2022). This is a

call to effectively support entrepreneurship activities and MSMEs (Agyapong & Boohene, 2020).

Noteworthy is the fact that Human capital generation constitutes a critical component of economic growth and innovation (Pelinescu, 2019). As a result, establishing how to train and empower entrepreneurs has an impact on the spirit and values of innovation which help to promote entrepreneurship. Entrepreneurship education encourages students to learn by taking responsibility, mentoring, networking, and raising their desire to start their firm (Pauwels, et al, 2016). Authors believe that there are still programs that are more theoretical than practical (Alawamleh, et al., 2015; Qiao (2018). As a result, recognizing the best strategies for developing various talents in individuals to fulfill new needs becomes an essential aspect of increasing competitiveness.

Moreover, the entrepreneurship ecosystem (EE) is essential for the national economy in backing corporate productivity to enable local development and growth (Audretsch & Belitski, 2021). Emerging economies, Brazil, China, India, and Malaysia encouraged innovation and entrepreneurship that led to increased productivity and global competitiveness from the 1970s to the present decade through developing their Entrepreneurship Ecosystem that supports MSMEs (Godwin & Simon, 2021).

This study is concerned with how innovative entrepreneurship ecosystems can be created to support micro, small, and medium-scale enterprises in Akwa Ibom, Nigeria. It presents research objectives and hypotheses, a literature review, and research method, and develops the research discussion based on the empirical findings.

➤ *Research Objectives*

The research objectives that best explain the scope of this study are as follows;

- To examine the effect of training and development on the innovation-entrepreneurship ecosystem.
- To evaluate the influence of digital technology advancement on the entrepreneurship ecosystem.

➤ *Hypotheses of the study*

Two null hypotheses were presented to enable the researcher to evaluate and conclude on the effect of capacity building on entrepreneurship and innovation ecosystem.

- There is no significant effect of training and development on the entrepreneurship ecosystem.
- There is no significant influence of digital technology advancement on the entrepreneurship ecosystem.

II. REVIEW OF RELATED LITERATURE

Of recent, a few researches related to capacity building appeared to be the message of the time and they consider this as appropriate for educating and encouraging invention and human resource management.

➤ *Capacity Training and Innovation*

A new or enhanced product or method that is distinct from the original and accessible to users is considered innovative according to the Oslo Manual (OECD, 2018). Through research and the creation of fresh ideas, these modifications advance both the economy and science (Alawamleh, 2019). Human capacity development should be the main focus of innovation and entrepreneurship since participants in the invention and learning processes are expected to be competitive in the goods and services they produce and supply (Keinäne and Kairisto, 2019). Therefore, it is crucial to create plans that encourage innovation and progress the necessary abilities through training and development where future business owners are instructed. The training procedures should make the student acquainted with the training processes that serve as a guide to help the learner get a better understanding of what they will encounter in real life (Penttila, 2016). Active teaching and learning strategies, diverse learning settings, and. These components include active teaching-training techniques, interdisciplinary learning atmospheres, integrating work life, research and development, adaptable curricula, entrepreneurship, and globalization.

