Electronic Records Management and National Development: A Case of Nigeria

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Abstract
This study examined Electronic Records Management and National Development in Nigeria with an adoption of correlational research design to find out if there was relationship between the variables under investigation. The population of the study was 1000 drawn from federal ministries of Nigeria and a sample size of 250 using (Krejcie & Morgan, 1970) with random sampling technique. The research instrument used for gathering data was a structured questionnaire entitled "Impact of Electronic Records Management and National Development in Nigeria (IERMNAN) with five point scales. Mean statistics was used to analyse the research questions. To ascertain the reliability and consistency of measurement, a pilot study was carried out on 140 federal government workers which yielded 0.96 coefficients. Pearson Product Moment Correlation was used to analyse the hypotheses. This study discovered that, e-records management has impacted positively on Nigeria`s national development in the areas of reliable backups, security control, facilitated collaboration, improved timeliness, lower archiving costs, e-tax payment, increased efficiency, jobs, education, retailing, health, business, money and banking, governance, e-Agriculture. Among other things, the study recommends that government should provide adequate modern office technologies for e-records management with regular training and retraining of federal ministries workers for more positive impacts on Nigeria`s national development to meet the level of needs of the citizens of Nigeria.

Keywords: *Impact, Records, E- records, Records Management, Electronic Records Management or E- records Management, National Development and Nigeria.*

Introduction

Information and Communication Technologies in government operations have given impetus to the generation of e-records that are vital to the functions of public sector institutions**.** Records and information management play a critical role in fighting corruption, protecting citizens 'rights, in ensuring transparency and good governance (Nyampon, 2015). Record is variously defined as information created, received, and maintained as evidence and as an asset by an organization or person, in pursuit of legal obligations or in the transaction of business". There are many purposes of and benefits of effective records management, as both definitions give a key feature of records as ability to serve as evidence of an event. Appropriate records

management helps preserve the future of every institution (Wikipedia, the free encyclopedia, 2019). Records are books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics in hardware and software made or received by an agency. Both private and public institutions in connection with States Government under Federal law or in connection with the transaction of public business and preserved for the agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations or other activities of the government or body because of the informational value of the data in them (United States National Archives and Records Administration, 2019).

Records management (RM) relates to the supervision and administration of digital or paper records, regardless of format. Records management activities are the creation, receipt, maintenance, use and disposal of records when the need arises. In this context, a record is content that documents a business transaction of both private and public agencies. Documentation of records management may exist in contracts, memos, paper files, electronic files, reports, emails, videos, instant message logs or database records. Paper records may be stored in physical boxes on-premises or at a storage facility (Enterprise Records Management Trend Guide, 2014). Records Management (RM) is that field of management responsible for the orderly control of creation, maintenance, use and disposition of records. From the Federal or National perspective, it is the planning, controlling, directing, organizing, training, promoting, and other managerial activities that involved in records creation, maintenance and use, and disposition in order to achieve adequate and proper documentation of the policies and transactions of the Federal Government of a country. It is difficult to achieve organizational objectives without effective records management. Records Management deals on planning, controlling, directing, organizing, training, promoting, and other managerial activities involving the life cycle of information, including creation, maintenance (use, storage, retrieval), and disposal, regardless of media. The goal of records management is to help an organization keep the necessary documentation accessible for both business operations and compliance audits. Both small and mid-sized businesses, spread-sheets are used to track where records are stored, but larger organizations find records management software suites and tied to both taxonomy and records retention schedule for useful activities. Record management implies a series of activities which include the creation, distribution, use, maintenance and disposition of recorded information maintained as evidence of business transactions .The common strategies in ERM includes (1) assigning unique identifiers to individual records, (2) protecting the records from unauthorised changes, and (3) maintaining audit trails which show how current records have evolved and the changes that have been effected (Bigirimana, Jagero & Chizema, 2015). Developed and developing nations today have migrated to electronic records and electronic records management because of the invasions of information and communication technologies and the immediate needs of effective service delivery to satisfy the citizens every day.

Electronic records or Digital records are stored on storage media, in-house or in the cloud or machine-readable records, and are records on electronic storage media. Electronic record means any information that is recorded in a form that only a computer or electronic machine can process. Federal electronic records are not necessarily kept in a "recordkeeping system" but may reside in a generic electronic information system or are produced by an application such as word processing or electronic mail (United States National Archives and Records Administration, 2019; Enterprise Records Management Trend Guide, 2014). Electronic records management [ERM] relates to an automated techniques to manage records regardless of format. Electronic records management is a broadly refers to electronically management of

records on various formats, be it electronic, paper, microform, etc. Electronic recordkeeping (ERK) is a subset of ERM, because ERK focuses on electronically managing electronic records. Electronic records management assist to impact seriously on governance and leads to national development.

National development is the ability of a county or countries to improve on the social welfare of the people e.g. by providing social amenities like quality education, potable water, transportation, infrastructure and medical care through good governance, etc. It adopts a framework of inclusive growth, which is high growth that is sustained, generates mass employment, and reduces poverty (Slideshare.net, 2019). This is what e-record management has done and still doing. The objectives of national development according to (Slideshare.net, 2019) are:

a.   Rapid growth of incomes of the population in general
b.   Poverty alleviation/reduction (rapid growth of the incomes of the poor)
c.   Satisfaction of basic social and economic needs
d.   Sustainment of a democratic and fully participatory society

Given the still-lagging state of our economy, insubstantial increases in incomes, low sense of purchasing power; it will be proper for the government to adopt e-records management to meet the needs of Nigerians. The reason for e-records management is for the easy, promotion of governance, e-governance and economic growth that metamorphosis in national development at all levels with focuses on the welfare of the citizens of the nation.

Review of Related Literatures
Types of Electronic Records (File) and Their Format
The table below summarizes the most common file formats (Minnesota Historical Society, 2008).

