JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

# ARTIFICIAL INTELLIGENCE AND INSTITUTIONAL GOAL ACTUALIZATION OF PROFESSIONAL ACCOUNTING INSTITUTES IN NIGERIA

**Chinedu Gandolph Ahannaya[1], Mayowa David Olalere[2], Odewusi Oyetola[3], Morounkeji Salami Olufolake [4], Biola Hammed Adesina[5]**

[1,2,3&4]*Department of Accounting, Babcock University, Ilishan-Remo, Nigeria.*
Emails: ahannayac@babcock.edu.ng

***Correspondence**:* ahannayac@babcock.edu.ng

**CITATION**: Ahannaya, C.G., Olalere, M.D., Oyetola, O., Olufolake, M.S. & Adesina, B.H. (2025). Artificial intelligence and institutional goal actualization of professional accounting Institutes in Nigeria, *Journal of Global Accounting*, 11(1), 1 - 28. Available:https://journals.unizik.edu.ng/joga

## ABSTRACT

*Goal actualization facilitates accounting institutes' ability to meet the needs of present customers while taking into account the needs of future generations. Goal actualization remains a growing field of research in varied organizations in light of the need to achieve and sustain competitive advantage through core competence. The research design adopted was a cross-sectional survey. The survey was conducted among 90,950 active professional members of the Institute of Chartered Accountants of Nigeria (ICAN) and the Association of National Accountants of Nigeria (ANAN). The sample size of 520 was determined using Taro Yamane formula. The findings showed that Artificial Intelligence had a positive and significant effect on institutional goal actualization with (R2 = 0.612, Chi_bs (5) = 298.944, p < 0.05), of professional accounting institutes in Nigeria. The study concluded that Artificial Intelligence affected institutional goal actualization of professional accounting institutes in Nigeria. It was recommended that professional accounting institutes should create more public education on the advantages and disadvantages of adopting Artificial Intelligence with a view to positioning stakeholders for seamless adoption of the technology.*

***Key words:*** *Accounting Institutes, Artificial Intelligence, Institutional corporate social responsibility, Institutional goals actualization, Institution Sustainability.*

## 1. INTRODUCTION

Accounting professional institutes have the objectives of achieving and maximizing institutional sustainability in terms of institutional growth, efficiency, corporate social responsibility, stakeholder loyalty, wealth and value creation of the institutes. Attaining the goal of achieving these objectives depends on the management ability to institutionalized disruptive technology via artificial intelligence, robotic technology, cloud accounting, block chain technology, and quick book technology. However, achieving accounting institutional sustainability requires proactiveness and need to navigate the dynamic forces of economic

and technological changes. These economic and technology changes, from technological revolution to rising environmental and social concerns, from seismic demographic shifts to mass geopolitical change, and from global systemic economic shocks to regulatory developments create challenges and difficulties for accounting professional institutes to achieve sustainability (Sorina-Geanina, Adriana & Ana-Maria, 2018). Among accounting professional institutions in developed countries, Siegel (2020) stated that advance information technology in accounting (artificial intelligence) have been recognized, used and depended upon in the developed countries within accounting professional institutes. Unlike, developing economies like Nigeria, Ghana, Kenya among other Africa developing economies; where Siegel (2020) stated that accounting professional institutes and accounting professionals have not adopted and fully recognize accounting technological advancement such as artificial intelligence, robotic technology, cloud accounting, block chain technology, and quick book technology in the day to day accounting functions in their endeavour.

Institutional sustainability remains a growing field of research in varied organizations in light of the need to achieve and sustain competitive advantage through core competence. However, conceptual observation has shown that most organizations especially accounting institutions in developing countries such as, Nigeria among others have not been able to achieve sustainability with consistent reports of either close-shop and or mergers of financial institutions, leading to lose in several millions/billions of naira. This scrutiny is evident in the artificial intelligence, robotic technology, cloud accounting, block chain technology, and quick book technology in these countries (Shonubi, 2024). Several studies have been conducted on disruptive technology and institutional goals actualization in developed countries and limited studies in developing countries however, the results have been inconclusive. A study by Zhang, Dai, and Vasarhelyi (2018) found that disruptive technologies have not significantly influenced accounting and auditing students in the universities. Conversely, Kruskopf, Lobbas, Meinander, Söderling, Martikainen and Lehner (2019) found disruptive technology has positive influence on all aspects of companies in the world. More so, the most rapid changes in current times are coming from the development and implementation of artificial intelligence, robotic process automation, and other groundbreaking technologies such as cloud accounting, block chain technology, and quick book technology (Jędrzejka, 2019). The implication of this is that studies have shown that there is a relationship between artificial intelligence and goal actualization of professional accountants and accounting institutes. This is in line with the findings from a study by Seseni

and Mbohwa (2018) that a positive relationship exists between artificial intelligence and goal actualization of professional accounting institutes. Similarly, Shaban and Ali (2014) had earlier postulated that the main driving force behind cloud computing as a dimension of disruptive technology include wireless networks, reducing storage costs and improving the software for online processing to achieve organisation goals.

Professional accounting institutes in Nigeria aim to achieve and maximize institutional sustainability through growth, efficiency, corporate social responsibility, stakeholder loyalty, and wealth creation. However, these institutes have ranked low in the World Economic Forum's rankings due to poor adoption of disruptive technology such as artificial intelligence, robotic technology, and cloud accounting. This has reduced their sustainability in terms of growth, survival, continuity, efficiency, and corporate social responsibility compared to developed countries. The challenge of adopting disruptive technology measures among accounting professional teaching institutes and scholars in developing countries like Nigeria has led to inadequate teaching of these technologies, creating poor institutional goals actualization, decline in growth, survival, continuity, institutional inefficiency, and enhancing competitive disadvantage. The impact of globalization on the accountancy profession has also affected Nigerian institutes, with some still using manual filing systems, analog computers, and few branches nationwide.

Limited studies have been conducted to assess the impact of artificial intelligence (AI) on sustainable development, including the Sustainable Development Goals (SDGs) and 169 targets internationally agreed in the 2030 Agenda for Sustainable Development. Low skill quality in accounting technologies has resulted in a lack of sustainability among Nigerian institutes. Failure to adopt and adapt to disruptive technologies key drivers has created institutional inefficiency among accounting practitioners and institutes in Nigeria. Dominic and Wilhelmina (2012) stated that accounting professional institutes may not achieve targeted goals, stakeholder loyalty, growth and survival, efficiency in accounting service delivery, and institutional corporate social responsibility due to their lack of in-depth knowledge of disruptive technologies.

