

THE USE OF ICT TOOLS AS AN ADMINISTRATIVE STRATEGY AND ORGANIZATIONAL PRODUCTIVITY IN NIPOST IN RIVERS STATE

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Abstract

This study investigated the relationship between the use of ICT tools as an administrative strategy and organizational productivity in NIPOST in Rivers State. Two research questions and two null hypotheses were designed to guide the study. This study was a correlational study. This is because the instrument (questionnaire) was used to elicit responses from the respondents to establish relationship or absence of it, that exists between the use of ICT tools as an administrative strategy and increased productivity in NIPOST in Rivers State. 1200 staff made up of 683 male and 517 female staff; 450 senior and 750 junior staff constituted the population. Through a stratified random sampling pegged at 30%, 205 male and 155 female staff; 135 senior and 225 junior staff were randomly drawn from the total population. Face and content validated instrument code-named relationship between ICT use and Organizational Productivity Assessment Questionnaire (RIUOPAQ) was used for data collection. This instrument had a 4 modified likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree with points ranging from 4 to 1. Mean and standard deviation statistical tools of analysis were used to give answers to the research questions, whereas t-test was employed in testing the null hypotheses. The results of the study revealed among others that, the ICT tools adopted and used by NIPOST as its administrative strategy is very insignificant and grossly inadequate and that there is a significant relationship between ICT tools and organizational productivity. Based on the above result, the researcher recommended among others, that NIPOST should review its business and administrative strategies to be completely ICT-driven to about productivity and competitive advantage and should holistically integrate all its administrative functions, operations and transaction into the mainstream of ICT-driven scheme.

Background of Study

All organizations, whether private or public, require productivity in all aspects administration and operation, but not all the administrative strategies lead to increased productivity. Therefore, every organization has the task to reposition itself strategically for increased productivity.

As a matter of clarification, whereas administration as a concept mostly relates to a public sector, management largely relates to a private sector. However, in both, strategies for attaining set goals and objectives are very crucial and indispensable. Administration has to be with making and executing of public policies made within an organization. The organization may be government ministries, agencies, parastatals, etc. according to Eldredge and Bates (1984), the term strategy means the overall guiding philosophy of a company (organisation) in the commitment of its resources for attaining its goals. Chandler (1962:13) cited in Pettigrew, Thomas, and Whittington (2006) famously defined strategy as the determination of basic long term goals and objectives of an enterprise and adaption of course of action and the allocation of resources necessary for those goals. From the above working definitions, the term strategy may be defined as a set of predetermined plans and actions geared towards achieving long term goals set by an organization or a person.

On the other hand, policies are statements that provide guidance for decision making in specific areas. Policies

assist in attaining an organisation's objectives within the philosophy of the strategy. Whereas goals and objectives are usually defined in terms of results or outcomes, strategies and policies are usually defined in terms of decision making inputs. This implies that administrative strategies/goals are usually stated in general terms unlike administrative objectives/policies which are usually stated in specific terms.

So far as administrative strategies are normally defined in terms of decision making inputs, organizational productivity level is dependent upon nature of decisions being made and taken by the administrator in-charge of an organization. Thus, the better the decision making and taking inputs, the higher the productivity level of an organization.

According to Benachy (2015), productivity measures the efficiency level of a production or transactional process in relation to attaining organizational goals. It is obtained when the proportion of resource outputs outweighs the proportion of resource inputs with less time spent in the process. For instance, an administrative strategy could be designated as productive where an administrator has successfully completed a task in five minutes using a computer, which ordinarily she could have achieved the same using 10men in five days. In the above given scenario, the proportion of the resource input is one computer. The proportion of the resource output is using such one computer to complete a task in five minutes of which such could have

taken 10men five days to complete the same task.

Therefore, any administrative strategy that encourages time, energy, efforts saving, cost reduction, convenience and elimination of delay and rigidity in the production and transactional processes, can be said to be highly productive.

A study by Twaddle (2016) revealed that there exists a significant relationship between ICT- driven administration and organizational productivity. It is in this regard that Twaddle recommended that organizational productivity target (strategy) must be anchored and leveraged on ICT- assisted production and transactional process, where goods are produced and/or services rendered with the use of ICT. The rationale behind this is that, in this era of knowledge-driven economy, the extent of competitive advantage accruable to any business organization is determined or measured by the strength and capacity of ICT such an organization has and puts into effective use.