Table 1: Electronic Records or Common File Formats

File Format Type	Common Formats	Sample Files	Description
Text	PDF, RTF, TXT, DOC	Letters, reports, memos, e-mail messages saved as text	Created or saved as text (may include graphics)
Vector graphics	DXF, EPS, CGM, SHP	Architectural plans, complex illustrations, GIS	Store the image as geometric shapes in a mathematical formula for undistorted scaling
Raster graphics	TIFF, BMP, GIF, JPEG, PNG	Web page graphics, simple illustrations, photographs	Store the image as a collection of pixels which cannot be scaled without distortion
Data file	Proprietary to software program	Human resources files, mailing lists	Created in database software programs
Spreadsheet file	Proprietary to software program, DIF	Financial analyses, statistical calculations	Store numerical values and calculations
Video and audio files	QuickTime (MOV), MPEG, Real Networks (RM), WMV, WAV, MP3, AVI	Short video to be shown on a web site	Contain moving images and sound
Markup languages	SGML, HTML, XHXML, XML	Text and graphics to be displayed on a web site	Contain embedded instructions for displaying the content of file or multiple files

Effective Electronic Records Management (ERM) Supports the Following:
According to National Archive (2019), effective electronic records support the following in governance and management

i. Efficient task performance, information exchange and inter-operability between government organisations and citizens

ii. It gives room for Evidence-based policy making by providing reliable and authentic information for the evaluation of past actions and decisions

iii. It leads to data protection principles and effective implementation of freedom of information and other information policy legislation, through good organizing of records

iv. E-records management give room for Knowledge management across sectors of government by making reliable information available for sharing, extraction and summarisation

v. E-records create space for specialised legislation by demonstrating the authenticity of records and supporting legal admissibility.

According to National Archive (2019) the model described relationship in electronic records management to create, store, manage and retrieve electronic records by electronic means.
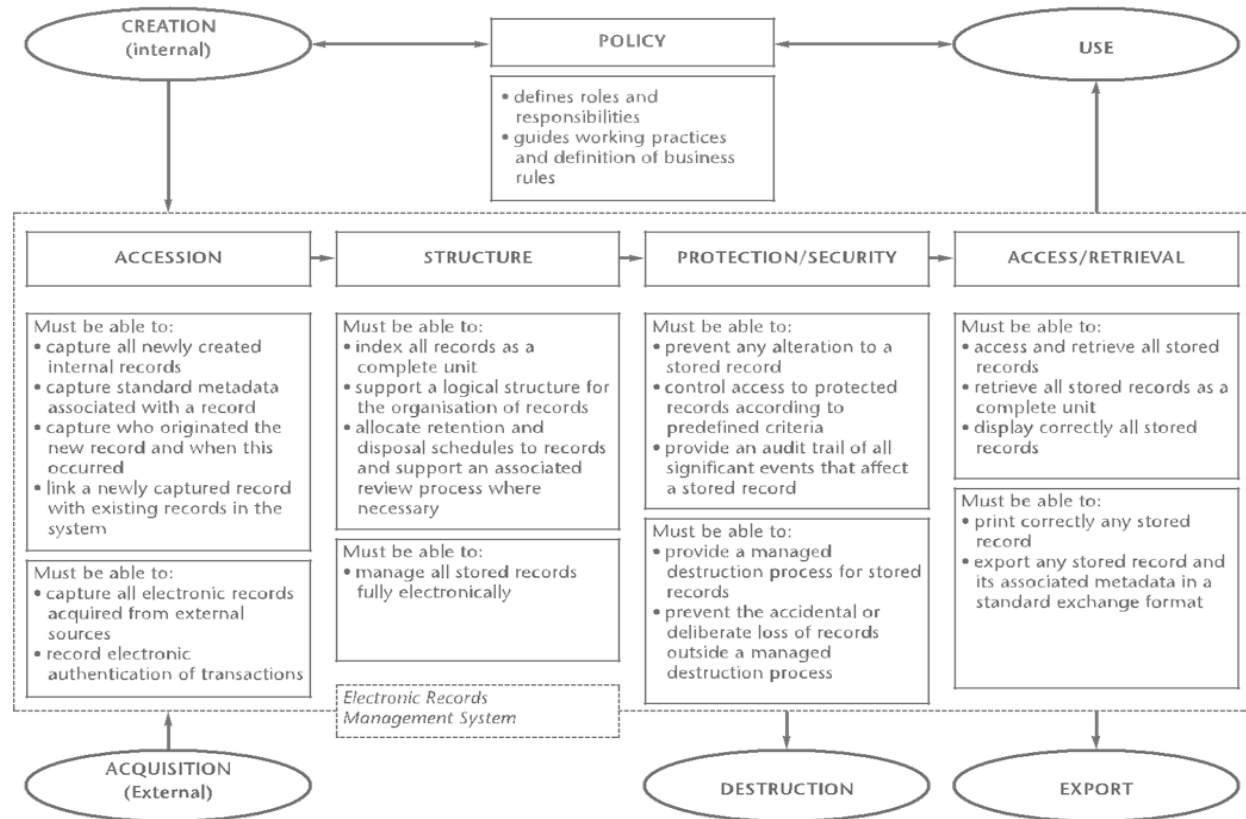

Figure 1: Model Described Relationship in E-Records Management (National Archive, 2019)

Some Roles of ERM on National Development

1. ERM is vital to effective e-government strategy for seamlessly services to public across government and sectors; as such the need to avoid paper mind in private and public firms. Variety regime of entire lifecycle of records can be embedded into information architecture to guarantee the authenticity, reliability; integrity and usability of records; to reduce cost, mitigate risk and to support consistent decision-making bring a unified and integrated administrative model that is fundamental.

2. Good and better planned ERM strengthens e-government strategy by supporting Business continuity, security and risk management, legal compliance and accountability, evidence-based decision making and transparency, good governance and public trust, good performance and government capability building and lead to the needed cooperation between government authorities and records management professionals across domains and time dimensions for sustainable development of legal and regulatory system.

