## Automation as A Panacea to Manual Administration of Polytechnics in Ogun State, Nigeria. (A Study of Abraham Adesanya Polytechnic, Ijebu-Igbo)

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#### Abstract

It is challenging and retrospective to find ICT Polytechnics lagging in the full application of automation in their administrations. This study investigated the effect of automation on manual administration of Ogun State Polytechnics, a study of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State. The study aimed at examining the effect of automation on manual administration of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State. It further examined the impacts of automation on Abraham Adesanya Poly (AAPoly) students' admission. The study made use of primary data where a wellstructured questionnaire containing ten (10) questions was distributed to the staff members in Rectory, Registry, Library and Bursary of the Polytechnic. ANOVA was used to analyse the data collected from the respondents. The finding showed that automation reduces workload and minimizes manpower who are to carry out administrative works. It also revealed that students' admission process would be easy in the application of automation in Polytechnics. The study recommended that the government should implement the policy of applying automation in the manual administration of Polytechnics in Nigeria, train the employees and ensure that application of information communication technology is well funded.

Keywords: Automation, Manual Administration, Students' Admission, Polytechnic.

## **1.0 Introduction**

The world as a global village transfigures in the aspect of technology and this birthed frequent changes in the whole world; particularly, organizations in order to adapt to the new changes the world is bringing. For every organization that aims at performing excellently and meeting targeted goals, administration of such organization has to be standard, effective, adaptive to new changes and be answerable to great innovations. Jaiyeoba (2006) in his study explicated administration as effective coordination of resources and people's efforts for the achievement of organizational goals. As related to education, the primary objective of administration has to do with the integration of all resources for the improvement of teaching and learning. It is also seen as all those techniques and procedures in operating the educational organization in line with established policies and principles.

Apparently, tertiary institutions cannot be without an administration and the activities of institutions demand the existence of some predetermined elements capable of acting when stimulated. Administration in every organization therefore stands as the process of mobilizing all factor resources for the achievement of goals and objectives. As the paper focuses on Polytechnics in Nigeria, it was observed that, even, with the changes technology has brought to the world, some of these Polytechnics are still using manual ways of carrying out administrative tasks. Obi (2004) explained administration in education as it is concerned with the coordinating of various activities of people in the school system to accomplish teaching and learning. It is the process of using methods, principles and practices to establish, develop and execute the goals, policies, plans and procedures necessary to achieve the objectives of education. In the above context, it is believed that as the population in the world increases, so as the population of students and staff of the tertiary institutions increases. This denotes that, manual way of keeping records, making payments, communication,

teaching, storing files and documents, collecting data of students, running admission of new students, issuing receipts for students and other activities in Polytechnics is obsolete and as well inducing moribundity. For establishment, development and execution of the goals, policies, plans and procedures of Nigerian Polytechnics to be easily ameliorated, automation of systems of operation must take its place.

Automation is a force that has changed many aspects of the way people live. Information is a key resource for undergraduate teaching, learning, research, and publishing. This brings the need for effective methods of information processing and transmission (Nwosu & Ogbomo, 2012). This has paved way for change not only the way society assesses knowledge but also transform and restructure traditional models of tertiary education. Automation is one skill area that is now essential for young people to gain a foot hold in the labour market in developed and increasingly in developing countries (Laura & Brown, 2011). As a matter of alacrity, Nigerian Polytechnics have to focus on e-learning environment, e-administration and much less on traditional methods as a result of the newly acquired capacity for students and staff to have access to the internet any point in time. Information Communication Technology helps staff (both administration and academics) and students become actively engaged together in online collaborative work to enhance traditional learning methods (Oliver, 2011).

Yakubu and Aboho (2015) opined that automation is an umbrella term that includes any device communication or application, encompassing; radio, television, cellular phones, computer and network hardware and software, satellite systems, as well as the various services and applications associated with them; such as video conferencing and distance learning. The use of automation serves as a light that illuminates darkness and wipe away unnecessary efforts as a result of technological aids to carry out a thousand tasks just in less than a minute. This could be traced back to year 2020, when

there was a CoVID-19 pandemic that made some businesses close down and put stop to all operations in the world. It was however known that only the companies and institutions that are already in use of automation could not be held down from operating due to its incessant ravaging. However, this paper ascertains the significant impacts that automation has to make better manual administration of Nigerian Polytechnics, using an Ogun State owned Polytechnic; Abraham Adesanya Polytechnic, Ijebu-Igbo, as a study.

