Harnessing Knowledge Based Economy and Artificial Intelligence [AI] for Sustainable National Growth

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Abstract

Campaigns directed at artificial intelligence, knowledge economy and national development have potentials to turn Nigerian economy into a robust economy and reclaim her rightful position as the giant of Africa. Nigeria is at cross road and calls for a credible alternative that is intellectually based rather than depending on crude oil which may not last forever. This study investigated artificial intelligence [AI], knowledge economy and national development. The study became necessary to find out how national development can be achieved using artificial intelligence and knowledge economy. The study tends to ascertain the extent to which artificial intelligence and knowledge economy can revamp Nigeria's economy in order to reclaim her rightful position as the giant of Africa. The study was anchored on Technology Acceptance Model (TAM)/theory and Media Dependency theory. Survey design was employed with the aid of 13-table questionnaire. The data obtained from questionnaire administered were analysed and presented using simple percentage and frequency table. Sample size of 400 was derived using Taro Yamane formula through sample random and purposive sampling techniques to reflect and represent all the residents in 12 wards of OREDO Local government area of Edo State. The result showed that there is need for diversification. Therefore more effort should be put in place especially in the areas of artificial intelligence, knowledge economy and national development. It also was revealed from the findings that artificial intelligence [AI] and knowledge economy have potentials to boost economy. There is need for training and education of citizens on the use of new technologies, artificial intelligence [AI], and knowledge economy for national development. The data collected revealed that there must be adequate government funding and purchase of AI because they consider its usefulness timely and fast in solving problems. This study concluded that Continue wide range campaigns and researches on the use of new technologies and organising orientation and symposiums for the masses on regular bases should be encouraged.

Keywords: Artificial Intelligence, Knowledge Economy and National Development.

Introduction

The intersection of *artificial intelligence (*AI) and knowledge economy for national development in essence represent a critical juncture where technological advancement and knowledge economy converge to play a pivotal role. In today's rapidly changing global landscape, nations are increasingly recognizing the importance of harnessing knowledge economy and artificial intelligence (AI) to drive sustainable growth and development. According to World Bank (2020), knowledge economy is a key

driver of economic growth, and artificial intelligence AI is transforming the way businesses, governments, and societies operate. Recent authors such as Schwab (2017) and Manyika *et al*. (2017) have emphasized the potential of AI to boost productivity, innovation, and competitiveness.

It's a statement of fact that the knowledge economy is characterized by the production, distribution, and consumption of knowledge and information, which currently has become a key driver of economic growth and development. It's worthy to note that artificial intelligence (AI) is a subset of the knowledge economy and its revolutionizing the way businesses, governments, and societies operate, with far-reaching implications for sustainable national growth.

The concept of knowledge economy was first introduced by Drucker (1969) and it refers to an economy where knowledge and information are the primary drivers of growth and development. Artificial intelligence (AI) can play a vital role in harnessing knowledge economy by enhancing innovation, improving decision-making and increasing efficiency. As noted by Bryn Jolfsson and McAfee (2014), AI has the potential to amplify human capabilities, making it an essential tool for sustainable national growth.

In this context, harnessing knowledge economy and AI is crucial for achieving sustainable national growth. Sustainable national growth is the ability of a nation to achieve resilient and independent economic growth while ensuring social equity, environmental protection, and long-term viability. Knowledge economy and AI can enhance innovation, productivity, and competitiveness, leading to increased economic growth and development. The benefits of knowledge economy and AI cannot be limited to economic growth alone. They also have the potential to address some of the most pressing challenges facing Nigeria nations today, such as climate change, healthcare, and education. For instance, AI can help optimize energy consumption, predict and prevent diseases, and personalize learning experiences.

However, harnessing knowledge economy and artificial intelligence AI for national growth is not without challenges. As highlighted by authors such as Ford (2019) and Webb (2019), there are concerns about job displacement, bias, and inequality; therefore, it is crucial for Nigeria to develop proactive policies and strategies that maximize the benefits of artificial intelligence (AI) while minimizing its risks. Moreover, the development and deployment of AI require significant investment in infrastructure, education, and training.