3. Positioning ERM in e-government strategy can provide an integration framework for both effective e-government strategy and good ERM. Such an integration framework can offer opportunities for dynamic, interactive and proactive citizen-centred services across domains and time dimensions supported by both government authorities and records management professionals nationwide

4.   Electronic Records management through the use of ICT focuses on enhancing and enabling choices in improving the standard of living of all individuals in the population in the areas of health, education, governance, agriculture, businesses, management, taxation maintenance and control of public utilities, etc. It is focused on enhancing processes, electronic voting, machines to capture and verify voters data, use of the internet, mobile phones and other electronic means to send announced results at polling units to wards, Local governments, State and National collation centres as well as the wide coverage of the elections by the electronic media with their video cameras and mobile phones (Oghogho & Ezomo, 2013).

Ten (10) Benefits of Electronic Document Management
Gold Group of Companies (2013) outlined and explained the following as ten benefits of electronic records management

Reliable in Backups of Information
Quite often, content may not be properly backed up. We often find this out when it is too late and content is lost. It is a regulatory requirement to be able to produce original and legible copies of records and having a strong backup solution in place for reference and future purposes. Once your data is digitized, you can easily create backup copies to store off-site. This also ensures that your business will survive any future disaster.

Increase Rate of Security and Control
Documents can be extremely sensitive and having adequate security and control over them in aspect of who can retrieve your information is imperative. Achieving control through a manual paper or filing system is extremely challenging in different ways.
Moving your data to the cloud, you can set permissions to each document, folder or cabinet and clearly identify who retrieved what documents, when and at where.

Facilitate Serious Collaboration among Agencies
The ability to create and implement workflows of your information greatly improves internal and external collaboration among agencies. For example, an employee or manager should be able to identify where a file is in the approval process at any given time.

Improved Timeliness
Staff that work either in an office or from remote locations can gain instant access to the documentation that they require. Being able to search for a file or document from their computer rather than manually dig through a filing cabinet saves time. In addition, since the documents are electronically filled, they can be viewed by many people at once with easy access.

Lower Archiving Costs
Paper document management and archiving can be very laboured intensive and expensive. Processing, storing and retrieving archived records can be significantly improved when moving to electronic environments.

Improved Version Control
Being able to search for a specific document or file quickly allows users to identify which record is the most current version. Also, seeing the time and date of stamped of the document and the last when updated provides great benefits to users wanting to reference the most recent record.

Increased Efficiency and Effective File Management

The document management process also offers massive productivity improvements for your staff. Instead of digging through filing cabinets to find elusive information, simply search for the information from your computer. Once you have found the documents, you can print a copy or just read it on screen to gather the information.

Better Searching Capabilities

Ability to easily find information and knowledge from indexed content allows one to improve on decision making to reduce the amount of time lost looking for information. A lot of document management software use Optical Character Recognition, or OCR, which is a technology that enables you to convert different types of documents, such as scanned paper documents, PDF files or images captured by a digital camera into editable and searchable data. Once your data has been converted using OCR software, it is much easier to organize, search, store and even display online for consumption by others.

More Consistency in Content

Ensuring that content is consistently formatted, named and controlled is not easy. Implementing digital workflows or designing on how you want your documents filed usually generates content that is consistently archived the same way. For example, your invoices will all be digitally filed with the same required information (Invoice #, Date, Vendor Name, Expense Code, etc.) which can be access at a glance.

Improved Task Management

Digitalizing your information allows tasks to be assigned to users as required. It also allows advanced workflow capabilities gives you the route to document throughout your organization while maintaining the ability to track their progress and subscribe to email notifications on their status.

Apart from the above said benefits, Electronic Record Management is the cornerstone of e-government of many countries (An, Sun & Zhang, 2011; IRMT 2011a; IRMT 2011b; IRMT 2011b & US Government Accountability Office, 2010). There is absolute need to embrace e-government in Nigeria through initiatives such as open data access, development of government websites, online transactions provided on the e-citizen portal and online whistle blowing. Some of the online transactions currently active include amongst others: application of public service jobs, filing of tax returns, application of higher education loans, application of driving licenses, application of business name registration, government tender applications and application of research permits (World Bank, 2012; Malakata, 2011; Howard, 2011; Rabah, 2011; Price, 2011; Google-Africa, 2011) which seems not effective as expected. Inadequate management of electronic records therefore creates gaps in the quality of data used across government ministries. While it would be desirable for government ministries to share cross-cutting data, this is hampered in cases where policies for information sharing and management of electronic records do not exist. The result is every ministry engaging in different activities to collect the same data, resulting into duplication of work and costly ventures for the public agencies.

Lack of a clear framework for managing electronic records poses a major risk to the sustainability, stability and quality of services offered through the e-government platforms. It does not only limits access to reliable and quality information but also jeopardizes general flow of services as employees have to juggle between manual record keeping systems and electronic record keeping systems to reconcile information required for management decision making, moreover during emergencies. The reliability of electronic systems is eroded. Gaps in

management of electronic records within e-government platform can also be negatively exploited and create loopholes for abuse through corruption, which in turn undermines government efforts of fostering transparency and accountability gaps in data and variations in decisions made across ministries (Ambira, Kemoni & Ngulube, 2018),

Other Potential Benefits of Electronic Records Management
Other potential benefits of electronic records management to national development are (World Bank, 2012):
i.   Better and consistent development and stewardship of corporate memory
ii.   Collaboration across workgroups and the enterprise
iii.   Enabling clerical staff to become professional knowledge workers
iv.   Faster decision making
v.   Greater access to corporate information
vi.   Improved public service and service quality
vii.   Managing information as an asset, encouraging its collection, dissemination and sharing
viii. Promotion of organisational learning and understanding
ix.   Reduced cost of business operations
x.   Responsiveness to change.

Electronic Records Management Should Be Capable Of Meeting the Needs of The:
i.   Public Records Acts
ii.   Freedom of Information Act and associated Codes of Practice
iii.   Data Protection Act
iv.   Human Rights Act
v.   Electronic Communications Act
vi.   Relevant European Directives
vii.   Cross-government information standards (outlined in section 4)

Typical Requirements for Electronic Records Management
National Archive (2019) outlined the following as typical requirements for electronic records management:
i.   Capturing, storing, indexing and retrieving all elements of the record as a complex unit, and for all types of record
ii.   Management of records within class categories or filing structures to maintain the narrative links between records – i.e. at the file/folder level
iii.   Record level metadata including retention and disposal rules
iv.   Integration between electronic and paper records
v.   Secure storage and management to ensure authenticity and accountability, including support for legal and regulatory requirements – preventing change to content
vi.   Appraisal and selection of records for preservation and transfer to the keeping of the Public Record Office or other permanent archive
vii.   Management facilities for the systematic retention and disposition of records
viii. Migration and export of records for permanent preservation without loss of information.

