

# **THE USE OF PROPER INFORMATION MANAGEMENT TO UNLOCK ADMINISTRATIVE BOTTLENECKS IN RIVERS STATE MINISTRY OF AGRICULTURE**

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## **Abstract**

The study investigated the use of proper information management to unlock Administrative bottlenecks in Rivers State Ministry of Agriculture. The study was conducted using a descriptive survey design. Out 940 senior and junior staff of Rivers State Ministry of Agriculture, 288 respondents were selected. Through stratified random sampling technique. The instrument code named proper information management Tools for unlocking Administrative Bottles Questionnaire (PIMTUABP) was used to elicit responses mean and standard deviation statistical tools were used analysis the research questions and t-test was used to test the null hypothesis. It was concluded that there exist a good number of administrative workflow bottlenecks struggling and rearing its ugly head in the ministry. However, it was recommended that the Ministry of Agriculture should integrate all its administrative workflow into the proper information management scheme to eliminate all forms of administrative bottlenecks for organizational success.

## **Background of Study**

On the shoulders of top administrative echelons rest the entire decision making as well as decision taking in any organization. Administration is the act of managing an organization or a given business or an office. From this definition emerge three aspects of administration namely organizational administration, business administration and office administration. All these species have the same guiding principles which may slightly defer based on the person in charge. Administration has to do with attaining organizational objectives through the concerted and deliberate efforts of coordinating and organizing people, information and other relevant resources. Within these definitions, Harvard Business Review sees an administrator as one who (a) directs the activities of other persons and (b) undertakes the responsibility for achieving certain objectives through these efforts. Consequently, an administrator is copiously required to do everything possible to set the organization under his control and management on a right track through sound decisions of eliminating unwanted administrative bottlenecks

which usually constitute a great threat to goal attainment. Administration of an organization can be impeded by some avoidable bottlenecks.

Council of supply chain Management Professionals (2010) defined bottlenecks as a constraint or obstacle that limits throughput or the utilization of capacity resulting in the limited performance of the entire system. Thus, a bottleneck in a given process occurs when input comes in faster than the next step can use it to create outputs. The word “bottleneck” compares resources or assets available in a given organization (time, information, products, materials, human beings) with water. According to Investopedia, a bottleneck is a point of congestion in a production process that occurs when workloads arrive too quickly for the production process to handle. The inefficiencies brought about by the bottleneck often create delays and higher production costs. The term refers to the shape of a bottle, and the fact that the bottle’s neck is the narrowest point, which is most likely place for congestion to bottle’ neck, the more water (assets, input, resources) is poured out and vice versa.

Melford (2016) categorized administrative bottleneck into two, namely;

(a) Short term bottlenecks: These do not happen all the time, but rather caused by temporary problems such as when key persons become ill or go on leave. When this occurs, no one else is qualified to take over their task, which causes a backlog in their work until they return.

(b) Long term bottlenecks: These happen all the time and usually arise when, for instance, on organisation’s month-end reporting process is delayed, because one person has to complete a series of time-consuming tasks and he cannot even start until he has final month-end figures (Melford, 2016).

Nwizu (2012) stipulated that the symptoms of bottleneck include backlogged work, where too much work piled up at one point, and not enough as the other point; long wait times, where work is delayed because an employee is waiting for a report, a product or more information or where time is spent walking between steps of a business or process and high level of stress in transaction processes.

According to McKeniah (2014), bottlenecks known to resist process flows within the organization’s transactions or operations are occasioned by a number of factors:

i) **Resource Inefficiency:** Efficiency is generally related to the rate at which time, effort, cost is properly utilized when undertaking a task. A resource, which can be a machine or a human, is said to be sufficient when its output is below the universally accepted rate of production (optimal output) of the resource.

ii) **Outdated technology:** When technologies are not updated, it becomes difficult for organizations to keep up with industrial growth. Most organizations continue to use obsolete technologies, thereby setting a stage for workloads.

iii) **Lack of resource:** Lack of resources such as adequate staff, money and time would definitely lead to a bottleneck.

iv) **Improper communication:** Communication is necessary for the success of any organization, lack of it or improper communication between resources or resource managers can lead to bottlenecks in an organization.

v) **Breakdown:** The causes of bottlenecks are always avoidable and there are situations where there is little one can do about it. Machine breakdowns, staff members falling sick, or unforeseen situations, such power outages, accidents and storms, can sometimes cause bottlenecks.

