UNIVERSITY OF GHANA

SCHOOL OF COMMUNICATION AND INFORMATION STUDIES

DEPARTMENT OF INFORMATION STUDIES

THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN STUDENTS’ RECORDS MANAGEMENT: A CASE STUDY OF UNIVERSITY OF PROFESSIONAL STUDIES, ACCRA

BY

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A DISSERTATION SUBMITTED TO THE DEPARTMENT OF INFORMATION STUDIES, UNIVERSITY OF GHANA, LEGON, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF ARTS DEGREE IN LIBRARY STUDIES.

JULY, 2018
DECLARATION

I hereby declare that, except for references and quotations from the works of other researchers which have been dully acknowledged, this study is the result of my own work and that it has not been submitted elsewhere either in part or whole in any institution for any award.

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DEDICATION

THIS WORK IS DEDICATED TO THE ALMIGHTY GOD AND MY ENTIRE FAMILY
ACKNOWLEDGEMENT

The commencement of this project was like an uphill struggle before me and I did not know how to go about it. I am grateful to the Almighty God whose grace has made it possible for me to complete.

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The adoption of Information Communication Technology (ICT) in general administrative duties has been recommended for many industries, especially and more particularly, in education and students’ records managements. For this reason, educational institutions, including University of Professional Studies, Accra (UPSA), are gradually incorporating ICT in students’ records management in anticipation for the numerous potential benefits.

It is in this vein that this study examined some records management practices and the use of ICT in students’ records management at UPSA. The objective of the study examined the types of students’ records kept in the University of Professional Studies, the extent of use of ICT in students’ records management, the benefits of ICT in students’ record management at UPSA, examine the challenges associated with incorporating ICT into students’ records management and also to make recommendations based on the findings of the study. The study employed the qualitative research method and relied on data from both primary and secondary sources. Primary data included interviews from staff at UPSA and secondary sources included literature such as journals, articles, books, internet sources among others. Data were collected using interviews with a sample of 10 staff involved.

With the help of interviews, results from the study revealed that even though UPSA had an appreciable number of ICT facilities, their extent of usage is limited to few administrative duties. Inadequate staffs, power outages, slow internet access, lack of resources and others were the major challenges that were revealed during the interviews. On benefits, UPSA experiences effective and efficient records management, quick decision making, and also serves as a catalyst for timely and professional delivery of task and responsibilities.
In attempt to address the identified challenges with the view of maximizing the benefit of ICT adoption in student records management, it was recommended that UPSA ought to hire more experienced and professional staff, organize regular training programs and fully digitize all student records.

**Keywords:** Student records, Information and communication technology (ICT), Document and Information Management Centre (DIMC), University of Professional Studies, Accra (UPSA),
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the study

Information as we know has become a commodity that is highly sought after. Every human being has an inalienable right to information (Alemna, 2009). People all over the world need information to be able to perform effectively and efficiently. The absence of information can halt the planning and decision making process of management in any institution since information is essential for the smooth running of the organization. Prior to the advent of Information and Communication Technologies (ICT) and even technology, every human activity over the last two decades or so was executed manually. Information and Communication Technology (ICT) has taken over almost every aspect of human activities, ranging from education, manufacturing, entertainment and communication to many others in this recent time that is the information age. Government agencies, tertiary institutions and other organizations have taken advantage of the opportunities provided by modern information and communication technologies and are making very good use of it.

Information and communication technology (ICT) refers to the application of information and communication technologies towards social, economic, and political development. “ICT refers to the processing and dissemination of information through
the integration of computers with telecommunications” (Adogbeji & Akporhonor, 2005, p.5). According to Franks (2013, p. 121), “ICT is a shorthand for the computers, software, networks, satellite links and related systems that allow people to access, analyze, create, exchange and use data, information, and knowledge in ways that, until recently, were almost unimaginable.” The term ICT is used almost interchangeably with the Internet. There has been tremendous improvement in the working environment due to the emergence of information and communication technology (ICT). It has become the basis for many activities rising up in the information age.

The mode of working, communicating, sharing of information, learning, teaching, storing of information, accessibility and usability has been made easier due to ICT. Using ICT has made it very easy for students, lecturers, and also those who are into academics when it comes to their research works, assignments and others. The distinctive feature of using ICT in the management of records is that data is recorded on a medium which is also represented in symbols that is binary digits and also with the help of a computer, reading and understanding becomes easy.

Several establishments in the world such as schools, universities, research institutions, museums and governmental organizations retain data about students. In order to keep up with the students’ performance, files are created, managed, preserved, and maintained for future references. For effective functioning of any organization, there must be one form of record or another (Iwhiwhu, 2005).
A record is a written document that provides evidence of activities performed, happenings that took place, results achieved or statements made. According to Research Clue (2014), the process of records management is maintaining the records of an organization from the time they are created up to the time they are disposed of. The practices of records management may include categorizing of the records, storing, securing and destruction (or in some cases, archival preparation) of records. Omoha (2013) further adds that the reason for record management is to make sure that records of students’ achievement and growth are reliable and authentic, records on the activeness of the individual and matters that will help improve the efficiency and effectiveness of the school system are kept. Records management is very essential when it comes to documentation of information. Records management was unfamiliar until the mid-twentieth century (Akotia, 2012). Records are created and preserved as evidence of the affairs that goes on during businesses.

The keeping and management of records is very important in every organization that deals with humans and this cannot be overemphasized. Record keeping in many developing countries is a serious problem which needs urgent attention. With the advent of information and communication technology, retrieval of records will be easier without having to go through stress to capture, process, store and retrieve records. Schools are transforming into smart schools hence educational technology also increases. Records management to a large extent is important because it enables an institution to take decisions based on evidence that has been provided, meet operational, legal and regulatory requirements, to be accessible and accountable, to provide
efficiency and effectiveness, to keep up with organizational or collective memory (Government Record Services, 2011).

Student records are however essential in any educational institution. Student records all over the world have tremendously increased over the past years due to the rise of institutions. They are created for students once they enroll in any program of the institution. The records after creation will hold information on the student relevant data throughout the period he or she will be in the institution. In effective records management, the records must be processed well so that its accessibility is timely and cost effective. The records kept should be accurate, complete, accessible and useable. The concept behind records management is the idea that each record has a life cycle. Records should be managed effectively regardless of the phases in which they pass through and also to meet the objectives for which they were intended (Okoampah, 2011).

According to States University, student records however can be grouped into three categories that is the permanent, the temporary and the directory information. There are those which document the contractual relationship between the student and the institution that is the records documenting admissions and enrolment, payment of tuition fees and non-academic disciplinary proceedings, for those which document the student as the learner, the programme taken by the student, his or her academic progress and performance, and those which document the student as an individual and consumer of services provided by the institution that is the records documenting the use of
accommodation service, counseling service, library and IT support services, career and employment services. This helps to make appropriate decisions and also provide evidence for accountability. Because of the nature of student records, managing it is very important. Institutions which do not manage their records properly find themselves in an awkward position should any record be requested and it is not brought forth.

Just like any other record, student records are vital for the smooth running of the institution. The basic function of student academic information in any educational institution is the creation, maintenance, retention and disposition of records as stated by Otu (2011). The process of creating and being able to keep up records relating to that of the student of an institution are supervising the liaison between the student and the institution, in the event to support other services and dexterity pertaining to the student, supervising the students’ academic performance and keeping records of their achievements both at the institution and afterwards and also to support the students after they complete their studies at the institution.

1.1.1 The University of Professional Studies, Accra (UPSA).

According to Rhoads et al (2014), “a university is an educational institution designed for advanced instruction and research in several branches of learning, conferring degrees in various faculties, and often embodying colleges, schools and similar institutions.” Tertiary education is the highest form of formal education one could ever have in Ghana. It is either acquired from a private institution or a public institution. These are academic institutions or colleges which an individual enrolls in after completion of
secondary education with the aim of obtaining a Certificate. Programs offered differ in every institution. Over the past years, the uprising of tertiary education in Ghana has increased and this can be linked to the fact that more and more people want to be educated. There are a number of public and private institutions in Ghana and among the public universities is the University of Professional Studies, Accra.