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

### 1.2 Objective

The study intends to determine the effect of artificial intelligence on institutional goals actualization of professional accounting institutes in Nigeria

### 1.3 Hypothesis

$H_{o1}$: disruptive technology has no significant effect on institutional goals actualization of professional accounting institutes in Nigeria

## 2. LITERATURE REVIEW

### 2.1 Conceptual Review

#### 2.1.1 Institutional Goals Actualization

Goals are an essential part of establishing priorities and setting an organisation up for success over a set period of time. According to Okunbanjo (2020), organisational goals are goals that a business anticipates accomplishing in a set period of time. It typically represents an organisation's larger purpose and work to establish an end-goal for employees to work towards. Business goals define the "what" of a business's purpose whereas business objectives define the "how." Business goals typically only provide a general direction that a company will follow whereas business objectives clearly outline actionable steps. Okunbanjo (2020) further stated that organizational goals are outcome statements that define what an organization is trying to accomplish, both programmatically and organizationally. Goals are usually a collection of related programs, a reflection of major actions of the organization, and provide rallying points for managers. Given the importance of goal-setting for predicting organizational behaviors and outcomes, it is essential to develop a more detailed and comprehensive understanding of the factors affecting firms' decisions to pursue a specific set of goals (Kotlar, De Massis, Wright, & Frattini, 2018).

At the organizational level, several factors influence organizational goals such as firm age and size (Short & Palmer 2003) and firm resources (Audia & Greve 2006). Organizations that differ in terms of industrial sector, size, ownership type, governance or market position, among other characteristics, pursue diverse organizational goals (Kotlar *et al.*, 2018). Ibietan (2017) posited that goal actualization occurs when an organisation accomplish its long term vision. The goal expresses a fundamental objective that represents a desire that is an end in itself with respect to the situation at hand (Bond, 2008). Goals actualization are aspirational,

that is to say they are not statements about what an organisation is but rather what it wants to become.

### 2.1.2 Artificial Intelligence

Artificial intelligence (Al) is a broad concept, and there are many different views on what intelligent machines are capable of accomplishing. Odoh, Echefu, Ugwuanyi, and Chukwuani (2018) defined artificial intelligence as the application of computational tools to address tasks traditionally requiring human sophistication. Artificial Intelligence is defined as the human intelligence being used by a computer system (Seseni & Mbohwa, 2019). Deloitte (2017) sees artificial intelligence as the name of the academic field of study which studies how to create computers and computer software that are capable of intelligent behavior. Elaine (2017) sees artificial intelligence as the study of how to make computers do things better than human. According to Odoh *et al* (2018), artificial intelligence is a system that thinks like humans (system that thinks rationally) and systems that act like humans. Artificial intelligence is seen as the capability of a device to perform activities which would otherwise only be expected of the human brain (Muhammad & Gang, 2019). These activities include the capacity for knowledge and the ability to acquire it. It also comprises of the ability to judge, understand relationships and produce original thoughts. Artificial intelligence aims to make an intelligent machine that can react in ways similar to human. It is thus seen as the simulation of the human brain.

According to Muhammad and Gang (2019), artificial intelligence is enhanced by major technologies which include expert system, Neura network, Fuzzy Logic, Genetic algorithm, Natural Language Processing (NLP) and intelligence agent. Expert Systems: Expert systems are artificial intelligence programs adopted in the 1980's that reach a level of expertise capable of replacing human specialty in a particular field of decision making. Expert systems are easily implemented and most widely used artificial intelligence technology (Shahid & Li, 2019). They include computer programs that simulates thinking manner of expert in a particular field. They are often developed with expert system shells. An Expert system shell is a software programming environment which enables the construction of expert or knowledge based systems. According to Taghizadeh, Mohammad, Dariush, and Jafar (2013) expert system software can be developed for any problem that involves a selection from among a definable group of choices where the decision is based on logical steps. Hence any

area where a person/group has special expertise needed by others is a possible area for an expert system (Muhammad & Gang, 2019).

### 2.2 Theoretical Review

This section of the review provides the basic theoretical assumptions for this study. It will focus on relevant theories that can be applied to the variables and concepts in order to come up with a logical linkage between the variables. These theories are Christensen Theory of Disruption Technology, model of organisation, diffusion innovation theory, resource based view theory and technology acceptance model.

#### 2.2.1 Christensen Theory of Disruption Technology

The Christensen Theory of Disruption Technology, introduced by Clayton Christensen in 1997, posits that through disruptive technology and innovation processes, institutions can maintain continuity and compete with larger multinational companies worldwide. The theory focuses on new and ground-breaking technologies that impact a firm's existence, while Chishakwe and Smith (2012) support the idea that disruption technology and innovation are a function of firm continuous performance and sustainability in the face of global competition. However, the theory's asymmetric assumptions, such as treating incumbent firms as heterogeneous actors with different preferences, incentives, and competencies, and not recognizing the influence of the environment, have led to a lack of managerial solutions.

Christensen differentiates between sustainable technologies and disruptive technologies, with sustainable technologies adding value to existing products and disruptive technologies disrupting performance levels and creating new marketplaces. Technological improvements in disruptive technology often result in performance improvements of established products, making them simpler and more appealing to customers. As competition increases, firms strive to upgrade their performance levels, but these improvements may increase faster than anticipated customer needs, leading to disruptive technologies.

#### 2.2.2 Diffusion Innovation Theory

The diffusion innovations theory, developed by Everett Rogers in 1976, explains how and at what rate new ideas and technology spread. It is based on the adopters-based theory developed by Surry and Farquhar (1997), which outlines five stages of diffusion: knowledge, persuasion, decision, implementation, and confirmation. The theory focuses on the conditions that

increase or decrease the likelihood of a new idea, product, or practice being adopted by members of a given culture. It also considers attributes associated with technological innovations that influence the rate of adoption. Diffusion of innovation theory emphasizes the importance of disruptive technology in identifying and exploiting scientific and technological opportunities, exerting a significant influence on innovation ability and providing a competitive advantage. The diffusion model consists of three main elements: identification of diffusion stages, characteristics of innovation that impact the rate of diffusion, and the adopter's strategy. In the competitive environment, innovation is considered a firm's core value creation capacity and a crucial competitive weapon. Therefore, accounting institutes in Nigeria should follow these stages of diffusion theory to adopt disruptive technology for a competitive advantage in the global society.

### 2.2.4 Technology Acceptance Model

The Technology Acceptance Model (TAM) is a popular research model developed by Davis in 1989 to predict the use and acceptance of information systems and technology by individual users. It focuses on two factors: perceived usefulness and perceived ease of use. Perceive usefulness is the prospective user's subjective probability that using a specific application system will enhance their job or life performance, while perceived ease of use is the degree to which the user expects the target system to be free of effort.

The TAM model is influenced by external variables such as social, cultural, and political factors. Social factors include language, skills, and facilitating conditions, while political factors involve the impact of technology use in politics and political crises. The attitude to use evaluates the desirability of employing a particular information system application, while behavioral intention measures the likelihood of a person employing the application. However, TAM has faced criticism for its questionable heuristic value, limited explanatory and predictive power, triviality, and lack of practical value. It has also been criticized for diverting researchers' attention away from other important research issues and creating an illusion of progress in knowledge accumulation. The TAM framework often overlooks other issues, such as cost and structural imperatives that force users into adopting technology.

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

**2.3 Empirical Review**

Ali, Omar and Bakar (2016) investigated the effect of accounting information system (AIS) on organizational performance in Jordanian banking sector. The study used four types of AIS success factors as the determinants performance namely service quality; information quality, data quality and system quality. Data were collected with a structured questionnaire survey and analyzed with PLS SEM technique. The findings revealed that service quality, information quality and system quality are the significant AIS success factors for increasing organizational performance. Shaban and Ali (2014) investigated effect of cloud computing in accounting and comparison with the traditional model. The study explored the concept of cloud accounting in terms of characteristics, advantages as well as disadvantages viz-a-viz traditional model. The study concluded that the main driving force behind cloud computing are Include wireless networks, reducing storage costs.