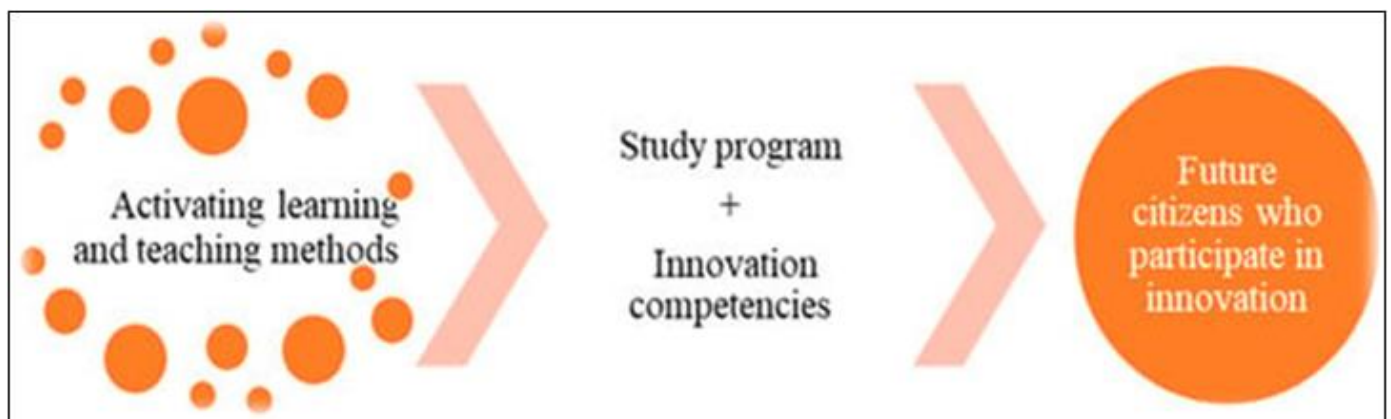


Fig 1 The Process of Teaching Trainees how to take part in innovation.
Source: Keinänen and Kairisto–Mertanen (2019)

The inclusion of people in the learning processes must be across different fields of learning so that students can collaborate and share their skills. The curriculum's adaptability enables students to take alternative paths based on their needs and interests. Additionally, it should provide the chance to encourage entrepreneurship, which entails risk management and looking for chances.

The lack of entrepreneurs who can create, launch, and carry out economic programs is one of the problems that slow down industry growth and economic development in Nigeria, according to Onuoha (2008). Entrepreneurship is important for Nigeria's economic success. Technology transfer is facilitated by the training and development of indigenous labor (Onuoha, 2008). The work of the entrepreneur also includes seeking out resolutions to issues, introducing new ideas, and launching new products to the market. According to Schumpeter (1934), an entrepreneur develops fresh concepts that influence the market by introducing novel business models. A technological push innovation is one in which the entrepreneur recommends the transformation and may present a novel technique of production, create new markets, or diversify to a new industry (Shabbak, 2019).

➤ *Innovation in an Entrepreneurship Ecosystem*

Adner (2006) views innovation ecosystems as the joint activities through which businesses bring together their ideas, talents, and offerings into coherent, customer-facing solutions. Entrepreneurship in an ecosystem includes creating new businesses, starting new divisions that take advantage of existing technology, and presenting completely new products and business models. The entrepreneurial ecosystem embodies an assemblage of successful business stakeholders that network within a physical environment and factors with the aim of adding value to entrepreneurship. According to Lanioglo (2021), these ecosystems signify communities of networking and interacting players that support innovation processes and create technologies and other inventions. An Innovation ecosystem can be built around two main categories of innovation, product innovation, and process innovation. Product innovation includes fresh know-how and machinery such as renewable energy, the creation of recyclable products, food tech, social, health, electronics, environmental protection, and agricultural technologies. Process innovation includes innovation in manufacturing firms, innovation in methods of production, licensing, and innovation in the marketing of new or existing products (Castro, Scheede, and Zermeno, 2019).

Innovative entrepreneurs incorporate numerous stratagems to stun the tasks in their businesses. It may require industrialists to have a vibrant strategy and a vision to reveal something innovative to the company. Innovative capitalists are individuals who have the capability of producing, building, and passing innovative products to the market. They are people with a web or diversity of knowledge to improve an existing venture or create new ventures. Some of these newly established firms grow to become powerful, competing businesses in an economy and may eventually substitute outmoded companies. Diversity of Knowledge and the Roles of New Ventures According to Zahra and

Nambisan (2011) in an innovation ecosystem, it is relatively easy to recognize the existence of three different new venture types, breeders, feeders, and niche players that specialize in creating new ventures that carve out a niche within an ecosystem and develop it. These venture types are connected to the ecosystem leader(s) and help them to address market needs, adapt, and quickly respond to the challenges of technology, market, and other changes (Baron 2006; Kressel and Lento 2007). It is noteworthy that diversity of knowledge can enhance new venture formation and subsequent survival and growth. (Livingston 2007).