The University of Professional Studies (UPSA), was initially called Institute of Professional Studies until it assumed a university status in September 2008, upon obtaining a Presidential Charter, conferring on it, the rank or position of a public university, hence the change of name from IPS to the University of Professional Studies (UPSA). It was founded in 1965, as a private professional and business education Centre. However in 1978, there was a change of ownership from private to government, as a result of the passing of the Institute of Professional Studies Decree, 1978 (SMCD 200). The core mandate of the institution is to provide tertiary as well as professional education in Accountancy, Banking and Finance, Management and other related areas of study to its students, in accordance to the Institute of Professional Studies Act, (Act 566), 1999. As part of efforts to increase the program components of the institute’s curriculum, the institute introduced bachelor's degree programs in September 2005, which further gave meaning to the IPS Act 566. The university now offers undergraduate and master's degree programs and it has currently been awarded international accreditation for its Business programs. This award was given by the Accreditation Council for Business Schools and Programs (ACBSP) in 2016. It also has accreditation to offer Public Relations Management, Actuarial Science and Law (LLB) given by the National Accreditation Board, Ghana (NAB) also in 2016. UPSA is still the
only Ghanaian public institution with the directive to render both academic degrees and also to administer training for higher professional education in Ghana. It runs professional programs such as Association of Certified Chartered Accountants (ACCA) UK, Institute of Chartered Accountants, Ghana (ICAG), Chartered Institute of Marketing, (CIM) UK.

The student population stands at about eleven thousand and three hundred, this is according to the university in 2016. There are so many institutions in the world today that are using ICT in teaching, learning, and also storing information. Information and communication technology (ICT) as stated earlier, has taken over almost all aspects of the human endeavor and this includes the integration and application of ICT resources. The University of Professional Studies generates a lot of student records which capture the data of students and when not managed well through technology can pose serious problems. Students’ records management is therefore essential in UPSA institution and with the help of information and communication technology (ICT), the records can be kept in good conditions until they are sought after.

1.2 Statement of the Problem

ICT offers pragmatic solutions to the majority of the problems faced in organizations, institutions and so on. However, the integration of ICT in students’ records management in developing countries have not been without challenges (Marutha, 2012). In Africa for instance, several studies have reported severe challenges in the integration and
application of ICT in students’ records management (Kalusopa, 2016; Adedeji, 2011). The same situation has been reported in Ghana, (Buabeng-Andoh, 2015; Otu, Bempah, & Amoako-Ohene, 2014).

Even though several studies have been conducted on this issue, there are still fundamental gaps in the current literature. Studies have not examined pragmatic institutional-specific policies put in place to address the challenges. This study, thus, seeks to address the gaps in literature using ICT integration of students’ records management in University of Professional Studies as a case study.

Students’ records management is very problematic in University of Professional Studies, Accra. Despite the huge investments that UPSA has made in ICT tools, staff and training, the Document and Information Management Centre and all satellite departments are not using ICT to manage the student records to the fullest. They have severe difficulties retrieving students’ records using the computers provided. They rather go through a long list of names to retrieve the file of students. This problem is not only peculiar to University of Professional Studies, but also common among the majority of tertiary institutions in developing countries; face these difficulties (Buabeng-Andoh, 2015; Kalusopa, 2016). It is the intention of the researcher to investigate this problem with the University of Professional Studies, Accra as the focus.
1.3 Purpose of the Study

The purpose of this study is to examine the extent of use of Information and Communication Technology (ICT) in managing students’ records at the University of Professional Studies with a view to identify problems in the study and proposing possible solutions.

1.4 Objectives of the Study

Specifically, the study seeks to achieve the following core objectives.

i. To examine the types of students’ records kept in the University of Professional Studies.

ii. To examine the extent of use of ICT in students’ records management.

iii. To examine the benefits of ICT in students’ record management at the University of Professional Studies.

iv. To examine the challenges associated with incorporating ICT into students’ records management.

v. To make recommendations based on the findings of the study.

1.5 Theoretical framework

Theories are assumptions or hypothetical answers that attempt to provide a plausible or rational cause-and-effect relationships or patterns among a group of observed phenomenon, they also seek to challenge and extend existing knowledge in academia. In the field of research, theories help the analyst or researcher to develop research questions, to interpret data as well as serving as frameworks for discussing findings.
Over the years, several studies have provided some theoretical frameworks for the field of research in the acceptance of information technology and information systems. (Ajzen 1975; David 1989; Davis et al 1989; Moore 1987; Taylor and Todd 1995). The Technology Acceptance Model (TAM), among these theories, nonetheless is considered as the most prominent and authoritative theory in explaining information technology adoption behaviour, based on the Theory of Reasoned Action (TRA) which was developed by Fishbein & Ajzen (1975), and Davis (1989) is considered the proponent of the TAM model. He is also credited with its revision.

In the current study, The Technology Acceptance Model was used as the framework. The Technology Acceptance Model (TAM) is an information system theory that models the perceived usefulness and usage intentions of users of technology, in other words the model suggests that when users are presented with a new technology, their minds are inundated with options or ideas about how and when they will use it, and this has a sizeable effect on the decision users settle with. The definitive intention behind TAM’s development was for investigating the impact of technology on users’ behavior. It suggests that the user’s anticipation of the technology’s usefulness and its ease of use are the two crucial components that influence the individual’s attitude towards embracing the technology. TAM therefore proposes several elements to influence technology acceptance, including perceived behavioural control, perceived usefulness, ease of use and social norm.
Davis (1989) concisely defined Perceived Usefulness (PU) as the belief users of technology have towards the improvement of performance in the execution work related duties and responsibilities. Davis (1989) further defined Perceived Ease (PE) as the reduction in human efforts required in the execution of operational tasks as a result of the deployment and adoption of technology. There is therefore a relationship between perceived use and perceived ease of use, as the former is considered to influence the latter.

Both perceived ease of use and perceived usefulness have effects on how users approach and use technology. Numerous studies have successfully used the TAM model to test users’ acceptance of Information Technology, for instance, in electronic-mailing (Gefen & Straub, 1997; Szajna, 1996) extended the use of this model to include gender differences in the perception and use of e-mail, in Website browsing (Koufaris, 2002; Lin & Lu, 2002; Van der Heijden, 2003), considered the online consumer as both a shopper and a computer user in order to test online consumer behavior. Other notable examples are e-learning (SY Park, 2009) in understanding university students' behavioral intentions to use e-learning facilities, ERP environment (K Amoako-Gyampah, Abdus F Salam, 2004) where they applied the model in an Enterprise Resource Planning Environment, to evaluate the impact of one belief construct and two widely recognized technology implementation success factors etc. The results of these studies indicated that TAM could effectively predict and explain users’ acceptance and satisfaction of information technology. This model which was originally propounded by Davis (1989) and alluded to by Lu et al. (2003) as well as many other scholars as the accepted model for information technology, was adopted and used in this study to test
whether or not perceived ease of use and perceived usefulness will help identify and address, firstly, if the use of ICT in students’ records management and its associated challenges, are influenced by institutional policies on information management and the extent to which they do, in University of Professional Studies, Accra.

**Figure 1.1: Technology Acceptance Model for Wireless Internet**

*Source: Lu et al. (2003)*

As shown in Figure 1.1, the TAM explains that actual system use is determined by behavioural intentions to use. Behavioural intention itself is influenced by the attitude that people have about ICT. Attitude is also influenced by perceived usefulness and perceived ease of use, both of which are affected by external variables. Therefore as the figure flows, perceived usefulness and perceived ease of use cause people to develop (favorable or unfavorable) attitude towards ICT which in turn influence their intentions to use and their actual use of ICT.
1.6 Scope of study

This study is concerned with examining the use of ICT in the management of students’ records in University of Professional Studies, specifically at the Documents and Information Management Centre (DIMC). This is because the centre handles the records of all the students in the entire University. In addition, the study also included staff at the academic department.

1.7 Significance of the study

Although similar studies have been conducted, this study would be significant in numerous ways. Information generated would be significant to policy makers, stakeholders, researchers, all other institutions and also information professionals to make informed decisions. Also, the findings of this study would contribute to knowledge in academia as well as serve as motivation for further studies. Furthermore, this study would serve as a basis for others evaluating ICT use in students records management.