#### **Statement of the Problem**

In past years, there has been a great interest on how technology can best be harnessed to ameliorate the efficiency and effectiveness of tertiary education in Nigeria to meet up with the standards of tertiary education in the developing and developed countries. However, ICTs are more than just these technologies; older technologies such as the telephone, radio and television, although now given less attention, have a longer and richer history as instructional tools. For instance, radio and television have for over forty years been used for open and distance learning, although print remains the cheapest, most accessible and therefore most dominant delivery mechanism in both developed and developing countries. Potashnik and Capper (2008) note that the use of computers and the internet is still in its infancy in under-developed and some developing countries due to limited infrastructure and the attendant high cost of accessibility. The problems in manual administration in Nigerian Polytechnics is a number that has no limit. The old (manual) way of filing documents in Nigerian Polytechnics is superannuated as it is exposed to unforeseen incidents which may result to total loss of documents with no backups. Another counterchallenge that is obsolete is the aspect of manual processing of admission for new students which is a total stress for the candidate and leading to excess use of resources. Automation being a diverse set of technological tools and resources used to communicate, and to create, disseminate,

store, and manage information. It is a groundswell of interest for multidimensional improvement in tertiary education. However, some scholars have written on automation and organizational performance; the likes of Darwish, Saki, Sahraei, Zakrifar and Talebi (2014) who wrote on effect of automated office systems (automation) on improve decision-making of staff managers, also Ijov and Wombu (2019) who did a study on impact of information and communication technology on tertiary institutions. Out of the above studies, none of them have written on effect of automation on manual administration of Ogun state Polytechnic, using Abraham Adesanya Polytechnic as a study. The following are the questions to be answered at the end of this study which as well serve as the objective of the study:

> • Does automation have significant effect on manual administration of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State?

> • To what extent does automation enhance students' admission of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State?

The following are the hypotheses to be tested;

**H0**<sub>1</sub>: Automation has no significant effect on manual administration of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State.

H0<sub>2</sub>: Automation does not enhance students' admission of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State.

## 2.0 Review of Related Literature 2.1 Conceptual Review

## Concept of Manual Administration

Manual Administration just like most other concepts has been variously defined by experts and educationists. These definitions are centered on what the experts conceive as what administration should achieve. Herbert A. Simon, Donald Smith and Victor A. Thomson in Ezeocha (1990) defined administration as "when two men co-operate to roll a stone that neither could have moved alone, the rudiments of administration

have appeared". Jaiyeoba (2006) gave his own view on administration as he referred to it as effective coordination of resources and people's efforts for the achievement of organizational goals. In tertiary education; the primary objective of administration has to do with the integration of all resources for the improvement of teaching and learning. It is also seen as all those techniques and procedures in operating the educational organization in line with established policies and principles. However, as several theorists have come up with lists of words they consider as appropriate in describing the administrative functions or process. These processes are frame work that provide guide to administration in tertiary education. The different components of administrative process may be outlined and defined as follows:

Planning: Oriaifo (2003) defined planning as "a process of establishing priorities for future actions in an attempt to solve economic problems, which stem from the existence of scarce resources. Planning function has four important goals as; to offset uncertainty and change, to focus attention on objectives, to gain economical operation, and to facilitate control. The implication is that every institution should know where it is going and administrator should engage in planning to give direction to the activities of an institution the dynamic environment confronting organizations, the need to identify and define emerging roles for the organization and the need to relate the organization to various environmental systems that make planning function critical and a matter of high priority. Obi (2003) identified three main features in every plan to include; every plan must be future oriented; it deals with predetermined objectives or decisions; it must be a process or a strategy. There are also three stages that are popular in planning as reiterated by Obi (2003). They include; decision stage, implementation stage and evaluation stage. Good planning backed by sincere effort therefore produces good results in the organization.