Poor Maintenance Schedule: Lack of maintenance culture is detrimental to the growth and success of any organization. Maintenance often includes the performance of routing action that helps keep a resource in proper working condition. Lack of a proper maintenance culture would lead to unplanned breakdown, which causes bottlenecks (Mckeniah, 2014).

Nwankwo (2008) and Nwizu (2012) noted that bottlenecks can cause a lot of problems in terms of lost revenue, dissatisfied consumers, wasted time, poorly quality products or services and high stress among the workforce.

On the authority of Eliyah Goldratt (1984), an appropriate theory relating to administrative bottleneck was formulated. This theory is called the Theory of Constraints, which states that every complex system consists of multiple linked activities, one of which acts as a constraint upon the entire system. The exact interpretation of this theory is to the effects that once the most important limiting factor (that is, constraint) that stands in the way of achieving a goal is identified, then the constraints is systematically improved until it is no longer the limiting factors. Adam (2012) posited that the proper implementation of the Theory of Constraints will give rise to the following benefits: increased profit, fast improvement, improved capacity in that the constraints will be optimized thereby leading to smoother and faster product flow and reduced inventory in that when bottlenecks are eliminated, there will be less work-in-process.

Adams (2012) equally noted that the Theory of Constraints provides a powerful set of tools for helping to achieve the organizational goals, which include the five (5) focusing steps (a method for identifying and eliminating constraints), the thinking process (tools for analyzing and resolving problems and throughput/investment accounting)( a method for measuring performance and guiding management decisions). All the above mentioned tools can be sought and obtained by the application of proper information management.

Since administration has to do with making and execution of public policies made within an organization, the focus here is to deploy attention to show how proper information managements can unlock the barriers of administrative bottlenecks in the Rivers State Ministry of Agriculture. Proper information management means the strategic deployment and use of information systems to achieve the set goals. Thus, information management is proper if the information systems are deployed in such a

manner that leads to goal attainment. Technopedia defined information system (IS) as a collection of multiple pieces of equipments involved in the dissemination of information. Hardware, software, computer system connections, and information set, information users, and the systems, housing are all parts of an information system. Wikipedia refers to it as an academic study of systems with a specific reference to information and the networks of hardware and software that people and organizations use to collect, filter, process, create and also distribute data.

It is essential to comprehend the difference between “data” and “information”- data is raw and unprocessed and has limited usefulness. It comes in different forms such as numbers, words, symbols, graphics, images, sounds and videos. It needs to be processed to make it into something useful (Coka, 2016). On the other hand, information is defined by Saint-Onge (2002) as organized data. Data endowed with relevance and purpose (Ducker, 2011). Simply, information is processed data. Davenport, (2000) added that, for data to become information, it must be contextualized, categorized, calculated and condensed.

Technically, proper information managements is a field of expertise, a business function responsible for managing information through the lifecycle irrespective of source or format enabling organizations to capture, manage, store, register, classify, deliver and dispose off through preservation or destruction (Coka, 2016 Wikipedia defined it as concerning a cycle of organizational activity. The acquisition of information from one or more sources, the custodianship and the distribution of that information to those who needs it, and its ultimate disposition through archiving or deletion.

The cycle of organization involvement with information involves a variety of stakeholders. For example those who are responsible for it safe storage, and disposal; those who are responsible for assuring the quality, accessibility and utility of acquired information and those who need it for decision making (Ward & Daniel, 2005).

Administratively, proper information management embraces all the generic concepts of management, including planning, organizing, structuring, processing, controlling evaluation and reporting of information activities, all of which is needed in order to meet the needs of the those with organizational roles or functions that depend on information (Bytheway, 2015; Ward and Peppard, 2002).

The studies by Nwankwo (2008) and Melford (2016) as well as the Theory of Constraints all revealed that there is a significant relationship between the use of proper information and unlocking of administrative bottlenecks in an organization. The reasons are not far-fetched. Proper information management usually adopts information systems and information technologies as a cardinal point of reference. It also involves planning, organizing, processing, tracking, controlling, evaluation and reporting of information activities. Information is key to business operations and people are the resources who make use of information to add value to an organization (Melford, 2016). Proper information managements as people. A large amount of administrative functions or roles

within an organization require the application of information management which uses information technologies such as computers, the internet, the Web, server, hardware and software, and so as its integral parts or tools.

