



## ASSESSING THE INTEGRATION OF NEW OFFICE TECHNOLOGIES IN RIVERS STATE PUBLIC SERVICE ADMINISTRATION

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### **Abstract**

*The study assessed the integration of new office technologies in Rivers State Public Service administration. The descriptive survey research design was adopted for this study. The population of the study comprised of 130 Senior Administrators' of Ministries and 245 Senior Administrators' of Agencies drawn from the Public Service in Rivers State. The entire population was used for the study. A structured questionnaire titled "Integration of New Office Technologies in Administration" (INOTA) was used as instrument for data collection. Three experts validated the instrument while Cronbach alpha was used to obtain the reliability coefficient of 0.89. Two research questions and two hypotheses guided the study. Only 319 copies of the questionnaire were retrieved and used for the study. The items were rated on a four (4) point rating scale; mean was used to analyze the research questions and z-test was used in testing the hypotheses. The findings revealed a moderate level of Senior Administrators' knowledge on the use of new office technologies and a low extent of Senior Administrators' utilization of new office technologies in Rivers State Public Service administration. The researcher recommended that government should ensure the training and retraining of officers of Ministries and Agencies on state of the art office technologies to build their knowledge on efficient usage and to improve service delivery in the Public Service.*

**Keywords:** *New Office Technologies, Administration, Integration, Public Service.*

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### **Introduction**

The desire to reposition the public service for effective and efficient service delivery has always been the preoccupation of many countries in both developed and developing nations. As a result, governments across the globe have initiated a number of policy frameworks to reform the public sector by reorganizing the structures, systems and processes that will enhance the delivery of services to their



citizens (Rahim, Akintunde, Oguntoyinbo, Obanla & Aremu, 2017). Literarily, the public service of any country is an establishment of governance and administration created basically to provide public good (water, electricity, health care, qualitative education and transportation systems among others) to the citizen in the most efficient and effective method.

Oni, Oni and Gberevbie (2015) opined that the public service of any country is a major pillar in determining the development and stability of such country. This is because the public service is the engine for the processing of the vastly acquired and expanded government responsibilities of executing public policies and projects and rendering essential services to the people. The public service comprises of government establishments which is made up of the Ministries, Departments and Agencies; charged with the responsibility of policy formulation and implementation that will translate into better service delivery and this requires a lot of information generation and transmission. The processes of handling these activities can better be described as administration.

Administration is the component part of management concerned with facilitating accomplishment of an organization's objectives through the systematic management of constraints and careful utilization of the available limited resources like human, material, finance etc. Ajike (2015) opined that Administration is the process of organizing people and resources efficiently so as to direct activities towards a common goal and objectives and that administration includes those functions required for effective business operations to ensure smooth day-to-day operations of an organization. Thus, Administration in the context of this study involves the control of office activities in terms of information sharing and effective communication. The Secretary is an important player when it comes to management and processing of information in every organization. Office administration requires a Secretary that possesses modern Information Technology and Management skills. A modern business office administration involves word processing, data processing, reprographics, micrographics and communication systems which are integrated to facilitate attainment of better office services (Agomuo, 2012). These are all new office technologies that have relegated the traditional office practices and have brought about efficiency in organizational service delivery.

New Office Technologies are computer related devices used in the discharge of office duties which include hardware and software facilities that bring about



efficiency in the management of information and communication. New Office Technologies, according to Morton (2012) include; PowerPoint (slide presentation), Blogging, Mobile Devices, iTunes, Screen Casting, Twitter, Wikis, Web, Video and Tele-conferencing, Video conferencing, Interactive White Board, Online Library, Database, LCD Projector, Overhead Projector, etcetera. Nwokike (2015) opined that New Technologies are also known as Information Communication Technology which consists of computer, scanners, printers, intranet, internet, email, videophone system, teleconferencing devices, wireless application protocols (WAPS), radio and microphones, television and satellites, multimedia computer and multimedia projectors.

According to Amaewhule and Appah (2019), Information and Communications Technology is technology that supports activities involving the creation, storage manipulation and communication of information, together with the related methods, management and application. In other words, Information and Communications Technology enables us to record, store, process, retrieve and transmit information using technological facilities.