This study aims to explore the potential of harnessing knowledge economy and AI for sustainable national growth, with a focus on federal republic of Nigeria which has long depended on crude oil. By examining recent trends, case studies, expert opinions, challenges, and opportunities, this research seeks to provide actionable insights for policymakers, business leaders, and stakeholders.

Statement of the Problem

Despite the potential benefits of knowledge economy and AI, many nations struggle to harness their power for sustainable growth. The challenges include: Limited understanding of the knowledge economy and AI; Inadequate infrastructure and investment in AI development; insufficient education and training in AI-related fields; Concerns about job displacement, bias, and inequality. As a result, many nations are unable to fully leverage the potential of knowledge economy and AI, leading to missed opportunities for sustainable growth and development.

Research Objective

The objective of this research is to explore the potential of harnessing knowledge economy and AI for sustainable national growth, with a focus on identifying the opportunities, challenges, and strategies for maximizing the benefits while minimizing the risks. Specifically, the research aims to: what extent are respondents aware of knowledge economy and artificial intelligence [AI] for sustainable national growth?

How has knowledge economy and artificial intelligence [AI] yielded positive result in the fight for sustainable national growth?

How can harnessing knowledge economy and artificial intelligence [AI] yield positive result in the fight for sustainable national growth in Nigeria?
How can knowledge economy and artificial intelligence [AI] be used for sustainable national growth?
How can knowledge economy and artificial intelligence [AI] be effectively utilized for sustainable national growth?
- Investigate the current state of knowledge economy and AI in Nigeria
- Identify the opportunities and challenges of harnessing knowledge economy and AI for sustainable growth
- Develop strategies for maximizing the benefits of knowledge economy and AI while minimizing the risks
- Provide actionable insights for policymakers, business leaders, and stakeholders
By achieving this objective, the research aims to contribute to the existing body of knowledge on knowledge economy and AI, and provide practical guidance for nations seeking to harness their power for sustainable growth and development.
In the 21st century, the global economy is undergoing a significant transformation, driven by the emergence of the knowledge economy and artificial intelligence.

Knowledge Economy

A knowledge economy is an economic system where knowledge, information, and innovation are the primary drivers of growth, productivity, and competitiveness. In a knowledge economy, knowledge is a key resource and asset. Economic activity is focused on creating, sharing, and applying knowledge. Innovation and R&D are crucial for competitiveness. Human capital (education, skills, and expertise) is highly valued. Technology and digital infrastructure facilitate knowledge sharing and collaboration. Networks and partnerships enable knowledge exchange and diffusion. Intellectual property protection encourages innovation and investment in knowledge creation. Governments support knowledge-based industries and initiatives. The knowledge economy has transformed the way businesses, governments, and individuals operate, creating new opportunities for growth, innovation, and prosperity. Examples of knowledge based economies include: 1. Silicon Valley (USA) 2. Singapore 3. Finland 4. Sweden 5. Israel 6. South Korea 7. Taiwan 8. Canada
Characteristics of a Knowledge Based Economy include:
1. High-tech industries and services.
2. Research and development (R&D) intensity.
3. Highly educated and skilled workforce.
4. Innovation and entrepreneurship.
5. Digital infrastructure and connectivity.
6. Globalization and international collaboration.
7. Emphasis on intellectual property and patents.
8. Continuous learning and professional development.

Artificial Intelligence

Artificial intelligence is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalise or learn from past experience. Since the development of the digital computer in the 1940s, it has been demonstrated that computers can be programmed to carry out very complex tasks (Britannica, 2024).

Artificial intelligence (AI) refers to the development of computer systems and software that can perform tasks and exhibit capabilities that are typically associated with human intelligence. The goal of

AI is to create machines that can think, learn and solve problems in ways that emulate or even surpass human cognitive abilities. The key aspects of AI as identified by Asemah (2024) are:

a. **Machine Learning**: The ability of computer systems to learn and improve from experience without being explicitly programmed. This involves the use of algorithms and statistical models to enable systems to perform specific tasks effectively.

b. **Natural Language Processing (NLP)**: The ability of computers to analyse, understand and generate human language, including processing, interpreting and producing speech and text.

c. **Computer Vision**: The ability of computer systems to identify and process digital images and videos, similar to how human vision works.

d. **Reasoning and Problem-Solving**: The development of systems that can reason, make inferences and solve complex problems and algorithms often by imitating human decision-making processes.

e. **Robotics**: The integration of AI technologies with physical robots, enabling them to perform tasks autonomously and interact with their environment.

f. **Adaptive and Autonomous Systems**: The creation of systems that can adapt to changing conditions, make decisions independently and take actions without direct human control.