Nwankwo (2008) posited that the use of these information management tools in has organizational administration proven to lead to efficiencies such as elimination of costly delay, reduction of resources like time and money, easy information accessibility, quick information capturing, storing, tracking, processing, retrieval, circulation, exchanging and sharing, and quick and sound decision making. All these act antithetically to administrative bottlenecks.

As Effiong and Onuorah (2014) succinctly put it, administration is all about decision making and execution with a view to achieving the organisational goals. Administrators all over the world rely heavily on information available to make or take vital and overreaching decisions. However, if there are constraints hindering or forestalling the free flow of information resources, there bounds to be the occurrence of bottlenecks along the administrative channel which is usually organized hierarchically in a top-bottom fashion. This basically leads to substantial and preventable energy, effort and time wastage, poor and slow communication, snail-move information circulation, processing sharing, tracking and exchange, lack or absence of flexibility and convenience accumulated high cost in production and transaction, excessive workloads and backlogs, erosion of business profit and re-investment, monumental stress and other administrative inefficiencies.

According to Effiong and Onuorah (2014), Coka (2016), Ward and Daniel (2005) and Nwankwo (2008), the solutions to the above administrative inefficiencies could be found with the four walls of the consolidation and application of proper information managements tools such as computers, the internet, the web, hardware and software applications, server, computer protocols, e-communication devices and facilities, among others. They are strongly of the view that these proper information management tools have been proved to possess adequate capacity to unblock or unlock any forms of administrative bottlenecks in these number of ways.

First, there is no delay in accessing information or data by the authorized information users in an organization should the person or a group of persons in-charge of holding and keeping such information assets is on leave, ill or dead (Effiong & Onuorah, 2014); Coka, 2016). This is because that may be required is all stored in the organization's database which makes for easy accessibility and retrieval. Second, in case of system breakdown or failure, or accident such fire outbreak or natural disasters such as flooding, earthquake, erosion, etc, secondary storage devices such as flash drives, DVDs, CDs, software disaster-resistant devices, among others can be used to prevent permanent and costly loss of information assets which will invariably occasion accumulated workloads and excessive backlogs thereby encouraging bottlenecks in administration of an organization (Nwankwo, 2008 Coka, 2016' Ward & Daniel, 2005).

Thirds from the computer database and other electronic enabled information/data flow systems, an administrator can, for instance, access information without delay on the number of staff employed or more to be employed or disengaged, the set of employees or an employee that causes slow flow of (information) resources, the amount of resources to be spent employing more workers or retraining the ones employed and so on. This, in no small measures, helps the administrator to make sound and quick decisions that have overarching positive effects in terms of goal attainments (Nwankwo, 2008; Coka, 2016; Effiong & Onuorah 2014).

Fourth, Proper information management tools usually removes stress that sets in due to difficulty always experienced in accessing required information thereby unlocking the administrative bottlenecks constraining free information/data flow in an organization (Nwankwo, 2008; Coka, 2008; Ward & Daniel, 2005).

Finally, with the use of proper information management tools, costly delay due to difficulty in accessing and acquiring information about on organization by the people outside in view of guiding them in their decision its transact or not to transact business with the organization, is completely removed. (Effiong & Onuorah, 2014; Coka, 2016; Nwankwo, 2008).

Ward and Daniel (2005), Nwankwo (2008), Coka, 2016 and Effiong and Onuorah (2014) concluded that, with effective use of information management tools, information or data travels at the speed of light within and outside and around the administrative sphere of an organization, reaching the authorized information/data users in good time and fashion. This ultimately unblocks and magnitude and sets organizations on the path of required optimal efficiencies.

### **Statement of the Problem**

A close look at the Rivers State Ministries, especially Rivers State Ministry of Agriculture seems not to deny the fact that there are gross and glaring efficiencies dotting their administrative landscape. It is not uncommon to see pieces of paper-based records and documents littering the office cabinet, tables, silos and shelves waiting and competing for attention in terms of signature, stamp, authorization and minted actions. So also, there is an obvious case where free flow of information or data is obstructed because vital pieces of information are organized in office silos or pigeon-holed in the office cabinets and shelves thereby causing costly delay and difficulty in accessing them as quickly as possible, particularly in the time of emergencies.