➤ *Digital Technology and Entrepreneurship Ecosystems:*

The entrepreneurship ecosystem is fast-tracked in the 21st century through digital technology advancement. The establishment of entrepreneurship-building centers by some institutions, including the Pan-Atlantic University Centre for Entrepreneurial Development, the Tony Elumulu Foundation, The Centre for Entrepreneurship Training and Empowerment, Leap Africa, Fate Foundation, MBC Africa, and Wenonovation Hub, among others have marked a starting point in the innovation ecosystem in Africa. Nigeria has seen a rise in entrepreneurship in recent years. Nevertheless, despite the promising impact of entrepreneurship on economic development, this region has not yet experienced the growth of informal businesses and the energy of invention that other regions have. According to Efi and Akpan (2012), there are three key causes of the difficulties in this region's entrepreneurial development: 1) There is a minimal relationship between research and development and the founding of new businesses, which prevents the transfer of technology; 2) There is little use of technology in business models; and 3) There is a lack of public policies that support technology-based companies (Efi and Akpan (2012); Bankole (2008); Onuoha (2008).

To eliminate these factors, it is imperative to support entrepreneurship education and innovation. Additionally, research and the pursuit of solutions to society's issues must facilitate the commercialization of these inventions (Weckowska, 2015). Universities also serve as important hubs for the transfer of information. According to recent studies, there is a disconnect between entrepreneurship education and technology transfer because technology commercialization takes place in controlled settings at universities but outside of these settings, it is rare (Boh and Dehaan, 2016). Last but not least, keep examining the influence of education on entrepreneurship and innovation, and its applicability through ventures used to solve real problems that lead to high-impact know-how firms, with the diffusion of good practices (Portuguez, et al., 2019). The level of success will depend on creating favorable environments for inventions, free enterprise, competitive public policies, and the expansion of a knowledge-oriented economy to boost economic development (Levie and Autio, 2011).

III. THEORETICAL CONCEPT

The theoretical aspects here are based on the views of the scholars in this study area and the reality of the context of entrepreneurship and human capacity development.

Relevant theories linked to this study are discussed below:

➤ *Innovation-Entrepreneurship Theory*

Describes the relevant elements of entrepreneurs and what makes them surpass other authorities. That is, finding innovative solutions to problems without destructive effects on the system. Developed by Schumpeter (1934), innovation-entrepreneurship theory states that business actors take the statutory low-cost venture to a new level of development by adding new ideas and creativity to their works. He opines that innovation helps organizations and individuals to reduce the cost of operation through continuous push for customer-driven production which subsequently increases the demand for certain products.

➤ *Opportunity-Based Entrepreneurship Theory,*

According to Peter Drucker (1985) is an ideal situation where an entrepreneur constantly explores the environment, looking for change, responds to it, and takes it as a prospect for progress. The theory emphasizes a comprehensive theoretical context of entrepreneurship and innovation.

➤ *Resource-Based Entrepreneurship Theory.*

This theory underscores the importance of financial, social, and human resources and in the process enhancing personnel capabilities (Tiwari, 2023).

➤ *Resource Mobilization And Protection Theory,*

Which are essential for putting invention into practice, are processes that involve ongoing participation and dialogue to build trusting alliances (Cerda, 2016). They also make sure that businesses' actions are framed within the boundaries of the law and that they are adjusted and in line with the various sustainability parameters (Korhonen, et al., 2021).

