Indigenous Knowledge Database Management System and Employments Generation: A Case of South-South Nigeria

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Abstract
This study adopted a correlation research design on “indigenous knowledge database management system and employments generation: a case of south-south Nigeria”. The population of the study was numbered 300 Indigenous Knowledge Practitioners. The sample size adopted for this study was a census sample of 300 because it was a manageable size. The instrument adopted was called “Indigenous Knowledge Database Management System and Employments Generation” (IKDMSAEG). Three experts validated the instrument, and it was subjected to face and content validation from Department of Business Education in Rivers State University, Port-Harcourt. To ascertain the reliability and consistency of measurement, phone conversations of two (2) week test retest of internal consistency were done on 30 Indigenous Knowledge Practitioners from Kanu and Kaduna states, using a Scale Score Reliability Estimates of Test-Retest Sample which yielded 0.85 reliability coefficients. Copies of the questionnaire were administered to the respondents by the researcher and ten research assistants via phone conversations. A total of 300 copies were administered and successfully retrieved. The study discovered that there were high employments areas in indigenous knowledge and creating data base management system for indigenous knowledge has led to and will continue to lead to high rate of employments generation in south-south Nigeria. Among other things, it was recommended that governments of the indigenous people should work together to develop database for indigenous knowledge for employments generation.

Keywords: Developing Database, Database Management System, Indigenous Knowledge, Employments Generation, Employments Areas, South-South and Nigeria.

Introduction
Indigenous Knowledge (IK) is local knowledge that is unique to every culture or society. Indigenous knowledge deals with profound detailed and shared knowledge, beliefs and rules with regards to the physical resource, social norms, health, ecosystem, culture, livelihood of the people who interact with environment both in rural and urban settings (Singh , 2016 Ghouloum, 2012). Indigenous Knowledge is the basis for local-level decision making in the areas of agriculture, health care, food preparation, education, natural-resource management, and a host of other activities in communities. IK provides problem-solving strategies for communities. Communities rather than individuals commonly hold IK. IK is a tacit knowledge
and therefore difficult to codify, it is embedded in community practices, institutions, relationships and rituals, often shunned by modern scientific knowledge (Husain & Nazim, 2015 & Singh, 2016). Indigenous knowledge is the local knowledge that is unique to a culture or society. Other names for it include: ‘local knowledge’, ‘folk knowledge’, ‘people’s knowledge’, ‘traditional wisdom’ or ‘traditional science’ etc. This knowledge is passed from generation to generation, usually by word of mouth and cultural rituals, and has been the basis for agriculture, food preparation, health care, education, conservation and the wide range of other activities that sustain societies in many parts of the world (UNESCO, 2010), yet seems not to have adequate database and database management system with prospect for employments generation.

Schorlars upheld that it is also the duty of the personnel staff to maintain record of employments tests of variations of indigenous knowledge globally and in African continent so as to ascertain the prospect of IK (Familusi, & Adekanmbi, 2019). According to (Masango, 2010), indigenous knowledge (IK) ‘is that knowledge that is held and used by a people who identify themselves as indigenous of a place based on a combination of cultural distinctiveness and prior territorial occupancy relative to a more recently-arrived population with its own distinct and subsequently dominant culture’. Traditional knowledge (TK) is ‘the totality of all knowledge and practices, whether explicit or implicit. This knowledge is established on past experiences and observation’ (Okumus, 2013 & Mugabe, 2009).

Following the definitions of indigenous knowledge and traditional knowledge, one can state that indigenous traditional knowledge is the totality of all knowledge and practices established on past experiences and observation that are held and used by a people which have created various employments. Okpokwasili (2019) and Peyala (2011) opined that indigenous knowledge encompasses indigenous names and designations, and folklore. Indigenous knowledge includes intangible African heritage that are ‘natural resources and cultural practices’. Some of these cultural practices are folklore that encompasses myths, beliefs, superstition, oral history, totem, ‘taboos and rituals related to species’, but without database for easy access and usage. Indigenous knowledge has a high prospect in which international communities are interested but problem of where and how to access it. Okpokwasili (2019) also noted that Indigenous Knowledge (IK) is the local knowledge that is unique to a culture or society. This knowledge is passed from generation to generation, usually by word of mouth and cultural rituals, and has been the basis for agriculture, food preparation, health care, education, conservation and the wide range of other activities that sustain societies in many parts of the world yet lack database.