Okpokwasili (2018) asserted that there are many information systems application tools commonly used in various offices in public parastatals. These information systems application tools include: Microsoft suits, Internet services, graphic application tools like CorelDraw etcetera. The utilization of these information system tools does not come with ease, it requires the development of certain level of competencies that will enable the users perform their jobs efficiently and effectively, thereby, enhancing the accomplishment of the public parastatals' objectives. Digital technologies need to be integrated in core processes and activities of the government in order to establish new ways of working and promote greater openness and collaboration; this requires the development of new capabilities and skills able to sustain a digital public sector culture (OECD, 2019).

By integrating the use of Information Communication Technology in government processes, public administration can achieve an increase in productivity and efficiency in service delivery. Information Communication Technology enabled administration has the potentials of revolutionizing the quality of services delivered to the citizens by ushering in transparency, accountability and efficiency which are the bane of the Nigeria's public sector (Oni *et al.*, 2015).



Mashau and Andrisha (2016) asserted that Modern office technological gadgets such as smartphones, faster Windows operating systems (e.g., Windows 7 and 8), laptops and tablets are being used by many managers and are helpful in terms of making work very flexible and easy and that computers and information technology has become an enabler for greater convenience. Users can access the most popular types of computer software programs, like word processing programs which help with the writing and editing of letters and reports, and data management programs which help us to work with long lists of data and spread sheets every day on our tablets, smartphones and laptops, thus, making some management tasks easier.

Managers of organizations and Secretaries now have many technologically advanced office gadgets to ease their jobs and enhance proficiency and productivity leading to improved service delivery. Today's secretaries are exposed to office technology including the internet that makes work much easier and knowledge more accessible; It is now easier to send messages by telex, electronic mails (e-mails), fax and telephones (Phyllis & Peter, 2016). Technological changes have altered the procedures and techniques for office functions to include New Technologies, such as computers, electronic mail, voice mail, and the internet. Modern Information and Communication Technologies, as expressed by Strielkowski, Gryshova and Kalyugina (2017) are crucial for the proper functioning of modern public administration, state and public sector management and with the growing importance of Internet, information and communications solutions that help to facilitate daily tasks; many governments in the world are embracing the novel and innovative solutions for the routine tasks. New Technology is changing the scope of what's considered an office Stone (2017). Offices inevitably adopt newer technologies that get more work done with fewer people, and there's pressure to keep a modern, professional image by staying on top of the latest tech trends.

### **Statement of the Problem**

Over the years, several changes have taken place in both private and public offices in terms of information management and communication which has been triggered by technological advancement in all phases of human life and endeavour. Most offices in today's business world; be it government, industry or other human endeavours, require detailed and accurate information for quick decision-making. The type of machines and gadgets that were used to produce, duplicate, store information and communicate has undergone a great transformation to cope with the growing world



of technology. New Technologies such as computers, smartphones, hand-held devices, electronic mail, voice mail, and the internet have altered the procedures and techniques for office functions and are required for information management by managers, secretaries and other office personnel.

Today, technology has become a strong force in information management and provides users with wide range of tools to help achieve goals of improved service delivery. Despite its potential benefits government and public offices seem to be struggling with the integration of these new technologies. Okpokwasili (2018) revealed that many of the computers in most public parastatals in Rivers State liedown idle without being put to functional use and where they are being used, only typing of textual documents are done with them; most times, graphic and calculation works, Internet services, PowerPoint, Microsoft publishers, spreadsheet as well as database applications are neglected and often times the official documents are taken to commercial business centres for production. Also, it is observed that the traditional method of information management and communication is still the main practice in today's offices with little or no application of technology; especially amongst the public services. Ministries and Agencies in Rivers State still produce document and share information manually. What remains open to question is the level to which public service offices in Rivers State have taken advantage of technology to enhance service delivery.

### **Research Questions**

The following research questions were posed to guide the study:

What is the level of Senior Administrators' knowledge on the use of new office technologies in Rivers State Public Service administration?

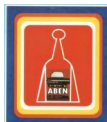
What is the extent of Senior Administrators' utilization of new office technologies in Rivers State Public Service administration?

### **Hypotheses**

The following null hypotheses were tested at .05 level of significance:

There is no significant difference in the mean ratings of Senior Administrators' of Ministries and Agencies on knowledge on the use of new office technologies in Rivers State Public Service administration.

