

**DATABASE APPLICATION, MICROSOFT WORD USAGE
AND MANAGEMENT OF STUDENTS' ACADEMIC RECORDS
IN UNIVERSITIES IN CROSS RIVER STATE, NIGERIA.**

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Abstract

The study examined database application, Microsoft word and management of students' academic records in Universities in Cross River State, Nigeria. To accomplish this purpose, two research questions and two null hypotheses were formulated to guide the study. Literature review was carried out based on the variables of the study. Survey research design was adopted for the study. The population for the study comprised 491 clerical staff, registry staff, student affairs staff and ICT staff of the Universities in the study area. Since the population was not too large and was manageable, all the 491 staff were used. The instrument used for data collection was the questionnaire titled 'Database Application, Microsoft Word Usage and Management of Students' Academic Records Questionnaire' (DAMSUMSARQ). The questionnaire was validated by three experts: Two business educators and one research and statistics expert, all from the University of Calabar. In order to establish the reliability of the instrument, a trial test was carried out in the University of Uyo, Akwa Ibom State, using 25 respondents which were not part of the population of the study. Cronbach Alpha reliability coefficient was used to determine the reliability estimate. The reliability indices ranged from .74 to .92 which implied that the instrument was reliable to measure what it purported to measure. The researchers, with the help of three research assistants, administered and retrieved 480 copies of the questionnaire from the respondents and analysed the data using Simple Linear Regression Analysis. The result of this study revealed that the use of database and Microsoft word applications significantly influenced management of students' academic records in the study area. It was recommended among others, that the Management of the Universities should upgrade the current level of utilization of database and Microsoft word resources in the management of students' academic records by providing training opportunities and desirable facilities to enhance quality service delivery.

Key Words: Database, Database management, Microsoft Word, Application, Academic records.

Introduction

A Database is a highly scalable infrastructure developed to manage large amount of records electronically to curb

the problems of traditional records filing system. A Database is an organized collection of related data about a particular subject (person, place or thing)

stored together (Okute, 2018). A computer information-base or database is a solitary coordinated assortment of organized information put aside with replication of data to offer a predictable and regulated state of data. This information is normal to all clients of the framework, and it is free of projects that utilizes the information (French, 2012). Manual databases placed in filing materials were the most methods of storing large amounts of data before computers became common in work places. Manual database works well for small amounts of information. In any case, when the volume of information begins to build up, it can introduce numerous issues to the organization, for example, trouble in cross-referring, misfiling, difficulty in tracing files, need for huge extra room et cetera (Ezeani, 2010).

In this era of electronic influx, it is beneficial to handle documents with database application and to have electronic records as the executive framework in each University. Indeed, it is critical to such an extent that Universities totally require data set framework for efficient and effective administration in a technological world. Universities are likely to be more productive in students' academic records, while simultaneously keeping up or improving the nature of administration. Database plays an important and a significant role in supporting productivity, precision and quick decision making. There is a connection between interest in electronic information and efficiency in the workplace especially in the Universities with regard to students' academic records. This is so because, according to Ifenaike and Olatokun, (2021), the loss of University's records could destroy the evidence of students' achievement, staff entitlements and jeopardize the University's rights and

interests. In the same vein, Worcester Polytechnic Institute (2023) stressed the need for data management plan to take cognizance of the type of data to be created, how to organize, store, and make the data available for reuse. It is in recognitions of the need for creating appropriated records, preservation, accessibility and retrieval of such records about students in the universities that the application of database in the management of students' academic records becomes imperative.

Computer-based records management makes information retrieval easier than paper or manual arrangement of documenting. For instance, the University of Calabar may store all the information about the students who graduated the previous year in the school database, and then once in a while, a student retrieves or recovers his/her school information from the internet on demand. This is done with the use of some coding and computer commands, example, inputting the student's registration number for retrieval of personal information. The computer, at the gathering of such command or order looks through its information base to track down the particular information being requested. It does this more effectively and rapidly than the manual recording framework which may take a significant stretch to glance through great many documents in the cupboards and racks to retrieve students' academic records.