**Organizing:** То organize implies the development of interconnections between the various subsystems and the total organizational pattern. It is a design of methods and determination of activities required to achieve objectives of the organization. In educational institutions, the administrator organizes both the human and material resources. He organizes the work in the school into units with each unit being headed by a specialist. He distributes duties and responsibilities to both academics and nonacademic staff alike. School facilities and instructional materials are properly allocated to ensure proper teaching and learning process. Rules guiding the behavior of the entire staff are well defined.

**Coordinating:** Co-ordination is the task of harmonizing the activities of various aims of the organization. It ensures team work toward realization of objectives. It is the function of the school administrator to co-ordinate all activities of the various units within the school. He schedules activities in such a way as to eliminate conflicts, so that the objectives of teaching and learning may be attained. Since the teachers are interdependent, it is the responsibility of the administrator to co-ordinate their activities.

**Commanding or Directing:** This is the task of optimizing the productivity of staff. The tertiary institution administrator should therefore have accurate knowledge of his staff, eliminate the incompetent, set a good example, take initiatives and encourage a spirit of belonging among his staff. The term commanding is similar to directing or stimulating. The administrator is expected to provide effective leadership by stimulating his staff to perform and guiding them as to what to do. He as well guides the performance of the students by instructing them on their routine duties. He gives proper information to both staff and students during assemblies.

**Controlling:** The administrative function of controlling is the measurement and correction of the performance of activities of subordinates in order to make sure that educational objectives

and the plans devised to attain them are being accomplished. The administrator ensures that things are done in accordance with laid down rules and regulations. Control helps in evaluating the output with a view to discovering the weakness that can be rectified for greater school efficiency. Within an organization such as the school, an administrator employs different strategies to ensure that right things are done at the right time and that those under him conform to the expected and desirable behavior. Such control strategies include; policies and rules, organizational design, performance appraisal, budget and technology, personal visits and informal discussions. Government policies and rules such as those contained in the National Policy on Education, the constitution, decrees, edicts and education laws provide guidelines on what should be done and what should not be done (Oyedeji & Fassasi, 2006). These laws are made so as to enable the government to control education. The administrator by his position should be guided by the law and he should as well apply it in guiding others.

Communicating: Communication is one of the basic elements of administrative process and it is central to all functions. It is defined by Amobi and Nnabuife (1999) as the art and science of conveying one's thought, need or information to another person or a group of persons. This can be through verbal utterances or non-verbal expressions. An organization cannot survive unless the administrator develops means of communication among various operating levels. In the light of this, Omenyi (2007) described communication as a means of imparting, exchanging attitudes, ideas and information through human abilities or technological media. Administrators who are skilled in communication have an improved chance of facilitating change within the school building. School leaders who are effective in achieving change communicate frequently and effectively with individuals and with groups and they facilitate communication among group members of their organization. Formal communication addresses task-related

issues and follows the organizations authority chain where the administrator gives direction to the teachers, provides advice to group members as well as offers needed suggestions.

Decision-making: Later writers on school administration introduced "decision-making, and evaluation" as part of the administrative process. The importance of these two elements stems from the fact that decision-making acts as characteristics of organizations behavior. While the main work of the executive is to take decisions and initiate and direct actions based on them, his decisions are based on facts and values that are subject to change over time and therefore require a continuous evaluation or appraisal. This will ensure their authenticity looking at the objectives to achieve. According to Adeleke in Oyedeji & Fasasi, (2006) decision-making is a process of generating and evaluating alternatives and making choice among them. It entails selection of a course of action from alternative courses intended to bring about the future state of affairs envisaged. For each of the administrative functions, decisions are made on specific activities to be performed in the school environment. The school administrator takes decisions on curricular and extracurricular programmes, human and material resources needed for achieving educational objectives. He also takes decisions on finance, information, time for carrying out specific programmes and then environment for executing a particular decision. Methods of teaching, modes of communication and procedures for acquisition and utilization of resources are also decided upon. The output of the decisional process is rules or policies to guide subsequent behavior. The importance attached to decision-making lies in its impact on future behavior in the organization. Ukeje et al (1992) explained that decision-making is a process by itself which takes cognizance of the past history of the organization and the experience of the administrator in relation to the current state of affairs in order to project the future actions to be taken.