AI technologies have a wide range of applications across various industries, including healthcare, finance, transportation, education and entertainment. They are being used to automate tasks, enhance decision-making, personalise experiences and unlock new possibilities that were previously limited by human cognitive capabilities. Thus, the rapid advancements in AI have raised both excitement and concerns, as they have the potential to transform industries, disrupt traditional job markets and raise ethical considerations around the responsible development and deployment of these technologies. Artificial intelligence often relied on knowledge based economy *as* the primary vehicle for boosting nation's economic fortune.

Artificial Intelligence (AI) in Public Relations:

AI is a fast-paced and ever-changing technology. In public relations, with the aid of the internet, artificial intelligence continues to find new uses as it ability to analyze vast amounts of data in seconds makes it a perfect fit. Analyzing data that would have taken a team of humans days to complete can be done by AI in seconds, and provide insights that are very accurate and up-to-date. Using spell check, asking a voice assistant to play a song, or navigating with GPS is artificial intelligence (AI). These types of tools have been around for years, but for modern AI it goes far way beyond spell check: AI can be used to gather and synthesize information to improve its own decision making and functionality. Using AI in public relations is specifically an exciting and interesting technological outlook with tools ranging from traditional chatbots to cutting-edge, comprehensive platforms. Using AI tools for public relations is excellent for automating manual tasks. Scheduling and managing social media posts, drafting press releases, responding to customer comments, emails, and messages, building media lists, and taking notes. As their capability grows, it becomes more essential to understand how to use AI for public relations for the purpose of drug abuse prevention. Tools in AI are Chatbots. Chatbots are interactive AI that emulates a human by answering questions, and they have grown beyond handling customers' complaints. Businesses today use them to answer frequently asked questions and make personalized product recommendations, and internally to respond to messages and automate tasks. Chatbots can improve customers' satisfaction and increase efficiency, making them an essential link between public relations and AI.

Speech-to-Text Tools

Many different industries and professions use speech-to-text tools, which have been around for years. The most common use is to take notes in meetings, but today's tools are smarter than ever. With this

type of AI, public relations professionals can automatically transcribe press conferences, media interviews, and conference presentations, as well as write speeches.

Social Media Automation

Managing multiple social media platforms can be time-consuming. AI can simplify these processes and save time by automating things like creating content calendars, posting content, and replying to comments. It can also help you improve collaboration with your team and schedule and deliver messages at the right time, to the right audience.

Content Creation

Generative AI, which generates new content based on a prompt and includes tools like ChatGPT from OpenAI, has catapulted into the spotlight. This type of AI in public relations can create press releases, social media posts, headlines, interview questions, and outlines, and quickly customize it for different target audiences. With text-to-video and other visual capabilities, it can also make quickly, high-quality images and videos for social media, blog articles, and more. **Media Outreach**

AI for public relations can streamline and automate media outreach and relationship management by helping you identifies and connects with the right people. AI generated signals can identify changes in journalists' home mastheads, beats, and contact information, provide insights on their engagement, and more. It can even recommend new contacts based on your past searches. That means you spend less time building outreach lists and more time building valuable relationships.

Media Monitoring

The amount of data on the internet is forecast to reach 181 zettabytes by 2025 and AI for public relations can shift through all that data in seconds. Cutting-edge AI algorithms can not only provide accurate, real-time media analytics, but also shift through the noise to surface the stories that matter most to your brand. Here, it's important to remember that AI is only as strong as the data it's built on, so the more comprehensive your media data set, the better results you will get.