➤ *The Technology Innovation System Theory (Tist),*

Which is a dynamic network of managers networking in an explicit economic or business area within a precise organizational facility and involved in the generation, diffusion, and utilization of technology, is another theory connected to the innovation and entrepreneurship ecosystem. Businesses focus on specific, significantly innovative developments that make use of a technology principle, claim Ortt and Kamp (2022). Performance, quality, and cost are crucial innovative aspects of products, especially when compared to less expensive alternatives. The system that surrounds such innovation is composed of several technological components. The majority of the time, it includes additional products and services in addition to manufacturing technology (i.e., the equipment needed to create the product). Technology expertise has advanced to the point that manufacturers can now offer superior goods and services at more affordable, competitive costs (Shabbak, 2019).

IV. EMPIRICAL FRAMEWORK

In a study by Akinwunmi and Godwin (2021) on financing entrepreneurship development through informal financial institutions in Nigeria, the research methodology employed secondary data sourced from the Central Bank of Nigeria (CBN), Small and Medium Enterprises Development of Nigeria (SMEDAN), and the National Bureau of Statistics (NBS). The study supports the complementary role of unceremonious financial intermediaries as an alternative source of funding entrepreneurship because of their accessibility. It is noteworthy that more than 70 percent of entrepreneurs raise capital outside the banking system and this leads to significant growth in SMEs. It concluded that the non-availability of credit is unarguably one of the limiting factors for the growth of entrepreneurship in Nigeria because most small businesses are financially excluded by the mainstream banks' loan terms and conditions such as collateral requirements. Sedeh, et al., (2021) in his study focused on 17 developing and 7 emerging countries to address the issues of lack of ecosystem and interaction among entrepreneurs and stakeholders by developing a multilevel framework that explains how entrepreneurial competencies reduce barriers to innovation. They observed that innovative entrepreneurship is one of the vital forces of economic progress for developing nations.

A study conducted by Diamantini and Tommasone (2014) in Brazil analyzes, through a case study, the contribution of the Master's degree in Innovation Management for Local Development offered by the Fluminense University of Rio de Janeiro and taught by experts from the University of Milano-Bicocca of Italy. With a focus on analyzing the key components of modernization and skill transfer, which foster interaction with other actors, such as incubators, businesses, and technology parks, the master program equips students with the skills they need to launch new businesses and transform their environments. The study concluded that interaction between the various innovators is necessary for economic progress, even while it is impossible to establish the best policies without taking into account the perspectives of people who are dealing with the problem. A similar study by Alemán, et al. (2012) and Anderson, et al. (2014) revealed how a group of researchers known as the "Kickstart" group, integrated nine institutions of higher education from Latin America and Europe, and they aimed to seek new practices that generate innovation in the countries. Different learning strategies were adopted to improve the quality of the teaching-learning process to pursue the expansion of professionals with an innovative approach. management was determined as a fundamental element that must exist in the professionals responsible for developing innovative strategies. This leadership seeks collaboration with the tools that allow the transfer of innovative goods and methods to generate ventures that resolve problems in their environment. Though not all professional guidance knew how to execute these approaches, the result was significant that there is a need to use innovative strategies in entrepreneurship training (Alemán, et al., 2018). Edwards, et al, (2015) advocated that the university needs to be involved in the innovative and entrepreneurial talent training processes, and one of its

functions is to prepare citizens to join the productive processes and the generation of wealth. On his part, Kariv, et al. (2019) supported that Entrepreneurship educators should support the students to learn by doing, incorporating mentors, networking, and increasing their interest in creating a new business.

A study by Efi and Akpan (2012) titled, “Impediments to Entrepreneurship Development in the Niger Delta Region of Nigeria”, outline, through the use of primary and secondary sources of data for analysis, the impediments to entrepreneurship. The correlations analysis of data revealed that poor financing and poor infrastructural facilities ranked first among other challenges that impede the growth of entrepreneurship in the Niger Delta Region of Nigeria. From the foregoing, they recommended a rural development program such as Entrepreneurial Skill Development (ESD) and Small Business Development Centres (SBDC) should be established to educate Niger Deltan on the need for innovation and entrepreneurship.