In the view of (Singh, 2016), the vast majority of databases and databases records are produced in developed countries but seems not adequate moreover in Africa and Nigeria in specific. It is felt that Indigenous Knowledge databases available in developing countries will provide a valuable source of information to the people and beyond. The convergence of humanitarian and scientific interests is leading to a scramble to document this knowledge in electronic databases so that it can be preserved, shared and utilized. Developing database through the use of ICT enables capturing, storing and sharing of Indigenous Knowledge for prospect of employments generation.

Database is a structure that stores organized information. Most databases contain multiple tables, which each may include several different fields. For example, a company database may include tables for products, services, employees, and financial records etc. Each of these tables would have different fields that are relevant to the information stored in the table (Techterms.com, 2019). Database management system (DBMS) is a software package designed to define, manipulate, retrieve and manage data in a database. A DBMS generally
manipulates the data itself, the data format, field names, record structure and file structure. It also defines rules to validate and manipulate this data. A DBMS relieves users of framing programs for data maintenance. Fourth-generation query languages, such as SQL, are used along with the DBMS package to interact with a database (Techopedia.com, 2019). Some other DBMS examples include: MySQL, SQL Server, Oracle, dBASE and FoxPro. Craig and Simon (2019) posited that database management system (DBMS) is system software for creating and managing databases. A DBMS makes it possible for end users to create, read, update and delete data in a database. The most prevalent type of data management platform essentially serves as an interface between databases and end users or application programs by ensuring that data is consistently organized and remains easily accessible. It will also support the incorporation of indigenous knowledge with modern scientific and technical knowledge to create easily accessible indigenous knowledge information systems as well as provide a platform for advocating for improved benefit of the poor from their intellectual property rights and indigenous creators.

Economically, employment provides income to poor families, revives domestic demand for goods and services, and stimulates overall growth. Socially, employment can also promote social healing, encourage the return of displaced persons, and improve social welfare in the long run (Usip.org, 2019). Employment prospects are career/employment opportunities presented. It is looking forward to new employment openings. If the policy objective is to improve the employment prospects of a targeted group, then the emphasis will be on the increase in employment in the target group in the short run, and on the improved employment prospects of that group in the long run. Therefore, the need for emphasis on indigenous knowledge database management system and employment generation in Nigeria.

Review of Related Literature
Reasons to Create Database for Indigenous Knowledge/Employment Generation
Bannister and Smith (2010) noted that the original idea behind creating an Indigenous Traditional Knowledge resource database was to systematically identify, compile, and make more accessible information on the application of ITK to sustainable forest management. Much relevant information is found outside of “forestry”, e.g., land use and occupancy studies, ethno-biology, land use planning, natural resource management, co-management, parks and protected areas (especially tribal parks). Information is housed in diverse collections or locations, making it difficult to know where to look, let alone what to look for. The “grey literature” (e.g., government, community and contract reports, strategic or stewardship plans, discussion papers, newsletters, websites, and other publications that are generally not peer-reviewed and not controlled by commercial publishing interests) is a particularly diverse and underutilized source of information on Indigenous Traditional Knowledge implementation in forest management, especially for community-based initiatives and other issues. However, grey literature is difficult to access because it is not routinely catalogued and no systematic way exists to access the information. A database on the application of ITK in forest management and indigenous knowledge would substantially increase efficiency in accessing and applying relevant information to policy and practices.

The form envisioned for the ITK database was a simple, searchable online database that contains articles (academic and non-academic) on ITK implementation or applications that communities, practitioners, academics and others want to share. Basic components envisioned included: complete citations (i.e., title, authors/editors, date, other reference details), abstracts or annotations, and links to full text or information on how to access full text (e.g., some articles will be open access, some will be accessible through interlibrary loan services, while others will require a subscription or purchase of hard copy). Key features include: a multi-category search function (e.g., subject, author, title, key words), a “retrieve” function for those articles
accessible online, and an electronic option to submit additional articles for inclusion in the database. The database would be open access and without cost to individual users. Interactivity among users could be encouraged through the use of a blog or web chat function.