There is equally a case where reports and documents containing vital information are exiled in the locked office room and kept out of reach on even the authorized stage, due to the fact that the office information holder in-charge is on leave or ill or even dead. There also abounds a case where vital documents and other information assets became permanently lost due to their destruction by flooding, roof leakage, rodents, accidental fire out break and harsh weather. It is not also uncommon to see people quelling up in front of office doors to access information or have their

documents attended to. In the heat of their struggle, many become stressed, frustrated and forced to decide to let go everything. Most at times, if luckily allowed in, the person or his document or request is being tossed from one office table to the other in the name of observing due office protocols and at annoying snail-speed. Similarly, instance abounds where people trying to access the State Government Agricultural loan facilities are being tossed from one office table to another to either obtain or return the forms filled for such consideration. All these above ugly situations point to the fact that there is prevalent administrative bottlenecks in the Rivers State Ministry of Agriculture. It is against this backdrop that this study is advanced to investigate how the use of proper information management can unlock the administrative bottlenecks in Rivers State Ministry of Agriculture.

### **Aim and Objectives**

The aim of this study is to investigate how the use of proper information management can unlock the administrative bottlenecks in Rivers State Ministry Agriculture. In specific terms, this study sought to accomplish the following objectives:

1. To find out the aspects of the administrative workflow in the Rivers State Ministry of Agriculture that usually experience bottlenecks in which the use of proper information management tools is needed to unlock the constraints.
2. To examine how proper information management tools can be applied to unlock administrative bottlenecks in Rivers State Ministry of Agriculture.

### **Research Questions**

The following research questions guided the conduct of this study:

1. What aspects of the administrative workflow in the Rivers State Ministry of Agriculture that usually experience bottlenecks in which the use of proper information management tools is needed to unlock the constraints?
2. How can proper information management tools be used to unlock administrative bottlenecks in Rivers State Ministry of Agriculture?

### **Research Hypotheses**

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

H<sub>01</sub>: There is no significant difference between the mean ratings of senior and junior administrative staff on the aspects of the administrative workflow in the Rivers State Ministry of Agriculture that usually experience bottlenecks in which the use of proper information management tools is needed to unlock the constraints.

H<sub>01</sub>: There is no significant difference between the mean ratings of senior and junior administrative staff on how proper information management can be applied to unblock administrative bottlenecks in Rivers State Ministry of Agriculture.

### **Methodology**

This study was conducted using a descriptive survey design. 960 staff of Rivers State Ministry of Agriculture made up of 340 senior staff and 620 junior staff constituted the population of this study. A 30% sample of 288 staff made up of 100 senior staff and 188 junior staff was drawn through stratified random sampling. The instrument for data collection was a questionnaire code-named Proper Information Management Tools for Unlocking Administrative Bottlenecks Questionnaire (PIMTUABP). The instrument had a modified 4-Likert Scale and was face. Validated by the experts in Office and Communication Technology. 0.82 reliability index was obtained using Pearson moment Product co-efficient. Mean and standard deviation statistical tools of analysis were used to answer the research questions, while t-test was used to test the null hypotheses. To obtain the criterion mean for scoring the questionnaire, the modified 4 Likert points were summed up and divided by 4 that is  $\frac{4 + 3 + 2 + 1}{4} = \frac{10}{4} = 2.50$ .

Thus, any weighted mean value with 2.50 index and above indicates acceptance of such an item while any one below 2.50 indicates rejection.

### **Results**

Below are presented the results emerging from analysis of data and interpretation there for.

**Research Question 1:** what aspects of the administrative workflow in the Rivers State Ministry of Agriculture that usually experience bottlenecks in which the use of proper information management tools is needed to unlock the constraints?

**Table 1:** Mean ( $\bar{x}$ ) and Standard Deviation (SD) Analysis Presenting the Aspects of the Administration workflow in the Rivers State Ministry that experience Bottlenecks in which PIM Tools is needed to unlock the Constraints.