1.8 Research Setting

The study was conducted among the staff of University of Professional Studies, Accra. Specifically, the study was conducted among the staff at the Documents and Information Management Centre (DIMC) and the academic departments of University of Professional Studies. The staffs at DIMC are responsible for the management of records of all students on behalf of the university. Therefore, these staffs are in a better position to discuss the issues that influence the use of ICT in students’ records management of the university.
The Document and Information Management Centre began its operation in 2014. The core mandate of this Centre is to restructure, organize and manage all documents, information resources and student files in the university. The Centre is also mandated to perform information storage activities in both electronic and analogue formats for various academic and administrative functions and also tracking the movement of files. In order to fulfil its mandate and to successfully provide the needed information services to stakeholders for planning and decision making, and to ensure safe and easy storage and retrieval of documents and information, the DIMC combines theory, principles and ideas not only in information science or information management, but also from corporate governance and related disciplines in business administration and information technology. Once a student is admitted into the university, a file is created during the manual registration at DIMC. The file which is created captures the biodata of the student, admission letter, WASSCE results, proof of registration etc. After the file is created, it is stored at the records department for the purpose of managing the student throughout his student life and beyond.

1.9 Ethical considerations

A letter of introduction was taken from the Department of Information Studies, University of Ghana, to the University of Professional Studies, Accra for permission to conduct the study.

The researcher maintained high ethical standards during the process of the study. The nature and purpose of the study was first explained to participants who were approached for the study.
Participants were made aware of the voluntary nature of the study and were also assured of privacy and confidentiality. They were informed of the fact that the work was mainly for academic purpose. Finally, the researcher strictly adhered to the University of Professional studies code of conduct governing research studies.

1.10 Organization of Study

The report of this study was organized into five chapters. Chapter One which is the introduction covered the background of the study, statement of the problem, aims and objectives of the study, theoretical framework and also talked about the research questions and significance of the study.

Chapter Two highlighted the review of literature.

Chapter Three presented the methodology which elaborated on the research design, selection of cases and subjects, population, sample size, sampling technique and instrumentation.

Chapter Four dealt with data analysis and presentation of findings.

Chapter Five which is the final chapter presented the summary of findings, conclusions and recommendations.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This section provides the context of literature review on the use of ICT in students’ records management. The review commenced from a wider perspective, and then captured African point of view as well as Ghanaian point of view. Studies that examined the level of readiness on the part of institutions in various sectors are also covered in this chapter. The literature review focused on examining studies across different contexts on the challenges of integrating ICT into students’ records management and its usage. The chapter concluded with what literature says on the factors that influence the adoption and smooth use of ICT in record management across various sectors of the economy.

2.2 Nature of Student Records

In this age, Information has become a pervasive part of society, crawling into spheres including health, education, business et cetera. Information is considered as the 5th factor of production, its importance makes it impossible to do away with. Student records are any information or piece of data directly related to students and maintained by the records keeping body within the institution. They are usually opened in order to address both administrative and student queries for the effective running of the institution. They are therefore essential in every organization. The nature of students records and the folders that houses its content hasn’t changed, they are still governed by administrative regulations which takes into consideration the retention and disposition policy, as well as issues regarding confidentiality.
in order to ensure trustworthiness and reliability of information concerning studentship within the university organization

They usually exist in handwriting, paper prints and digital formats.

Most institutions in Ghana operate a parallel system of records keeping where student’s documents or records are housed on shelves as well as on computer systems.

At UPSA, which is the Centre of this study, students records (handwritten) are stored in the university clinic's directory, this comprises the doctor’s handwritten notes detailing diagnosis, prognosis, prescriptions and among others on individual hospital cards.

At the records department, information on students are stored as hardcopy prints, the typical student folder contains records of the student’s bio data, academic entry records, nationality and a medical report on a student’s health status. These are captured by filing photocopy documents of birth certificates, high school grades and names of persons recommending the student as well as a medical clearance certificate, issued upon completion of a thorough medical examination.

Once a student is admitted, a student’s folder is opened on the day of verification and registration. The disciplinary records of the student also features prominently on the student folder.

Electronic or digital records are stored at the university’s ICT directorate, these consists of current academic records, existing in the form of academic online transcripts as well as summary information on financial history of students, including penalties for various infractions committed, school fees paid, faculty dues et cetera.
2.3 Benefits of ICT adoption in students’ records management

Information and Communication Technology (ICT) has been welcomed across the globe because of its great impact and contribution to numerous fields and sectors of the economy. More generically, Zain (2004) postulated that ICT plays key roles in the operations of both governmental and private sector institutions through the development of technological applications and programmes that aid the smooth execution of fundamental managerial functions which include planning, organizing, directing and controlling. Mnjama and Wamukoya (2007), and Wamukoya and Mutula (2005) opined that the various improvements and innovations in fields such as engineering, medicine, accounting, finance, economics, just to mention a few, are all the end products of ICT-powered inventions.

In the field of education, and students’ record management, ICT has made remarkable contributions, as these sectors’ efficiency and effectiveness have also heavily depended on ICT, especially during the last three decades. Manduku, Kosgey, and Sang (2012) surveyed Head and Deputy teachers, Head of Departments, and Governing Board members and came to the conclusion that ICT improves data management, fosters effective communications and prudent management of students’ records in the case of Kenya’s second cycle education. Meanwhile, Davis, Bagozzi and Warshaw (1992) also established through a research that the main driving and perceived reasons for the use of ICT in records management included improvements in decision making, reduction in paper-works, reduction and improvements in planning times, and reduction in labour cost.
In contemporary times, the use of ICT in students’ record management is viewed as a catalyst for accuracy, timeliness, and proper professional deliveries of tasks and responsibilities (Minishi-Majanja, 2016). These findings were confirmed by Toyo (2017) who postulated that the use of ICT in records management makes available superior data storage capacities, aids fast data retrievals and analysis. Toyo (2017) further reckoned that reports generation was made easier, faster, quicker and in a more organized manner when ICT was employed in students’ records management. Data sorting, amendment, security, and duplications were also taken care of in students’ record management when ICT is brought on board.

Radloff (2001) also focuses on the benefits that ICT presents for upgrading the quality of teaching and learning to include assistance to staff and students to know how they teach and learn, applying theory and research on learning and principles of good instruction to designing online learning environments, creating an environment where teaching and learning is made available to the public, encouraging collaboration and team work among staff (and students), more people being offered access to learning, being able to expand the technical knowhow and status of university teachers.

The benefits of ICT cannot be limited just to these. ICT has helped immensely in the business sectors, education, health, almost all aspects of the human life. The working environment has become enjoyable.
2.4 ICT Integration into Students’ Records Management in Africa

Adedeji (2011) examined the availability and use of ICT in some selected colleges of education in Nigeria. The study involved a sample of 200 respondents which consisted of trainee teachers from colleges in south-western Nigeria. Questionnaires were therefore administered to reveal the level of availability of ICT resources, use of and perception of the impact of ICT affected or influenced teacher trainee education. Out of the total of 200, 180 were retrieved representing 90% rate of return, the data collected was analyzed quantitatively using the Statistical Package for Social Science software.

Findings from the study showed that ICT had not been properly integrated into the colleges’ teaching and learning curriculum and in addition to that, the trainee teachers were reluctant and uninterested in applying ICT as part of their training curriculum. Adedeji (2011) however affirmed that ICT had become a pervasive part of the academic discourse communities around the world; hence he proposed that ICT teaching should be inculcated in teacher trainee colleges to build a refreshing and interesting academic discourse environment, thus providing a new horizon of experience and exposure to trainee teachers.

ICT Tutors should therefore offer prospective teachers, skills that evidently spell out to them how they can use ICT to enhance the syllabus or subjects they teach to students. Schools in Nigeria may lack a state of the art ICT facility; resources also might vary from school to school but ICT teachers must, in an effort to create an effective teaching and learning environment not only teach ICT in theory but also illustrate what they teach, so that teachers – to-be can understand extensively how technology can enhance
their work in the classroom, in other words they must model best practice through demonstration.

Kalusopa (2016) also conducted a study to assess the use of ICT systems in the management of records in labour organizations in Botswana. The sample for the study was to be 50 but 45 responded. Findings from the study also showed that ICT had not been properly administered in the integration of records management. It also conclusively proved that the records management practices in the Corporate Service Division were not well established thus weakening the delivery of services. The inexistence of the records management policy, procedural manual, excessive missing file cases, the problem of accessing and using records, were some of the shortfalls identified by the Corporate Service Division. To supervise the management of records, it was advised that a framework that would improve the delivery of services as well as training programmes should be put into action.