In tertiary education, decision-making is a vital element in the administrative process since what the administrator does depends on his choice among alternative paths to his goals as well as how he decides to move along that path by allocating time and resources. Explaining further, Ukeje et al emphasized that a decision is the result of deliberation, calculation, thoughtful response to internal and external conditions of the environment. So the administrator/school head makes wide consultations and deliberations with the ministry of education, staff and student body relating curriculum, on issues to teaching/learning, school discipline and intercommunity relations etc. He then makes a choice of all the suggestions given to him and be ready to defend its application. Whatever is his choice must reflect the school's objectives, policies and plans. Administrative process thus refers to the manner through which an institution takes decisions and desired actions to attain its objectives.

**Evaluating:** Evaluation is a life pattern of organization's daily activities because human beings all over the world have evolved overtime a culture of judgment. At most levels of human action, individuals, groups, organization and government pass judgment about the appropriateness or

inappropriateness, desirability or undesirability of events, decisions performances, processes, objectives, situations and the like. In line with this, Otu (2006) views evaluation as the process of determining the quality, worth, significance of anything be it an activity, events, person, object or programme.

Generally, evaluation is seen as frequent decision-making and which judgments individuals, groups, institutions and governments pass on what affect their lives and those of others. Thus evaluation seeks the most effective use of all available resources to ensure that programmes, activities of events or administration fulfill their goals successfully.

Further, evaluation in educational administration consists of the behavior to make decisions about

an educational programme in relation to set objectives. It is important to point out that the human society is not static, but dynamic. Therefore, educational administration which operates within the confines of the society is ever changing. This demands that the administrator should always evaluate his administrative processes for necessary feedback to enable him define and redefine his goals to accommodate innovations. The school administrator uses evaluation to determine the extent to which educational objectives are either pursued or achieved. To achieve this, certain questions call to mind: How well does administrative process perform with respect to criteria set? How can the process be better improved to attain the set goals? Decision has to be taken on the type of evaluation, when to evaluate and what to evaluate. Evaluation therefore serves as a hub of change and innovation in administrative process that predict the general trend in the development of teaching and learning. As innovation in evaluation entails application of information technology, Nigerian polytechnics are required to ensure that automation is applied in their administrations, management, students' admission process and minimize more of file documents and maximize storing of documents in the cloud.

## Automation as a force for positive change

In the study of Nwankwo (2013), he emphasizes that automation has permitted people to participate in a world in which school, work and other activities have been increasingly enhanced by access to varied and developing technologies. Automation tools have helped people find, analyze, explore. exchange, and present information most importantly, without discrimination. When efficiently use, automation can provide quick access to ideas and experiences from a wide range of people, communities and cultures (Kwame, 2010). It also involves the development of effective and integrated tools as well as training modules to enable ICT application through effective teaching and learning. These according to Nwankwo (2013)

positive effects of automation (ICT) can be felt in the following aspects:

Promotion of better-quality research is made possible through ICT. Application of ICT are particularly powerful and uncontroversial in higher education's research function. The steady increases in bandwidth and competing power available have made it possible to conduct complex calculations on large data sets (Balasubramanian, 2009). Through the aid of automation, process of huge amounts of data can now be done extremely fast, accurate and reliable, thus, reducing the burden of manually analyzing data which hitherto was very difficult and cumbersome.

Another important measurement of ICTs in research is the use of online full text data bases and online libraries/virtual libraries which are the direct outcome of the growth in telecommunications networks and technology. These databases and libraries provide researchers with online access to the contents of hundreds of thousands of books from major publishing houses, research reports and peer reviewed articles in electronic journals. Examples includes; the Questia online library which provide access 24/7 to the world's largest online collection of books and journals in the Humanities and Social Sciences, while other related online books and journal library are Academia, Researchgate, Coursera. CodeAcademy, Youtube. GetFreeBooks etc. There is also the online Book page hosted by the University of Pennsylvania libraries which provides free online access to books which includes an index of thousands of online books, links to directories and archives of online texts.