Sentiment Analysis

Brand sentiment analysis goes even further than media monitoring or social listening, providing you with a picture of how people feel about your brand. The best AI tools for public relations take traditional social listening and sentiment analysis to the next level, using AI to contextualize words, account for nuances and multiple opinions in a single post, and uncover the true intent behind conversations. AI has always been a recurring theme among the journalists and communicators, because all work or assignments done with AI is done right. Therefore, employing AI in national development would have tendencies to boost Nigeria's economy. AI can take care of easy, day-to-day tasks accurately and consistently, freeing up your team to focus on the big picture such as campaign strategy and optimization. It saves time and resources up-front, but run more efficient campaigns that boost your return on investment ROI.

Customer Engagement

AI can provide real-time insights into what's working in your campaigns – and what isn't. It can even give you accurate predictions. That helps you tailor your strategies, refine your messaging, and deliver the right content to the right people at the right time. When your campaign resonates with your audience, they will click, read, and convert.

Reputation Management

One of the biggest benefits of AI in public relations is the ability to proactively manage your brand reputation. AI tools can constantly monitor public sentiment, identifying both positive and negative patterns. You can then take action to magnify the good and manage the bad, safeguarding your reputation and creating happier customers.

Crisis Management

AI and public relations also go hand-in-hand when it comes to crisis management, helping to bring certainty to an uncertain landscape. These tools can predict how and when negative sentiment may turn

into a crisis, so you can create strategies to mitigate those risks. And if a crisis does happen, you'll be able to respond quickly and keep it from escalating.

Proven ROI

Ultimately, all of the above benefits of AI in public relations ladder up to one thing: growing the bottom line by improving the ROI of your campaigns. Not only that, they allow you to connect your PR activities to KPIs like click-through rate, conversions, and revenue, proving your team's positive impact on the business.

Embracing AI in Public Relations

As technology advances and becomes more accessible, we are sure to see even more partnerships between public relations and artificial intelligence. Yet communications will remain a very human art, one that depends on relationships, creativity, and innovation.

CisionOne brings together the best of technology and human expertise to uncover the stories that impact your brand, understand the true intent behind conversations, and simplify media outreach.

Empirical Review

Theoretical Framework

Theories are crucial to any empirical research, they provide the landscape of analysis and hypothesis testing, which are aimed at predicting phenomenal relevant to any research work. Several theories can be applied to the topic of harnessing knowledge based economy and artificial intelligence (AI) for sustainable national growth. However, this study is anchored on the following theories. Knowledge-Based View (KBV), Media Equation Theory and Technology Acceptance Model (TAM)/Theory**.** These theories can be used individually or in combination to provide a framework for understanding the relationship between knowledge based economy, AI, and sustainable national growth.

Knowledge-Based View (KBV)

This theory was developed by Grant (1996), Knowledge-Based View (KBV) focuses on the role of knowledge as a key resource for organizations and nations. The theory suggests that knowledge management and innovation are critical for sustainable growth.

Media Equation Theory

The media equation theory was proposed by Clifford Nass & Byron Reeves in 1996 at the Stanford University. The theory explains that people tend to respond to media as they would respond to another person or to places and phenomena in the physical world, depending on the cues they receive from the media.

The media equation theory also known as the computers are social actors (CASA) paradigm, is a theory in the field of human-computer interaction that suggests how people tend to interact with technology and media as if they were interacting with other people. Reeves & Nass (1996) argue that ''individuals' interactions with computers, television and new media are fundamentally social and natural, just like interactions in real life.'' The media equation theory of communication, therefore, argues that the expression "Media = Real Life" is true. Going by the media equation theory:

a. People tend to apply the same social rules and etiquette when interacting with computers, robots, artificial intelligence or other media as they do when interacting with other people.
b. People naturally tend to ascribe human-like traits, emotions and characteristics to non-human entities, such as computers, artificial intelligence, robots or virtual agents.
c. People often times engage in mindless behaviours when interacting with media, automatically applying social scripts and mental models that they use in human- to-human interactions.

d. People can experience psychological responses, such as social presence, feelings of affiliation and emotional responses, when interacting with media, just the same way they would respond to other people.

The media equation theory has important implications for media campaigns, especially via social media. The messages from social media can be treated by members of the public as if they were messages delivered in real life situation. This is also very apt in the use of AI for the dissemination of messages on knowledge based economy. This theory has been widely applied in the fields of human-computer interaction, human-robot interaction and the design of virtual assistants, chatbots and other interactive media.