Databases are normally set up to meet the data needs of significant parts in a University. In the University of Calabar being one of the Federal Government funded University in Cross River State where information-base framework should exist, there ought to be need to document students' school charges and different payments by electronic methods using the computer systems because of false

documentation by certain students which the school may have encountered in the time past.

The management of students' records electronically and utilizing Database makes it simpler for the assessment of students' academic presentations which may have been uploaded online to be inspected consistently for viable evaluation. This can be conceivable by the utilization of social data set standards to evaluate the performance of a student over a significant time span very quickly with the utilization of Structured Query Language (SQL). Moreover, scholarly foundations need to think of electronic recording as an executive framework to agree with the latest thing in records, and carry out same as a need in a period where individuals devour more delicate information than any other time in recent memory ever. Electronic records as an executive framework is moderately less expensive as far as saving expense, time, and energy and guarantee rapid assistance conveyance. These days, it is more expedient and useful for the data officials to recover measurable data through information base when contrasted with paper-based records framework.

Be that as it may, the pool of information accessible to an institution from both outside and inside sources is viably boundless. This bounty of information particularly in a scholastic establishment may achieve issues in information and subsequently, the organization must be successful in administration of huge measure of information. Additionally, they should consistently screen their information gathering systems and record maintenance approaches for normalization and to guarantee that they meet the University's particular requirement. The information accumulated and the methods utilized

normally shift from one association to another contingent upon the association's necessity.

Database is therefore a highly scalable structure developed to manage large amount of information with such highlights like information autonomy, information trustworthiness and information adaptability. This implies that a thing put away is free for other use and is independent to the projects which use it. There is likewise aversion of clashing and copied information. This implies that there is just one duplicate of unconventional information and just one update is expected to address an off-base figure (assuming any); all projects which access that data will consequently be given the right figure (Arora, 2006). Data set is additionally seen by analysts as dependable for the dissemination of students' academic information since it is adaptable in nature; going from openness of information with various techniques and for some reasons, cross-referring in social tables to information inquiries.

In the same way, Microsoft Word is a word preparing bundle or programming application designed to crate and input information into a computer framework. It empowers control of information, information stockpiling and recovery through a yield gadget specifically, the printer. Microsoft word is generally called "MS Word" or "Word document" and can be utilized to get ready letters, reports, notices, books or any kind of correspondence on a computer (Ezeani, 2010). A portion of the more well known word processors accessible today are Microsoft Word, Lotus Word Pro and Word Perfect. Albeit these, word processors are made and sold by various organizations, they have numerous comparable capacities. For instance, Microsoft Office 2007 is a coordinated application bundle containing Word,

Excel, Access, PowerPoint, Outlook and Publisher.

Microsoft Word application could be suitably utilized to input students' information into the computer frameworks since it has basically supplanted the manual typewriters. Additionally, it has the capacity to store composed records in the computer memory, see the archive on screen prior to printing, naturally right errors, embed or erase words, move segments of text to another piece of the report, reinforcement report for some time in the future, reuse a report over and over, change the format of the record and print out the report even whatever number occasions as would be prudent. Consequently, Microsoft Word bundle could be legitimately used to manage students' academic records since it permits the user to electronically make, alter, arrangement, store and print text archive contrasted with the manual typewriter officially utilized for word preparing (Udeze, 2017).

Records management advanced from paper-based to computer-based. The computer which empowers electronic records generally began with a model (Abascus) which was first seen in the 600 B.C. The math device was a wooden casing with wires and globules for performing computations by sliding the dots along bars that were utilized as counters. In 1833, a Scientist Charles Babbage during the mechanical upset built an incredible processing machine, which he called scientific motor. This was the machine that brought about the main broadly useful advanced computer. The Computer has from that point forward, developed up to the fourth era in 1970s which is more refined with incorporated circuits and are comprised of silicon chips. These Computers are little in size with high limit, inner capacity, multiprogramming offices, far off

correspondence offices and wide scope of operational and discretionary peripherals like the focal preparing unit otherwise called the Computer Processing Unit (CPU), the information units (console and mouse), the memory unit and the yield (the screen and the printer). These are generally called the product and the equipment of the computer (Ben, 2010).