There is no significant difference in the mean ratings of Senior Administrators' of Ministries and Agencies on the extent of utilization of new office technologies in Rivers State Public Service administration.



## Methodology

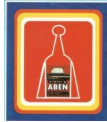
The descriptive survey research design was used in conducting the study. The population of the study as indicated in the table below comprised of 130 Senior Administrators' of Ministries and 245 Senior Administrators' of Agencies drawn from Rivers State Public Service.

**Table 1:** Population Distribution

S/N	Groups	Dir. Admin	Secretaries	Total No. of Senior Administrators'
1.	Ministries	26	104	130
2.	Agencies	49	196	245
		<b>75</b>	<b>300</b>	<b>375</b>

Source: Establishment/Training/Pension Bureaus, 2019.

No sampling technique was used for the study, since the population was small. The instrument used for data collection was a structured questionnaire titled "Integration of New Office Technologies in Administration" (INOTA). The instrument provided response to the two research questions with 30 items; Item 1-15 addressing Research Question One and item 16-30 addressing Research Question Two in a 4-point rating scale weighted as "High Level" (HL) 4 points, "Moderate Level" (ML) 3 points, "Low Level" (LL) 2 points, "Very Low Level" (VLL) 1 point and High Extent" (HE) 4 points, "Moderate Extent" (ME) 3 points, "Low Extent" (LE) 2 points and "Very Low Extent" (VLE) 1 point respectively. To establish the validity of the instrument, the questionnaire was subjected to face and content validity by two experts from the Department of Business Education and one expert from Measurement and Evaluation, all in the Faculty of Education in Rivers State University. To ensure the consistency of the instrument, the test-retest method of reliability was adopted and a reliability coefficient of .89 was established. Only 319 copies of the questionnaire were retrieved and used for the study; this represents 85 per cent of the total number distributed. The data analysis was done using the mean to analyze the research questions while z-test was used to test the hypotheses. The mean was obtained by the summation of all responses as assigned to a rating scale in an item divided by the total number of responses:  $4+3+2+1/4 = 2.50$ . The mean score of 2.50 and above was accepted, while those below 2.50 were rejected. Also, the decision rule for the hypotheses was that any hypothesis with a z-calculated value less than the z-critical table value of 1.96 is considered accepted whereas if it is more than the critical table value it is considered rejected.



## Results

### Research Question 1

What is the level of Senior Administrators' knowledge on the use of new office technologies in Rivers State Public Service administration?

**Table 2:** Mean ratings on level of Senior Administrators' knowledge in Rivers State Public Service administration N=319

S/N	Items: I am knowledgeable in the use of:	Ministries (121)		Agencies (198)		Mean	Std. Dev.	Remarks
		0	STD	0	STD			
1.	Computers.	3.55	0.76	3.54	0.77	3.55	0.77	HL
2.	Projectors.	2.53	1.23	2.52	1.23	2.53	1.23	ML
3.	Scanners.	3.52	0.78	3.51	0.77	3.52	0.78	HL
4.	Printers.	3.51	0.81	3.50	0.83	3.51	0.82	HL
5.	Photocopiers.	3.49	0.84	3.46	0.84	3.48	0.84	ML
6.	Smart Phones.	3.09	1.07	3.04	1.21	3.07	1.14	ML
7.	Microsoft Word.	3.57	0.71	3.54	0.78	3.56	0.75	HL
8.	Microsoft PowerPoint.	3.36	0.97	3.33	0.99	3.35	0.98	ML
9.	Microsoft Excel.	2.42	1.21	2.41	1.20	2.42	1.21	LL
10.	Facebook.	3.49	0.88	3.48	0.85	3.49	0.87	ML
11.	Twitter.	2.38	1.19	2.37	1.20	2.38	1.19	LL
12.	WhatsApp.	3.27	1.11	3.26	1.09	3.27	1.10	ML
13.	Video Conferencing.	2.40	1.18	2.38	1.19	2.39	1.19	LL
14.	Search Engines.	3.23	1.18	3.22	1.17	3.23	1.18	ML
15.	Electronic Mailing.	3.36	1.05	3.35	0.99	3.36	1.02	ML
<b>Total Mean/SD</b>		<b>47.17</b>	<b>14.97</b>	<b>46.91</b>	<b>15.11</b>	<b>47.04</b>	<b>15.04</b>	
<b>Grand Mean/SD</b>		<b>3.14</b>	<b>0.99</b>	<b>3.13</b>	<b>1.01</b>	<b>3.14</b>	<b>1.00</b>	<b>ML</b>

Source: Field work, 2019.