However, authors consider that there are still programs that are closer to theory than to practice (Alawamleh, et al. 2019; Ojao, 2018); Thus, understanding the best practices in developing different skills in individuals to meet the new requirements becomes an indispensable factor for improving competitiveness.

V. RESEARCH METHOD

The present research follows a quantitative case study methodology that seeks to describe the role of capacity building in the entrepreneurship and innovation ecosystems of El-Kanis Ltd in Akwa Ibom, Nigeria. The case was adjudicated relevant to this study because of its role in capacity training and entrepreneurship development in Nigeria. The quantitative case study methodology provides a clear understanding of the problems through an in-depth analysis of the data by the instrument to generate categories (Qiao, 2018).

➤ *Study Population*

The study population was the 200 trainees and employees of El-Kanis Agro Ltd, a registered agricultural and food processing company in Akwa Ibom state, Nigeria. The company produces and processes rice and poultry products such as chicken feed and immune boosters for chickens. They also carry out intensive entrepreneurial training and development of prospective entrepreneurs in Akwa Ibom and beyond. It is an award-winning organization for innovation and youth development.

➤ *Sample Size and Sampling Technique*

The determination of tolerable sample size for this study was guided by Krejcie & Morgan’s (1970) sample size determination table. For the population of 200 employees, the suitable sample size as depicted by Krejcie and Morgan’s sample determination table is 132 (check Appendix for sample size determination table). To avoid bias in sampling selection, the random sampling approach was adopted to select respondents who were mainly full-time employees and trainees of the company.

➤ *Data Collection Instrument*

The primary data-gathering instrument developed and used by the researcher was the structured, closed-ended, questionnaire. The choice of the questionnaire above other forms of scientific inquiries for this research was founded on its economy, adjustment, and suitability. A thorough literature review was carried out and used to develop the initial questionnaire. This provided the foundation for the design of the questionnaire. The questionnaire items were scored based on the 5-point Likert scale of 1 to 5, thus 1 represents Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, and 5 represents Strongly Agree. The structured questionnaire with the heading, “The Role of Capacity Building in Entrepreneurship Ecosystem in Akwa Ibom State Nigeria had two sections, namely: The demographic section with questions meant to collect information about the profile of respondents and the entrepreneurship-innovation ecosystem section. A total of 15 questionnaire items were designed for this study’s data collection.

Table 1 Summary of Questionnaires Administered and Collected

Categories of Workers and Department	N0. Of Questionnaire		Percentage Retrieved (%)
	Served	Retrieved	
Leadership Team	8	6	75
Production Unit trainees	75	75	100
Technical Unit	16	16	100
Finance and Audit	5	5	100
Marketing	20	18	90
Medical	8	8	100
	132	128	96

Field survey data (2023)

➤ *Validity and Reliability of Instrument*

To ensure the consistency and reliability of the instruments, this study was subjected to content validation by some management researchers and a statistician. The administration of the instrument was done once and the scores obtained were used to establish the reliability coefficient, using a parametric test (multiple linear) regression. The result showed that the research instrument was consistent in its result and captured what it was designed to capture. As an outcome of this exercise, Subsequently, a Cronbach’s reliability test was conducted to check the internal reliability of the questionnaire items. As shown in the results

(Table 2), scale items' reliability was found to be above $\alpha = 0.60$ thresholds. This indicates that a research instrument is good and also confirms the internal reliability of the items used in the questionnaire.