E-registration of courses and details of examination and other services are being offered online, thereby, reducing pressure during course registration. With the use of ICT, students pay school fees online and check their results after every examination. Moreover, the use of the internet could reduce administrative cost because the same information can be sent to all Departments through the internet without having to do it individually. Therefore, communication both within and outside the department is a lot easier with the use of the internet.

# Nexus between Automation and Nigerian Polytechnic

Automation is defined as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information."

These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony.

Nigerian Polytechnics are patterned to create quality workforce by growing, training and attracting the outstanding talents; support current business and industry, improve learning and teaching through professional and technological innovation; take strong and visible roles in regional initiatives, disseminate research and employ a diverse workforce (Myamoto, 2010). The use of automation in educational settings will act as a catalyst for change in this domain. Automation by their very nature is a tool that encourages sound supports independent learning. Students using ICTs for learning purposes usually become immersed in the process of learning and use computers as information sources and cognitive tools (Reeves & Jonassen, 2006).

The trend towards a knowledge-based economy has emphasized the importance of higher institutions as repositories of valuable human capital to help secure shares in the global market. The accelerating shift to high technology and information technology economies require sustained human resources development and training. Driven by globalization and pressures to teach and train knowledgeable, skilled and competitive professionals, tertiary institutions face a huge challenge to increase access to higher education and improve the quality of higher education against the stark reality of decreasing resources (Amaechina; Chukwuemeka-Okolo & Ekoro, 2013).

## **Theoretical Review**

#### Theory of Reasoned Action (TRA)

The Theory of Reasoned Action (TRA) has its genesis in the social psychology that searches to identify the determinant factors of the consciously intentional behavior (Fishbein & Aizen, 1979). Define the relations between beliefs, attitudes, norms, intentions and behavior, that is, a determined behavior, for example, technology use or rejection is the result of an intention in making the behavior, and this intention is influenced conjointly by the individual attitudes, been this attitude determined by beliefs and subjective norms in relation to the aimed behavior (Quintella & Pellicione, 2006). For Fishbein and Ajzen (1979) the elements that form the attitudes are the beliefs, that refer themselves to the information that the subject has about a determined object and the subjective norms, that is the perception of an external evaluation about adopting or not determined behavior. According to the TRA, the intention determines the effective behavior that refers to the observable acts (Fishbein & Ajzen, 1979).

We could exemplify the work TRA in the following way: it is imagined that a user who has the conscious intention to use a determined information system, derivative from the use attitude, which may be positive or negative, followed by subjective norms, which are referred to the perception that the user has of the other people's opinion. According to Oliveira Júnior (2006) the people choose to perform a behavior, even not agreeing with it and its consequences, in case they believe that a determined person thinks that this one should be his behavior and if they are motivated to please that person.

#### **Technology Acceptance Model (TAM)**

The Technology Acceptance Model, most known as technology acceptance model (TAM), was proposed by Davis (1989), being an adaptation of the model Theory of Reasoned Action (TRA), already mentioned before. However, according to Davis (1989), for being so universal, the TRA was modified specifically, to create models of acceptance in information technology, as in the specific case of TAM. The intention of the development of the model TAM resulted from an IBM Canada contract with the *Massachusetts Institute of Technology* – MIT, in the 80s to evaluate the market potential to new products of the brand and to make it possible an explanation of the determinants of computers use (Davis, Bagozzi & Warshaw, 1989).

Davis (1989) proposed the TAM to focus in the reason the users accept or reject the information technology and how to improve the acceptance, offering, this way, a support to foresee and explain the acceptance. The validation of the TAM model was based in the acceptance of a software text editor (Davis, 1989; SÁ, 2006).

Silva (2006) adds that Davis (1989) on this sample found out that the perceived use had higher impact in the behavior than the perceived facility. The TAM has the advantage of being specific to information technology and has a strong theoretical base, besides the wide empiric support, as claims Davis (1989).