In another related study, Aduku and Aisha (2012) explored the managements of records in Abuja at the judicial service committee of the Federal Capital using closed ended questionnaires. The findings of the study was that the judicial service committee did not recognize the full worth of records management. The major types of records unearthed were produced in the committee where employee records and the records of the nominees for appointments. In order to meet the committees’ goals and aspirations, the records of the nominees for judicial appointments were looked at as being the most beneficial. The judicial service generates its information. Most part of the document was paper based. They further explained that the committee should prioritize the
management of records in their organization. Some studies revealed that the unintegrated records management programmes in Nigeria in the public service had led to the incompetence and absence of important information needed for decision making.

Marutha (2012) also examined the performance of electronic records management systems in the public health sector of Limpopo, South Africa, focusing on what is the ideal e-records management and recordkeeping practices or systems that will facilitate proper health care service delivery in the public health sector of Limpopo, specifically looking at the Records and Information Management Units at the hospitals.

Interviews, observations and questionnaires were used in undertaking the study with respondents from 40 hospitals from the above mentioned units. The management of patient records was a bit of an issue, with problems in filing, storage and timely retrieval. This was shown by the fact that patients had to sometimes consult the doctor without data on their medical history.

It was discovered that the difficulty was due to a lack of effective records management skills involved in opening, indexing and tracking of patients files, the absence of a proper retention and disposition policy as well as a lack of knowledge about e-records fundamentals hence a hold-up in the implementation of a full fledge e–health service. According to the study, the above problems can only be addressed by integrating Information and Communication Technology (ICT) into the health sector delivery, and this can be catalysed by the presence of the National Archives and Records Service in
Limpopo, ready to provide the necessary guidelines and policies on electronic records management for the various hospitals.

Furthermore, the study revealed that the old manual records management system in place stifled the growth of the health care sector in Limpopo, by inhibiting effectiveness and timeliness in service delivery, which resulted in long patient waiting times and patients being treated without medical history, aggravated by the large number of patient files and difficulty in retrieving them. Also, hospitals that had an e-records management system available, had systems that failed to capture all the patients data, the information it provided was limited to only patients’ bio data and payments made by the patients.

As solution to this, the study proposed utilising ICT for effective service delivery, agreeing that an introduction of an Electronic Records Management System, with a capacity to not only access personal and financial data of patients, but by extension, a complete and comprehensive patient records including medical history as well as having the option of tracking manual records, such as the Electronic Document and Records Management System (EDRMS).

Godwin (2013) also researched into the use of ICT in universities management in north-central, Nigeria. A 26 item questionnaire was used in undertaking the study. Data was analyzed using means and standard deviations. The study involved 446 respondents, 280 in federal and 166 in state universities. Findings of the study showed that ICT can be used in checking results online, communication and also filling forms online. It was revealed that there was unavailability of ICT equipment
and also unreliable power supply. It also stated that ICT was not being used appropriately.

By integration and application of ICT, university administrators can have access to accurate data on students such as enrolment records and academic records in a timely fashion. Thus, the research sought to definitively reveal areas in which ICT can be applied and be useful within the universities, as well as lay out the framework and processes involved in setting up ICT facilities in the universities, procedures for applying the set ups in the day to day university business and also thinking ahead, by finding out potential problems that could arise in using ICT in the management of universities in north-central Nigeria.

Taking into account the findings of the study, it was highlighted that even though most of the universities dwell in an environment of infrequent power supply as well as inadequate ICT set ups and equipment, going forward ICT can still be applied in diverse areas within the circles of the universities, comprising of computation of results, collection of student data for record keeping as well as allocation of hostel accommodation.

The findings recommended that, since the universities are state and federal owned, thus semi-autonomous, the political administration in Nigeria should provide adequate funds for the purchase of ICT equipment at the universities. Also NGOs whose domain lies within the spheres of university education, should endeavor to supplement government efforts by aiding in the acquisition of ICT facilities and set ups for the universities.
Above all, the staff of the universities, in an effort to be worthy of their salt, should add to their knowledge, basic skills and techniques required in handling ICT facilities and equipment, as this will go a long way to increase efficiency and productivity within the university work environment.

2.5 ICT integration into Students’ Records Management in Ghana

Adu (2014) discovered that there was poor management of records in some universities. Her study involved two campuses (Kumasi and Mampong) of the University of Education, Winneba. The study was therefore an attempt to bridge this gap by using the two campuses as a case study for the research. The study revealed literature on the meaning of record, record lifecycle as well as records management best practice models.

In the course of the study, 80 administrative staff responded to the questionnaires given and the statistical package for social science SPSS was used in analyzing the data. Findings from the study showed that ICT had not been well integrated in the selected campuses and that UEW should embrace records management functions to ensure effectiveness in service delivery and also employ professionals with a records management background.

Otu et.al (2014) also examined good governance and management of students records at the Polytechnic of Koforidua. The study was analyzed qualitatively using interviews in which 15 users participated. In the study, it was revealed that records’ keeping is
fundamental in good governance. A well-organized information is crucial for decision making. Information was captured on both electronic and paper medium. However, paper was the main medium used in capturing information. The unavailability of a records management policy as well as a weak programme structure made it difficult to manage records. The Polytechnic lacked the authority to create, use and preserve records due to the absence of the policy. The researcher was of the view that the management of records was poorly handled. This can be evidenced with the fact that the institution had limited resources for storing current and noncurrent records and facilities such as the filing cabinets and shelves had records on them which made the room a bit clumsy. There was no plan with regards to the storing and maintenance of their records.

Findings also revealed that there was no procedural manual guiding staff in the management of their student records. This manual is a document that draws up statement of the duties and responsibilities of staff to enhance their work performance. A procedural manual characterize all aspects of activities which allows staff to acknowledge what others do and also for them to see that their duties and responsibilities are interrelated. Also, there were no guidelines or policy on the disposition of the student records. It was concluded that all these things should be implemented to ensure effective and efficient running of their student records office.

In a related study, Obiri-Yeboah, Kwarteng and Kyere-Djan (2013) examined the adoption of ICT in tertiary institutions in relation to teaching, research and learning in Ghana. Mixed data collection method was used in which interviews and questionnaires...
were administered for respondents to react to the question on the trend of ICT infrastructure within the last 10 years at the Kwame Nkrumah University of Science and Technology (KNUST).

These were issued out to 212 respondents from various faculties of the institution comprising ICT staff, students and lecturers. The findings revealed that there was a major problem of inadequate ICT equipment and infrastructure such as computers and internet services at the university, it further reported that the internet speed was slow, with a high rate of down time. Accessibility to the internet facility available, was also limited to the university’s top hierarchy, other stakeholders like students had to find their own means of accessing the World Wide Web for learning and research. However attention had been given to the IT Directorate of the institution, in terms of internet access with an improved bandwidth from below 10 mbps (Megabyte per second) to 55mps in the last 10 years.

ICT centres were also being constructed all over the university’s campus to enable wireless internet access in other words a Student Wi-Fi was in the pipeline to curb the problem of limited access to internet services. As a solution to the issue raised on the inadequacy of IT equipment, the findings discovered that the university had made an order for the delivery of approximately 3000 computers to be made available at all the offices of the various units in the institution.

However, it was said that more can be done to expedite the full integration of ICT in the teaching and learning curriculum at the university, with respondents calling for the establishment of a modern e-learning centre with highly specified computers and
programs to aid research and learning such as Excel, Minitab, SAS, SPSS et cetera. The study therefore highlighted the importance of ICT infrastructure and computer literacy to supplement teaching and learning in tertiary institutions across the country.

Buabeng-Andoh (2015) also researched into the use of ICT by teachers and the factors that affected its use in secondary schools. 10 groups comprising 6 students each from various schools, representing teachers from diverse social class communities were used as the focus for this study.

Focus group interview was used in gathering data from the respondents. The result of the findings showed that there were inadequate technological resources, and that teachers in secondary schools have not yet found a way to adroitly integrate ICT into their teaching methods, and this makes it difficult to explain abstract concepts to students, in other words a child who does not know how a CPU looks like might struggle to comprehend what it can be used for. The teachers however use ICT as an informative tool to be abreast with the day to day news development around the world.