By deduction, Twaddle is saying that the best and innovative administrative strategy in respect of enhancing productivity level in organizations must be rooted in the effective utilization and implementation of ICT scheme.

ICT scheme if well executed makes production, transactional and operational processes very easy, cost saving and time efficient; eliminates costly delays and avoidable risks; ensures convenience and flexibility, maximizes competitive advantage and profitability, encourages quick and quality service

renditions to customers' satisfaction, guarantees customers' retention and high patronage and promotes business or service accountability and transparency (Nwankwo, 2008; Benachy, 2015).

Anderson (2012) posited that, generally strategic (business) administration is the ability of the administrator to ensure steady increase in productivity level through thorough implementation of innovative ideas and policies of not only integrating ICT tools into the administrative mainstream but also of mobilizing and motivating the workforce. What Anderson tends to be saying is that a particular organization will be adjudged productive where its administrator carries out innovative policies of motivating and mobilizing both human and material resources at the disposal of that organization.

It is imperative therefore to emphasize that ICT innovation in an organization will not succeed or be productive if workers are not ICT friendly, environment not ICT activated and the workers who drive the ICT scheme and use them in their daily tasks or work are not properly motivated. Thus, organizational productivity is likely to be achieved if the administrator puts under consideration two major things or factors namely – ICT administrative tools and mobilizing and galvanizing workers who drive the ICT initiatives (Anderson, 2012).

Twaddle (2016) and Anderson (2012) concurred that it is not possible to seek organizational productivity in this 21st century without ICT to innovate and

workers' motivation to drive the innovation.

A study by Giaus and Ferry (2014) showed that employees who are ICT skilled are proficient are bound to be motivated to use ICT tools, which usually translates into achieving organizational productivity. This is because tasks are done in time; energy, efforts and money are saved; flexibility and convenience in production of goods and services are guaranteed and minimal cost is spent on staff's salaries, allowances. and trainings. Computers, the internet, the web, the hardware and software applications, among others, make transactions and operations very easy and cheap. They also secure information assets of an organization, help in secured, fast and cheap information collection, storage, storage, retrieval, processing, tracking, exchanging, circulating and sharing. They equally make communication and interaction within and outside organization quick, cheap and accurate and ensure quick and easy business coordination, planning, organizing, budgeting, financial forecasting, and operational evaluation. Above all, they bring about accountability and transparency as information is accessible and available for everyone one to see anywhere anytime.

Statement of the problem

Misfiring administratively is the ominous sign of wrong business strategy. Wrong business strategies usually rakes in unproductivity in organizations with a disastrous consequence of setting the business crashing. Looking at the Nigerian

Post Office Services (NIPOST), it seems no better than unproductivity personified. In this 21st century, it is surprising and very unfortunate that a great volume of services being undertaken by NIPOST are not automated. In few branches where there is a little presence of ICT tools, such as computers, the internet connectivity, the staff members seem grossly unequipped and poorly motivated to put these ICT tools into use. The use of these ICT tools is usually further decimated by lack of power supply and routine maintenance. Mailbox allotment is still carried out in most antiquated ways as it has not been subjects to electronic coding system. In courier services, there is obvious lack of electronic tracking system to ensure that letters, documents, and parcels reach the appropriate persons or group of persons or organizations on time and anywhere. The documentations, financial and transactional administrative functions are still highly paper and face-to-face fashioned. The intra and inter communications and interactions between the administrators and workers along the workflow channel are not yet ICT centred, thereby hindering quick, easy and cheap service delivery. There also exists high level of customers dissatisfaction about NIPOST services as they are being seen expressed this by abandoning NIPOST for other private courier alternative services such as EMS,DHL, among others. Consequently, NIPOST is now lacking in competitive advantage over other related private firms with a touch of ICT based administrative strategies. It is in this light that this study sought to investigate

relationship between the use of ICT tools as an administrative strategy and organizational productivity in NIPOST in Rivers State.