Today, indigenous knowledge had been developed covering all occupational works and skills with the combination of using animal tools and modern technologies to derive its goals and objectives. Indigenous knowledge in the 21st century is playing pivotal roles in the fields of medicine, agriculture, arts and crafts, engineering, education, manufacturing, custom and culture, humanities, religion etc. Indigenous knowledge through direct or indirect employments, many able bodied Nigerians are gainfully employed. Indigenous knowledge skills remained the largest employer of labour in the Ekiti, Ondo, and Osun states and others, if it is funded regularly, it can take Nigeria out of recession (Familusi & Adekanmbi, 2019).

The authors further opined that the Kenya Ngo(s) strengthening information training and enterprise (site) ran the Juan kali project from 1996-1998 to improve traditional apprenticeship training.

The objective were to upgrade the technical and managerial skills of master craft people, to enable them diversify their production, strengthen their capacity building to provide quality training to the apprentices, and improve the selected vocational institutes to provide the much needed master crafts people.

**Application or Function of DBMS in Different Areas of Employments**

Following fields are where the main Database Applications lie (Techterms.com, 2019):

- Banking: all transactions
- Airlines: reservations, schedules
- Universities: registration, grades
- Sales: customers, products, purchases
- Online retailers: order tracking, customized recommendations
- Manufacturing: production, inventory, orders, supply chain
- Human resources: employee records, salaries, tax deductions

Defining, constructing and manipulating the database for various applications as displayed figure 1 below:

![Database Management Software](Astera.com, 2019)

**Figure 1: Database Management Software**

Database systems are designed to manage large bodies of information. In a relational database management system (RDBMS), the most widely used type of DBMS, API is SQL, a standard programming language for defining, protecting and accessing data in an RDBMS and this is applicable to indigenous knowledge database management. See figure 2 below:
Model Types of Employment Generation through Indigenous Knowledge

Below figure 3 is the globe model of science and indigenous-knowledge relations that leads to employments generation.

![Globe Model](image)

**Figure 3:** The globe model of science and indigenous-knowledge relations (Paul, 2006).

This globe model of science and indigenous-knowledge relations leads to employments in areas like native medicine, canoe carving, native medicines, wooden seats, wooden beds, native mats, native caps or hats, native houses, tattoos, native methods of fishing, native traps. Others are native methods of apprenticeships, birth support methods, teaching and learning, cultural entertainment, cooking and selling, created employment in teaching and learning local languages, create employment for researchers, human bodies/bones fixing (Paul, 2006).

Some Major Functions of Database Management Software in Information Management

Some of its key benefits that are also applicable to indigenous knowledge database management (Astera.com, 2019):

1. **Simplified Data Sharing**

A DBMS allows users (onsite as well as remote) to easily share the data by following the correct authorization protocols. It provides operators access to well-managed data. As a result, they can rapidly respond to variations in the environment. By using a DBMS, you can yield speedy responses to impromptu queries as the data is properly managed and up-to-date. In case of any ad hoc query, the database management software returns a response (known as the query result set) to the application.
2. **Enhanced Data Safety**
The threats of data security breaches become more pronounced when several users access the database. A database management software offers better implementation of data confidentiality and safety guidelines through controlled user access.

3. **Improved Data Integration**
A DBMS stimulates an integrated view of the company’s data. The company can quickly see how activities in one division of the organization influence other divisions.

4. **Better Decision-Making**
A database management system provides access to well-managed data, making it possible for users to make accurate and timely decisions. It offers a streamlined framework to enable data quality initiatives, improving data management procedures and yielding better-quality information.

5. **Improved Efficiency**
Streamlined data access, along with the tools that convert data into valuable information, enable operators to make swift, knowledgeable decisions. This improves database performance and efficiency.