The study went on to recommended an integration of ICT into teaching, and provision of ICT training for teachers, to promote academic practices of ICTs use in schools.
2.6 Institutional readiness in the use of ICT in students’ records management

The manual system that is the paper usage which was used in keeping records is still in use by many universities. The usage of computers and other information and communication technology infrastructure as well as the ongoing digitization and office automation keep increasing by the day so therefore electronic records are now being generated to enhance productivity. We live in a paperless age now where all papers will gradually fade. Student records may be misplaced or delayed due to the dependence on paper work.

As technology keeps advancing, an ever growing issue for the records management community is the conversion of existing or incoming paper records to electronic format. Paper records occupy space and also take time to retrieve the records when in need. In an attempt to provide a unified framework to assess the worth of the breadth and depth of the digital divide between the developed and developing countries, the concept of e-readiness was developed during the latter part of the 1990s as postulated by Asogwa (2013).

Lipchak and McDonald (2003) defined e-records management readiness as the extent to which we create, manage, share, and use electronic information and all other technologies to better the administration process, to keep up with businesses, improve global security and support other activities in the world. Institutions all over the world are embracing the present day information and communication technologies (ICT), as a tool for providing effective and efficient services to their citizens. In Africa, the
socio-economic ecosystem in which universities dwell is becoming competitive by the day, this is not limited to the growing number of university establishments but also the inculcating of new disciplines, therefore in order to have a competitive edge, these institutions must seek to embrace ICT to ensure good record keeping which underpins good administrative work within the confines of their establishment.

However, the readiness of the institution to make use of electronic record keeping in the management of systems depends largely on the facilities available. Even though various e-records readiness tools are available in the West, none of them addresses e-records readiness issues in Africa where systems and procedures for managing records both paper and electronic are inadequate. As corollary to this, a simple tool for assessing the e-readiness for the adoption of e-records in an environment is provided. Institutions as due diligence, must examine among many things its legal and regulatory framework, physical infrastructure, steps for gathering, processing, storing and dissemination of e-records, staff exposure to ICT as well as issues relating to the long-term storage and accessibility of e-records

A study conducted by Asogwa (2013), revealed that universities in Nigeria are not ready to manage electronic records, despite the availability of data carrying technologies such as scanners, printers, photocopiers, laminators, CDs, CD-ROM, DVDs, flash drives, and floppy disks. This problem was attributed to weak legislative and organizational framework. The study aimed to examine the background of the problems as well as the strategies for e-records management in Africa. Employees were asked if they were
conversant with electronic records management, 31% answered in the affirmative, specifically saying that they were familiar with certain aspects of electronic records management after taking part in a mandatory staff ICT training, while a whopping 69% disclosed they weren’t conversant handling of electronic records or the processes involved in managing it at any stage of the records life cycle. This, by a long stretch, goes to show the extent at which electronics records management training is important in any organization, especially in a world that is in a constant technological flux. Organizations therefore must seek to embolden members willy-nilly, to participate in staff ICT training sessions, in order for its staff to perform at their full potentials and maximize resources at their disposal.

Mnjama (2007) also stated that the proliferation of ICT and electronic records are being generated all over Africa and in many public sector organizations. However, there had been a shift in the way information was collected, processed, stored and disseminated. Archivists and the records managers also face some challenges. The various e-records readiness tools, systems and procedures for managing both e-records and paper records are easily available and accessible in developed nations, but the same cannot be said of many nations in sub Saharan Africa.

A study conducted at Makerere University by Moses (2009), also indicated that the availability of internet facilities, computers, management information systems, electronic databases were accessible to all administrators, lecturers and students, though with restricted access for viewing results, record keeping, preparing and
marking examination scripts. Although these were all in place and ready to use, they wondered why they still faced bottlenecks with regards to its usage, whether it was as a result of users’ attitude, inadequate technical know-how, the complexity of the system or how the system was introduced. The study therefore, intended to establish how ICT affected management of students' records in the University. The researcher used both correlation and cross sectional survey design as well as qualitative and quantitative methods in collecting and analyzing data based on a target population of 1,611, sampling both teaching staff and the university administrative personnel. It was concluded that even though users had ICT facilities at their disposal its usage was limited to uploading examination results, tracking students' academic history, issuing of grades, communication between staff as well as the student body, and this was done by a few respondents (staff both teaching and administrative) due to the low level of experience and lack of basic prerequisite skills in operating ICT equipment and resources.

In a study conducted by Riesenmy (2010), some important views as to why there were still challenges in adopting ICT at medical centres were revealed, seeking to explore physician sense making and readiness to implement Electronic Medical Record as a first step to finding strategies that enhance EMR adoption behaviours, a case study approach was adopted revealing a detailed analysis of individuals within an organizational unit. The findings showed that factors such as expectations, outside influences, emotional arousal, trust and faith, controlled influence et cetera enables physicians to make sense and derive meaning of a new technology. The findings threw more light on physicians, painting them as autonomous learners utilizing innovative thought processes to prepare
for the implementation of EMR in medical centres. Holt et al. (2007), proposed the readiness for change constructs which gives insight into the relationship between how physicians make sense of Electronic Medical Record and their readiness to adopt it. Physicians have been slow to adopt the EMR technology as a result of the negative perceptions about the effects of this new technology on their medical practice that is according to DesRoches (2008). His study emphasized that physicians should make purposeful changes in their practices. They must be ready to accept changes that come about as the world and technology keeps enhancing.

2.7 Challenges in the use of ICT in students’ records management

The major challenges that hinder the use of ICT in students records management is lack of ICT equipment, lack of personnel, inability to keep up with the present technological changes and power failure.

Mnjama and Wamukoya (2004) pointed out that, the East and Southern Africa member countries were facing some real challenges in the processing and the preservation of records. These include: absence of organizational plans for managing records; low awareness of the role of records management in support of organizational efficiency and accountability; lack of stewardship and coordination in handling records; absence of legislation, policies and procedures to guide the management of records. In addition, the cited absence of core competencies in records and archives management; absence of budgets dedicated for records management; poor security and confidentiality controls; lack of records retention and disposal policies; and absence of migration strategies for records.
Iwhiwhu (2005) emphasized on the poor management of records in the school system that is the quantity and quality of manpower. He emphasized that manpower is employed without prejudice to qualitative records management most especially in registry.

Edoho (2013), also focused on identifying areas where ICT can be introduced and integrated to produce benefits that will be profitable to all. His study examined the strengths and the weaknesses relating to the implementation of ICTs in Africa in this globalization age. He intimated that poor technical infrastructure and lack of resources affect the access to ICTs, which accounts for digital divide. Castells (2002, p. 248) defines digital divide as “inequality of access to the internet,” because obtaining access to the internet is “a requisite for overcoming inequality in a society which dominant functions and social groups are increasingly organized around internet.”

Pali (2009) recorded that the management of records is the systematic control of records in either electronic or printed materials from the time they are created until their final disposition which includes the advancement of standards to the creation, usage, storage, retrieval, disposition and archival preservation of recorded information. Robek et al (2002), claimed that “without a records management programme, an organization has no effective means of controlling the growth of its records”. An article by Musembi (2005), stated that because of the poor handling of government records system in Kenya, citizens do not receive immediate services from public offices. Records are either missing, lost or the records hidden by some corrupt civil servants. Citizens may however
in an attempt to search, bribe the public officers. This is also peculiar to the Lands Commission, Law Courts and also the utility sector. Kenya is not the only country experiencing this but also in most developing countries.

The introduction of ICT has brought a lot of changes to the societies but the application of it has become a problem. This is because people are used to the manual or old way of doing things therefore they feel reluctant adopting a new thing.

2.8 Summary of Literature Review

The literature broadly shows that majority of the studies report findings to the effect that universities in Africa face severe challenges when it comes to the readiness, integration of ICT into students’ records management and the adoption of ICT. The same trends have been reported in tertiary institutions in Ghana. However, the root causes of these challenges as well as institutional policies for dealing with the challenges have not been adequately researched.
3.0 METHODOLOGY

3.1 Introduction

The methodology chapter contains the procedures that will be used to gather and analyze data for the study. The sections included here are; the research design, population of the study, sample size, sampling technique, data collection instruments, procedures for data collection, data analysis and presentation and ethical concerns.