Aim and Objectives

The cardinal aim of this study is to investigate relationship between the use of ICT tools as an administrative strategy and organizational productivity in NIPOST in Rivers State. Specifically, this study was designed to achieve the following objectives:

1. To ascertain the ICT tools NIPOST adopted as an administrative strategy for rendering services in Rivers State.
2. To examine the relationship between the use of ICT tools as an administrative strategy and increased productivity in NIPOST in Rivers State.

Research Questions

The study is guided by these research questions:

1. What ICT tools are adopted by NIPOST as an administrative strategy for rendering services in Rivers State?
2. How does the use of ICT tools as an administrative strategy relate to increased productivity in NIPOST in Rivers State?

Research Hypotheses

The following hypotheses tested at 0.05 level of significance guided the conduct of this study:

H₀₁: There is no significant difference between the mean ratings of male and female staff of NIPOST in Rivers State on

the ICT tools NIPOST adopted as an administrative strategy for rendering services in Rivers State.

H₀₂: There is no significant difference between the mean ratings of senior and junior staff of NIPOST on how the use of ICT tools as an administrative strategy relates to increased productivity in NIPOST in Rivers State.

Methodology

This study was a correlational study. This is because the instrument (questionnaire) was used to elicit responses from the respondents to establish relationship or absence of it, that exists between the use of ICT tools as an administrative strategy and increased productivity in NIPOST in Rivers State. 1200 staff made up of 683 male and 517 female staff; 450 senior and 750 junior staff constituted the population. Through a stratified random sampling pegged at 30%, 205 male and 155 female staff; 135 senior and 225 junior staff were randomly drawn from the total population. Face and content validated instrument code-named Relationship between ICT Use and Organizational Productivity Assessment Questionnaire (RIUOPAQ) was used for data collection. This instrument had a 4 modified likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree with points ranging from 4 to 1. Mean and standard deviation statistical tools of analysis were used to give answers to the research questions, whereas t-test was employed in testing the null hypotheses. The criterion mean of 2.50 was used for

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measuring each item of the questionnaire in that any item whose mean value is 2.50 and above indicates acceptance, while the one below 2.50 indicates rejection of such an item.

Results

The study presented the results achieved from analyzing the data collected as follows:

Research question one: What ICT tools are adopted by NIPOST as an administrative strategy for rendering services in Rivers State?

Table: mean (\bar{x}) and standard deviation analysis presenting the ICT Tools adopted by NIPOST as an Administrative strategy for rendering services

their calculated mean values below the criterion mean of 2.50. This result therefore indicates that ICT tools which are adopted by NIPOST as an administrative strategy for rendering services in Rivers State include computers, e-mail, secondary storage devices such as flash drives, CDS, DVDS, etc and effective phone lines. Conversely, ICT tools not adopted include computers with the internet/intranet connectivity, the web, software applications, e-conferencing, e-publication boards, social media platforms, strong/reliable database or data warehousing, e-tracking system, e-mail box allotment system, e-documentation/record keeping and high capacity servers.

S/N	Items	Male staff: N=205		Female staff: N=155		Mean set $\frac{X_1 + X_2}{2}$	Decision
		\bar{x}	SD	\bar{x}	SD		
1	Computer	2.75	1.13	2.83	1.13	2.79	Agree
2	The computers with the internet/intranet connectivity	2.47	1.04	2.25	1.13	2.36	Disagree
3	The web	2.34	1.03	2.28	1.01	2.31	Disagree
4	E-mail	2.89	1.07	2.88	1.12	2.89	Agree
5	Software applications	2.10	1.10	2.01	1.09	2.06	Agree
6	Electronic conferencing	1.75	0.91	1.96	1.10	1.86	Disagree
7	Electronic Boards publication	1.64	0.81	1.95	1.03	1.80	Disagree
8	Social media platforms such as facebook, Twitter, instogram, whatsapp, etc	2.06	1.07	2.00	1.08	2.03	Disagree
9	Secondary storage devices such as flash drives, CDS, DVDs, etc.	2.51	1.01	2.58	1.22	2.55	Agree
10	Strong/reliable database or data warehousing	2.29	1.18	2.17	0.95	2.23	Disagree
11	Electronic tracking system	2.10	1.10	1.85	0.91	1.98	Disagree
12	e-mail box allotment system	2.24	1.14	2.07	1.10	2.16	Disagree
13	e-documentation/record keeping	2.17	1.23	2.08	1.20	2.13	Disagree
14	High capacity servers	2.25	1.12	2.39	1.26	2.32	Disagree
15	Effective phone lines	2.60	1.23	2.54	1.18	2.57	Agree
	Aggregate mean	2.28	1.08	2.26	1.10		

Table 1 reveals that, with the exception items 1, 4, 9 and 15, all other items had

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Research question two: How does the use of ICT tools as an administrative strategy relate to increased productivity in NIPOST in Rivers State?