S/No	Items	Senior Staff N=100		Junior Staff N=188		Mean set	Decision
		( $\bar{x}$ )	SD	( $\bar{x}$ )	SD	$\frac{\bar{x}_1 + \bar{x}_2}{2}$	
1.	Accessing information from the office documents, files and records.	3.53	0.87	3.09	1.05	3.31	Agreed
2.	Documentation of information /data.	3.07	1.02	3.06	1.09	3.07	Agreed
3.	Tracking files and records	3.72	0.65	3.30	0.90	3.51	Agreed
4.	Processing of data	3.50	0.74	2.96	1.10	3.23	Agreed
5.	Preservation of information /data	3.01	1.17	3.18	0.97	3.10	Agreed
6.	Communication / interaction	3.02	0.98	3.16	0.85	3.09	Agreed
7.	Circulation of information	2.60	1.18	3.30	0.76	2.95	Agreed
8.	Exchanging/sharing information	3.14	0.90	3.12	0.96	3.13	Agreed
9.	Publication of information	3.02	1.09	3.09	1.06	3.06	Agreed
10.	Planning of information	2.96	1.11	3.02	0.92	2.99	Agreed
11.	Coordination of information	2.97	1.01	3.20	0.91	3.09	Agreed
12.	Financial budgeting	3.07	1.06	2.75	0.99	2.91	Agreed
13.	Feedback	3.12	1.13	2.90	0.97	3.01	Agreed
14.	Transmitting directives/policies	3.43	0.84	2.79	1.11	3.11	Agreed
15.	Evaluation	2.75	1.10	2.95	0.95	2.85	Agreed
<b>Aggregate Mean</b>		<b>3.13</b>	<b>0.99</b>	<b>3.06</b>	<b>0.97</b>	<b>3.10</b>	

Table 1 review that all the items had the calculated mean values above the criterion mean of 2.50. This therefore indicates that the aspects of administrative workflow in the Rivers State Ministry of Agriculture that usually experience bottlenecks in which the use of proper information management tools is needed to unlock the constraints include accessing information from the office documents, files and records, documentation of information, tracking of files and records, processing of data, preservation of information/data, communication interaction, circulation, sharing, publication and planning of information. Others include coordination of information, financial budgeting, feedback, transmitting directives/policies and evaluation. The above result was further buttressed by the aggregate mean values for senior staff (3.13); and Junior staff (2.98) which are all greater than the criterion of 2.50; hence,  $\bar{x} = 3.13$  and  $2.98 \geq 2.50$ .

**Research Question 2:** How can proper information management tools be used to unblock administrative bottlenecks in Rivers State Ministry of Agriculture?

Table 2: Mean  $\bar{x}$  and  $\bar{s}$  standard deviation (SD) Presenting How proper information management Tools to be used to unlock Administrative Bottlenecks

*Academic Scholarship*

S/N o	Items	Senior Staff N=100		Junior Staff N=188		Mean set $\frac{x_1 + x_2}{2}$	Decision
		(x)	SD	(x)	SD		
1.	Using computers/the internet can remove costly delay in processing of data in the ministry.	3.50	0.94	3.19	0.83	3.35	Agreed
2.	Using of computers and software applications can help in sound and quick decision making.	3.47	0.85	3.05	0.89	3.26	Agreed
3.	Building computer database can encourage rapid access to information/data	3.67	0.70	2.85	1.13	3.26	Agreed
4.	Using the secondary storage devices such as CD, DVDs flash drives can save vital information/assets to forestall any delay in accessing information/data in time of system failure/breakdown or natural disasters.	3.61	0.85	3.28	0.87	3.45	Agreed
5.	Using a special designed software can detect the point(s) along the administrative channel where major hiccups usually occur.	3.38	0.98	3.11	0.98	3.25	Agreed
6.	Using software applications and the internet can liberalize information access and ensure quick and easy information dissemination and communications.	3.74	0.69	3.07	0.96	3.41	Agreed
7.	Displaying spreadsheet and the web can remove delay in financial budgeting preparation and forecasting.	2.99	0.99	3.18	0.92	3.09	Agreed
8.	Providing portal points so that the web site can enhance fast and accurate information access and processing for external community.	2.97	1.07	3.13	0.88	3.05	Agreed
9.	Using computers and software applications for information documentation and record keeping can eliminate delay in rendering services.	2.63	1.15	3.04	0.98	2.84	Agreed
10.	Employing software and computer can track information/data as quickly as possible.	2.85	1.13	3.02	1.00	2.94	Agreed
11.	Using computers/the internet can help by-pass unnecessary protocols in order to achieve quick access to and responses from top-notched authorities in the Ministry.	2.74	0.99	2.86	1.04	2.80	Agreed
12.	Using computers/the intranet for information publication (notice) can forestall delay.	2.90	0.96	2.84	0.97	2.87	Agreed
13.	Using computers/database can promote easy and quick information assess and retrieval even if the staff in charge of keeping such information assets is on leave ill or even dead.	3.24	0.95	2.82	0.92	3.03	Agreed
14.	Using electronic social media platforms such as facebook, Twitter, Instagram, Whatsup etc can facilitate easy and quick communication/ interactions between the super ordinates and subordinates on one hand and between the staff and the external community on the other.	3.13	0.93	2.82	0.92	2.98	Agreed
15.	Using software applications for monitoring, feedback and evaluation can make service delivery easy and fast.	2.88	0.95	2.80	1.02	2.84	Agreed
<b>Aggregate Mean</b>		<b>3.18</b>	<b>0.94</b>	<b>3.00</b>	<b>0.95</b>	<b>3.09</b>	Agreed