3.2 Research Design / Strategy

The central and important part of a research project depends on how well you plan and implement the research. This is where the “hows, whys, wheres and whens” comes into play.

A research design is defined as the overall strategy that is chosen to integrate different parts of a study in a coherent manner to address a research question (Plonsky, 2017). A research design thus describes the ways, the process or techniques for gathering and analyzing data (Cresswell, 2013). The focus is the study of the use of Information and Communication Technology (ICT), in student records management at the University of Professional Studies, Accra. In the current study, the research design that was chosen was the qualitative research design.
3.3 Selection of Subjects

3.3.1 Population

A research population is a well-defined collection of individuals or elements who share similar characteristics based on what a researcher is interested in and therefore qualify to be included in the study (Cresswell, 2013). In the current study, the population of interest is all staff who are involved in the management of students’ records in the main and various satellite records departments at University of Professional Studies. The number of staff at the Document and Information Centre add up to 4 and those in the Academic Department add up to 6 making a total number of 10.

3.3.2 Selection of Sample (Sample size and Sampling Technique)

Sample Size

Sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. Therefore sample size is the act of choosing the number of observations or replicates to include in a statistical sample. Sample size is a subset of a population and it represents the main interest of the study. However, the sample size should be large enough so that the findings from the study can be generalized to the entire population (Plonsky, 2017).

Sampling Technique

There was no sampling because the total population was used.

3.4 Instrumentation

According to Kumar (2005), there are several methods used to collect data in his book. There are two major approaches in gathering information which is the secondary and the
primary data. Methods used in collecting primary data include interviews, observations and questionnaires. The data for the study were collected using interviews. The interviews were guided by the interview guide developed purposely for this study.

According to Kumar (2005), an interview involves a person to person interaction between two or more people. Interviews help to unearth certain facts that the researcher has not even thought of and this can be achieved when there is a good rapport between the researcher and the respondent. According to Aina (2002), interviews can be used in both quantitative and qualitative research and can be structured, unstructured and semi-structured. However, it is known to have some limitations. These limitations include time consumption and danger of interview bias since the objectivity, sensitivity and insight of the researcher is crucial. An interview guide was developed to guide the interactions with the identified respondents for the study. Specifically, the study used the interview to explore deeper into the use of ICT in the management of students’ records at University of Professional Studies.

According to the English Oxford Living Dictionary, observation is the action or process of observing something or someone carefully in order to gain information. Observation was also be used to assess how things were operated at the university since some answers could only be obtained through observation. According to Fraenkel et al (2000:535) “certain kinds of research questions can best be answered by observing how people act or how things look.” There are different types of observation which are the participant and non-participant observation (Kumar, 2005). The overt and covert
observations are the types of participant observation. With the overt participant observation, the observer or researcher is known to the subjects. Covert participant observation is where the researcher disguises him or herself and acts as any other participant. The adopted appropriate observation was the overt participant observation. This was because to avoid anything affecting the outcome of the research, the researcher thought it was not possible to adopt the covert participant observation.

3.5 Data Collection Procedure

The data collection procedure began by scheduling time with the interviewees. A copy of the interview guide was given to the Director as well as his co staff of the Document and Information Management Centre to give them enough time to prepare. The interviews were conducted within a period of 2 weeks. All the interviews were audiotaped. It was a one on one procedure. Due to the face to face interaction, the researcher was able to ask probing questions pertaining to the research.

3.6 Data Analysis and Presentation

The collected data were first edited to remove errors and also to ensure that everything was perfect. The in-depth interviews were analyzed using Thematic Content Analysis (TCA). All the audiotaped interviews were transcribed. The analysis began by reading and coding the transcripts. Next, all minor codes were grouped together to form basic themes. Then the basic themes were also grouped into emergent themes for analysis and discussion. The emergent themes were presented as the results.
Figure 3.2: An illustration of the thematic content analysis

1. Transcription

2. Coding
3. Searching for themes
4. Reviewing potential themes
5. Defining themes

6. Result

Source: Braun & Clarke (2012).
CHAPTER FOUR

4.0 DATA ANALYSIS, PRESENTATION OF FINDINGS AND DISCUSSION.

4.1 Introduction

This study explored the extent of use of Information and Communication Technology (ICT) in managing students’ records at the University of Professional Studies. The level of readiness, ease of use, the extent of use and useful of ICT in students’ records management in the university were examined. The challenges facing the university as well as ways of addressing the challenges with regards to the use of ICT in students’ records management were also explored.

This chapter presents findings from the study. The chapter progresses as follows. First, the demographic characteristics and profiles of the participants are presented. After that, students’ records management in the university is examined in its broader sense. Next, the level of readiness of the university in integrating ICT into students’ records management is presented. After that, the extent of use and usefulness of ICT in students’ records management are presented. The challenges of integrating students’ records management and ways of addressing the challenges are then presented.

For the purpose of anonymity, the respondents were identified using ‘R1’ to ‘R10’

4.2 Demographic Characteristics and Profile of Participants

Interviews were conducted with a total of ten (10) staff in charge of students’ records management. This section presents the demographic characteristics and profile of participants interviewed for the study. The demographic characteristics are presented on
Table 1.

Table 4.1: Demographic characteristics of respondents

<table>
<thead>
<tr>
<th>Factor</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>7</td>
<td>70.0%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3</td>
<td>30.0%</td>
</tr>
<tr>
<td>Age</td>
<td>30 – 39 years</td>
<td>5</td>
<td>50.0%</td>
</tr>
<tr>
<td></td>
<td>40 – 49 years</td>
<td>2</td>
<td>50.0%</td>
</tr>
<tr>
<td></td>
<td>50 – 59 years</td>
<td>2</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>60+ years</td>
<td>1</td>
<td>10.0%</td>
</tr>
<tr>
<td>Educational level</td>
<td>First Degree</td>
<td>2</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>Master’s Degree</td>
<td>8</td>
<td>80.0%</td>
</tr>
<tr>
<td>Position</td>
<td>Assistant Registrar</td>
<td>6</td>
<td>60.0%</td>
</tr>
<tr>
<td></td>
<td>Principal Administrative Officer</td>
<td>2</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>Admissions Officer</td>
<td>2</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

From Table 1, it can be seen that the respondents were dominated by male staff (70%) more than female staff (30%). Their ages ranged from 30 – 60 years. Half (50%) of them were between the ages of 30 – 39 years. Majority (80%) of them had Masters’ degree with the remaining 20% having first degree. Majority (60%) of them were at Assistant Registrar position, 20% were Principal Administrative Officers, with the remaining 20%
being Admission Officers.

Profile of Participants

This section provides detail profile of each of the respondents on Table 2, to help put their narratives into perspective.

Table 4.2: Profile of Participants

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Age</th>
<th>Sex</th>
<th>Role</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Early 30s</td>
<td>Male</td>
<td>Assistant Registrar</td>
<td>MA in Records Management</td>
</tr>
<tr>
<td>R2</td>
<td>Early 30s</td>
<td>Male</td>
<td>Assistant Registrar</td>
<td>MA in International Affairs and Diplomacy</td>
</tr>
<tr>
<td>R3</td>
<td>47</td>
<td>Male</td>
<td>Assistant Registrar</td>
<td>Master’s degree</td>
</tr>
<tr>
<td>R4</td>
<td>39</td>
<td>Female</td>
<td>Assistant Registrar</td>
<td>Master’s degree</td>
</tr>
<tr>
<td>R5</td>
<td>58</td>
<td>Female</td>
<td>Assistant Registrar</td>
<td>MA in Records Management and Archives.</td>
</tr>
<tr>
<td>R6</td>
<td>60</td>
<td>Male</td>
<td>Assistant Registrar</td>
<td></td>
</tr>
<tr>
<td>R7</td>
<td>53</td>
<td>Male</td>
<td>Geophysicist</td>
<td>Master’s in Petroleum Geoscience, MBA in finance</td>
</tr>
<tr>
<td>R8</td>
<td>Early 40s</td>
<td>Male</td>
<td></td>
<td>MSc Management Information Systems</td>
</tr>
<tr>
<td>R9</td>
<td>35</td>
<td>Male</td>
<td>Principal administrative assistant</td>
<td>Degree</td>
</tr>
<tr>
<td>R10</td>
<td>39</td>
<td>Female</td>
<td>Admissions officer</td>
<td>Degree</td>
</tr>
</tbody>
</table>
4.3 Students’ Records Management in UPSA

This section presents findings with regards to students’ records management in its general sense in the university. This sought to examine students’ records management in the university, before examining how ICT is being integrated into it. The domains examined included processes involved in students’ records creation, types of students records kept and the reasons for creating such records.