Sobhan (2019) explored the concept of cloud accounting and its adoption in Bangladesh. The study stated that there are three models of cloud accounting namely IaaS (Infrastructure as-a-Service), PaaS (Platform as-a-Service) and SaaS (Software as-a-Service). Cloud accounting is more cost effective, secure and flexible and, provides larger storage compared to traditional accounting. Mirrazavi and Khoorasgani (2016) evaluated the impact of cloud computing technology on organizational performance; financial, customer, and operational. The t-test statistics results showed that cloud computing technology has a positive and significant impact on the organizational performance. Also, cloud computing has a positive and significant impact on the dimensions of organizational performance- financial, customer and operational.

Seseni and Mbohwa (2018) examined the implications of artificial intelligence (AI) on Soweto furniture manufacturing SMEs. The study adopted qualitative research approach and case study research design. The study discovered that SMEs in the studied area are not ready because they do not have the necessary resources to can operate AI despite the fact that it could improve the quality of products and services. The study further positioned that the implementation of artificial intelligence will mean that most people will lose their jobs due to their jobs being replaced by a computer system. Shahid and Li (2019) examined the impact of artificial intelligence among marketing professionals of Pakista. Qualitative research method which involved semi-structured interviews with different marketing professional belonging from different firms of Pakistan was utilized conducted. The study concluded that

integration of AI in the marketing functions will improve the performance of the business and thus, achieving profitability and competitive advantage.

Lichtenthaler (2019) explored intelligence-based view of firm performance and artificial intelligence and established that an intelligence-based perspective underscores the need to integrate AI applications with specific human expertise to complicate imitation by competitors. The study concluded that firms further need to develop a meta-intelligence to dynamically renew and recombine their intelligence architecture with multiple types of human and artificial intelligence in order to attain competitive advantage. Choi, Kim and Park (2018) conducted an empirical study on process innovation and robotic technology among small and medium-sized enterprises. The study adopted stratified sampling technique and primary data through the use of questionnaire. The results of the structural equation model indicated that there is significant influence of robotic technology on process innovation. Quinn and Cleary (2016) conducted an exploratory study on intellectual capital and business performance using cloud accounting as a moderator. The study adopted survey research design and collected through questionnaire. The regression results revealed that cloud accounting have a positive and statistically significant impact on human capital and relational capital. However, an insignificant effect was found on structural capital.

## 3. MATERIALS AND METHOD

The study adopted cross-sectional survey research design, which was a valuable design for assessing opinion, people's beliefs, motivations, and behavioral patterns at a particular time and facilitate the use of a questionnaire research instrument in obtaining data for the analysis (Zikmund, Quinlan, Babbin, Carr, & Griffin, 2015). The population of this study covered the professional members of the major accounting professional institutes operating in Nigeria which are mainly: - Institute of Chartered Accountant of Nigeria (ICAN), The Association of National Accountants of Nigeria (ANAN), Institute of Certified Public Accountant of Nigeria (ICPAN), Chartered Institute of Management and Cost Accountant (CIMCA), and Association of Chartered Certified Accountant (ACCA).

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

Table 1: Population of Professional Accounting Institutes in Nigeria

| S/N | Professional Accounting Institutes | Number of Professional members | Year of Establishment |
|---|---|---|---|
| 1 | ICAN | 52,250 | 1st September, 1965 |
| 2 | ANAN | 38,700 | 1st January, 1979 |
| | **Total** | **90,950** | |

Source: Website of Various Accounting Professional Institutions (2021)

The selection of a set of people or group to participate in the study investigation could be described as a study sample. Sampling size according to Kotler and Keller (2012) is the list of individuals in a population from which a sample is drawn from. To obtain the representative sample size for this study the Taro Yamani formula (1997) of sample size was applied. And the researcher, judgmentally added 30% for non-respondents.

The following formula applies:

$n = \left(\frac{N}{1+N\,(e)^2}\right)$

n = the sample size

N = the population size

e =95% confidence interval.

$= \frac{90950}{1+90950(0.05)^2}$

$n = \frac{90950}{90951\ x\ 0.0025}$

n = 400

$n = \frac{90950}{90951\ \ x\ 0.0025}$

n = 400

With a 30% addition to make up for non-respondent of 400 = 120

the sample size becomes 520.

ICAN $= \frac{52,250}{90,950} \text{ x } \frac{520}{1}$

= 299

AWAN $= \frac{38,700}{90,950} \text{ x } \frac{520}{1}$

= 221

Total = 299 + 221

= 520

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

In view of the research design for this study and after assessing various research objectives, questions and hypotheses, primary source of data was used in gathering data from the respondents. The primary data was collected through administering copies of questionnaire to the target respondents. The justification for using questionnaire was due to the fact that, the questionnaire translated research objectives into specific questions which the respondents were asked to answer. To achieve the objectives of this study, primary data were collected and the primary data were analyzed using both descriptive and structural equation modeling techniques.

## 4. RESULT AND DISCUSSIONS

### 4.1 Descriptive Statistics

The summary statistics of both the socio-demographic variables and variables used for inferential statistics are presented in the section below. The variables of the analysis are analyzed using different tools of descriptive statistics such as frequency and percentage distribution for socio-demographic variables. Also, the inferential variables used both frequency distribution, percentage distribution, weighted mean score, standard deviation, and ranking. Meanwhile, the summary statistics such as mean, standard deviation, minimum, maximum, and total number of observations are presented in the analysis of the independent and the dependent variables.

The target number of questionnaires expected to be filled by ICAN and ANAN professionals in accounting was 520 copies. Responses from the questionnaire were drawn from various parts of Nigeria and foreigners since Nationality is divided into two main aspects. Due to missing copies of questionnaire, incomplete cases and data access challenges, 496 copies of the questionnaire were filled completely and correctly. As shown in Table 2, 95.4% of the questionnaire were adequate for data analysis and made an inference on Nigeria.

Table 2: Response Retrieved

| Questionnaire | Total Administered | Total Retrieved | % |
|---|---|---|---|
| ICAN | 299 | 284 | 54.61 |
| ANAN | 221 | 212 | 40.75 |
| Total | 520 | 496 | 95.46 |

Source: Researcher's Field Survey, (2024)

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

This section discusses the background information of the people who responded to disruptive technology and institutional sustainability of professional accounting institutes in Nigeria and the variables used in the section are analyzed accordingly. The socio-demographic variables of the respondents include gender, age, marital status, highest educational level, professional qualification, current management level, current function, and length of service.

### 4.1.1 Gender

The gender of an individual is an important aspect of this data analysis as it presents information about the individual and helps to know the opinion of both male and female on the artificial intelligence and institutional sustainability of professional accounting institutes. The gender is sub-divided into male and female categories and analyzed using frequency and percentage distribution as indicated in Table 3

Table 3: Gender of the Respondents

| ***Gender*** | **Frequency Distribution** | **Percentage Distribution** |
|---|---|---|
| *Male* | 257 | 51.8 |
| *Female* | 239 | 48.2 |
| ***Total*** | **496** | **100.0** |

Source: Researcher's Field Survey, 2024

Table 3 shows the number of people who responded to male and female and the result is presented above. From the result, it could be deduced that the majority of the respondents who responded to the question are male with the frequency and percentage distribution of 257 (51.8 percent) while 239 (48.2 percent) are female.