According to Ambira, Kemoni and Ngulube (2018), the below figure 2 displayed recommendations, implementation, reasons and officers responsible for Electronic Record Management for e-government of nations.

S N	Recommendation	Implementation type	Reason	Officers to be Responsible
1	Development of policy framework for MER	Short-term	To provide harmonised managed of e-records across government	National Agency for Records Management Officers
2	Review of legislative framework	Short-term	To address the creation, capture and long-term preservation of e- Records	Record Management Managers and ICT Officers
3	Capture of official electronic Records	Short-term	Enhance security, integrity, trustworthiness and accessibility	Record Management and ICT Officers
4	Develop specification and	Short-term	To standardise electronic records systems' implementation across	Principal Secretaries and ICT (e-government secretariat)
5	functional requirements for e- records systems		Government	Principal Secretaries and ICT (e-government secretariat)
5	Implement systems for managing electronic records	Short-term	To ensure government ministries have all platforms for capturing and managing e-records	Principal Secretaries and ICT (e-government secretariat)
6	E-government development Framework	Short-term	Build harmonised implementation of e-services and embed MER in e-government	Principal Secretaries and ICT (e-government secretariat)
7	Develops minimum training needs assessments requirements	Short-term	Build capacity, technical and professional for MER in government	Principal Secretaries and ICT (e-government secretariat)
8	Implementing digital archiving System	Mid-term	To enhance security of e-records	Record Management Managers and ICT Officers
9	Partnership programmes	Mid-term	As a strategy for embedding best practices in MER and e-Government	Principal Secretaries and Record Managers
10	Electronic records standards Adoption	Mid-term	Align MER to international standards	ICT and RMOs

Figure 2: recommendations, implementation, reasons and officers responsible for Electronic Record Management for e-government

Below is also a proposed framework for management of electronic records in support of e-government for agencies globally.
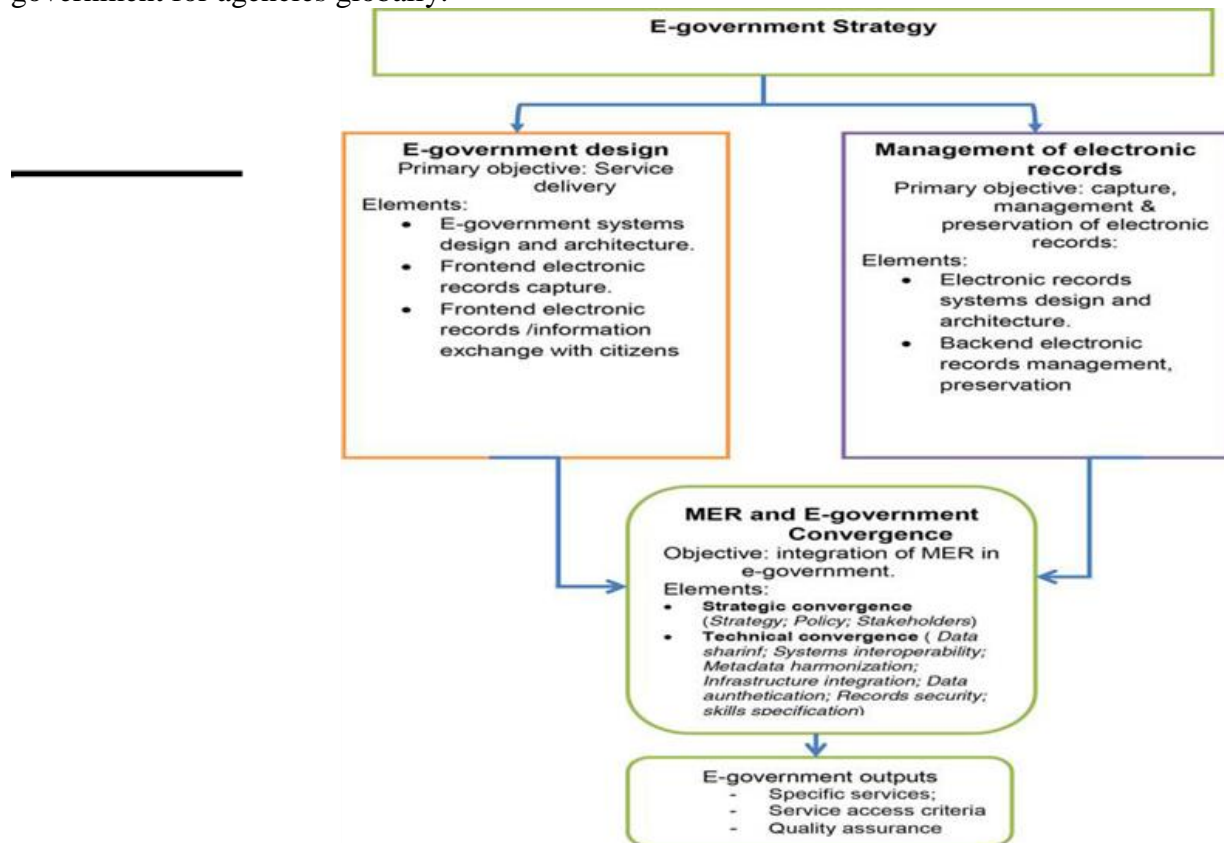

Figure 3: Proposed framework for management of electronic records in support of e-government (Malakata, 2011)

Driving Forces of ERM in E-government Strategy

Studies showed that better ERM are foundations to good governance and good performance, as essential part e-government services. Different country has different concerns in their customer-services. In U.S, security, privacy and protecting information are identified as core government needs. Driving forces of ERM e-government strategy in the above three countries. The core business of e-government is the key drivers for different approaches to ERM in e-government strategy (An, 2009). In U.S, government electronic records are regarded as national information resources. Entire life cycle control model is used for managing electronic records in e-government strategy. ERM is embedded in FEA as part of infrastructure for cost-effective government services and business consolidation. In U.K., government electronic records are regarded as national information asset. Business continuity model is used for managing electronic records in e-government strategy. ERM is incorporated into government change response for building government compatibilities in mitigating risk and sharing of information and knowledge. In New Zealand, government electronic records are regarded as trusted information. Digital continuity model is used for managing electronic records in e-government strategy. ERM is integrated into digital strategy for good governance, accountability, transparency, public trust and confidence.