4.3.1 Creation of Students Records

Narrative of participants showed that creation of students’ records is the foundation of students’ records management in the university. Records are created for students the moment they are enrolled in the university. The records creation is the primary mandate of the Documents and Information Management Centre (DIMC). These are exemplified by the narratives of participants below:

*This Department is in charge of registering students, we check the documents they used to apply before gaining admission, crosschecking the photocopies with the originals before a student file is created. I could say that I take part in the raising of student’s files which includes records such as their birth certificates, academic certificates and provisional admission letters among others. (R1)*

*The creation of a file starts from the point of registration, after students are admitted as freshmen they are obligated to report to the Documents and Information Management Centre (DIMC), during this period, we make sure that the documents that they used in the application process such as WASSCE or ABCE certificates, birth certificate, the declaration form, which is the hard copy of the data they*
imputed online before the offer of admission, are inspected and verified before a student file is created for the students. We choose files according to program of study. So for instance if the offered program is B.A Marketing, we use a file designated for marketing students only programs like Banking and Finance as well as the others are also assigned files exclusive to the program of study. So the process involves inspecting, verification, approval and opening of new student’s files to store the student records or documents followed by indication of the name, index number, entry level and the year of completion on the cover of the file, we make sure we store all the relevant documents in the file, this is the process involved in creating a new file at DIMC. (R2)

This was the response of respondent R3:

I’m in charge of students records at the faculties mainly the examination scripts. So in the event of a student complaint regarding an examination result, my job is to locate and retrieve the exact script for the lecturer to attend to it. I am also involved in opening new files for the freshmen during student registration at the beginning of a new academic year.

In addition to that I also attend to requests or queries regarding student records. (R3)

Respondent 4 said:

Directly I’m not involved in the opening of files per say but I do come in when Files are being created because of the necessary materials or documents that ought to go
unto it such as students birth certificate, Declaration form, as well as their Educational certificates (R4)

At this department, the file is opened when the freshman comes to register, that is when we verify all the relevant records which formed the basis for admission, when we are clear on that we proceed to file photocopies of these binding records; said respondent 5 (R5).

4.3.2 Types of Records Kept

This sub-section examined the type of records that are kept. Findings from respondents’ narratives showed that the main types of records included biodata, previous educational documents (e.g. high school certificates) and current university documents or records (e.g. proof of registration, deferment letters etc.). These are shown by the narratives below in response to a question as to types of records kept:

The main records we keep here include birth certificates, academic certificates and provisional admission letters among others. (R1)

We keep records of WASSCE certificates, birth certificate, the declaration form. (R2)

We require all documents relating to Photocopies of previous examination certificates, bio data, proof of registration, admission letters, letters of deferment and among others. (R3)

Admissions letters, deferment letters, personal records that is birth certificates, baptism and Educational certificates. (R4)
4.3.3 Reasons for keeping students’ records

This sub-section presents findings on the reasons for keeping students’ records in the university. Findings showed that records were kept for five different but interrelated reasons. These included keeping records as evidence, keeping records for identification purposes, keeping records to update students’ information and keeping records as proof of entry qualification to National Accreditation Board. These are exemplified by the narratives of participants below:

*They serve as evidence that indeed the information they provided online during the application process, information such as their nationality and grades are exactly what is on their certificates or records.*

*They also serve as proof to the National Accreditation Board during its routine investigations or enquiries to verify that indeed the University adheres to its principles or educational requirements (R1)*

*The birth certificate, just as the other documents also serve as evidence of the actual birth of the individual, this is important because one of the requirements for a mature program is the age of a student, that is, you have to be 25 years and above before you are eligible to enroll as a mature student (R2)*

*It also enables us to know the student’s entry qualification and it provides us with the history of a student with regards to the activities and requests he/she has made. The records contain data on individual students, if a department needs information on any student to facilitate its decision making, the students file is requested for. (R10)*
4.4 Level of Readiness of ICT Use in Students’ Records Management

The second objective examined the level of readiness for integrating ICT use into the management of students’ records in the university. This objective basically assessed how the university had positioned itself to be able to embark on full integration of ICT in students’ records management. Findings showed that there have been the creation of a data management center, different ICT tools have been introduced and the two have helped in the management of students’ records.

4.4.1 Creation of Documents and Information Management Centre (DIMC)

Findings showed that the university had created a data management center. This is called the Documents and Information Management Centre (DIMC). The DIMC is responsible for integrating all records and document management within the university, which include the creation, movement and management of students’ records. The DIMC ensures access, retrieval and security of students’ records by giving access to the right individuals and restricting access to unauthorized persons. These are reflected in the narratives of participants below:

In response to a question about the movement of files, the respondents had these to say;

*Previously no, but with the establishment of DIMC, the movement of student files are now tracked, the unit records the entry and exit of a file. (R10)*

*Apart from the staff at DIMC no other person is allowed entry into the records room.*

*The records rooms also are under lock and key and so without permission no one is allowed entry.*
Also even if it’s a student that makes a request, he/she is not allowed to carry the file to the designated office, which is done by an authorized personnel. Unauthorized people are not allowed to handle student files, so every time a request comes in, you need an authorized official at post to be able to deliver the file to the designated office. (R10)

4.4.2 Introduction of ICT Tools and Equipment

Apart from the creation of the DIMC, several ICT tools and equipment have been introduced into the University for the management of students’ records. Most of these ICT tools are under the management of the DIMC. The ICT tools include hardware components (e.g. computers, scanners, printers, laptops, photocopiers, routers) and software component (i.e. the use of the INFOMINA software). These are exemplified by the sample narratives below:

- We have desktop computers, and a modern industrial scanner (Epson WorkForce GT-1500 Document Scanner) (R2)

- The unit has a scanner that it uses it to scan previous documents so that they can be digitized. There are also printers and laptops at its disposal. (R4)

- We have a server room, it is a small data center. We also have switches and routers, computers and printers. (R7)
4.4.3 Movement and Return of Files

The creation of the DIMC and the introduction of both hardware and software ICT tools have been found to help in the movement and return of students’ files.

Before these files move out we have an outward book that records the movement of the file including the date they leave the Centre. When the files return it is also recorded in the same book which is a movement book. (R1)

We have a note book that records in detail the movement of a student file until it returns back to the shelf. (R3)

The existence of a new file is recorded as well as the movement of files to and fro various offices. (R9)

4.5 Extent of ICT Use in Students’ Records Management

The extent of ICT use in students’ records management was also explored. This helped to gain understanding into the practical and pragmatic ways that the university has been able to actually integrate ICT in students’ records management. Findings showed that despite the establishment of the DIMC and introduction of ICT tools, the university is yet to fully integrate ICT in all areas of students’ records management. While some aspects have been found to be fully integrated, other aspects are still done in the old manual way. These are reflected in respondents’ narratives below:

DIMC as far as I know is yet to inculcate fully the use of ICT in management of student records. However, for the entire institution there is a department called ISTD and they are in charge of the electronic aspect of students records that is for example the grades they imputed when they applied for admission and the grades
they have obtained during the various examinations here, as well as their bio data which includes their name, date of birth and among others. This department only stores hardcopies of student records. All electronic or soft copy records are held at ISTD. (R1)

If I recall DIMC was set up in 2014 and one of its key mandate is to digitize student’s files. However, the process for digitizing student records has not kick started fully. For now we have ensured that all the documents that should be on the file before the actual scanning or digitization commences are on the file. The Centre however, has digitized a lot of closed files from the university’s registry. It is still ongoing and I can say more than 60% have already been digitized. So hopefully very soon the process of digitizing student records will begin. (R2)

I would prefer using percentages. We are not fully there. We are still getting there; I would say 50-50. (R4)

We are yet to begin digitizing the students’ records that we have and so immediately, the finding aid assists us to identify the specific type of documents that we are looking for within the records Centre, therefore its precision has been very helpful during retrieval and shelving of files. (R5)

Well of course that’s a good question. The director some time ago instituted it but I don’t know how far it went because I am used to my manual system. As you can see, the computer in front of me is just here. I prefer to use it in doing other things but when it comes to working, my manual system goes. (R6)
4.6 Usefulness of ICT Use in Students’ Records Management

This section presents findings on respondents’ perspectives on the usefulness of the integration of ICT into students’ records management. This assessed the experiences of the staff with regards to how efficient and useful they have found the process of integrating ICT thus far. Findings showed that, by far, the staff have found ICT useful in their day to day activities. They indicated that the integration of ICT is making work easier, convenient and faster and is also improving filing of students’ records’.