VI. DATA PRESENTATION

Table 2 Effect of Training and Development on Entrepreneurship Ecosystem

SN	ITEMS	SD	D	N	A	SA
1	The development of human capacity is essential for innovation.	0	0	64.7	6853.1	5442.2
2	Your skills and abilities after training will be utilized to contribute to economic development	0	32.3	0	5845.3	7054.7
	Higher education chiefly creates synergies among actors in the innovative ecosystem	2.1.6	75.4	0	7659.4	4333.6
3	Training and development enhance your skills and competency to deliver quality goods and services	0	0	21.6	4333.6	8364.8
4	Techno-entrepreneur is attained through capacity building	0	10.8	21.6	8365.0	4233%
5	Technology transfer is facilitated by the training and development of indigenous labor	0	0	0	4535.2	8364.8

Source: Field Survey (2023) Strongly disagree (SD), Disagree (D), neutral (N) agree (A), strongly agree (SA)

Table 2 above shows the total number of respondents to the questions that training and development influence entrepreneurship and innovation ecosystem. The question of whether the development of human capacity is essential for innovation in Nigeria was strongly agreed by 54 (42.2%) respondents and agreed by 68 (53.1%) respondents. 4.7% of the total respondents remained neutral. When asked if employees' skills and abilities were utilized to contribute to economic development, 70 (54.7%) of the respondents strongly agreed while 58 (45.3%) agreed. 3 respondents, 2.3% disagreed that their skills would be utilized while.

When asked if training and development would enhance their skills and competency to deliver quality goods and services, 83 of the respondents (64.8%) strongly agreed and 33.6% agreed. 1.6% of the respondents were neither here nor there (neutral).

When asked if techno-entrepreneurship is attained through capacity building in an economy, 42 respondents which represent 33% of the total respondents strongly agreed and agreed with 83 (65%) respondents whereas 1.6% and 0.8% of the respondents disagreed and neutral respectively.

Table 3 Effect of Digital Technologies on Entrepreneurship Ecosystem

SN	ITEM	SD	D	N	A	SA
1	Tech has helped to increase the effectiveness of your training	0	0	10.8	4736.7	8062.5
2	Digital TECH and data sharing will play significant roles in the future success of your entrepreneurs	0	32.3	53.9	5039.1	7054.7
3	Many inventions shortly through capacity-building	0	0	0	3728.9	9171.1
4	Tech. The transfer will add value to the CBI	32.3	0	53.9	5039.1	7054.7
5	Automation initiatives within our organization have led to positive outcomes	0	0	0	4736.7	8163.2

Source: Field Survey (2023) Strongly disagree (SD), Disagree (D), neutral (N) agree (A), strongly agree (SA)

Table 3 shows the responses used in assessing the effect of digital technology on the entrepreneurship ecosystem. When asked if technology has helped to increase the effectiveness of your training and development, 80 (62.5%) of the respondents strongly agreed (SA), and 36.7% also agreed with the question. 0.8% remained neutral with the assertion. The question of digital TECH and data sharing will play significant roles in the future success of your entrepreneurs, 70 respondents which represent 54.7% of the total respondents strongly agreed (SA) while 50 (39.1%) of the

respondents agreed. 2.3% and 3.9% of the respondents disagreed and were neutral respectively. 71.1% strongly agreed that Nigeria will experience many inventions soon through capacity building. 37 respondents 28.9% also agreed with this assessment. None of the respondents disagreed that technology plays a significant role in capacity building and entrepreneurship ecosystems. The question, technology transfer will add value to the capacity building initiatives garnered 50 and 70 (39.1% and 54.7%) respondents agreed and strongly agreed respectively.

Table 4 Entrepreneurship Ecosystem Through Capacity Building.

SN	ITEMS	SD	D	N	A	SA
1	Entrepreneurship education and support facilitate economic growth and development	0	0	0	4535.2	8364.8
2	Diversity of knowledge is achieved through the integration of entrepreneurship with innovation	0	0	0	4434.4	8465.6
3	New venture development is rapidly possible through innovation and entrepreneurship ecosystem	0	0	0	3829.7	9070.3
4	A combination of individual and corporate talents and skills offers a coherent customer solution.	0	0	0	4031.2	8868.8
5	Integrating diversity of knowledge can improve the productivity of the existing firm	0	0	0	4434.3	8465.7

Source: Field Survey (2023)