Statement of the Problem

Manual records management is stressful, time, capital intensive and space consuming. This seems to affect the managerial, administrative, procedures and processes of organization and nations. Electronic records management (ERM) is fundamental to good governance, business

efficiency, effectiveness of e-governance in networking and digitalizing the society especially with immediate and easy access of larger audience. ERM as an integrated digital strategy for good governance, accountability, transparency, public trust and confidence has been embraced by countries of the world, so the case of Nigeria cannot be exceptional. Therefore, this study seeks to investigate E-Records Management and National Development in Nigeria. That is the role ERM to national development.

Purpose of the Study
The purpose of the study was to investigate E-Records Management and National Development in Nigeria
The study specifically sought to find out:
1. Find out the types of electronic records management format used to impact on Nigeria`s national development
2. Find out how electronic records management has impacted on Nigeria`s national development
3. Find out areas electronic records management has impacted on Nigeria`s national development

Research Questions
To lead this study the following research questions were posited
1. What are the types of electronic records management used to impact on Nigeria`s national development?
2. How has electronic records management impacted on Nigeria`s national development?
3. What are the areas electronic records management has impacted on Nigeria`s national development

Hypotheses
Three directional hypotheses were formulated and tested at 0.05 levels of significance
1. There is significant relationship between the types of electronic records management used to impact and Nigeria`s national development
2. There is significant relationship between how electronic records management has impacted and Nigeria`s national development
3. There is significant relationship between the areas electronic records management has impacted and Nigeria`s national development

Method
This study adopted a correlational research design. This was because it focussed on finding out if there was relationship between the variables under investigation. That is if there is relationship between ERM and national development in Nigeria. The population of the study was 1,000 drawn from federal ministries of Education (200), Health (200), Finance (150), Defence (150), Science and Technology (100), Justice (100) and Youth Development (100). These ministries were chosen because they used E-records management for national development in Nigeria. The population is as displayed below using exploded pie-in-3D:
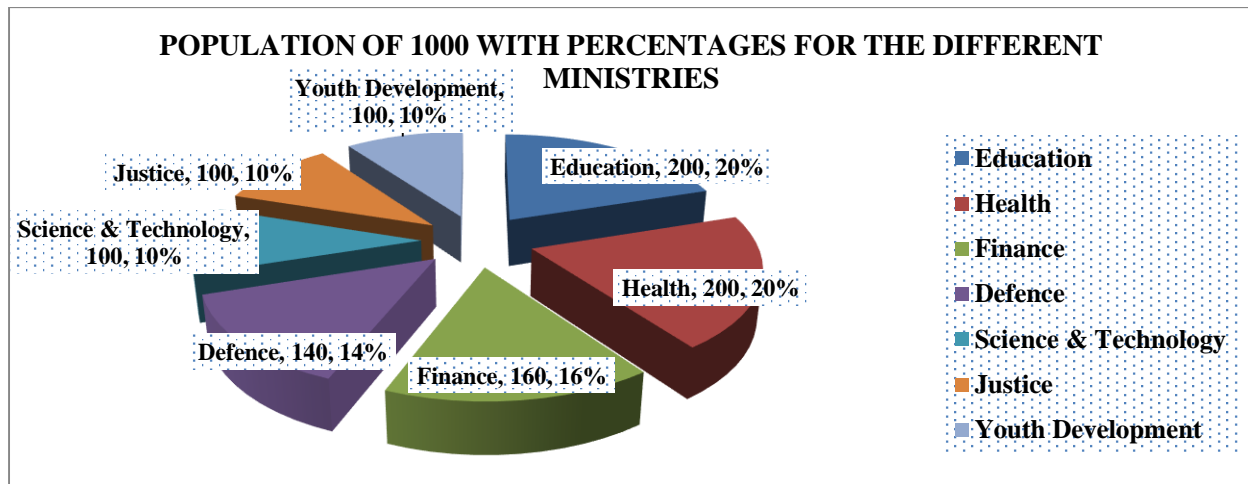
Figure 4: Population of 1,000 with Percentages for the Different Ministries

The sample size was 250 using (Krejcie & Morgan, 1970) of determining sample size of a known population of 1000 with random sampling technique. A total of 250 questionnaires items were administered and completely retrieved. The sample of the study is as displayed using exploded pie in 3-D:
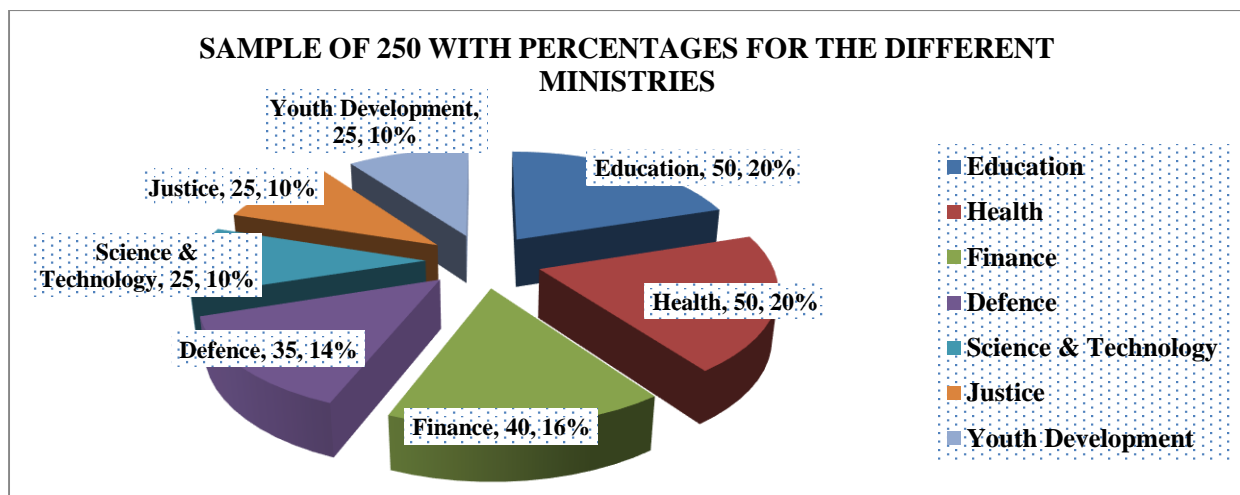