Table 2 show that all the items had the calculated mean values above the criterion of 2.50. This therefore indicates that how proper information management tools can be used to unblock administrative bottlenecks in Rivers State Ministry of Agriculture are as

follows: computers and software applications can remove costly delay in processing of data in the Ministry, help in sound decision making, building computer database can encourage rapid access to information or data. Using the secondary storage devices can save vital information assets to forestall any delay in accessing information/data in time of system failure/breakdown or natural disasters, using a special designed software can detect the point(s) along the administrative channel where major hiccups usually occur, using software and the internet can liberalize information access and ensure quick and easy information dissemination and communications, deploying spreadsheet and the web can remove delay in financial budgeting preparation and forecasting, using computers and software for information documentation and record keeping can eliminate delay in rendering services and track information as quickly as possible. Others include using computers/the internet can help by-pass unnecessary protocols in order to achieve quick access to and responses from top-notched authorities in the ministry, using computers and the intranet for information publication (notice) can forestall delay, using computer/database can promote easy and quick information access and retrieval even if the staff in-charge of keeping such information is on leave, ill or even dead, using electronic social media platforms can facilitate easy and quick communication/interactions between the superordinates and subordinates on one hand and between the staff and the external community on the other and using software application for monitoring, feedback and evaluation can make service delivery easy and fast. The above result is further affirmed by the aggregate mean values for senior staff (3.18) and junior staff 3.00 which are all greater than the criterion mean of 2.50; hence  $x = 3.18$  and  $3.00 \geq 2.50$ .

### **Test of Hypotheses**

**H0<sub>1</sub>:** There is no significant difference between the mean ratings senior and junior. Administrative Staff on the aspects of the administrative workflow in the Rivers Ministry of Agriculture that usually experience bottlenecks in which the use of proper information management tools is needed to unlock the constraints.

**Table 3:** T-test Analysis presenting the Difference between the mean ratings of senior and junior administrative staff on the aspects of the administrative workflow in the Rivers State Ministry of Agriculture that usually Experience Bottlenecks.

<b>Variables</b>	<b>N</b>	<b><math>\bar{X}</math></b>	<b>SD</b>	<b>T-cal</b>	<b>T-crit.</b>	<b>DF</b>	<b>Level of significance</b>	<b>Decision</b>
Senior staff	100	3.13	0.99	0.58	1.96	186	0.05	H0 <sub>1</sub>
Junior staff	188	3.06	0.97					Accept

### *Academic Scholarship*

Table 3 indicates that the t-calculated is 0.58 while the t-critical is 1.96 at 0.05 level of significance. The degree of freedom is 186. Since the t-calculated is less than the t-critical (that is,  $0.58 \leq 1.96$ ) the null hypothesis is accepted. Therefore, there is no significant difference between the mean ratings of senior and junior administrative staff on the aspects of the administrative workflow in the Rivers State Ministry of Agriculture that usually experience bottlenecks in which the use of proper information management tools is needed to unlock the constraints.

**H0<sub>2</sub>:** There is no significant difference between the mean ratings senior and junior administrative staff on how paper information management tools can be applied to unblock administrative bottlenecks in Rivers State Ministry of Agriculture.