The data presented in Table 2 shows that the responses for items 1, 3, 4 and 7 had the mean scores of 3.55, 3.52, 3.51 and 3.56 which implies a high level of knowledge in the use of Computers, Scanners, Printers and Microsoft Word and items 2, 5, 6, 10, 12, 14 and 15 had mean scores of 2.53, 3.48, 3.07, 3.35, 3.49, 3.26 and 3.36 which implies a moderate level of knowledge in the use of Projectors, Photocopiers, Smart Phones, Microsoft PowerPoint, Facebook, WhatsApp, Search Engines and Electronic Mailing. Also, items 9, 11 and 13 had mean scores of 2.42, 2.38 and 2.39 which imply a low level of knowledge in the use of Microsoft Excel, Twitter and Video Conferencing. Consequently, the grand mean of 3.14 indicates a moderate



level of Senior Administrators' knowledge on the use of new office technologies in Rivers State Public Service administration.

### Research Question 2

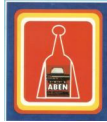
What is the extent of Senior Administrators' utilization of new office technologies in Rivers State Public Service administration?

**Table 3:** Mean ratings on extent of Senior Administrators' utilization of new office technologies in Rivers State Public Service administration N=319

S/N	Items: I utilize the following:	Ministries (121)		Agencies (198)		Mean	Std. Dev.	Remarks
		0	STD	0	STD			
		16.	Computers.	3.62	0.68			
17.	Projectors.	2.41	1.20	2.40	1.16	2.41	1.18	LE
18.	Scanners.	3.50	0.88	3.50	0.89	3.50	0.89	HE
19.	Printers.	3.67	0.61	3.64	0.69	3.66	0.65	HE
20.	Photocopiers.	3.70	0.58	3.69	0.62	3.69	0.60	HE
21.	Smart Phones.	3.52	0.86	3.49	0.90	3.51	0.88	HE
22.	Microsoft Word.	3.63	0.67	3.61	0.74	3.62	0.71	HE
23.	Microsoft PowerPoint.	1.46	0.76	1.45	0.76	1.46	0.76	VLE
24.	Microsoft Excel.	1.47	0.77	1.44	0.73	1.46	0.75	VLE
25.	Facebook.	1.41	0.79	1.38	0.66	1.39	0.73	VLE
26.	Twitter.	1.44	0.74	1.42	0.67	1.43	0.71	VLE
27.	WhatsApp.	1.40	0.73	1.39	0.66	1.39	0.69	VLE
28.	Video Conferencing.	1.36	0.70	1.34	0.59	1.35	0.65	VLE
29.	Search Engines.	1.49	0.80	1.48	0.79	1.49	0.79	VLE
30.	Electronic Mailing.	1.37	0.71	1.36	0.64	1.37	0.68	VLE
<b>Total Mean/SD</b>		<b>35.45</b>	<b>11.48</b>	<b>35.18</b>	<b>11.24</b>	<b>35.32</b>	<b>11.36</b>	
<b>Grand Mean/SD</b>		<b>2.36</b>	<b>0.77</b>	<b>2.35</b>	<b>0.75</b>	<b>2.35</b>	<b>0.76</b>	<b>LE</b>

Source: Field work, 2019.

The data presented in Table 3 shows that the responses for items 1, 3, 4, 5, 6 and 7 had the mean scores of 3.61, 3.50, 3.66, 3.69, 3.51 and 3.62 which implies a high extent of utilization of Computers, Scanners, Printers, Photocopiers, Smart Phones and Microsoft Word. Also, items 2, 8, 9, 10, 11, 12, 13, 14 and 15 had mean scores of 2.41, 1.46, 1.46, 1.39, 1.43, 1.43, 1.39, 1.35, 1.49 and 1.37 which implies a very low extent of utilization of Projectors, Microsoft PowerPoint, Microsoft Excel, Facebook, Twitter, WhatsApp, Video Conferencing Search Engines and Electronic Mailing. Consequently, the grand mean of 2.35 indicates a low extent of Senior



Administrators' utilization of new office technologies in Rivers State Public Service administration.