Microsoft Word application is seen by scientists as being valuable in dealing with students' academic records since it could be utilized to make and keep up both basic and refined reports. It is additionally furnished with formats and wizards to assist the user with making archives like letters, structures, resumes, students' transcripts, students' performance evaluation sheets and students' result sheets. Microsoft Words in any case called "MS Word" or "Word" can likewise work with archives containing designs and pictures. By utilizing Microsoft Word, the user can type, alter, configure and produce or print documents like manuals, presents, reading material, pamphlets, notices, memoranda etcetera, which are valuable for both students and the University (Egwunyenga in Okute, 2018).

Microsoft Word usage could be suitable for management of students' academic records because it has such features like file tab or office button, ribbon, tabs, title bar, dialog box launcher, status bar, view toolbar, zoom button and quick access toolbar. Analyzing the features, file tab or office button leads the user to the backstage view where he manages files and data, that is, developing, saving, assessing for secret materials or individual data and arrangement alternatives. The ribbon is a section on the upper of the materials that creates over every abilities of the package accessible in a single region. The Tab is an area that has buttons that are arranged

in groups, with related specific commands. The Tab provides the user with swift access to frequently used commands required for completion of specific tasks.

Utilizing a Word processor permits the user to enter text on the page displayed on the computer screen, causes changes to that content without having to retype the whole archive and without any preparation as on account of manual typewriter. The user can likewise save the report on plate so that it may be recovered and chipped away at sometime in the not too distant future. The client can do complex organizing by utilizing a Word processor, so the archive looks extremely proficient. This load of things is impossible on a typewriter (Manyabula, 2009).

Microsoft Word processor has computerized reasoning just as the actual computer. Man-made consciousness alludes to the study of making insightful machines, particularly knowledge computers with programs that make such machines work like people (Okute, Olom & Ewuru, 2016). Microsoft word processor could be said to be a cybernetic system that has control and feedback mechanisms that enable the user to detect errors and provide options for correcting the errors using the editing and formatting features of word processing software.

Microsoft Word bundle could be effective in dealing with students' academic records in light of its security highlights. A user can secure a significant or delicate Word record by adding a secret phrase, making the report read-only etcetera. For instance, a user needs to keep students' academic records hidden, ensuring that only himself and certain person(s) can peruse or alter it. Even better, the user needs to confine the kind of alterations that somebody can make to the archive on the off chance that he

realizes which instruments to use in Word and how to utilize them. The most recent Office 365 adaptation of Microsoft Word has a few security choices, for example, read-just, scramble, computerized signature, watermarks etcetera. A word processing application like Microsoft Word could be utilized to make students' academic records better with the utilization of the computer situation to empower simple stockpiling, control of information, safeguarding and security. It likewise makes it simpler for students' information to be moved starting with one office computer onto the next through systems administration framework (Freda, 2014).

Statement of the problem

The Researchers observed that in Universities in Cross River State there is still huge amount of paper work, hence, this may weaken the control of students' academic records or information in the Universities. These invariably may slow down the process of handling students' academic records in terms of prompt retrieval and data security. It has also been observed that records staff in Universities in South-South Nigeria had little knowledge of electronic records skill while the Institutions have no formal training programme organized for records officers (Okute, 2015).

This problem of barely keeping students' academic records in automated environment has over time caused delay in retrieval of information, loss of transcripts, exposing document to damp, flood, rodents, misfiling, non-classification of files, misplacement of folders, difficulty in cross-referencing and other misfortunes in record keeping. Also, since documents are in paper format, it is easy to mutilate or remove document from file on negotiation with the record keeper, whereas this is difficult

with electronic record practices due to electronic file sharing and the document is accessible by more than one person. The above have been viewed as some of the related challenges bothering on electronic records management in Universities in Cross River State and is worrisome in this modern society where virtually all university students consume more soft data than ever before in history.