### 4.1.2 Age of the Respondents

Different categories of age-group are determined in this section as indicated in Table 4. The age group considered is from 18 years and above since it is believed that 18 years of age people are employed have more knowledge on disruptive technology and institutional sustainability. The categories of the age group include 18 – 28 years; 29 – 39 years; 40 – 49 years, and 50 years and above analyzed using frequency and percentage distribution as explained below.

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

Table 4: Age of the Respondents

| Age | Frequency Distribution | Percentage % Distribution |
|---|---|---|
| 18 – 28 years | 74 | 14.9 |
| 29 – 39 years | 221 | 44.6 |
| 40 – 49 years | 144 | 29.0 |
| • 50 years | 57 | 11.5 |
| Total | **496** | **100.0** |

Source: Researcher's Field Survey, 2024

From Table 4, it is shown that the majority of the respondents are between the age group of 29 – 39 years with the frequency and percentage distribution of 221 (44.6 percent); followed by 144 (29.0 percent) of the respondents whose ages are between 40 – 49 years; 74 (14.9 percent) are 18 – 28 years, and 57 (11.5 percent) are greater than 50 years.

### 4.1.3 Marital Status of the Respondents

Information gathered on the marital status of the respondents is analyzed using frequency and percentage distribution as described in Table 5. The marital status consists of single, married, and divorced, separated, widowed, and widower is classified as marital status.

Table 5: Marital Status of the Respondents

| Marital Status | Frequency Distribution | Percentage % Distribution |
|---|---|---|
| Single | 179 | 36.1 |
| Married | 279 | 56.2 |
| Others | 38 | 7.7 |
| Total | 496 | 100.0 |

Source: Researcher's Field Survey, 2024

From the result, Table 5 shows that the majority of the respondents are married with the frequency and percentage distribution of 279 (56.2 percent) out of the total respondents of 496; followed by 179 (36.1 percent) which are single, and only 38 (7.7 percent) belong to other categories of marital status.

### 4.1.4 Nationality

In an organization, it is believed that different nationalities can be found in the organization as this section is classified into Nigerian and foreigner. Foreigners in this section are people who work in Nigeria but are not Nigerian citizens or a person coming from countries other

than Nigeria. Also, Asbrock, Lemmer, Becker, Koller, and Wagner, (2014) defined Foreigners, known as Immigrants as no homogeneous group. The section is analyzed using frequency and percentage distribution as displayed in Table 6.

Table 6: Nationality of the Respondents

| **Nationality** | **Frequency Distribution** | **Percentage % Distribution** |
|---|---|---|
| Nigerian | 449 | 90.5 |
| Foreigner | 47 | 9.5 |
| Total | 496 | 100.0 |

Source: Researcher's Field Survey, 2024

Most of the people interviewed on disruptive technology and institutional sustainability are Nigerians showing the frequency and percentage distribution of 449 (90.5 percent) while only 47 (9.5 percent) are Foreigners. This shows that the majority of the people interviewed and people who responded to the questionnaires are Nigerians. More Nigerians are found in the organization where the questionnaires were distributed because it is not easy for people to migrate from their countries and work in another country.

### 4.1.5 Highest Educational Level

Education is one of the most important factors to be determined on the disruptive technology and institutional sustainability of professional accounting and it is analyzed using frequency and percentage distribution.

Table 7: Highest Educational Level of the Respondents

| **Educational Level** | **Frequency Distribution** | **Percentage % Distribution** |
|---|---|---|
| WASC/OND | 37 | 7.5 |
| BA/BSC/HND | 213 | 42.9 |
| MA/MSC/MPHIL | 135 | 27.2 |
| PHD | 111 | 22.4 |
| **Total** | **496** | **100.0** |

Source: Researcher's Field Survey, 2024

It is important to know how educated the respondents are. The influence of technology in education can shape the lives of people, especially organizations. This helps people to shape their level of education and offers are given to people who have opportunities who take part in innovation and technological advancement. More so the level of education of people seems

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

to have an impact on technological advancement and making them more globalized. From the result, it is observed that the majority of the people who responded are HND/BA/BSc holders with the frequency and percentage distribution of 213 (42.9 percent); followed by the respondent having MA/MSc/MPhil certificate with the frequency and percentage distribution of 135 (27.2 percent); 111 (22.4 percent) are Ph.D. holders, and only 37 (7.5 percent) are having WASC/OND certificate out of the total respondents of 496. This has proven that education is crucial in determining the disruptive technology and institutional sustainability of professional accounting institute.

### 4.1.6 Professional Qualification of the Respondents

The most recognized professional qualification for accountants is the two mentioned below. It is believed that the respondents are expected to be part of either ICAN/ACCA or ANAN professional qualification for accountants. This section investigates the type of professional qualification the respondents belong to using a structured form of a questionnaire which is analyzed using frequency and percentage distribution.

Table 8: Professional Qualification of the Respondents

| **Qualification** | **Frequency Distribution** | **Percentage % Distribution** |
|---|---|---|
| ICAN/ACCA | 284 | 58.1 |
| ANAN | 212 | 33.1 |
| Total | **496** | **100.0** |

Source: Researcher's Field Survey, 2024

The top professional qualification identified by the respondents is ICAN/ACCA showing the frequency and percentage distribution of 284 (58.1 percent) while 212 (33.1 percent) out of 496 belong to ANAN professional qualification for accountants. It is observed that ICAN/ACCA is the most recognized professional qualification for accountants out of the two presented in the study and people who are interviewed belong to the most recognized professional qualification for accountants. ICAN/ACCA holders are people who work as an auditor, accountant, finance analysis, etc. since the professional accountants provide an offer to business-relevant, first-choice qualification to people who applied, seek the ability and ambition around the world for people who seek their career in accountancy, management, and finance. The other professional qualification for an accountant is also recognized but not like that of ICAN/ACCA professional qualification for accountants.

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

### 4.1.7 Current Management Level of the Respondents

Most organizations have three levels of management as top, middle, and lower level. This section also incorporates the three-level of management and it is analyzed using frequency and percentage distribution.

Table 9: Current Management Level

| Management Level | Frequency Distribution | Percentage % Distribution |
|---|---|---|
| Top | 150 | 30.2 |
| Middle | 275 | 55.4 |
| Others | 71 | 14.3 |
| **Total** | **496** | **100.0** |

Source: Researcher's Field Survey, 2024

Most of the people interviewed are middle managers, also known as middle-level managers showing 275 (55.4 percent) as their frequency and percentage distribution while 150 (30.2 percent) are top-level managers, and others regarded as the first level managers show the frequency and percentage distribution of 71 (14.3 percent). This indicates that the majority of the people who responded to the questionnaires are middle-level managers.

