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**A SYNERGY BETWEEN AGRICULTURAL PRODUCTION,
TECHNOLOGICAL INNOVATION & MANAGEMENT EFFICIENCY:
A PANACEA TO ECONOMIC STABILITY
DURING PANDEMIC**

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ENHANCING INFORMATION MANAGEMENT AND ECONOMIC DEVELOPMENT IN NIGERIA USING DIGITAL CONTENT MANAGEMENT (DCM) AND CONTENT MANAGEMENT SYSTEM (CMS) DURING COVID – 19 PANDEMIC

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Abstract

Present study was borne out of the fact that there was the need to migrate to a better way of storing and organizing data, in a digitalized form. This research paper attempts to investigate how to enhance information management and economic development in Nigeria using Digital Content Management (DCM) and Content Management System (CMS) during this Covid – 19 pandemic. This research work was embarked upon because there was the need to improve on the existing system because of its inherent limitations like its inability to allow Machine Readable Cataloguing (MARC). For the system design, we make use of a content management system model, the model contains a number of segments like pre-processing, input, select the edit button, add links to tools, explore the sample space created, share space with members. For the system implementation, we made use of Digital Asset Management Software, which is an instance of content management system. The result obtained from implementation contain the following segments: storage space used, bandwidth used, Next reset/billing date and media assets. This study is very significant in the sense that it enables us to migrate to store and organize data in digital format. Therefore, publishing data, audio, video, among others, can now be store electronically.

Keywords: Management, digital, custodianship, content, Digital Content Management (DCM), Content Management System (CMS) Machine Readable Cataloguing (MARC).

Introduction

Efficient Information Management can, of course, lead to greater economic development in Nigeria, especially during this era of Covid – 19 pandemic, which is ravaging the whole world (Satope. B and Akanbi .B, 2014). Information management can be described as a cycle of organizational activity: the acquisition of information from one or more sources, the custodianship and the distribution of that information to those who need it, and its ultimate disposition through archiving or deletion (<https://www.en.m.wikipedia.org,2021>). Also, information management, includes the planning, organizing, structuring, processing, controlling, evaluation and reporting of information activities, all of which is needed in order to meet the needs of those with organizational roles or functions that depend on information.

Thus, this research paper investigates the enhancement of information management and economic development in Nigeria using Digital Content Management (DCM) and Content Management System (CMS) during Covid – 19 pandemic. The effort is to encourage digital information storage and the subsequent growth in the nation's economy especially during this pandemic.

The existing system limitations in Nigeria, has shown that the use of advanced information storage techniques have not been encouraged in the country, thereby, inhibiting economic growth in general. Data protection laws and regulations in Nigeria covers common issues including relevant legislations and competent authorities' territorial scope, key principles, individual rights, registration formalities, appointment of a data protection officer and of processors in 39 jurisdictions (Emmanuel. G, and Oghomwan. A, 2021)

Furthermore, digital content management and/or knowledge management are related to economic development of any Nation. Kenan, P.J and Athena. A (2001) opined that knowledge management is a set of techniques and tools to uncover and utilize information and knowledge assets – especially implicit knowledge. Economic development organizations can use knowledge management tools to enhance external communications

of local companies including marketing and to promote internal communications within local business and help companies capture implicit knowledge

The objectives of this research work include:

- Data were collected by using direct observation and interview
- The data collected was analyzed using the principle of system analysis. Here, the faults inherent in the existing system were discovered and used as starting point for system design.
- New system was designed by using models and a technology called content management system
- System implementation was carried out using data to run the newly designed system.

Thus, the methodology used involves the processes found in the Content Management System (CMS). We made use of the following places for data collection: University of Ibadan, Ibadan, Nigeria. The Polytechnic, Ibadan. Oyo State College of Agriculture and Technology, Igboora, as well as Ibadan municipal.

The scope of the research work is to investigate how to enhance Information Management in Nigeria in order to boost Nigerian economy during covid – 19 pandemic using the Content Management System (CMS).

Research questions

The following are the research questions for the research paper:

- (1) What is the importance of this present study?
- (2) How does the Content Management System (CMS) work?

Research Hypothesis

There is no significant difference between a research where content management system is applied to information management and the one where content management system is not applied

Methodology

Data collection:

Data was collected using observation, interview and questionnaire. 50 people were approached for data collection in order to elicit system requirement. People were approached at the University of Ibadan, Ibadan, the Polytechnic, Ibadan, OYSCATECH Igboora and Ibadan municipal, questioned on acquisition of information from sources, custodianship of information, distribution of information to those who need it, disposition of information through archiving or deletion.

In the university of Ibadan, Ibadan, data were collected from physics and chemistry departments in the Faculty of Science and also at the Economics and Sociology departments, in the Faculty of Social Sciences.

At the Polytechnic Ibadan, data were collected at the Computer sciences department as well as Business Administration department, among others.