Technology Acceptance Model (TAM)/Theory:

The Technology Acceptance Model (TAM) is another theory that is relevant to this study. The theory was propounded by Fred Davies and Richard Bagozzi (Davis, 1989; Bagozzi and Warsaw (1992) as cited in Olise (2013). The theory borders on the ease of use and usefulness of new technologies such as artificial intelligence (AI) to combat drug abuse. The principles behind this theory is that people use new technologies such as mobile phones, smart phones, Ipad and computers among others to explore artificial intelligence (AI) because they consider its usefulness timely and fast in solving problems . The relationship to the study, therefore, lies on the ease at which artificial intelligence (AI) is utilized by government scientists and scholars and its usefulness is based on the cognitive attitude of the users towards it. Just as this theory advocates, this study, which bothered on the artificial intelligence (AI) and knowledge based economy for sustainable national development, promotes the usefulness and ease of using new technologies to boost national economic development on the basis of cognitive attitude towards AI (Olise and Perekeme, 2015). The model's basic proposition is that an individual's attitude towards a new technology design system is a function of the perception of the degree of advantages that accrues from using the AI technology without stress, or its "ease of uses" (Davis, 1993 cited in Shittu, 2013). Furthermore, it postulates that perceives usefulness of AI and ease of use directly determine whether the individual will use AI as a new technology (Shittu, 2013). The popularity and increased usage of knowledge based economy shows the extent to which new technologies have been accepted greatly by countries and other users. This has been made possible and easy with the proliferation of mobile phone especially smartphones which has made browsing the internet easy and fast**.**

Research Methodology

The survey design was used for this study. The population of the study is drawn from residents of Oredo local government area of Edo State. The researcher randomly selected Oredo out of other local government areas in Edo states. The selected Oredo local government area (Edo South) has a total population of Oredo (Edo south), is 374,515, (Population Density, 2016).

The sample size for this work is 400, which is drawn from residents of Oredo Local Government Areas. This figure was derived using Taro Yamene Formula. The sample size of 400 was also deduced from the sample size determination formula proposed by Taro Yamane. The sampling techniques employed in the collection of data were the simple random sampling and the purposive techniques. The simple random technique was adopted to allow the researcher give all respondents in the defined population equal and independent chance of being selected for the sample. The research instrument for collecting data for this study is the questionnaire. The instrument for this study was administered to 400 (four hundred) residence of Oredo Local Government Area, with Benin City as the headquarters. Oredo local government area is made up of 12 (twelve) wards. The wards in oredo are: Gra./Oko, Ogba, Ogbe,Ogida, Uselu, New Benin, Ogbeson, Etete, Ologbo, Irimwinhin, Ugbekun and Oka To reach the populace, the researcher distributed the 400 copies of questionnaires among the 12 (twelve) wards in Oredo local government. The researcher with the aid of one research assistant gave 33 copies of the questionnaire to 33 respondents in Gra./Oko ward, Ogbe 33 copies, Ogida 33 copies, Uselu 33

copies, New Benin 33 copies, Ogbeson 33 copies, Etete 33 copies, Ologbo 33 copies, Irimwinhin 33 copies, Ugbekun 33 copies, and Oka 33 copies , with a total of 396 questionnaires. The remaining 4 copies of the questionnaires were randomly distributed to 4 residences in any of the ward. The research study covered all the wards in Oredo local government area. The completed copies of the questionnaires were collected on the spot upon completion. The method employed by the researcher for the collection of this study data, was the person – to – person approach with the aid of one (1) research assistant to reach out to the 400 respondents in the 12 wards of Oredo local government area in Benin, Edo state. In effect, the completed questionnaires were retrieved on the spot. This enabled the researcher to collect the entire questionnaires administered without losing any. It also afforded the researcher the opportunity to clarify issues before the respondents within the confines of research ethics. The method used by the researcher in analyzing data which were collected from respondents was the simple percentage method.

DATA PRESENTATION

The data collected from the field is presented as follows.

SECTION A: BIO DATA

Table 1: Showing Gender of respondents

Gender of Respondents	Frequency of Response	Percentage of Response (%)
Male	256	64 %
Female	144	36 %
Total	400	100 %

Source: Field Survey, 2024

From the data collected, majority of the respondents are males. This is because the male are 256 representing 64% of the total respondents, the number of female are 144 representing 36% of the total number of respondents.