**UN Declaration on the Rights of Indigenous Peoples/Knowledge**
As described by the president of the UN General Assembly as “a major step forward”, the United Nations Declaration on the Rights of Indigenous Peoples was adopted by the United Nations General Assembly during its 62nd session at UN Headquarters in New York City on 13 September 2007. The Declaration is the result of nearly 25 years of contentious negotiations over the rights of native people to protect their lands and resources, and to maintain their unique cultures and traditions. Countries voted overwhelmingly in favour of the Declaration, with 143 in favour and only 4 against (11 countries abstained from the vote), (UNESCO, 2010).

**Women’s Knowledge: Traditional Medicine and Nature**
The Islands of Reunion, Mauritius and Rodrigues have their own unique medical traditions that have emerged from multiple origins through a process of realisations. This book brings to our attention the knowledge of medicinal plants and medical practices of the women of these Islands, with special focus on childbirth. It also considers the place of medicinal knowledge within these evolving societies which are actively confronting the threats and opportunities. Okpokwasili (2019) identified the following and explained as reasons for creating database for indigenous knowledge:

1. **A Spiritual Relationship with the Land**
   For indigenous people, the land is the source of life, a gift from the creator that nourishes, supports and teaches. Although indigenous peoples vary widely in their customs, cultures, and impact on the land, all consider the Earth like a parent and revere it accordingly. ‘Mother Earth’ is the centre of the universe, the core of their culture, the origin of their identity as a people. She connects them with their past (as the home of ancestors), with the present (as provider of their material needs), and with the future (as the legacy they hold in trust for their children and grandchildren).

2. **Natural Remedies and Medicines**
   In many parts of the world, indigenous societies classify soils, climate, plant and animal species and recognise their special characteristics. Indigenous people have words for plants and insects
that have not yet been identified by the world’s botanists and entomologists. The Hanunoo people of the Philippines, including the Obolo nation of Niger Delta of Rivers State, for example, distinguish 1600 plant species in their forest, mangroves, and 400 more than scientists working in the same area of the estimated 250,000 to 500,000 plant species in the world, more than 85% are in environments that are the traditional homes of indigenous people. Nearly 75% of 121 plant-derived prescription drugs used worldwide were discovered following leads from indigenous medicine. Globally, indigenous peoples use 3000 different species of plant to control fertility alone.

3. **Sustainable Resource Management**
The industrial world is facing an ecological crisis, yet few industrial economists would admit they could learn from indigenous people. Their economies are often called ‘primitive’, their technology dismissed as ‘Stone Age’, and most governed the key to success of sustainability. Indigenous people today use the resources available without depleting them. They use their intimate knowledge of plants, soils, animals, climate, and seasons, not to exploit nature but to co-exist alongside with it. This involves careful management, control of population, the use of small quantities but a wide diversity of plants and animals, small surpluses, and minimum wastage.

4. **Sustainable Social Relationships**
Social cohesion has been the key to survival for many indigenous cultures. Food gathering and hunting depend on mutual support and co-operation, and disharmony within a part of the group is dangerous to the whole. In many cultures men and women have developed complementary, if not equal roles; political decisions are arrived at by consensus in many cultures, and other social arrangements that benefit the entire community have often been incorporated into indigenous cultural traditions.

**Prospects of Indigenous Knowledge in the Global Audience**
Bhoi (2017) ICT can be used to develop a database by:
- Capture, store and disseminate indigenous knowledge so that traditional knowledge is preserved for the future generation
- Promote cost-effective dissemination of indigenous knowledge
- Create easily accessible indigenous knowledge information systems
- Promote integration of indigenous knowledge into formal and non-formal training and education
- Provide a platform for advocating for improved benefit from IK systems of the poor
- UN Declaration on the Rights of Indigenous Peoples/Knowledge
- Inclusion of indigenous knowledge in the curriculum of some universities
- Indigenous knowledge offering solutions to world problems
- The global interest in indigenous knowledge

**Statement of the Problem**
Over the centuries, the indigenous people and their knowledge have been overlooked and seem not useful despite the immeasurable roles in various areas and in specific in employment generation. The worse situation is the indigenous knowledge without organized area of information known as database management system. The UN declaration for indigenous peoples’ right is a wakeup call for the people concerned, especially governments in Nigeria. There is now need for it more than ever before for a developed database management system concerning indigenous knowledge as a people as regard to employments generation. Therefore,
the reason for this topic “Indigenous knowledge database management system and employments generation: a case of south-south Nigeria”