### Hypothesis 1

There is no significant difference in the mean ratings of Senior Administrators' of Ministries and Agencies on knowledge of the use of new office technologies in Rivers State Public Service administration.

**Table 4:** z-test result on level of Senior Administrators' knowledge in the use of new office technologies in Rivers State Public Service administration

Respondents	N	Mean	Std. Dev.	Df	z- Cal Value	z- Crit Value	L/Sig	Decision
Ministries	121	3.14	0.99	317	0.09	1.96	0.05	Accepted
Agencies	198	3.13	1.01					

Source: Field work, 2019

Table 4 above revealed a z-calculated value of 0.09 which is less than the standard z-critical value of 1.96; thus, the null hypothesis was accepted. The result therefore is that there is no significant difference in the mean ratings of Senior Administrators' of Ministries and Agencies on knowledge of the use of new office technologies in Rivers State Public Service administration.

### Hypothesis 2

There is no significant difference in the mean ratings of Senior Administrators' of Ministries and Agencies on the extent of utilization of new office technologies in Rivers State Public Service administration.

**Table 5:** z-test result on extent of Senior Administrators' utilization of new office technologies in Rivers State Public Service administration

Respondents	N	Mean	Std. Dev.	Df	z- Cal Value	z- Crit Value	L/Sig	Decision
Ministries	121	2.36	0.77	317	0.11	1.96	0.05	Accepted
Agencies	198	2.35	0.75					

Source: Field work, 2019

Table 5 above revealed a z-calculated value of 0.11 which is less than the standard z-critical value of 1.96; thus, the null hypothesis was accepted. The result therefore is



that there is no significant difference in the mean ratings of Senior Administrators' of Ministries and Agencies on the extent of utilization of new office technologies in Rivers State Public Service administration.

### **Discussion of Findings**

One of the findings of this study was that the respondents level of knowledge in the use of Projectors, Photocopiers, Smart Phones, Microsoft PowerPoint, Facebook, WhatsApp, Search Engines and Electronic Mailing is moderate amongst others; thus, indicating a moderate level of Senior Administrators' knowledge on the use of new office technologies in Rivers State Public Service administration. This agrees with Phyllis and Peter (2016) who asserted that today's secretaries are exposed to office technology including the internet that makes work much easier and knowledge more accessible. The technological evolution in the office world is the reason for which administrators are striving to acquire several necessary skills relating to new technologies as required in automated offices all over the world.

The study also revealed a very low extent of utilization of Projectors, Microsoft PowerPoint, Microsoft Excel, Facebook, Twitter, WhatsApp, Video Conferencing, Search Engines and Electronic Mailing; indicating a low extent of Senior Administrators' utilization of new office technologies in Rivers State Public Service administration. This agrees with the findings of Okpokwasili (2018) who observed that many of the computers in most public parastatals in Rivers State lie idle without being put to functional use and where it is being used, only typing of textual documents are done with it. Most times, graphic and calculation works, Internet services, PowerPoint, Microsoft publishers, spreadsheet as well as database applications are neglected and often times the official documents are taken to commercial business centres for production.

### **Conclusion**

New Technologies such as computers, smartphones, hand-held devices, electronic mail, voice mail, and the internet services have altered the procedures and techniques for office functions and are required for information management by managers, secretaries and other office personnel's. No doubt, a change in the practice of office administration is imperative vis-à-vis the emerging technologies associated with modern office administration. The integration of new technologies in the Public Service helps in the delivery of better service. Administrators of Ministries and



Agencies in Rivers State Public Service are notably seen producing officially documents outside their offices, despite the fact that they are knowledgeable in the use of these new technologies. This suggests that they rarely utilize new office technologies and are comfortable with the traditional system or probably availability of these office technologies may be an issue confronting the full integration of new office technologies in Public Service administration.

### **Recommendations**

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

Government should ensure the training and retraining of officers of Ministries and Agencies on state of the art office technologies to build their knowledge on efficient usage.

Administrators in the Ministries and Agencies should ensure effective utilization of available new office technologies for better service delivery in the Public Service.

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