Table 2: Showing the Age Distribution of Respondents

Age Range	Frequency of Response	Percentage of Response (%)
18-22 years	12	3
23-29 years	24	6
30-36 years	164	41
37 years and above	200	50
Total	400	100

Source: Field survey, 2024

Data collected from the field revealed that majority of the respondents are those who fall under 37 years and above as they are 200 representing 50% of the total number of respondents. Respondents who fall under the age range of between 18 – 22 years representing 3% of the total numbers of respondents are the least as they were only 12 of them.

Table 3: Showing the Marital Distribution of Respondents

Marital Status	Frequency of Response	Percentage of Response (%)
Single	10	2.5 %
Married	360	90 %
Separated	20	5%
Divorced	10	2.5%
Total	400	100%

Source: Field Survey, 2024

Among the respondents, the married are more. They are 360 representing 90% of the total number of respondents. While the singles and divorced are ten (10) respondents each representing 2.5% each, those that are separated are twenty (20) representing 5% of the total number of respondents.

Table 4: Showing the Religion Distribution of Respondents

Religion of Respondents	Frequency of Response	Percentage of Response (%)
African Traditional religion ATR	16	4 %
Christian	360	90%
Muslim	24	6 %
Total	400	100%

Source: Field Survey, 2024.

Majority of the respondents surveyed are Christians as 360 of them representing 90% of the total number of respondents identify with the religion. While 24 respondents representing 6% of respondents are Muslims, only 16 respondents representing 4% of the total number of respondents practice African traditional religion.

Table 5: Showing Distribution of Respondents per wards

Wards	Frequency of Response	Percentage of Response
GRA./OKO ward	33	8.5
OGBE	33	8.5
OGBA	33	8.5
OGIDA	33	8.5
USELU	33	8.5
NEW BENIN	33	8.5
OGBESON	33	8.5
ETETE	33	8.5
OLOGBO	33	8.5
IRIMWINHIN	33	8.5
UGBEKUN	33	8.5
OKA	33	8.5
Total	396	100

Source: Field Survey, 2024.

The above table gives a breakdown of the population of OREDO local government area in Benin City, Edo State.

Table 6: showing the extent to which respondents are aware of knowledge economy and artificial intelligence [ai] for sustainable national growth

Items	Frequency	Percentage
Large Extent	384	96%
Low Extend	10	2.5%
Not Exposed	06	2.5%
Total `	400	100%

Source: Field Survey; 2024

Majority of respondents agreed that they are aware of knowledge economy and artificial intelligence [ai] for sustainable national growth.

Table 7: Showing the Extent to which knowledge economy and artificial intelligence [ai] **has yielded positive result in the fight** for sustainable national growth

Items	Frequency	Percentage
Large Extent	16	4%
Low Extend	364	91%
Not Exposed	20	5%
Total `	400	100%

Source: Field Survey; 2024

Majority of the respondents surveyed agreed that knowledge based economy and artificial intelligence (AI) has not yielded positive result in the fight f or sustainable national growth in Nigeria as 364 of them representing 94% of the total number of respondents identify low extend. While 16 respondents representing 4% of respondent's claims to a large extent, only 20 respondents representing 5% of the total number of respondents claim not to be expose to any knowledge economy and artificial intelligence (AI)

Table 8: showing harnessing knowledge economy and artificial intelligence [ai] for sustainable national growth through

Items	Frequency	Percentage
Diversification of the economy	16	4%
Investing in Research and information, communication and technology	384	96%
None of the above	0	0%
Total `	400	100%

Source: Field Survey; 2024

Majority of the respondents surveyed which are 384 of them representing 96% of the total number of respondents identified and agreed that Diversification of the economy, Investing in Research and information, communication and technology is the way to harness knowledge based economy and artificial intelligence (AI) for sustainable national growth.