**Purpose of the Study**
The purpose of this study is investigating indigenous knowledge database management system and employments generation: a case of south-south Nigeria. The study specifically sought to:

1. To identify the various categories of employments areas in indigenous knowledge in south-south Nigeria
2. To identify the relationship between indigenous knowledge database management system and employments generation in south-south Nigeria

**Research Questions**
The under stated research questions were posed to guide this study

1. What are the various categories of employments areas in indigenous knowledge in south-south Nigeria?
2. What is the relationship between indigenous knowledge database management system and employments generation in south-south Nigeria?

**Hypotheses**
Two null hypotheses were formulated and tested at 0.05 level of significance

1. There is no significant relationship between the various categories of employments areas and indigenous knowledge in south-south Nigeria
2. There is no significant relationship between indigenous knowledge database management system and employments generation in south-south Nigeria

**Method**
This study adopted a correlation research design on investigating indigenous knowledge database management system and employments generation: a case of south-south Nigeria. The study covered, Akwa Ibom state, Bayelsa state, Cross River state, Delta state, Edo state, and Rivers state. The population of the study was numbered 300 Indigenous Knowledge Practitioners. Akwa Ibom State was 45, representing 15%, Bayelsa State was 55 representing 18%, Cross River State was 50, representing 17%, Delta State was 55, representing 18%, Edo State was 50, representing 17% and Rivers State was 45, representing 15%. The breakdown is as stated below using Exploded Pie Chart in 3-D for the presentation of the population:
A census sample size adopted for this study was 300. The sample of 300 was adopted because it is a manageable size. The sample size is as presented including their percentages in Exploded Pie Chart in 3-D below:

The instrument adopted was called “Indigenous Knowledge Database Management System and Employments Generation” (IKDMSAEG). Three experts validated the instrument, and it was subjected to face and content validation from Department of Business Education in Rivers State University, Port-Harcourt. To ascertain the reliability and consistency of measurement, a two (2) week test retest of internal consistency were done on 30 Indigenous Knowledge Practitioners from Kanu and Kaduna states, using a Scale Score Reliability Estimates of Test-Retest Sample which yielded 0.85 reliability coefficients. Copies of the questionnaire were administered to the respondents by the researcher and ten research assistants via phone calls.
A total of 300 copies were administered and successfully retrieved. Mean statistics was used to analyse the two research questions and Standard Deviation used to find out the extent in which scores in the distribution clustered around the means. Pearson Product Moment Correlation Coefficient (r) was adopted as statistical tool for testing the two hypotheses to determine the extent of significant relationship between the variables under investigation. Mean scores from 4.50 to 5.00 was seen as Very High Employments Areas In Indigenous Knowledge (5 points), 3.50 to 4.49 High Employments Areas In Indigenous Knowledge (4 points), 2.50 to 3.49 Moderate Employments Areas In Indigenous Knowledge (3 points), 1.50 to 2.49 Low Employments Areas In Indigenous Knowledge (2 points) and 0.50 to 1.50 Very Low Employments Areas In Indigenous Knowledge (1 point). The decision point was that, any calculated grand mean from 3.0 and above will be accepted and any grand mean below will be rejected. Also, any calculated value of (r) Pearson Product Moment Correlation Coefficient that is greater than > the critical table value of 0.113 at 0.05 significant levels such null hypothesis (H₀) will be rejected, but if the critical table value is greater than > the computed value such null hypothesis will be accepted.

Results Presentation

Research Question 1: What are the various categories of employments areas in indigenous knowledge in south-south Nigeria?