The model TAM was designed to comprehend the causal relation between external variables of user's acceptance and the real use of computer, trying to understand the behavior of this user through the utility knowledge and use facility perceived by him (Davis, 1989). For Davis (1989) the people tend to use or not certain technology with the objective to improve his performance at work - perceived use. However, even if this person understand that determined technology is useful, its use may be damaged if it is too complicated, in a way that the effort is not worthwhile the use - perceived facility. This way, the TAM is based basically in two constructs: the perceived utility and the perceived facility, seeing that both measured completely the effects of external variables, such as features systems, development process, training, in the use intention (Davis, 1989). The intention of this model is to represent the impact of external factors related to the information system, under those internals of the individual, as the attitudes and use intentions (Davis, Bagozzi & Warshaw, 1989; Davis 1989; Dillon & Morris, 1996; Lee et al., 2003; Venkatesh et al., 2003).

#### **Empirical Review**

Akor & Mustapha (2016) investigated the use of internet and online resources by non-academic

staff of two universities in Nigeria. The universities considered under this study are federal university of Technology, Minna and Ibrahim Babangida University, Lapia. A survey research design was adopted for this study. Four objectives and four research questions were formulated to guide the study. A stratified random sampling technique was used to select a sample size of 104 junior staff of the two universities. Instruments for data collection included a well-structured questionnaire. One hundred and four copies of questionnaire were distributed to the junior staff of the two universities with a return rate of 46 (48.42%) from the Federal University of Technology, Minna and 49 (51.5%) from Ibrahim Badamasi Babangida University, Lapai. The study used frequency counts and percentages as statistical measures for data analysis. The results revealed that many non-academic staff of the universities internet and online resources used for communication, searching for information, downloading or uploading documents.

Ijov & Wombu (2019) did a study on the impact of Information and Communication Technology as a veritable tool for global competitiveness in a knowledge-based economy cannot be overemphasized. This is why the Federal Republic of Nigeria (2014) places emphasis on the provision and utilization of Information and Communication Technology when it states that because of the prominent role of ICT in advancing knowledge and skills necessary for effective functioning in the modern world, there is urgent need to integrate Information and Communication Technology (ICT) into education in Nigeria. The study further discussed the various impacts of ICT on tertiary institutions as well as the major obstacles to the utilization and implementation of ICT in tertiary institutions.

#### 3.0 Methodology

The approach of this paper is descriptive in nature, and primary data has been used in this study.

The study area, Ijebu-Igbo, Ogun State Nigeria, was purposively selected as it is accessible by the researcher for the purpose of the study. The researcher limited this study to Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State as the scope.

The population of the study is One hundred and ninety-nine (199) but the study focuses on four departments (Rectory, Registry, Library and Bursary) in the Polytechnic because the study only concerns the administrators. The total number of the respondents from the four selected departments is 50. The study employed primary and secondary data. The primary sources of data were collected from the staff of Abraham Adesanya Polytechnic, Ijebu-Igbo and secondary source of data was collected from relevant sources such as Journals, Textbooks, Library etc. A well-structured questionnaire was distributed to all the selected respondents The questionnaire constructed was coined from the research questions which the study tends to answer at the end of the study, to ensure the validity of research instrument and the responses of the respondents were thoroughly checked to ensure the data obtained were reliable.

The well-structured questionnaire was ten (10) close-ended questions with Likert Scale response options; Strongly Agreed, Agreed, Undecided, Strongly Disagreed and Disagreed). The Analysis of Variance (ANOVA) statistical method was employed to analyze the data collected at 5% level of Significance.

**4.0 Data Interpretation, Analysis and Results** The researcher distributed 50 questionnaires and was able to retrieve all after confirming that they were filled properly and ready to be compiled for analysis. The percentage of the returned questionnaire is 100% which makes it be free from any objection.