Ideally, a university registry, the database department and other offices that manage students' academic records are supposed to be computerized, provided with Local Area Network (LAN) for interconnectivity of computer systems for easy sharing of electronic files and documents and also provided with necessary security measures for the safety of the soft data. With electronic recording, it is possible to generate a receipt on-line on payment of fees with the use of computer and internet systems and the receipt could be shared via e-mail. When all students registration processes are done on-line, and the university systems are totally computerized and networked, there is little or no need for unnecessary photocopying of students' documents and littering the place with students' files since confirmation of all payments would be done online (Egwunyenga, 2009). It is on the basis of this premise that the researchers were curious to ascertain database application, Microsoft word usage and management of students' academic records in Universities in Cross River State, Nigeria.

Purpose of the study

The main purpose of this study was to ascertain the influence of database application, Microsoft word usage and management of students' academic records in Universities in Cross River State, Nigeria. Specifically, the study was carried out to:

1. Ascertain the influence of Database application on management of students' academic records in universities in Cross River State, Nigeria.
2. Ascertain the influence of Microsoft Words usage on management of students' academic records in universities in Cross River State, Nigeria.

Research Questions

The following research questions were raised to guide the study:

1. How does Database application influence management of students' academic records in Universities in Cross River State?
2. How does usage of Microsoft Words influence management of students' academic records in Universities in Cross River State?

Hypotheses

The following hypotheses were formulated to be tested in the research:

1. There is no significant influence of Database application on management of students' academic records in universities in Cross River State.
2. There is no significant influence of Microsoft Word usage on management of students' academic records in Universities in Cross River State.

Methodology

The study adopted the survey research design. The study was carried out in two public Universities and one private University in Cross River State. The justification for the inclusion of the private University is predicated on the fact that management of students' academic records is a core activity in both public and private universities. Since both public and private universities deal with vast

amount of students' records in this era of digital explosion, it is justifiable to study them together. Thus the researchers considered it expedient to study both private and public universities together.

Two research questions and two null hypotheses were formulated to guide the study. The total population of this study was 491 administrative staff. The categories of staff consisted of 96 clerical staff (only the ones handling students' records), 87 registry staff, 64 student affairs staff and 42 ICT staff, totalling 289 from the University of Calabar. From the University of Cross River State, 78 clerical staff, 40 registry staff, 36 student affairs staff and 27 ICT staff, totalling 181, was used for this study. From the Arthur Jarvis University, 9 clerical staff, 5 registry staff, 3 student affairs staff and 4 ICT staff, totalling 21, was used. This gave a grand-total of 491. Since the population was not too large and was manageable, all the 491 respective staff were used. No sampling was carried out in the study because the population was manageable.

The instrument that was applied for information gathering was a structured questionnaire and was called 'Database Application, Microsoft Word Usage and Management of Students' Academic Records Questionnaire'(DAMSUSARQ) It had 12 items and was designed by the researchers under supervision. The items in the DAMSUSARQ were developed based on related literature. The questionnaire was grouped into two parts. Part one contained the respondents' personal data such as staff category, gender and educational qualification. Part two examined the sub variables which were Database and Microsoft Words.

Section 'A' focused on usage of database for students' records management. Section 'B' was on usage of Microsoft Word for students' records management. It was measured on a four- point rating Scale of 'SA = Strongly agree', 'A = Agree', 'D = Disagree' and 'SD = Strongly disagree'. In order to establish the reliability of the instrument, a trial test was carried out in the University of Uyo, Akwa Ibom State using 25 respondents which were not part of the population of the study. Cronbach Alpha reliability coefficient was used to determine the reliability estimate. The reliability indices ranged from .74 to .92 which implied that the instrument was reliable to measure what it purported to measure. The researchers, with the help of research assistants, administered and retrieved 480 copies of the questionnaire from the respondents and analysed the data using Simple Linear Regression Analysis. The justification for the use regression analysis is predicated on the fact that regression analysis, apart from being a powerful tool for testing hypotheses about relationships between variables, it can also assist the researcher(s) to answer on how a change in one variable affect another, or what factors influence an outcome in a research.