Table 4 above shows the total number of respondents that responded to the questions on entrepreneurship ecosystem (En) through CB. In the question of Entrepreneurship education and support facilitate economic growth and development, 45 respondents (35.2%) agreed while 83 (64.8%) respondents strongly agreed that Entrepreneurship ecosystems facilitate economic development. Also, 44 (34.4%) of the total respondents agreed and 84 (65.6%) of the respondents strongly agreed that Diversity of knowledge is achieved through the integration of entrepreneurship with innovation. 38 (29.7%) of the respondents agreed while 90 which represents 70% strongly agreed that new venture development is rapidly possible through innovation and entrepreneurship ecosystem. Inquiry if the combination of individual and corporate talents and skills offer coherent customer solutions, 88 respondents which represent 68.8% of the total respondents strongly agreed while 40 (31.2%) respondents agreed that combined skills and talents can offer a coherent customer solution. The assessment, of Integrating diversity of knowledge can improve the productivity of the existing firm has 84 respondents which represent 65.7% of the total respondents that strongly agreed and, 44 (34.3%) agreed with this assessment.

VII. ANALYSIS AND INTERPRETATION OF RESULT

To analyze the data from the survey and evaluate the hypotheses of this study, linear multiple regression analysis was conducted to examine the influence of the explanatory variables, training and development, and digital technology advancement on the response variable, entrepreneurship ecosystem. The findings and discussion are displayed below;

➤ *Results:*

This section presents the results from the analysis of the survey data. The researcher used linear regression to test the hypotheses at a 95 percent confidence interval which gave F statistics (2,125) = 9.063, Probability value = 0.001, R = 0.356, R² = 0.427, and adjusted R² = 0.513 (displayed in the model summary, appendix 1). The R-value of 0.336 indicates that the variables have a marginally positive connection. The adjusted R² of 0.512 indicates that approximately 51% of the change in the entrepreneurship ecosystem is described by the regressor (digital technologies (DG), training and development (TD), while 49% is captured by the error term. This analysis shows that the model is a good fit. Also, the Watson statistic of 1.93 indicates that there is no evidence of autocorrelation in the regression line. The collinearity statistics show the tolerance and value inflection factor (VIF) of 0.955, 0.955, and 1.049, 1.049 respectively. These indicate that there are no multiple linearity issues in the model. Some statisticians suggest that if the VIF is less than 3.5, the model is correct.

Table 5 Results from the Analysis of the Survey Data

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
	(Constant)	3.738	.273				13.674	.000	3.197
1 Training and development	.161	.052	.267	3.128	.002	.059	.263	.955	1.047
Digital tech	.093	.043	.185	2.160	.033	.008	.178	.955	1.047

a. Dependent Variable: entrepreneurship/innovation ecosystem

VIII. DISCUSSION OF FINDINGS

The analysis in the coefficient table above shows that training and development (TD) have a positive influence on entrepreneurship and innovation ecosystem (EN). In the unstandardized coefficient, B = 0.161, t =3.128, P-value = 0.002. Since the calculated t-value exceeds the threshold (table value of 1.96), the null hypothesis which states that there is no significant effect of training and development on entrepreneurship and innovation ecosystem is rejected. More so, the P-value of 0.002 is less than the 0.05 level of significance, indicating that the result is significant. This demonstrates that training and development affect the entrepreneurship-innovation ecosystem that is predictable by the measured trainees, especially in a transformation of ideas where they use what they learned to create an entrepreneurship ecosystem in the region. This is in agreement with Lehto and Penttilä (2013) that meta-

innovation processes enable participants to build skills for participation in a society that is becoming more international. Since participants in the innovative processes of the public and private sectors are expected to be competitive in the goods and services they offer, human capacity development should be the main focus of innovation (Keinänen; Kairisto-Mertanen, 2019). In their study, Edward, et al. (2015) opine that institutions of training and professionals must be involved in the processes of entrepreneurship and invention training. Citizens will be better prepared to participate in the creation of wealth and productive processes as a result. The development of human capital is essential to enable innovative processes to impact the economy of a country. This influence is possible if training promotes the generation of ideas and ventures (Alawamleh, et al., 2019)