Figure 5: Sample of 250 with Percentages for the Different Ministries

The research instrument used for gathering data was a structured questionnaire entitled "Impact of Electronic Records Management and National Development in Nigeria (IERMNAN). Five point scales was adopted. Mean statistics scores from 4.50 to 5.00 was seen as Very High Positive Impact (5 points), 3.50 to 4.49 High Positive Impact (4 points), 2.50 to 3.49 Moderate Positive Impact (3 points), 1.50 to 2.49 Low Positive Impact (2 points) and 0.50 to 1.49 Very Low Positive Impact (1 point). The instrument was subjected to face and content validation by three experts from department of Business Education, Rivers State University. The modifications, corrections and inputs of the experts formed the validity of the instrument. To ascertain the reliability and consistency of measurement, a pilot study was carried on 140 federal ministry workers of Petroleum Resources (20), Transport (20), Interior (20), Works (20), Special Duties (20), Power (20), Labour and Productivity (20) through questionnaire which yielded 0.96 showing excellent relationship. Mean statistics was used to analyse the only 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 was used to

analyse the hypotheses. Any calculated value of (r) that is greater than > the critical table value of 0.113 at 0.05 significant levels such directional hypothesis (H_1) will be accepted and vice versa. In addition, Point Estimation statistics was also adopted to draw inference about the population of the study.

Result

Research Question 1: What are the types of electronic records management used to impact on Nigeria`s national development?

Table 2: Computed Mean and Standard Deviation of the Types of Electronic Records Management Format Used to Impact on Nigeria`s National Development

N = 250

SN	File Format Type	Common Formats	Sample Files	Description	X	SD	SE	Re-Mark
1	Text	PDF, RTF, TXT, DOC	Letters, reports, memos, e-mail messages saved as text	Created or saved as text (may include graphics)	4.8	0.96	0.43	HPI
2	Vector graphics	DXF, EPS, CGM, SHP	Architectural plans, complex illustrations, GIS	Store the image as geometric shapes in a mathematical formula for undistorted scaling	4.8	0.96	0.43	HPI
3	Raster graphics	TIFF, BMP, GIF, JPEG, PNG	Web page graphics, simple illustrations, photographs	Store the image as a collection of pixels which cannot be scaled without distortion	4.6	0.92	0.41	HPI
4	Data file	Proprietary to software program	Human resources files, mailing lists	Created in database software programs	4.6	0.92	0.41	HPI
5	Spread-sheet file	Proprietary to software program, DIF	Financial analyses, statistical calculations	Store numerical values and calculations	4.8	0.96	0.43	HPI
6	Video and audio files	QuickTime (MOV), MPEG, Real Networks (RM), WMV, WAV, MP3, AVI	Short video to be shown on a web site	Contain moving images and sound	5.0	1.00	0.44	VHPI
7	Mark-up languages	SGML, HTML, XHXML, XML	Text and graphics to be displayed on a web site	Contain embedded instructions for displaying and understanding the content of a file or multiple files	5.0	1.00	0.44	VHPI
	Grand	**Mean**	**SD and SE**		**4.8**	**1.34**	**0.59**	**HPI**

Field Survey, (2019)

In analysing research question one, the grand mean of items numbered 1-7 showed 4.8, representing High Positive Impact. This is accepted because it is above the benchmark of 3.0 (Moderate Positive Impact). This means that those are the types of electronic records

management used to impact on Nigeria`s national development. The Grand Standard Deviation was 1.34 this indicated closeness in the views of the respondents. The Grand Standard Error was 0.59 this is very low, showing a true sample mean of the data used as drawn from the population of the study. Using Point Estimation, the mean of the sample from the population was 36. This means that out of every 250 respondents of the population of 1000 of the study, 36 respondents will agree that the items listed on table 2 of this study above are types electronic records management used to impact on Nigeria`s National Development by the federal ministries workers.

Research Question 2: How has electronic records management impacted on Nigeria`s national development?

Table 3: Computed Mean and Standard Deviation of How Electronic Records Management Has Impacted on Nigeria`s National Development

		N = 250			
SN	Items Statements	X	SD	SE	Remark
1	Reliable Backups	4.8	0.96	0.43	HPI
2	Increased Security & Control	4.8	0.96	0.43	HPI
3	Facilitated Collaboration	4.6	0.92	0.41	HPI
4	Improved Timeliness	4.6	0.92	0.41	HPI
5	Lower Archiving Costs	4.8	0.96	0.43	HPI
6	Improved Version Control	5.0	1.00	0.44	VHPI
7	Increased Efficiency and File Management	5.0	1.00	0.44	VHPI
8	Better Searching Capabilities	5.0	1.00	0.44	VHPI
9	More Consistent Content	4.6	0.92	0.41	HPI
10	Improved Task Management	4.8	0.96	0.43	HPI
	Grand Mean	**4.8**	**0.95**	**0.42**	**HPI**

Field Survey, (2019)

In analysing research question two, the grand mean of items numbered 1-10 showed 4.8, representing High Positive Impact. This is accepted because it is above the benchmark of 3.0 (Moderate Positive Impact). This means that those are how electronic records management used impacted on Nigeria`s national development. The Grand Standard Deviation was 0.95 this indicated closeness in the views of the respondents. The Grand Standard Error was 0.42 this is very low, showing a true sample mean of the data used as drawn from the population of the study.