### 4.1.8 Current Function

The function of each of the respondents in the organization is examined using frequency and percentage distribution. This helps to know the number of people who are president, head of finance, head of planning, and others.

Table 10: Current Function

| Function | Frequency Distribution | Percentage % Distribution |
|---|---|---|
| President | 34 | 6.9 |
| Head, Finance | 217 | 43.8 |
| Head, Planning | 140 | 28.2 |
| Others | 105 | 21.2 |
| **Total** | **496** | **100.0** |

Source: Researcher's Field Survey, 2024

It is deduced that most of the people interviewed are from the head, finance since it has the highest frequency and percentage distribution of 217 (43.8 percent) out of the total respondents of 496; followed by the respondents from head planning showing the frequency

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

and percentage distribution of 140 (28.2 percent), 105 (21.2 percent) belong to other current functions, and only 34 (6.9 percent) of the respondents are president. This proves that the majority of the people who responded to the questionnaires have their current functions as head, finance.

### 4.1.9 Length in Service

The duration in which the respondents have stayed in service is categorized in the table below. The duration is expressed in five (5) years intervals and it is analyzed using the frequency and percentage distribution.

Table 11: Length in Service

| Service | Frequency Distribution | Percentage % Distribution |
|---|---|---|
| 0 – 5 years | 101 | 20.4 |
| 6 – 10 years | 128 | 25.2 |
| 11 – 15 years | 120 | 24.2 |
| 16 – 20 years | 93 | 18.8 |
| 21 – 25 years | 23 | 4.6 |
| 26 – 30 years | 17 | 3.4 |
| ➢ 31 years | 14 | 2.8 |
| **Total** | **496** | **100.0** |

Source: Researcher's Field Survey, 2024

Table 11 shows that 128 (25.2 percent) of the respondents have used 6 - 10 years in service; followed by 120 (24.2 percent) who have used 11 - 15 years in service; 105 (20.4 percent) used 0 - 5 years in service; 93 (18.8 percent) used 16 - 20 years in service; 23 (4.6 percent) used 21 - 25 years in service; 17 (3.4 percent) used 26 - 30 years in service, and 14 (2.8 percent) have used more than 31 years in service. This implies that a larger percentage of the people interviewed have used 6 - 10 years and they have 6 - 10 years of working experience while the least people interviewed are their working experience for 31 years and above.

### 4.1.10 Artificial Intelligence

In this section, the measurement of variables used in artificial intelligence is the ordinal level of measurement, also known as the Likert Scale. The variables range from not at all to a very large extent which is on a scale of 1 – 6.

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

Table 12 Descriptive Analysis of Artificial Intelligence

| | Frequency and Percentage Distribution | | | | | | Weighted Mean Score | | |
|---|---|---|---|---|---|---|---|---|---|
| **Artificial Intelligence** | **NA (%)** | **VSE (%)** | **SE (%)** | **ME (%)** | **LE (%)** | **VLE (%)** | **TS** | **Statistic** | **Std. dev** |
| Open Culture | 7 (1.4) | 11 (2.2) | 22 (4.4) | 144 (29.0) | 206 (41.5) | 106 (21.4) | 2337 | 4.929 | 0.872 |
| Machine Learning Algorithms | 5 (1.0) | 5 (1.0) | 47 (9.5) | 205 (41.3) | 79 (15.9) | 155 (31.3) | 2301 | 4.904 | 1.035 |
| Expert System | 7 (1.4) | 14 (2.8) | 60 (12.1) | 163 (32.9) | 212 (42.7) | 40 (8.1) | 2167 | 4.592 | 0.864 |
| Natural Language Processing | 0 (0.0) | 10 (2.0) | 153 (30.8) | 126 (25.4) | 138 (27.8) | 69 (13.9) | 2087 | 4.488 | 1.070 |
| Digital Learning Platform | 5 (1.0) | 5 (1.0) | 157 (31.7) | 122 (24.6) | 146 (29.4) | 61 (12.3) | 2070 | 4.462 | 1.056 |
| Automated grading | 6 (1.2) | 8 (1.6) | 173 (34.9) | 146 (29.4) | 89 (17.9) | 74 (14.9) | 2014 | 4.379 | 1.130 |
| Audio Processing | 2 (0.4) | 143 (28.8) | 90 (18.1) | 80 (16.1) | 121 (24.4) | 60 (12.1) | 1843 | 4.259 | 1.349 |

*Where NA indicates Not at all, VSE – very small extent, SE – Small extent, ME – Moderate extent, LE – Large extent, VLE – Very large extent, TS – Total Score, and Std. dev – Standard deviation.* Source: Researcher's Field Survey, 2024

From the result, it is shown that open culture has the highest weighted mean score showing the value of 4.929 with the standard deviation of 0.872 being rated "Large extent" by the mode (highest frequency and percentage distribution) of 206 (41.5 percent); followed by the second rated variable, known as machine learning algorithms having the value of 4.904wms with the standard deviation of 1.035 being rated "Moderate extent" by the mode value of 205 (41.3 percent); expert system (4.592wms; ±0.864std) being rated "Large extent" by 212 (42.7 percent); natural language processing (4.488wms; ±1.070std) being rated "Small extent" by 153 (30.8 percent); digital learning platform (4.462wms; ±1.056std) being rated "Small extent" by 157 (31.7 percent); automated grading (4.379wms; ±1.130std) being rated "Small extent" by 173 (34.9 percent), and the least weighted score of all the variable is audio processing having the value of 4.259 with the standard deviation of 1.349 being rated "Very small extent" by the frequency and percentage distribution of 143 (28.8 percent).

It can be deduced from the result that the open culture and expert system as a variable is known to a large extent as part of the variable which determines the disruptive technology

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

and institutional sustainability of professional accounting. Other variables such as machine learning algorithms are known as a determinate of disruptive technology and institutional sustainability of professional accounting to a moderate extent while natural language processing, digital learning platform, and automated grading are determined to a small extent, and audio processing is a factor used to determine the disruptive technology and institutional sustainability of professional accounting is known in a very small extent. Open culture is regarded as the most artificial intelligence factor which is reinventing the world of business today and has more advantages on the technology to embrace a culture of innovation.

### 4.1.11 Institutional Goals Actualization

The institutional goals actualization (IGA) is a variable used to measure the institutional sustainability of the professional accounting institutes in Nigeria. Six (6) factors were used to determine the IGA of an institutional goals actualization, the variables are student enrollment, participant retention, maintain professional program quality, produce world-class chartered accountants, ethical accounting standards, and technical accounting competence.