The analysis of the second hypothesis shows that the explanatory variable has a positive effect on entrepreneurship and innovation ecosystem integration at $B = 0.93$, $t = 2.16$, and $p\text{-value} = 0.08$. This indicates that the null hypothesis which states that there is no significant influence of digital technology advancement on the entrepreneurship ecosystem is rejected. The t-statistics value of 2.16 shows that technology plays a significant role in entrepreneurship and innovation training. Lanioglo (2022) argues that the entrepreneurial ecosystem, representing a collection of actors that interact within a geographically bound entrepreneurial environment and factors, contributes to the development of productive entrepreneurship through the use of emerging technology.

IX. CONCLUSION

Based on the findings from this study, we draw the following conclusion. Regarding the question of how training and development have affected the development of the entrepreneurship ecosystem, the analyzed study shows that the practices advanced permitted the apprentices and workers to develop skills for innovation which assisted them in integrating these skills into the creation of new ecosystems. The application of these skills, talents, and knowledge favored the emergence of sustainable initiatives for creating an entrepreneurship ecosystem in Akwa Ibom. This will help to close the wide gap that existed between Nigeria and the countries have built innovation ecosystems many years ago. Moreover, creating a coherent and effective entrepreneurship ecosystem is a function of capacity building. It encourages the generation of companies that help other entrepreneurs to develop solutions to ecological and social problems. The learning has an impression on the entrepreneur that is recognized by the studied population, especially in a change of idea where they practice what they learned in their workplace or business.

Because the entrepreneurship-innovation ecosystem represents communities of interacting actors that support innovation processes and create technologies and innovations. It was identified that entrepreneurship ecosystems increase industrialists' ability to apply technological innovation to work. It is established in the analysis of data that an adjusted R square of 0.513 shows that about 51.3% change in performance is explained by the innovativeness of the trainees which subsequently leads to the creation of many small and medium-scale enterprises. We conclude that innovation is the heart of business and companies that successfully integrate such into their production system can among other things ignite the spirit of wealth creation and socio-economic development. This study put forward several suggestions, that the Government and stakeholders should encourage prospective and existing entrepreneurs to employ training, retraining, and empowerment schemes and create an ecosystem where entrepreneurs research, brainstorm, and find solutions to problems. This will lead to effective monitoring of projects and sustainable development. We also recommend a critical evaluation of the trained entrepreneurs and the trainees' present capabilities to know in detail how to apply their

knowledge in solving societal problems such as environmental degradation and pollution, among others.

Therefore, we suggest a continuous integration of entrepreneurship in Nigeria by increasing the link with other actors in the innovation ecosystem as also recommended in the entrepreneurship ecosystem by Maroufkhani et al. (2018).

➤ Contribution to Knowledge

A cursory look at the previous study literature showed that there is a lacuna between what higher institutions impart and what students can apply in their endeavors. This is true because some curricula are more academic than real-world applications. This does not allow students to prepare for the future needs of the society. In Akwa Ibom State, Nigeria, the Dakkada slogan by the state government which means "Arise" is akin to treating the symptoms instead of the bugs. Entrepreneurship-innovation ecosystem push has not been taken seriously by the state actors. The gap that exists between the training and funding of entrepreneurs should be filled through proper empowerment plans. This paper has unraveled the points to capacity building and actual entrepreneurial practices in Nigeria. We also offer solutions to the unemployment and unemployability of Nigerian youths. We wish to solicit grants and other assistance from international donors to enable us to build many entrepreneurship ecosystems in Nigeria. Original draft, writing, review, and editing, as well as data analysis and findings, show that this work has contributed to the existing body of knowledge in entrepreneurship and innovation.

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