Table 1: Computed Mean and Standard Deviation on the Various Categories of Employments Areas in Indigenous Knowledge in South-South Nigeria

<table>
<thead>
<tr>
<th>SN</th>
<th>Item statement</th>
<th>( \bar{x} )</th>
<th>SD</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>native medicine, human bodies/bones fixing</td>
<td>3.8</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td>2</td>
<td>cenoe carving, wooden seats</td>
<td>3.8</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td>3</td>
<td>wooden beds, native mats,</td>
<td>3.6</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td>4</td>
<td>native houses, tattoos, native methods of fishing</td>
<td>3.6</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td>5</td>
<td>Native apprenticeships</td>
<td>3.8</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td>6</td>
<td>cultural entertainment, cooking and selling</td>
<td>3.7</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td>7</td>
<td>native caps, native traps</td>
<td>3.8</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td>8</td>
<td>birth support methods</td>
<td>3.8</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td>9</td>
<td>create employment for researchers</td>
<td>3.7</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
<tr>
<td></td>
<td>Grand mean</td>
<td>3.7</td>
<td>0.9</td>
<td>HEAIIK</td>
</tr>
</tbody>
</table>

Source (Field Study, 2020)

In analysing research question 1, and items on table 1, the grand mean showed 3.7 representing high employment areas in indigenous knowledge in south-south Nigeria. The Grand Standard Deviation was 0.9 representing closeness in the views of the respondents on high employment areas in indigenous knowledge in south-south Nigeria. The views of the respondents show that there were high employment areas in indigenous knowledge in south-south Nigeria. Meaning indigenous knowledge has created high employment areas in south-south Nigeria

Research Question 2: What is the relationship between indigenous knowledge database management system and employments generation in south-south Nigeria?
Table 2: Computed Mean and Standard Deviation on the relationship between indigenous knowledge data base management system and employments generation in south-south Nigeria

<table>
<thead>
<tr>
<th>SN</th>
<th>Item statement</th>
<th>( \bar{x} )</th>
<th>SD</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capture, store and disseminate indigenous knowledge so that traditional knowledge is preserved for the future generation employments</td>
<td>3.8</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td>2</td>
<td>Promote cost-effective dissemination of indigenous knowledge for employment generation</td>
<td>3.8</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td>3</td>
<td>Create easily accessible indigenous knowledge information systems to aid in employment generation</td>
<td>3.6</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td>4</td>
<td>Promote integration of indigenous knowledge into formal and non-formal training and education for employment generation</td>
<td>3.6</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td>5</td>
<td>Provide a platform for advocating for improved benefit from IK systems of the poor to generate employments</td>
<td>3.8</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td>6</td>
<td>UN Declaration on The Rights of Indigenous Peoples/Knowledge</td>
<td>3.7</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td>7</td>
<td>Inclusion of indigenous knowledge in the curriculum of some universities will generate employment</td>
<td>3.8</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td>8</td>
<td>Indigenous knowledge offering solutions to world problems</td>
<td>3.8</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td>9</td>
<td>The global interest in indigenous knowledge will lead to employment generation</td>
<td>3.7</td>
<td>0.9</td>
<td>HIKDSEG</td>
</tr>
<tr>
<td></td>
<td><strong>Grand mean</strong></td>
<td><strong>3.7</strong></td>
<td><strong>0.9</strong></td>
<td><strong>HIKDSEG</strong></td>
</tr>
</tbody>
</table>

Source (Field Study, 2020)

In analysing research question 2, based on the questionnaire items numbered 1 to 9 on table 2, the Grand Mean showed 3.7, representing High indigenous knowledge data base management system and employments generation in south-south Nigeria. The Grand Standard Deviation was 0.9 representing closeness in the views of the respondents on indigenous knowledge data base management system and employments generation in south-south Nigeria. This means that
creating data base management system for indigenous knowledge has led to and will continue to lead to high rate of employments generation.

**Hypothesis 1:** There is no significant relationship between the various categories of employments areas and indigenous knowledge in south-south Nigeria

**Table 3: Summary of Calculated (R) of the Various Categories of Employments Areas and Indigenous Knowledge in South-South Nigeria**

<table>
<thead>
<tr>
<th>SN</th>
<th>Variables</th>
<th>N</th>
<th>(\bar{x})</th>
<th>SD</th>
<th>SE</th>
<th>Df</th>
<th>Alpha Level</th>
<th>R-cal.</th>
<th>R-tab.</th>
<th>Decision</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Various categories of employment areas</td>
<td>300</td>
<td>3.8</td>
<td>0.9</td>
<td>0.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Indigenous Knowledge</td>
<td>300</td>
<td>3.7</td>
<td>0.8</td>
<td>0.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source** (Field Study, 2020)