Using Point Estimation, the mean of the sample from the population was 36. This means that out of every 250 respondents of the population of 1000 of the study, 25 respondents will agree that the items listed on table 3 of this study above are how electronic records management has impacted on Nigeria`s national development as indicated by federal ministries workers.

Research Question 3: What are the areas electronic records management has impacted on Nigeria`s national development?

Table 4: Computed Mean and Standard Deviation of Areas Electronic Records Management Has Impacted on Nigeria`s National Development

		N = 250			
SN	Items Statements	X	SD	SE	Remark
1	Jobs	4.8	0.96	0.43	HPI
2	Education	4.8	0.96	0.43	HPI
3	Crime Control and Policing	4.6	0.92	0.41	HPI
4	Retailing	4.6	0.92	0.41	HPI
5	Health	4.8	0.96	0.43	HPI
6	Business	5.0	1.00	0.44	VHPI
7	Money and Banking	5.0	1.00	0.44	VHPI
8	Governance	5.0	1.00	0.44	VHPI
9	e-Agriculture	4.6	0.92	0.41	HPI
10	Training and Retraining	4.8	0.96	0.43	HPI
11	e-governance	5.0	1.00	0.44	VHPI
12	Entrepreneurship	4.8	0.96	0.43	HPI
13	Internetpreneurship	5.0	1.00	0.44	VHPI
	Grand Mean	**4.8**	**0.96**	**0.42**	**HPI**

Field Survey, (2019)

In analysing research question three, the grand mean of items numbered 1-13 showed 4.8, representing High Positive Impact. This is accepted because it is above the benchmark of 3.0 (Moderate Positive Impact). This means that those are the areas electronic records management has impacted on Nigeria`s national development. The Grand Standard Deviation was 0.96 this indicated closeness in the views of the respondents. The Grand Standard Error was 0.42 this is very low, showing a true sample mean of the data used as drawn from the population of the study. This means that out of every 250 respondents of the population of 1000 of the study, 19 respondents will agree that the items listed on table 4 of this study above will agree that those are areas electronic records management has impacted on Nigeria`s national development.

Hypothesis 1: There is significant relationship between the types of electronic records management used to impact and Nigeria`s national development

Table 5: Summary of Calculated (r) Between the Types of Electronic Records Used to Impact and Nigeria`s National Development

SN	Variable	N	X	SD SE	Df	Alpha level	r-cal.	r-crit.	Remark Decision
1	Types of E-records Management	250	4.8	1.34	0.59				
					248	0.05	2.775	0.113	Significant Accepted
2	Nigeria`s National Development	250	4.8	1.34 0.59					

Field survey, (2019)

Decision

The result on table 5 revealed that the (r) calculated value is greater than r-critical value. Since the r-calculated value of 2.775 is greater than the r-critical value of 0.113. Therefore, the directional hypothesis which stated that there is significant relationship between the types of electronic records management used to impact and Nigeria`s national development is accepted. This means that there is significant relationship between the types of electronic records management used to impact on Nigeria and Nigeria`s national development. This means that the types of ERM listed on table 2 has impacted on Nigeria`s national development.

Hypothesis 2: There is significant relationship between how electronic records management has impacted and Nigeria`s national development

Table 6: Summary of Calculated (r) Between How Electronic Records Management Has Impacted and Nigeria`s National Development

SN	Variable	N	X	SD SE	Df	Alpha level	r-cal.	r-crit.	Remark Decision
1	How E-records Management Has Impacted	250	4.8	0.95	0.42				
					248	0.05	2.875	0.113	Significant Accepted
2	Nigeria`s National Development	250	4.8	0.95 0.42					

Field survey, (2019)

Decision
The result on table 5 revealed that the (r) calculated value is greater than r-critical value. Since the r-calculated value of 2.875 is greater than the r-critical value of 0.113. Therefore, the directional hypothesis which stated that there is significant relationship between how electronic records management has impacted and Nigeria`s national development is accepted. This means that there is significant relationship between how electronic records management has impacted and Nigeria`s national development.

Hypothesis 3: There is significant relationship between the areas electronic records management has impacted and Nigeria`s national development

Table 7: Summary of Calculated (r) Between Areas Electronic Records Management Has Impacted and Nigeria`s National Development

SN	Variable	N	X	SD SE	Df	Alpha level	r-cal.	r-crit.	Remark Decision
1	Areas E-records Management Has Impacted	250	4.8	0.96	0.42				
					248	0.05	2.975	0.113	**Significant Accepted**
2	Nigeria`s National Development	250	4.8	0.96 0.42					

Field survey, (2019)

Decision
Result on table 6 revealed that the (r) calculated value is greater than r-critical value. Since the r-calculated value of 2.975 is greater than the r-critical value of 0.113. Therefore, the directional hypothesis which stated that there is significant relationship between the areas electronic records management has impacted and Nigeria`s national development is accepted. This means that the areas stated on table 4 are the areas ERM has impacted on Nigeria`s national development.

Discussion of the Result/Findings
From the analysis of research question 1, the findings showed that the items on table 2 are the types of electronic records management used to impact on Nigeria`s national development .The opinions of the respondents are in agreement with (Minnesota Historical Society, 2008) who stated text, vector graphics, raster graphics, data file, spread-sheet file, video and audio files, mark-up languages and others as the types e-records management that impact on Nigeria`s national development positively. This means that these are types of ERM format used to impact on Nigeria`s national development.

Also from the analysis of research question 2, the findings showed that the items on the table 3 are how electronic records management has impacted on Nigeria`s national development. The opinions of the respondents are in agreement with (Gold Group of Companies, 2013), (National Archive, 2019) and (Wikipedia, the free encyclopedia, 2019) that indicated reliable backups, increased security and control, facilitated collaboration, improved timeliness, lower archiving costs, e-tax payment, increased efficiency and file management and improved task

management etc. as some of the ways of how e-records management impacted on national development positively.

Finally, from the analysis of research question 3, the findings showed that the items on the table 4 are the areas electronic records management impacted on Nigeria`s national development. The opinions of the respondents are in agreement with (Oghogho & Ezomo, 2013) and (Nyampon, 2015) who identified jobs, education, crime control and policing, retailing, health, business, money and banking, governance, e-Agriculture etc. as areas e-records management has impacted on Nigeria`s national development positively.