Table 9: Showing how harnessing knowledge economy and artificial intelligence [ai] can yield positive result in the fight for sustainable national growth in Nigeria

Items	Frequency	Percentage
Continues wide range media campaign using new technologies and Organising orientation and symposiums for the masses on harnessing knowledge based economy and artificial intelligence (AI)	198	49.5%
Investing in knowledge based economy, Researches and information, communication and technology	200	50%
Diversification of the economy	10	0.5%
Total `	400	100%

Source: Field Survey; 2024

The table above shows Majority of the respondents surveyed suggest and affirm that Continues wide range media campaign using new technologies and Organising orientation and symposiums for the masses on harnessing knowledge based economy and artificial intelligence (AI). Investing in knowledge economy, researches, information, communication and technology can yield positive result in for sustainable national growth in Nigeria.

Table 10: Showing: How can knowledge based economy and artificial intelligence (AI) be used for sustainable national growth.

Items	**Frequency**	**Percentage**
Through training and education on the use of new technologies like knowledge based economy, robotics and artificial intelligence (AI)	200	50%
there must be adequate research, government funding and purchase of knowledge based economy and artificial intelligence (AI) soft and hardware's for sustainable national growth	200	50%
None of the above	0	0%
Total `	400	100%

Source: Field Survey; 2024

The table above shows Majority of the respondents surveyed believe that knowledge based economy and artificial intelligence (AI) can be used for sustainable national growth through training and education on the use of new technologies like knowledge economy, robotics and artificial intelligence (AI). The data collected revealed that there must be adequate research, government funding and purchase of knowledge economy and artificial intelligence [AI] soft and hardware's for sustainable national growth

Table 11: Showing: How can knowledge based economy and artificial intelligence (AI) be effectively utilized for sustainable national growth

Items	**Frequency**	**Percentage**
Through training and education in formal and informal setting on the importance knowledge economy, robotics and artificial intelligence (AI)	199	49.8%
Provision of a strong policy framework and adequate government funding and purchase of knowledge economy, robotics and artificial intelligence (AI) hardware's and software technologies. More so creating a	201	50.2%

ministry to oversee it.		
Nome of the above	0	0%
Total `	400	100%

Source: Field Survey; 2024

From the data collected as indicated above in table 11, respondents are of the view that Provision of a strong policy framework and adequate government funding and purchase of knowledge based economy, robotics and artificial intelligence (AI) hardware's and software technologies. This can also be done through training and education in formal and informal setting on the importance of knowledge based economy, robotics and artificial intelligence (AI)

Discussion of findings

RQ1: What is the extent to which knowledge based economy and artificial intelligence (AI) has yielded positive result in the fight for sustainable national growth?

From the various data presented as shown on the various tables establishes the fact that the Majority of the respondents surveyed agreed that knowledge economy and artificial intelligence (AI) has not yielded positive result in the fight for sustainable national growth in Nigeria as expected because respondents identify low extend. While very few respondents claim not to be exposed to any knowledge economy and artificial intelligence (AI). From the data collected from the field as shown in table 6, show that to a large extent Majority of respondents in Oredo local government area agreed that they are aware of knowledge based economy and artificial intelligence (AI) for sustainable national growth.

RQ2: How harnessing knowledge based economy and artificial intelligence (AI) can yield positive result in fight for sustainable national growth in Nigeria

The answer to this question can be proffered from Table 8 and 9. Which suggest and affirm that Majority of the respondents surveyed identified and agreed that Diversification of the economy, investing in Research and information, communication and technology is the way to harness knowledge based economy and artificial intelligence (AI) for sustainable national growth. In the same vain table 9 shows Majority of the respondents surveyed suggest and affirm that Continues wide range media campaign using new technologies and Organising orientation and symposiums for the masses on harnessing knowledge economy and artificial intelligence (AI). Investing in knowledge economy, researches, information, communication and technology can yield positive result in for sustainable national growth in Nigeria. More so Table 10 shows Majority of the respondents surveyed believe that knowledge based economy and artificial intelligence (AI) can be used for sustainable national growth. It provides a framework for the question from the data gathered that showed through training and education on the use of new technologies like knowledge economy, robotics and artificial intelligence (AI). The data collected revealed that there must be adequate research, government funding and purchase of knowledge based economy and artificial intelligence [AI] soft and hardware's for sustainable national growth. AI is a fast-paced and ever-changing technology. With the aid of the internet, artificial intelligence continues to find new uses as it ability to analyze vast amounts of data in seconds makes it a perfect fit. Data that would have taken a team of humans days to complete can be done by AI in seconds, and provide insights that are very accurate and up-to-date. AI can be used to gather and synthesize information to improve its own decision making and functionality. Using AI in public relations is specifically an exciting and interesting technological outlook with tools ranging from traditional chat bots to cutting-edge, comprehensive platforms. Chatbots are interactive and can improve audience satisfaction and increase efficiency, making them an essential link between public relations and AI. Using AI tools for public relations is excellent for automating manual tasks. Scheduling and managing social media posts, drafting press releases, responding to customer