Results

Research Question One

How does Database application influence management of students' academic records in Universities in Cross River State?

The analysis of data that answer this research question is presented in Table 1.

Table 1: Simple Linear Regression analysis of the influence of database records keeping on management of students' academic records in Universities in Cross River State.

R	R square	Adjusted R square	Std. Error of the Estimate		
.628	.395	.394	4.98402		
Model	Sum of Squares	Df	Mean square	F	Sig.
Regression	7746.039	1	7746.039	311.831	.000 ^b
Residual	11873.753	478	24.840		
Total	19619.792	479			

$$y' = a + bx$$

- a) Dependent Variable: Management of students' academic records
 b) Predictor (Constant): Database records keeping.

From Table 1, the R and the dependent .628 indicate significant positive influence of application of database records keeping on management of students' academic records. This showed that as utilization of database records keeping expands, there is probable expansion in the management of students' academic records. The coefficient of assurance (Adj. R²) which clarifies the force of the autonomous variable in foreseeing the reliant variable is .394. This displayed that up to 39.4 percent of change in the management of students' academic records is clarified by information base records keeping. The Table additionally showed that the p-worth of .000 related with the figured F-esteem (311.831) is not exactly the degree

of importance (0.05) at 1 and 478 level of opportunity. With this outcome, the invalid theory was dismissed. This infers that use of database records keeping altogether impacted on the management of students' academic records in Universities in Cross River State.

Research Question Two

How does usage of Microsoft Word influence management of students' academic records in universities in Cross River State?

The analysis of data that answer this research question is presented in Table 2.

Table 2: Simple Linear Regression analysis of the influence of Microsoft Words records keeping on management of students' academic records in universities in Calabar metropolis.

R	R square	Adjusted R square	Std. Error of the Estimate		
.392	.154	.152	5.89434		
Model	Sum of Squares	Df	Mean square	F	Sig.
Regression	3012.527	1	3012.527	86.708	.000 ^b
Residual	16607.265	478	34.743		
Total	19619.792	479			

- a) Dependent Variable: Management of students' academic records
 b) Predictor (Constant): Microsoft Word records keeping.

From Table 2, the R and the dependent .392 indicate significant positive influence of application of Microsoft Word records

keeping on management of students' academic records. This showed that as usage of Microsoft Word records keeping

increases, there is likelihood increase in management of students' academic records. The coefficient of determination (Adj. R^2) which explains the power of the independent variable in predicting the dependent variable is .152. This displayed that over 15.2 percent of variance in management of students' academic records is explained by Microsoft Words records keeping. The Table also displayed that the p-value of .000 associated with the computed F-value (86.708) is less than the level of significance (0.05) at 1 and 478 degree of freedom. With this result, the null hypothesis was rejected. This implies that application of Microsoft Words records keeping significantly influenced management of students' academic records in the Universities in Cross River State.

Findings

Based on the data analysis, it was found out that:

1. The use of database records keeping has significant influence on the management of students' academic records in universities in Cross River State.
2. Usage of Microsoft Word records keeping has significant influence on the management of students' academic records in Universities in Cross River State.