The calculated Pearson Product Moment Correlation Coefficient (r) 0.716 is greater than (> the critical table value of 0.113 at 0.05 significant levels. Since the calculated value of (r) 0.716 is greater than (> the critical table value of 0.113, the null hypothesis which stated that there is no significant relationship between the various categories of employments areas and indigenous knowledge in south-south Nigeria is rejected. The computed value of (r) 0.716 signifies a high positive significant correlation between the various categories of employments areas and indigenous knowledge in south-south Nigeria.

**Hypothesis 2:** There is no significant relationship between indigenous knowledge database management system and employments generation in south-south Nigeria

**Table 3: Summary Of Calculated (R) of indigenous knowledge data base management system and employments generation in south-south Nigeria**

<table>
<thead>
<tr>
<th>SN</th>
<th>Variables</th>
<th>N</th>
<th>(\bar{x})</th>
<th>SD</th>
<th>SE</th>
<th>Df</th>
<th>Alpha Level</th>
<th>R-cal.</th>
<th>R-tab.</th>
<th>Decision</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indigenous knowledge data base management system</td>
<td>300</td>
<td>3.4</td>
<td>0.9</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Employments generation</td>
<td>300</td>
<td>3.4</td>
<td>0.8</td>
<td>0.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Source** (Field Study, 2020)

The calculated Pearson Product Moment Correlation Coefficient (r) 0.715 is greater than (> the critical table value of 0.113 at 0.05 significant levels. Since the calculated value of (r) 0.715 is greater than (> the critical table value of 0.113, the null hypothesis which stated that there is no significant relationship between indigenous knowledge database management system and employments generation in south-south Nigeria is rejected. The computed value of (r) 0.715...
signifies a high positive significant correlation between indigenous knowledge database management system and employments generation in south-south Nigeria. This means that there is a high positive significant correlation between indigenous knowledge database management system and employments generation in south-south Nigeria.

Discussion of Findings
From the results of this study it was obvious that there were high employment areas in indigenous knowledge and creating database management system for indigenous knowledge will lead to high rate of employments generation. The opinions of the respondents are not contrary to that of (Singh, 2016), (Ojeifo & Azelama, 2007), (Familusi, & Adekanmibi, 2019), (Fien, 2006), (Techterms.com, 2019), (Techopedia.com, 2019), and (Craig & Simon, 2019) who saw native medicine, agriculture human bodies/bones fixing, canoe carving, wooden seats, wooden beds, native mats, cultural entertainment, cooking and selling, capture, store as areas of high employment generations and creating data base management system for indigenous knowledge has led to and will continue to lead to high rate of employments generation in south-south Nigeria.

Conclusion
From the findings of the study it is concluded that there were high employment areas in indigenous knowledge and creating data base management system for indigenous knowledge has led to and will continue to lead to high rate of employment generation in south-south Nigeria and beyond.

Recommendations
1. Governments of the indigenous people should work together to develop database for indigenous knowledge for employment generation.
2. There should be inclusion of indigenous knowledge in the schools’ curriculum.
3. Proper and adequate implementation of the indigenous knowledge should be carried out at the different level of institutions
4. Federal, State and Local government in Nigeria should improve more the funding, development and assistance of local indigenous skills that could attract the interest of employable people.
5. Many indigenous knowledge skills are moribund due to lack of successors. Small scale entrepreneurship skills acquisition centers should be established in each local government headquarters nationwide for youths who are ready to learn the trades.
6. Federal government should intensify more effort in the promotion of made in Nigerian goods. Foreign foods etc. should be banned from the country
7. It was imperative that the three tiers of government should amend their economic policies to promote, development and increase their financial budgeting to fund indigenous knowledge development or direct more attention to the provision of social amenities, bank loan with lowest or non-interest rate, organizing adult literacy education to reach remote communities where indigenous knowledge practitioners reside, provide subsidized tools and equipment to facilitate mass production.

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