## Interpretation of data

Table 1 Questionnaire

S/N	Questions/Variables	SA	Agrd	Undcd.	SD	Dsgrd
1.	Automation of some administrative tasks in	19	22	3	5	1
	Abraham Adesanya Polytechnic has fostered					
	her performance.					
2.	There is computer system and internet access	27	16	1	2	4
	that can be used to send and receive information					
	automatically in your office					
3.	There is a virtual avenue like Zoom and Team,	21	23	5	1	-
	at which meetings are held within the staff of					
	Abraham Adesanya Polytechnic.					
4.	Information Communication Technology has	17	25	1	-	7
	done more good to the administrative functions					
	of Abraham Adesanya Polytechnic.					
5.	Through the aid of automation, process of huge	36	8	2	2	2
	amounts of data can now be done extremely					
	fast, accurate and reliable.					
6.	E-registration of courses and details of	41	6	-	-	3
	examination and other services are being					
	offered online, thereby, reducing pressure					
	during course registration.					
7.	The use of online full text data basis and online	24	16	-	7	3
	libraries/virtual libraries is a development for					
	Abraham Adesanya Polytechnic.					
8.	Abraham Adesanya Polytechnic is an ICT	30	12	3	1	4
	Polytechnic that enables students under the					
	course receive IT Essential certificate in the					
	Polytechnic.					
9.	Automation tools have helped to find, explore,	14	33	-	1	1
	analyze, exchange, and present information					
	most importantly, without discrimination and as					
	well give quick access to information and					
	experiences.				_	
10.	The use of automated administration is more	24	9	2	7	8
	convenient than manual administration.					

**Source**: Researcher's Field Survey, 2022 (All the questions in the questionnaire were constructed by the researcher).

## **Hypothesis One**

**H0**<sub>1</sub>: Automation has no significant effect on manual administration of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State.

Source of						
Variation	SS	$d\!f$	MS	F	P-value	F crit
Between	2235.2	4	558.8	23.1483	2.88E-07	2.866081
Within	482.8	20	24.14			
Total	2718	24				

#### ANOVA SUMMARY

Critical Value of 5% level of significance with degree of freedom 4 to 20 is 2.87

#### **Decision Rule**

Since the calculated value is 2.88, is greater than the critical value of 2.87. The alternative hypothesis should be accepted and the null hypothesis (H0) should be rejected.

Therefore, automation has significant effect on manual administration of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State.

## **Hypothesis** Two

**H0**<sub>2</sub>: Automation does not enhance students' admission of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State.

Source of						
Variation	SS	$d\!f$	MS	F	P-value	F crit
Between					2.92E-	
Groups	2341.36	4	585.34	12.6478	05	2.866081
Within						
Groups	925.6	20	46.28			
Total	3266.96	24				

**ANOVA SUMMARY** 

Critical Value of 5% level of significance with degree of freedom 4 to 20 is 2.87

#### **Decision Rule**

Since the calculated value is 2.92, is greater than the critical value of 2.87. The alternative hypothesis should be accepted and the null hypothesis (H0) should be rejected.

Therefore, automation enhances students' admission of Abraham Adesanya Polytechnic, Ijebu-Igbo, Ogun State.

#### **Conclusion and Recommendation**

The task of managing Nigerian Polytechnics in such an effective manner that it leads to sustainable development cannot be attained if the full use of Information Communication Technology-related educational initiatives that is, e-learning, e-payment and e-administration are not explored. Polytechnics being an institution aimed to provide education that will improve the practical and technical skill of their students, application of technology in their

operations cannot be demoted as the world keeps changing technologically. It is apparent that automation is а necessary and indispensable tool that students, researchers and Polytechnic administrators need for good success in their daily engagements. In the scope of this study, it was deduced that automation has greatly contributed to the development of the Polytechnic. Through the findings, the choice of the respondents revealed that eregistration of courses and details of examination and other services are being offered online, thereby, reduced pressure during course registration for their students. It was further concluded through the choice of the respondents that through the aid of automation, process of huge amounts of data can now be done extremely fast, accurate and reliable. Also it was cognized that automation reduces workload and minimizes manpower who are to

carry out administrative works while it makes easy the process of students' admission in Nigerian Polytechnics.

In related to the conclusion above, the researcher recommends the following;

Government should implement the policy of applying automation in the manual administration of Polytechnics in Nigeria, train the employees and ensure that application of information communication technology is well funded.

Nigerian Polytechnics should plan and have a well-structured programme for confronting the various classes of barriers that can hinder effective plan implementation.

Administrators should be aided in exploring the right techniques that will equip him adequately in attaining the educational objectives and the use of automation in this regard should not be underestimated.

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