Table 13 Descriptive Analysis of Institutional Goals Actualization

| | **Frequency and Percentage Distribution** | | | | | | **Weighted Mean Score** | | |
|---|---|---|---|---|---|---|---|---|---|
| **Institutional Goals Actualization** | **VL (%)** | **L (%)** | **ML (%)** | **MH (%)** | **H (%)** | **VH (%)** | **TS** | **Statistic** | **Std. dev** |
| Student Enrollment | 9 (1.8) | 10 (2.0) | 23 (4.6) | 78 (15.7) | 181 (36.5) | 195 (39.3) | 2485 | 5.251 | 0.880 |
| Maintain professional program quality | 10 (2.0) | 11 (2.2) | 25 (5.0) | 80 (16.1) | 188 (37.9) | 182 (36.7) | 2459 | 5.210 | 0.893 |
| Technical accounting competence | 10 (2.0) | 12 (2.4) | 18 (3.6) | 169 (34.1) | 95 (19.2) | 192 (38.7) | 2391 | 5.107 | 1.000 |
| Ethical accounting standards | 2 (0.4) | 7 (1.4) | 33 (6.7) | 156 (31.5) | 113 (22.8) | 185 (37.3) | 2414 | 5.099 | 0.969 |
| Participant Retention | 10 (2.0) | 9 (1.8) | 67 (13.5) | 136 (27.4) | 225 (45.4) | 49 (9.9) | 2192 | 4.660 | 0.883 |
| To produce world-class chartered accountants | 2 (0.4) | 12 (2.4) | 158 (31.9) | 140 (28.2) | 103 (20.8) | 81 (16.3) | 2061 | 4.465 | 1.124 |

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

*Where VL indicates Very Low, L – low, ML – Moderately low, MH – Moderate high, H – High, VH – Very high, TS – Total Score, and Std. dev – Standard deviation.*

Source: Researcher's Field Survey, 2024

Results in Table 13 revealed that the student enrollment factor is the most rated factor used to measure the actualization of the institutional goals of professional accounting institutes in Nigeria. The factor shows the weighted mean score of 5.251 with the standard deviation of 0.880 being rated "very high" by the mode value (highest frequency and percentage distribution) of 195 (39.3 percent); maintain professional program quality (5.210wms; ±0.893std) being rated "high" by 188 (37.9 percent); technical accounting competence (5.107wms; ±1.000std) being rated "very high" by 192 (38.7 percent); ethical accounting standards (5.099wms; ±0.969std) being rated "very high" by 185 (37.3 percent); participant retention (4.660wms; ±0.883std) being rated "high" by 225 (45.4 percent), and produce world-class chartered accountants (4.465wms; ±1.124std) being rated "moderate-low" by the mode value (highest frequency and percentage distribution of 158 (31.9 percent). This proves that the IGA of the IS is best measured using student enrollment. Though, the result has proven that student enrollment, ethical accounting standards, and technical accounting competence are very high factors of IGA while participant retention, maintain professional program quality are high factors of IGA, and producing world-class chartered accountants is a moderately low factor to determine the IGA of institutional sustainability of professional accountants in Nigeria.

### 4.2 Test of Hypothesis

$H_{o1}$: artificial intelligence has no significant effect on institutional goals actualization of professional accounting institutes in Nigeria

The hypothesis was tested using an SEM and it was explained accordingly as presented in Figure 1 and Tables 14.

JOURNAL OF GLOBAL ACCOUNTING
11(1) February, 2025.
ISSN (Online): 1597–7641; ISSN (Print): 1597-8273
https://journals.unizik.edu.ng/joga

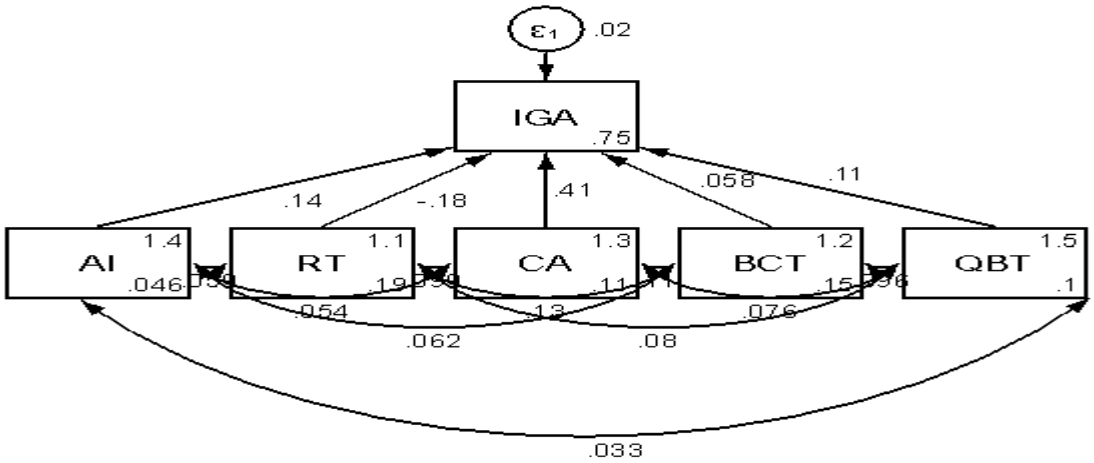


Figure 1: Disruption Accounting Technology and Institutional Goals Actualization

Table 14: Effect of Disruption Accounting Technology on Institutional Goals Actualization

| | **Coeff** | **Std. Error** | **Z** | **P > Z** |
|---|---|---|---|---|
| Constant | 0.746 | 0.055 | 13.51 | 0.000 |
| AI | 0.140 | 0.047 | 2.92 | 0.003 |
| RT | -0.182 | 0.022 | -8.23 | 0.000 |
| QBT | 0.113 | 0.315 | 3.61 | 0.000 |
| CA | 0.413 | 0.400 | 10.34 | 0.000 |
| BCT | 0.058 | 0.140 | 1.45 | 0.148 |
| Chi2_bs(5) | 152.950 | **P –value** | **0.000** | **$R^2$ = 0.569** |
| **Goodness of Fit** | | | | |
| AIC | -911.9392 | BIC | -798.3619 | Df = 27 |

Source: Researcher's Field Survey, 2021

Following the results of the structural equation modelling on disruptive technology and institutional goals actualization, the analysis of the coefficient value is revealed in Table 14 and Figure 1 showing ($\beta_1$= 0.140; $\beta_2$ = -0.182; $\beta_3$= 0.413; $\beta_4$ = 0.113); while four out of all the coefficients showed a positive contribution to the institutional goals actualization, only robotic technology had a negative contribution to the institutional goal actualization. The individual results further revealed that only four of the variables had a significant effect at p-value < 0.01 and 0.05 respectively. The coefficient and the p-value of the variable which are significant with IGA are given as: AI (*coeff.* = 0.140; *p*=0.003) positive and significant; RT (*coeff.* = -0.182; *p*= 0.000) negative but significant; CA (*coeff.* = 0.413; *p*=0.000) positive and

significant, and QBT (*coeff.* = 0.113; *p*=0.000) positive and significant, while BCT (*coeff.* = 0.148; *p*=0.058) was positive but insignificant at *p*-value < 0.01 and 0.05.

This means that AI, OBT, CA, and RT had significant effect on institutional goals actualization of professional accounting institutes in Nigeria. As these variables increase by one unit, the actualization of the institutional goals also increases statistically by 0.140, 0.413, and 0.113 respectively (that is an increase of 14%, 41.3%, and 11.3%). However, a unit increase in RT results statistically in a decrease in institutional goal actualization by -0.182 (-18.2%) of professional accounting institutes in Nigeria. The covariance between the disruptive technology and the actualization of the institutional goals is 0.033. The covariance measures the relationship between the two variables and the extent to which the variables change together. The result shows that a 3.3% increase in the disruptive technology will increase institutional goals actualization.