Table 2: mean (\bar{x}) and standard deviation (SD) Analysis presenting how the use of ICT tools as an administrative strategy relates to increase productivity.

S / N	Items	Male staff: N=205		Female staff: N=155		Mean set	Decision
		\bar{x}	SD	\bar{x}	SD		
1	Using computers can make data processing and storage quick and easy.	3.05	1.00	2.88	1.08	2.97	Agree
2	Using computers with the Internet can encourage fast and easy tracking of files, records and information.	2.92	0.92	3.28	0.82	3.10	Agree
3	Using the web can guarantee easy and fast access to information.	3.04	1.06	3.13	1.00	3.09	Agree
4	Using e-mail can promote easy, quick, convenient and flexible communications and information circulation.	3.02	0.98	3.14	0.93	3.08	Agree
5	Using the appropriate software can aid quick, accurate and sound decision making.	2.81	0.99	2.90	1.00	2.86	Agree
6	E-conferencing can save energy, efforts and time and eliminate risks associated with traveling for meetings.	3.01	0.94	2.96	1.01	2.99	Agree
7	E-publication boards can make information circulation, public notice, official directives and policies very easy, quick and readily accessible.	2.97	1.01	2.94	0.95	2.96	Agree
8	Social media platforms such as facebook, Twitter, whatsapp, etc can promote easy, quick, convenient, and flexible communications, interactions, information sharing and exchange.	3.28	0.90	2.99	1.07	2.99	Agree
9	Using the secondary storage devices such as CDS, DVDS, flash drives, etc, can forestall delay and save vital information resources from complete loss in case of system failure or breakdown or natural disasters.	3.15	0.99	3.01	1.04	3.08	Agree
10	Maintaining strong database/data warehousing in NIPOST can promote quick and easy access to information/data.	2.93	0.84	3.01	0.96	2.97	Agree
11	Using e-tracking system can ensure easy and quick tracking of courier services such as letter, document and parcel delivery.	3.24	0.89	3.10	1.03	3.17	Agree
12	E-allotment system of mail boxes can encourage effective, easy and quick area coding and mail box distribution.	3.19	0.87	2.80	0.98	3.00	Agree
13	E-documentation and recordkeeping can save time, energy and efforts.	3.27	0.92	3.28	0.80	3.28	Agree
14	Using high capacity servers can aid easy and quick systems connectivity and resource sharing.	3.06	0.79	3.23	0.91	3.15	Agree

15	Effective phone lines can help in easy and quick communications.	3.39	0.80	3.24	0.85	3.32	Agree
	Aggregate mean	3.09	0.93	3.04	0.96		

Table 2 shows that all the items had their calculated mean values above the criterion mean of 2.50. This result thus shows that the use of ICT tools as an administrative strategy relates to increased productivity in the following number of ways. Using computers can make data processing and storage quick and easy, computers with the internet can encourage fast and easy tracking of files, records and information, the web can guarantee easy and fast access to information, e-mail can promote easy, quick and convenient and flexible communications and information and information circulation, appropriate software can aid quick, accurate and sound decision making, e-conferencing can save energy, efforts and time and eliminate the risk associated with travelling for meetings, e-publication boards can make information circulation, public notice, official directives and policies very easy, quick and readily accessible, social media platforms can promote easy, quick, convenient and flexible communications, interactions, information sharing and exchange and the secondary storage devices can forestall delay and save vital information resources from complete loss in case of systems failure or breakdown or natural disasters. Other include that strong database/data warehousing in NIPOST can promote quick and easy access to information or data, e-tracking system can ensure easy and quick tracking of courier services such as letter, document and parcel delivery, e-

allotment system of mail boxes can encourage effective, easy and quick area coding and mail box distribution, e-document and record keeping can save time, energy and efforts, high capacity servers can aid easy and quick systems connectivity and resource sharing and effective phone lines can help in easy and quick communications.