System Analysis

This is the process of studying a procedure or business in order to identify its goals and purposes and create systems and procedures that will be achieved in an efficient way. (<https://www.en.m.wikipedia.org/wiki/2021>), we were able to identify goals and purposes of information management and discovered that the existing system did not live up to expectations

System Design

New Information management system was designed using a new technology called Content Management System (CMS). This was done using a model, which is given below. TO get the digital information stored electronically using the content management system, we have this model:

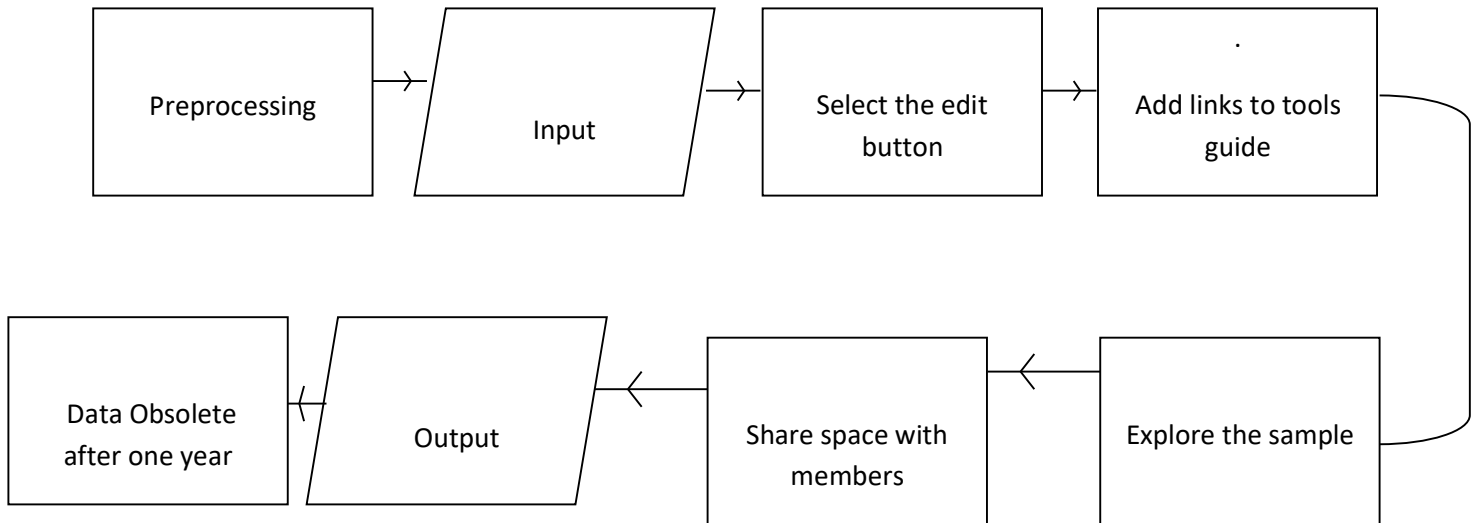


Fig 1: Content Management System

The above depicts managing the flow of an Information System (IS) data from creation and initial storage to the time it becomes obsolete and is deleted (Kenneth, I.N and Afolahan. A,2021)

For effective information organization and storage, the following standards must be followed:

- Catalogue information resources
- Classify information resources
- Create and manage databases
- Process information resources physically
- Store information resources
- Analyze and organize specialist information

System Implementation: Usage

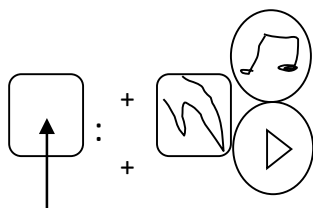
Storage space used: need more 0B/5GB
Badun used: need more? 0B/10GB

Next reset/billing date
27-07-2021
View billing history

GO TO ANALYTICS
GO TO ANALYTICS

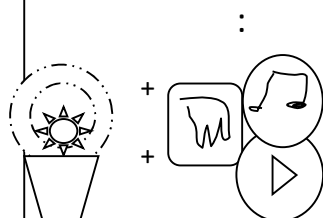
Files

+upload Files.



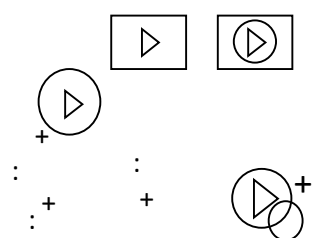
Version

+create version



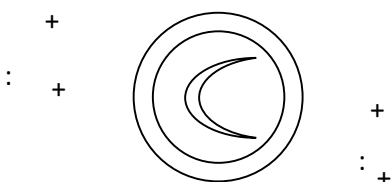
Players

+create player



Watermarks

+create watermark



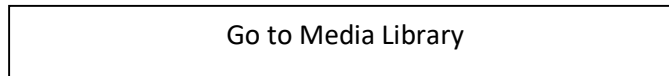


Fig .1: Digital Asset Management Software
(William Wordsmith,2021)

Results and Discussion

Digital Content Management (DCM) and Content Management System (CMS) worked together to produce this result using Digital Asset Management software, Digital Asset Management software allows up to store, easily manage, share

Digital Asset Management software allows you to store, easily manage, share and organize all your assets in one place. In this digital age we live in, such a tool is indispensable across various industries

From the implementation above, we have the following:

- The storage space used for the storage of data was 0B/10GB
- The bandwidth used for the transmission of Signals was 0B/10GB
- Next reset/ billing date used was 27 – 07 -2021
- For the media Assets, we have:
 - Files and how to upload files
 - Version and how to create versions
 - Players and how to create players
 - Watermarks and how to create watermarks

Conclusion

With this present study it can be seen that it is possible to store, organize, data digitally and also possible to retrieve and upload. Apart from the data for publishing, music, video, audio among other are always in use. Therefore, we have implemented the study with Digital Asset Management software which is an instance of content management system

Recommendation

From the era of storing, organizing data manually to the era of digitalization, there is still room for further studies. We, therefore, encourage other researchers to continue from where this study ends.

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