**4.2.1 Decision:** A decision rule is stated based on the hypothesis set in Chapter One. The decision rule states that if the probability value (*p*-value) is less than 0.05 (5% significance level), do not accept the null hypothesis, otherwise, accept the null hypothesis. The *p*-value of the analysis shows that the null hypothesis is not accepted at *p*-value < 0.05 and the alternative is used as the conclusion of the analysis. Therefore, the aggregated findings revealed that disruptive technology have a positive and significant effect on institutional goals actualization at *p*-value (0.000) < 0.05 (5% significance level) with the Chi2_bs(5) of 152.950

The goodness of fit of the model shows that the data has a good fit. Another test was conducted on the goodness of fit using AIC and BIC; the result shows that BIC best fits the model since it has the least value of -798.3617 compared to the value of AIC having -911.9392. This shows that BIC (Bayesian Information Criterion) best fits the model. Another goodness of fit considered is R square value of 0.569. The R square of 56.9% shows the composition of disruptive technology in institutional goals actualization while the remaining 43.1% constitutes factors not considered in this study.

The analysis in hypothesis through the aggregated results revealed that statistically, artificial intelligence has a positive significant effect on institutional goals actualization of professional accounting associations in Nigeria. Also, four (AI, QBT, CA, RT) out of the five individual variables showed a significant effect on institutional goals actualization. The findings in this study showed similarities and disparities with the conceptual, empirical and theoretical

positions of previous scholars. It is important to note that scholars in accounting institutions have interchangeably intellectualized disruptive technology as disruptive accounting technology (Casino et al., 2019; Cong et al., 2018; Lui, 2019; Siegel, 2020).

Conceptually, Okunbanjo (2020) and Kotlar et al. (2018) claimed that to comprehend organisational goals which comprise the goals that a business anticipates accomplishing in a set period of time both programmatically and organizationally given the importance of goal-setting for predicting organizational behaviors and outcomes, it is essential to develop a more detailed and comprehensive understanding of the factors affecting firms' decisions to pursue a specific set of goals. Thus, Siegel (2020) opined that to achieve sustainability of goals actualization of accounting professional institutions with the global trend, disruptive technology is paramount.

Ousama (2019) added that disruptive technology with regards to accounting is one that displaces an established accounting technology and shakes up the accounting practices to create a completely new accounting practice. Singh and Hanafi (2019) supported Ousama (2019) that disruptive technologies are identified after their effects are known and the benefit is seen with hindsight. In the opinion of Indiran and Muhammad (2018), disruptive technologies have to mature over a period of time to evolve from an innovation to a useable product. Likewise, Chishakwe and Smith (2012) stressed that technology per se is not disruptive, but it becomes disruptive when it exceeds the performance of technology that is currently in use. As such, in the opinion of Windel (2007), poor knowledge and adoption of disruptive accounting technology among professional accounting institutions in developing economies may adversely affect their international competition with professional accounting institution in developed economies.

Additionally, aligning this study's findings in previous scholarly empirical works, Chishakwe and Smith (2012) found that disruptive technology has a significant impact on the achievement of business goals in a developing nation. Similarly, a study by Kruskopf *et al.* (2019) found that there is a significant effect of disruptive technology on all aspects of companies' achievements. Dileep *et al.* (2019) findings supported other works that a significant and positive relationship existed between disruptive technology and the performance of firms in terms of the actualization of set objectives. More so, Lui (2019) and Naidoo and Hoque (2018) found disruptive information technology innovations positively and significantly impacted firm profitability and goals. Despite the overall aggregated results,

the individual coefficient results in the SEM analysis for hypothesis one revealed that, statistically, while disruptive technology such as artificial intelligence (AI), cloud accounting (CA), and quick book technology (QBT) have a positive and significant effect, robotic technology (RT) has a negative but significant effect on institutional goals actualization (IGA) of professional accounting associations in Nigeria. These results support previous works such as a study conducted by Seseni and Mbohwa (2018) that a positive relationship exists between artificial intelligence and goal actualization of professional accounting association. Also, Odoh *et al.* (2018) found the application of artificial intelligence to positively influence the performance of accounting functions. More so, Shahid and Li (2019) found that integration of AI in the marketing functions improved the performance of the business and thus, enhanced achievement of profitability and competitive advantage in line with previous works, Lichtenthaler (2019) established that an intelligence-based perspective underscores the need to integrate AI applications with specific human expertise to complicate imitation by competitors and to achieve business goals.

The researcher concluded that the study from Model 1 implies that disruptive technology has the potential to impact institutional goals actualization by creating new technology development for artificial intelligence, cloud accounting, and QuickBooks technology. Thus, in addition, it will affect the development of institutional goals actualization of professional accounting institutes in Nigeria. Therefore, based on the result obtained on robotic technology where robotic technology showed a negative but significant effect on IGA, the implication is that disruptive technology could affect actualization of the institutional goals negatively if not implemented with adequate knowledge and training. Nevertheless, robotic technology will slowly impact institutional goals actualization since this is the direction of modern technology for achieving and sustaining greater institutional goals actualization. Consequently, based on the combined SEM analysis results, disruptive technology dimensions have a positive significant effect on institutional goals actualization of professional accounting institutes in Nigeria.

## CONCLUSION AND RECOMMENDATIONS

The Ministry of Finance should increase In Disruptive technology has changed every aspect of the business environment especially in accounting institute. Today, technologists take the lead role in innovation and idea generation which makes every organization highly productive and creative. This technology has the administration advantage of providing the necessary

infrastructure for accountants, institutes, and organizations across the chain to conduct an online transaction and develop an app without the typical use, delays, and cost of paying an accountant, as ubiquitously obtains at present. Disruptive technology leverages on many benefits of verifiable, transparent, visible, traceable, and secure data management capabilities, with positive externalities of guaranteed information documentation and security.

The study found a significant effect of artificial intelligence on institutional goal actualization of the professional accounting institutes in Nigeria. The study had demonstrated the reason why technology must be introduced and supported by the accountants and institutions. The study was, however, carried out among the accountant professionals as well as institutes such as ICAN, ACCA, and ANAN respectively. In addressing this, the data used in the study was primary data collected from both foreigners and Nigerians who are either a member of ICAN or ANAN professional body.

In line with the results and the findings obtained in each of the models, the following recommendations are made:

1. Management of institutions and organisations should adopt the use of technology, this should help them to be more productive and creative. More so, accounting technology must take a lead role in every school curriculum..
2. Professionals accountants should adopt the use of artificial intelligence and cloud accounting techniques with the ability to learn, recognizing patterns with logical reasoning that would make them do a better job of providing financial information to their clients.

**REFERENCES**

Ali, B.J., Omar, W.A.W., & Bakar, R. (2016). Accounting information system (AIS) and organizational performance: moderating effect of organizational culture. *Journal of Management Information Systems, 7*(2), 29-54.