comments, emails, and messages, building media lists, and taking notes. As their capability grows, it becomes more essential to understand how to use AI for public relations for the purpose of drug abuse prevention. The data collected revealed that there must be adequate government funding and purchase of AI. Olise (2013) noted that Technology Acceptance Model (TAM) borders on the ease of use and usefulness of new technologies such as artificial intelligence AI. The principles behind this theory is that people use new technologies such as mobile phones, smart phones, Ipad and computers among others to explore artificial intelligence AI because they consider its useful timely and fast in solving problems.

RQ3: How can knowledge based economy and artificial intelligence (AI) be used for sustainable national growth

Table 10 shows Majority of the respondents surveyed believe that knowledge economy and artificial intelligence (AI) can be used for sustainable national growth through training and education on the use of new technologies like knowledge based economy, robotics and artificial intelligence (AI). The data collected revealed that there must be adequate research, government funding and purchase of knowledge based economy and artificial intelligence (AI) soft and hardware's for sustainable national growth

RQ4: How can knowledge based economy and artificial intelligence (AI) be effectively utilized for sustainable national growth

The data collected as indicated above in table 11, respondents are of the view that Provision of a strong policy framework and adequate government funding and purchase of knowledge based economy, robotics and artificial intelligence (AI) hardware's and software technologies. This can also be done through training and education in formal and informal setting on the importance of knowledge based economy, robotics and artificial intelligence (AI). The study revealed that in public relations, with the aid of the internet artificial intelligence continues to find new uses as it ability to analyze vast amounts of data in seconds makes it a perfect fit. Public relation is a planned, deliberate and sustained effort by an organisation to establish and maintain good cordial, mutual relationship and goodwill between an organization and it public {Nigerians}. According to the Mexican declaration (1978) public relation is the art and science of analyzing trend, predicting their consequences, and counseling organizations leadership and implementing planned programmes of action which will serve both an organization and the public's interest.

Conclusion

Knowledge based economy and artificial intelligence (AI) can be harnessed for sustainable national growth. The result showed that knowledge based economy and artificial intelligence (AI) has not yielded positive result in the fight for sustainable national growth in Nigeria as expected because respondents identify low extend. While very few claim not to be exposed to any knowledge based economy and artificial intelligence (AI). Despite majority being aware of knowledge based economy and artificial intelligence (AI) capabilities in creating sustainable national growth, the study suggested and affirmed that Nigeria needs diversification of the economy, and investing in researches in the area of information, communication and technology, which is the way to harness knowledge based economy and artificial intelligence (AI) for sustainable national growth. More so the study concluded that knowledge based economy and artificial intelligence can be used for sustainable national growth through training and education in formal and informal setting on the use of new technologies and importance of knowledge based economy, robotics and artificial intelligence (AI). The study revealed that good public relations is needed, with the aid of the internet, artificial intelligence continues to find new uses as it ability to analyze vast amounts of data in seconds makes it a perfect fit.

The study revealed that there must be adequate research, government funding and purchase of knowledge based economy and artificial intelligence [AI] soft and hardware's for sustainable national growth. There should be Provision of a strong policy framework. More so, it will be proper to create a ministry to oversee it.

Recommendations

Based on findings of this study, the researcher recommended as follows that Continues wide range media campaigns using public relations and new technologies in Organising orientation and symposiums for the masses on harnessing knowledge based economy and artificial intelligence (AI). Investing in knowledge based economy, researches, information, communication and technology can yield positive result for sustainable national growth in Nigeria. It is recommended that Nigeria government should look in this direction and make necessary policies in this regards.

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