Conclusion

Based on the findings of this study, it was concluded that there was a significant relationship between the electronic records management and Nigeria`s national development. Also, e-records management has impacted positively on Nigeria`s national development in the areas of reliable backups, increased security and control, facilitated collaboration, improved timeliness, lower archiving costs, e-tax payment, increased efficiency jobs, education, crime control and policing, retailing, health, business, money and banking, governance, e-Agriculture etc. However, there is need for serious improvement by government in ERM so as to meet the level of needs of the citizens at appropriate time.

Recommendations

Based on the findings of this study, the following recommendations were made

1. Government should provide the needed modern office technologies in all the ministries for workers to perform their tasks and effectively manage records electronically
2. There is need for training and retraining of federal ministries workers to get themselves acquainted with the current modern office technologies and usage
3. Government should play a role of providing regulatory stability that will ensure ease of doing business, low prevalence of corruption, trust in ICT processes and legal protection
4. The media should shape public and government opinions on the needs for adequate provision of office technologies for records management. They should provide a platform for the stakeholders to meet and make policies, programmes and plans on office technologies known to the public
5. The academia should strongly take the responsibility of engaging in research and development that will foster innovative and successful applications office technologies for e-records management for national development in Nigeria.

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APPENDICES

Appendice 1

Computed Raw Scores of the of the Types of Electronic Records Management Used to Impact on Nigeria`s National Development

N = 250

SN	File Format Type	Common Formats	Sample Files	Description	VHPI (5)	HPI (4)	MPI (3)	LPI (2)	VLPI (1)	Total Number of Responses
1	Text	PDF, RTF, TXT, DOC	Letters, reports, memos, e-mail messages saved as text	Created or saved as text (may include graphics)	200 (1000)	50 (200)	0(0)	0(0)	(0)	1200
2	Vector graphics	DXF, EPS, CGM, SHP	Architectural plans, complex illustrations, GIS	Store the image as geometric shapes in a mathematical formula for undistorted scaling	200 (1000)	50 (200)	0(0)	0(0)	0(0)	1200
3	Raster graphics	TIFF, BMP, GIF, JPEG, PNG	Web page graphics, simple illustrations, photographs	Store the image as a collection of pixels which cannot be scaled without distortion	150 (750)	100 (400)	0(0)	0(0)	0(0)	1150
4	Data file	Proprietary to software program	Human resources files, mailing lists	Created in database software programs	150 (750)	100 (400)	0(0)	0(0)	0(0)	1150
5	Spread-sheet file	Proprietary to software program, DIF	Financial analyses, statistical calculations	Store numerical values and calculations	200 (1000)	50 (200)	0 (0)	0 (0)	0 (0)	1200

| 6 | Video and audio files | QuickTime (MOV), MPEG, Real Networks (RM), WMV, WAV, MP3, AVI | Short video to be shown on a web site | Contain moving images and sound | 250 (1250) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 1250 |
| 7 | Mark-up languages | SGML, HTML, XHXML, XML | Text and graphics to be displayed on a web site | Contain embedded instructions for displaying and understanding the content of a file or multiple files | 250 (1250) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 1250 |

Appendice: 2
Computed Raw Scores of the of How Electronic Records Management Impacted on Nigeria`s National Development

		N = 250					
SN	Items Statements	VHPI (5)	HPI (4)	MD PI	LPI (2)	VLPI (1)	Total Number of Responses
1	Reliable Backups	200 (1000)	50 (200)	0 (0)	0 (0)	(0)	1200
2	Increased Security & Control	200 (1000)	50 (200)	0 (0)	0 (0)	0 (0)	1200
3	Facilitated Collaboration	150 (750)	100 (400)	0 (0)	0 (0)	0 (0)	1150
4	Improved Timeliness	150 (750)	100 (400)	0 (0)	0 (0)	0 (0)	1150
5	Lower Archiving Costs	200 (1000)	50 (200)	0 (0)	0 (0)	0 (0)	1200
6	Improved Version Control	250 (1250)	0(0)	0 (0)	0 (0)	0 (0)	1250
7	Increased Efficiency and File Management	250 (1250)	0(0)	0 (0)	0 (0)	0 (0)	1250
8	Better Searching Capabilities	250 (1250)	0(0)	0 (0)	0 (0)	0 (0)	1250
9	More Consistent Content	150 (750)	100 (400)	0 (0)	0 (0)	0 (0)	1150
10	Improved Task Management	200 (1000)	50 (20)	0 (0)	0 (0)	0 (0)	1200

Appendice: 3
Computed Raw Scores of Areas Electronic Records Management Impacted on Nigeria`s National Development

		N = 250					Total Number of Responses
SN	Items Statements	VHPI(5)	HPI(4)	MPI(3)	LPI(2)	VLPI(1)	
1	Jobs	200(1000)	50(200)	0(0)	0(0)	(0)	1200
2	Education	200(1000)	50(200)	0(0)	0(0)	0(0)	1200
3	Crime Control and Policing	150(750)	100(400)	0(0)	0(0)	0(0)	1150
4	Retailing	150(750)	100(400)	0(0)	0(0)	0(0)	1150
5	Health	200(1000)	50(200)	0(0)	0(0)	0(0)	1200
6	Business	250(1250)	0(0)	0(0)	0(0)	0(0)	1250
7	Money and Banking	250(1250)	0(0)	0(0)	0(0)	0(0)	1250
8	Governance	250(1250)	0(0)	0(0)	0(0)	0(0)	1250
9	e-Agriculture	150(750)	100(400)	0(0)	0(0)	0(0)	1150
10	Training and Retraining	200(1000)	50(200)	0(0)	0(0)	0(0)	1200
11	e-governance	250(1250)	0(0)	0(0)	0(0)	0(0)	1250
12	Entrepreneurship	200(1000)	50(200)	0(0)	0(0)	0(0)	1200
13	Internetpreneurship	250(1250)	0(0)	0(0)	0(0)	0(0)	1250

Field Survey, (2019)