Discussion of findings

The findings on Database application in managing students' academic records revealed that it significantly influenced management of students' academic records in universities in Cross River State. This could be due to the fact that it is a highly scalable facility which is used in handling payments of students' fees, issuing of receipts and updating of information. This finding was

in consonant with Okonigene, Ighalo and Ogbeifun (2008) who asserted that the use of computer systems and databases for information processing, facilitate instant access to students' personal and course information. Also students' information are instantly updated and monitored for the purpose of automatic computation of their Grade Point Average (GPA). The use of database system can enable the enforcement of security measures through the allocation of access privileges and checking mischievous acts of mutilating scores on the results sheet. Similarly, Toney-Okeme (2017) asserted that database application helps to provide quick access to information in relational database, thus avoiding duplication of same information,

The finding of this study also agrees with Udeze's (2017). The author examined automated students' result management information system and how it affects process of compiling students' examination results in University of Calabar. The study revealed that automated information management system facilitates preparation and release of Senate-approved result to students to view their performance on time. Also revealed is the fact that database system enhances flexibility in operation and fast compilation of results for graduation and convocation. Hence, automated database system in University of Calabar adds value to the school system through its effective and efficient task performance.

On the other hand, a study by Okute (2015) revealed that some universities do not have electronic record policy and staff possess little or no knowledge of electronic records management skills. She may have drawn her conclusion based on the fact that before now, there was dearth of trained ICT staff in universities and shortage of computer systems to aid electronic records

management. Today, there are competent hands to handle electronic records in universities and database systems are being installed more than ever. The implication of this finding is that much still have to be done to ensure that conventional documents are captured electronically.

Also, Okonigene's (2017) results on the assessment of using database for students' records management in University of Technology, Minna, conflicts with the findings of this study. The study found the following results: a. There was ineffectiveness in students' records management practices due to incompetent personnel. b. There was inadequate infrastructural facilities due to lack of fund and power failure. The study showed that if standby generator is provided as an alternative to power supply and database personnel are properly trained, management of students' academic records could improve.

The findings on Microsoft Word usage in managing students' academic records showed that there was significant influence of Microsoft Word records keeping on administration of students' academic records in Universities in Cross River State. This finding agrees with Freda (2014) who undertook a study on the evaluation of document administration processes within the worker of two satellite campuses of university of education in Winneba, Ghana and to identify benefits of using Microsoft Word in keeping students' records. The results showed that the use of Microsoft Word in processing students' information leads to quick decision making, saves office space and promotes good corporate governance.

On the contrary, Otu and Ohene's (2014) study on examination of management of students' records at the Polytechnic, Ghana revealed that there was absence of a record management

policy to guide the management of students' records and a weak programme structure for managing records among others. However, the study showed that if internal policies are developed to guide management of records in the school, the standard and records procedures could be improved. The study also showed that if the staff are well trained and become competent and also, automated system of handling students' records is introduced into the school, there would be great improvement.

The findings of this study revealed that Universities in Cross River State use Microsoft Word in handling students' academic records. They use this computer package in inputting data, manipulate the data and process it for information purposes. It was discovered that Microsoft Word package has replaced the manual typewriter in information processing and therefore enabling faster and automated method of processing students' information. However, it was found out that not all the staff who manage students' records in the offices were provided with a computer system and it was also discovered that some staff lacked the knowledge on how to use Microsoft Word to process students' information. It was discovered that Microsoft Word package is efficient in managing students' academic records because of its enormous security features. It was learnt that if the user may want to keep a student's transcript private, he could lock down the important Word document by adding a password and sometimes making the document 'read-only'.

Conclusion

In conclusion, based on the outcome of the research, it was concluded that application and usage of Database and Microsoft Word for electronic records

keeping had relatively predicted administration of students' academic records in Universities in Cross River State in terms of faster and automated way of inputting data, data manipulation, timely dissemination of information and quick decision-making. However, the need for the improvement on the current state of electronic records facilities for more efficient management of students' academic records was also emphasized.

Recommendations

Based on the conclusion drawn in this research, the following recommendations were made:

1. That the University Management should improve on the current state of database usage and Microsoft word application by providing opportunities for constant training and deployment of Database Staff to various U nits that handle students' records.
2. That there should be a robust policy framework to guide the usage of database and application of electronic gadgets in the management of students' academic records.

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