Audia, G. & Greve, R. (2006). Less Likely to Fail: Low Performance, Firm Size, and Factory Expansion in the Shipbuilding Industry. *Journal Management Science*, vol. 52, issue 1, 83-94

Bond SD, (2008). Generating objectives: Can decision makers articulate what they want. *Management Science, 54*, 56-70

Casino, F., Dasaklis, T.K., & Patsakis, C. (2019). Systematic literature review of blockchain-based applications: Current status, classification and open issues. *Telematics and Informatics, 36*, 55–81

Chishakwe, D.B., & Smith, W. (2012). An analysis of the impact of disruptive technology on the success of small and medium enterprises (SMEs) in a developing nation. A case of King Williams Town. *Journal of Business Management,.6*(36), 50-60,

Choi, M.J., Kim, S., & Park, H. (2018). Empirical study on the factors influencing process innovation when adopting intelligent robots at small- and medium-sized enterprises—the role of organizational supports. *Information, 9*, 2-15

Christensen, C. M. (1997). Marketing strategy: learning by doing. *Harvard business review*, *75*(6), 141-151.

Deloitte. (2017). *Strategies for optimizing your accounts payable.* Retrieved from https://www2.deloitte.com/content/dam/ Deloitte/ca/Documents/finance/ca-en-FA-strategies-for-optimizing-youraccounts- payable.pdf

Dominic, B. C., & Wilhelmina, S. (2012). An analysis of impact of disruptive technology on the success of SMEs in a developing nation. A case of King Williams Town, South Africa. *Journal of Business Management, 6*, 50-60

Elaine, R. (2017). *Solution manual for artificial intelligence*. Www.usenet.nl

Ibietan, J. (2017). Theories of personnel motivation in organisations. *Multidisciplinary Journal of Research Development*, *15*(2), 67-78

Indiran, P.N., & Muhammad, H. (2018). Impact of information technology on innovation in determining firm performance. *African Journal of Science, Technology, Innovation and Development, 10*(6), 643-653

Jędrzejka, D. (2019). Robotic process automation and its impact on accounting. Zeszyty Teoretyczne Rachunkowości, 161(105), 137-166.

Kotlar, J., De Massis, A., Wright, M., & Frattini, F. (2018). Organizational goals: Antecedents, formation processes and implications for firm behavior and performance. *International Journal of Management Reviews,* 20(Suppl 1), S3–S18. https://doi.org/10.1111/ijmr.12170

Kotler, P. and Keller, K.L. (2012) Marketing Management. 14th Edition, Pearson Education.

Kruskopf, S., Lobbas, C., Meinander, H., Söderling, K., Eds. Martikainen M., & Lehner OM. (2019). Digital accounting: Opportunitie, threats and the human factor. *Oxford Journal of Finance and Risk Perspectives, 8*,1-15

Lichtenthaler, U. (2019). An intelligence-based view of firm performance: Profiting from artificial intelligence. *Journal of Innovation Management, 7*(1), 7-20

Lui, K.A. (2019). *The impact of disruptive information technology innovations and firm performance: The case of RFID adoption and its implications in fashion and textiles industries*. Ph.D Thesis, Hong Kong Polytechnic University.

Mirrazavi, D., & Khoorasgani, N. (2016). The impact of cloud computing technology on organizational performance; financial, customer, operational (Case study: Zarin Iran Porcelain Industries Co.) *Mediterranean Journal of Social Sciences, 7*(4), 279-288

Muhammad, Z. S., & Gang, L. (2019). Impact of artificial intelligence in marketing: a perspective of marketing professionals of Pakistan. *Global Journal of Management and Business Research: and Marketing, 19*(2), 27-35

Naidoo, I.P., & Hoque, M. (2018). Impact of information technology on innovation in determining firm performance. *African Journal of Science, Technology, Innovation and Development, 10*(6), 643-653

Odoh, L., Echefu, C., Ugwuanyi, U., & Chukwuani, N., (2018). Effect of Artificial Intelligence on the Performance of Accounting Operations among Accounting Firms in South East Nigeria. *Asian Journal of Economics, Business and Accounting,* Page 1-11. DOI: 10.9734/AJEBA/2018/41641

Okunbanjo, O.I. (2020). *Structural capital and performance of SMEs in Lagos metropolis*. A Paper Presented at the College of Social and Management Sceience conference, McPherson University.

Ousama A.A. (2019). *Accounting challenges and risks of disruptive technology*. M.Sc Thesis, University Muhammadiyan Yogyakarta.

Quinn, M., & Cleary, P. (2016). Intellectual capital and business performance - an exploratory study of the impact of cloud-based accounting and finance infrastructure. *Journal of Intellectual Capital, 17*(2), 255-278.

Rogers, E. M. (1976). New product adoption and diffusion. *Journal of consumer Research*, *2*(4), 290-301.

Seseni, L., & Mbohwa, C. (2018). *The implications of Artificial Intelligence on Soweto Furniture Manufacturing SMEs*. Proceedings of the International Conference on Industrial Engineering and Operations Management Washington DC, USA.

Shaban, M., & Ali, M. (2014). Effect of cloud computing in accounting and comparison with the traditional model. *Research Journal of Finance and Accounting, 5*(23),104-115

Shahid, M. Z., & Li, G. (2019). Impact of artificial intelligence in marketing: a perspective of marketing professionals of Pakistan. *Global Journal of Management and Business Research: and Marketing*, *19*(2), 27-35

Shonubi, O. A. (2024). Advancing organisational technology readiness and convergence of emerging digital technologies (AI, IoT, I4. 0) for innovation adoption. *International Journal of Technology and Globalisation*, *9*(1), 50-91.

Short, J. C., & Palmer, T. B. (2003). Organizational performance referents: An empirical examination of their content and influences. *Organizational Behavior and Human Decision Processes*, 90(2), 209–224. https://doi.org/10.1016/S0749-5978(02)00530-7

Siegel, J., (2020). Cultivating Invisible Impact with Deep Technology and Creative Destruction. *The International Journal of Multidisciplinary Approaches on Innovation*, Vol. 8 No. 3

Singh, D. S. M., & Hanafi, N. B. (2019). Disruptive technology and SMEs performance in Malaysia. *International journal of academic research in Business and social sciences*, *9*(12), 140-148.

Sobhan, R. (2019). The concept of cloud accounting and its adoption in Bangladesh. *International Journal of Trend in Scientific Research and Development*, *3*(4), 61-67

Sorina-Geanina, S., Adriana, P., & Ana-Maria, C. (2018). The role of the accounting profession in achieving the objectives of sustainable development. *Annals - Economy Series, Constantin Brancusi University, Faculty of Economics*, *3*, 117-122

Surry, D., & Farquhar, J. (1997). Diffusion theory and instructional technology. *Journal of Instructional Science and Technology, 2(1), 269–278.*

Taghizadeh, A., Mohammad, R., Dariush, S., & Jafar, M. (2013). Artificial intelligence, its abilities and challenges. *International Journal of Business and Behavioral Sciences*, *3*(12), 19-25

Yamane, T. (1973). Statistics: An introductory analysis.

Zhang, C., Dai, J. &, Vasarhelyi, M. A. (2018). The impact of disruptive technologies on accounting and auditing education. *CPA Journal*, *88*(9), 20-26

Zikmund, W. G., Quinlan, C., Babbin, B., Carr, J. C., & Griffin, M. (2015). *Business research methods*. United States: South-Western College, California Publisher.