Test of Hypotheses

H0₁: There is no significant difference between the mean ratings of male and female staff of NIPOST in Rivers State on the ICT tools NIPOST adopted as an administrative strategy for rendering services in Rivers State.

Table 3: t-test analysis presenting the difference between the mean ratings of male and female staff on the ICT tools NIPOST adopted as administrative strategy in rendering services

Variables	N	\bar{X}	SD	t-cal	t-critical	DF	Level of Significance	Decision
Male Staff	205	2.28	1.08	0.17	1.96	358	0.05	Accept
Female Staff	155	2.26	1.10					

Table 3: indicates that the t-calculated is 0.17, while the t-critical is 1.96 at 0.05 level of significance. The degree of freedom is 358. Since the t-calculated is

less than the t-critical (that is, $0.17 < 1.96$), the null hypothesis is accepted. Therefore, there exists no significant difference between the mean ratings of male and female staff on the ICT tools NIPOST adopted as an administrative strategy in rendering services.

H0₂: There is no significance difference between the mean rating of senior and junior staff of NIPOST on how the use of ICT tools as an administrative strategy relates to increased productivity in NIPOST in Rivers State.

Table 4: t-test analysis presenting the difference between the mean ratings of senior and junior staff of NIPOST on How the use of ICT tools as an Administrative strategy relates to increased productivity.

Variables	N	\bar{X}	SD	t-cal	t-critical	DF	Level of Significance	Decision
Senior Staff	135	3.09	0.93	0.49	1.96	358	0.05	Accept
Junior Staff	225	3.04	0.96					

Table 4 reveals that the t-calculated is 0.49, while the t-critical is 1.96 at 0.05 level of significance. The degree of freedom is 358. Since the t-calculated is less than the t-critical (that is, $0.49 < 1.96$), the null hypothesis is accepted. Therefore,

there exists no significant difference between the mean ratings of senior and junior staff of NIPOST on how the use of ICT tools as an administrative strategy relates to increased productivity in NIPOST in Rivers State.

The ICT Tools NIPOST adopted as an Administrative Strategy

The result generated from analyzing research question one indicated that the ICT tools that NIPOST adopted as an administrative strategy in rendering services in Rivers State are computers, secondary storage devices such as flash drives, CDS, DVDS etc, and effective phone calls. The deduction derivable from the result is that NIPOST use or has adopted a very little or insignificant portion of ICT tools. Little wonder, high level of unproductivity that is characterizing that public establishment at present. The result also points to the fact that NIPOST is yet to embrace ICT-oriented administrative strategy which is adjudged the best global practice driving the post office services globally today. Nwankwo (2008)'s study affirmed the above result as it found the level of ICT application in public organizations in Nigeria is still at lowest ebb.

Use of ICT tools as an Administrative Strategy and Increased Productivity

The result strategy from analyzing research question two showed that there exists a significant relationship between the use of ICT tools as an administrative strategy and increased productivity in NIPOST in Rivers. As revealed by the

result, computers, the internet, the web, e-mail, e-publication system, e-conferencing social media platforms, secondary storage devices, among other, are identified as ICT tools which are highly productivity-driven. This is because they can save energy, efforts, time and money. They are also found to guarantee fast and easy access, tracking, processing, sharing, exchange and dissemination of information, secure information resources in case of systems failure or breakdown or natural disasters and lots more. This result is in conformity with the study of Twaddle (2016) which revealed that there exists a significant relationship between ICT-driven administration and organizational productivity.

Conclusion

The study concluded that the level of ICT tools adopted by NIPOST as its administrative strategy is hopelessly insignificant and grossly inadequate. Again there exists a significant relationship between ICT tools and organizational productivity.

Recommendations

Based on the results of the study, the following recommendations were made:

1. NIPOST should review its business and administrative strategies to be completely ICT-driven so as to attract the much needed productivity and competitive advantage.
2. Having established a strong correlation between the use of ICT tools and organizational productivity, NIPOST should holistically integrate all its

administrative functions, operations and transactions into the main-stream of ICT-driven scheme.

3. Quality implementation of this ICT-driven scheme should be religiously pursued by NIPOST.

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