**Table 4:** T-test Analysis Presenting the Difference between the Mean Ratings of Senior and Junior Administrative staff on how proper information Management tools can be applied to unblock administrative bottlenecks

Variables	N	$\bar{X}$	SD	T-cal	T-crit.	DF	Level of significance	Decision
Senior Staff	100	3.18	0.94	1.54	1.96	186	0.05	H0 <sub>2</sub>
Junior Staff	188	3.00	0.95					Accept

Table 4 shows that the t-calculated is 1.54 while t-critical is 1.96 at 0.05 level of significance. The degree of freedom is 186. Since the hypothesis is accepted. Therefore, there is no significant difference between the mean ratings of senior and junior administrative bottlenecks in Rivers State Ministry of Agriculture.

### **Discussion of the Results**

The discussion of the results is anchored on two major subheadings below.

#### **Aspects of Administrative workflow that Experience Bottlenecks**

The result emanating from research question one showed that the aspects of administrative workflow that usually experience bottlenecks in which proper information management is needed to remove the constraints include the following: accessing information from the office documents, files and records, documentation of information/data, tracking files and records, processing of data, preservation of information/data, communications and interactions, circulation, exchange, sharing, publication, planning and coordination of information, financial budgeting, feedback,

transmitting of directives/policies and evaluation. This result is affirmed by Nwankwo (2008) and Melford (2016) who found that organizational bottlenecks cannot be remedied or removed unless the aspects of administrative workflow in which the bottlenecks are usually experienced are clearly identified to warrant the use of appropriate strategy or approach.

### **Proper Information Management Tools and Unblocking of Administrative Bottlenecks**

Result emerging from research question two indicated that there exists a significant relationship between using proper information management tools and the likelihood of unlocking administrative bottlenecks in Rivers State Ministry of Agriculture.

As revealed by the result, there are a number of ways the possibility of using Proper Information Management tools to unlock administrative bottlenecks is guaranteed. It was found that, for instance, computers/the internet use remove costly delay, appropriate software and computer application can aid sound and fast decision making, can detect the points along the administrative channel where major hiccups usually occur, can liberalize information access and ensure quick and easy information dissemination and communications can eliminate delay in rendering services, can track information/data as quickly as possible, can forestall delay information publication and can be used to make monitoring, feedback and evaluation easy and fast. Further, the result indicated that building computer database can encourage rapid access to information/data, using the secondary storage devices such as CDS, DVDS, flash drives can save vital information assets to forestall any delay in accessing information/data in time of system failure/breakdown or natural disasters, deploying spreadsheet and the web can remove delay in financial budgeting preparation access and processing for external community. So also, the result revealed that using computers and the internet in the Ministry can help by-pass unnecessary protocols in order to achieve quick access to and responses from top-notch authority in the Ministry, using computers/database can promote easy and quick information access and retrieval even if the staff in-charge of keeping such information assets is on leave, ill or even dead, and using electronic social media platforms such as Facebook, Twitter, Instagram, whatsapp, can facilitate easy and quick communication/interactions between the super ordinates and subordinates on one hand and between the staff and the external community on the other. All these indicate that there is a strong connection between using proper information management tools and unlocking of any form of administrative bottlenecks. Proper Information Management tools have designated to be the most efficient mechanism or approach to remove or unblock bottlenecks because problems relating to costly delay, difficulty in having easy access to information, rigidity and inconvenience, among others, are completely circumvented and removed. The studies of Nwankwo (2008), Melford (2016) and Effiong and Onuorah (2014) buttressed the result above as they found that there is a

significant relationship between the use of proper information management and unblocking of administrative bottlenecks in an organization.

### **Conclusion**

From the results of the study, it is right to conclude that there exist a good number of areas of administrative workflow where bottlenecks still rear its ugly head in the Ministry. There also exists a significant correlation between using Proper Information Management tools and unblocking administrative bottlenecks completely in the Rivers State Ministry of Agriculture.

### **Recommendations**

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

1. Rivers State Ministry of Agriculture should integrate all its administrative workflow into the proper information management scheme.
2. It should overhaul all its information management policies with a view to accommodating the best global practice found in office automation by use of Proper Information Management tools to eliminate all forms of administrative bottlenecks.

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