ICT has made work easier and convenient. Makes working faster. ICT has been positively impactful in the management of student records. For example with the inclusion of ICT the Academic Affairs Directorate is now able to have access to a student’s file without physically going to the records center. (R2)

4.7 Challenges of ICT Use in Students’ Records Management

The challenges associated with the integration of ICT into students’ records management were also examined. Findings showed that, despite the attempt made so far, there are several challenges that are inhibiting full integration of ICT into students’ records management in the university. The dominant challenges mentioned were; staffing challenges, frequent power outages, slow internet access, small storage environment as a result of office rooms being converted to records rooms, delay in accessing records, lack of financial resources and security concerns with services persons.
4.7.1 Staffing Challenges

Staff challenges featured heavily among the narratives of participants. They indicated that the manpower available was not enough and that created barriers for full integration because there were not enough people to take care of different aspects of the ICT integration process.

*We have staff challenges at the departments and along the line, Internet issues as well as power fluctuations cropped in. This made it difficult to use the online request system.* (R1)

*We will also need more people employed in the records Centre of UPSA to assist with the retrieval and filing of documents, sometimes there are retrieval delays because of lack of personnel and the few available are also usually overwhelmed. Extra hands are needed to help with the digitization of the student’s records as well.* (R2)

*We also have staff challenges due to the embargo on employment. There have been some national service personnel we’d wish had stayed on but it has not been possible because of the freeze on employment in the government sector.* (R3)

*The main challenge here is inadequate staff, for a department to effectively manage records it’s very important to have a lot of hands on board especially when you’re dealing with paper documents and that have been a major hindrance for us.* (R5)

*Inadequate Staff and resources.* (R6)

*Well, I think you can’t do without the personnel or staff because definitely someone will have to shelve and retrieve the files, ICT cannot do that one for*
you, so If the records room can get enough qualified staff, that should go a long way to improve their work. (R9)

The records Centre has staff challenges and so I think there should be permanent staff at post who will be handling issues and queries regarding student files

4.7.2 Frequent power outages

Frequent power outages also came up as a major challenge to full integration of ICT in students’ records management. This is because anytime there is power cut, all their activities come to a standstill because there is no other source of power.

Power outages, the electricity is not so reliable sometimes and this affects our work a great deal. Slow Internet speed, because we take pictures for the proof of registration, sometimes when the download speed is slow, it affects our work since we need to get access to students passport pictures on the University’s server. (R8)

4.7.3 Lack of resources

The participants also indicated that they had severe lack of resources they needed to run the integration and digitization fully and efficiently.

We don’t get top management support, especially in getting the devices and equipment that we need. (R7)

Well, challenges with the INFOMINA system should be addressed and brought back for use again. (R9)
4.7.4 Security concerns with services persons

Some of them also indicated that the role of service personnel in the integration process has not been well-defined. This is because they are not made part of it and they are constantly being changed, a situation which they indicated could pose security threat to safety and privacy of students’ records.

*The rate at which service personnel are changed is a security concern and so we’ve petitioned Management to work on getting the unit permanent staff.* (R4)

*The national service personnel should also be made to feel relevant at the Center by making them play a part in Records Management.* (R10)

4.7.5 Slow internet access

Slow internet services has also been cited as a major challenge. The limited internet connectivity makes it very difficult for full digitization of the students’ records.

4.7.6 Small storage environment

Another challenge identified was the small storage environment. This problem was deemed to have come about as a result of office rooms being converted to records rooms.

4.7.7 Delay in accessing records

The several challenges identified culminated into creating unnecessary delays in accessing students records for their everyday activities.
4.8 Addressing the Challenges of ICT Use in Students’ Records Management

The last objective examined what the participants thought constituted pragmatic ways of addressing the challenges they were facing in fully integrating ICT into students’ records management. The recommendations made by participants included; employing more staff, investing in ICT equipment, introduction of electronic request system, creating bigger storage environment and instituting periodic training and retraining programs.

4.8.1 Employing more staff

The participants indicated that employing more staff to boost the personnel strength would help address the challenges associated with integration of ICT into students’ records management in the university.

Also there is the problem of lack of personnel; more people should be recruited who have a background in records management or information studies.

We need permanent staff with proper records management training. Instead of national service personnel who only pass through for a year. (R3)

Records Management is the heart of every organization, if there is proper records management in place, things get done easily, efficiently and work goes on smoothly.

So Leadership should consider hiring experienced records management staff and the records office has to be restricted to only permanent staff. The changing of service personnel yearly is not helping; we encounter a lot of misfiling, for them they are here for just a short period, so they may not have a sense of responsibility in dealing with the records since their stay is transient.
The obvious thing is to employ more experienced staff with the right qualifications; leadership should provide the necessary resources to facilitate the smooth running of the department. (R5)

They should employ more experienced staff with the right qualification and then whatever resources we need to be provided. (R6)

Well I think you can’t do without the personnel or staff because definitely someone will have to shelve and retrieve the files, ICT cannot do that one for you, so If the records room can get enough qualified staff, that should go a long way to improve their work. (R9)

The records Centre has staff challenges and so I think there should be permanent staff at post who will be handling issues and queries regarding student files. (R10)

4.8.2 Investing into ICT equipment

They also indicated that the university needed to invest resources in ICT tools and equipment in order to make the process efficient.

Well we need air-conditioners at the storage room for examination scripts in order to regulate the temperature of the documents for the purposes of preservation. We also need additional qualified staff to support the work. (R1)

Well, challenges with the INFOMINA system should be addressed and brought back for use again. (R9)
Well for any challenge to be addressed, it depends on leadership so as long the leaders are aware I’d advice they take action. Funds should be made available to secure CCTV cameras or access control systems so that where the records are kept authorized people will still need to login before they can get access to the student files, that way, we will be able to monitor entry and exit into the records room

Management should invest money into ICT. Every year we submit a budget input but the funds don’t come in, our budget is often overlooked. (R7)

High speed Internet bandwidth is quite expensive in Ghana, if the University can afford high speed Bandwidth then we definitely are good to go. For the user training, it’s important to keep training and rewarding. Rewarding here comes in two ways, those who do the right thing, you encourage them and those who flout the laws you let the policies deal with them accordingly. (R8)

4.8.3 Introduction of electronic request system

They also indicated the need for introducing electronic request system to address the delay associated with manual request of records and documents

Funds should be made available to procure storage facilities such as shelves, ladders and other things needed for proper records management. (R2)

4.8.4 Creating bigger storage environment

They suggested further that more space need to be created to increase the storage environment.
4.8.5 Instituting periodic training and retraining programs

The participants also mentioned that there was the need to introduce training programs to train the staff involved in the ICT integration process.

*Also in less than a year, you have to train different groups in records management and this can be quite daunting*

*Management should also endeavor to implement the policies on Records Management that govern this institution. (R4)*

4.9 Discussion of Findings

This section discusses the findings from the study. The findings are synthesized and discussed around two overarching themes; the state of ICT use in students’ records management and challenges and recommendations for addressing the challenges of ICT in students’ records management.

4.9.1 State of ICT Use in Students’ Records Management

This theme discusses findings in relation to integration of ICT into students’ records management. This theme integrates findings in relation to level of readiness, the extent of ICT use in students’ records management and usefulness of ICT use in students’ records management.
The study examined the level of readiness and extent of ICT use in students’ records management. The level of readiness assessed how the university has positioned itself to be able to embark on full integration of ICT in students’ records management. The extent of ICT use also assessed the practical and pragmatic ways that the university has been able to actually integrate ICT in students’ records management. The study also assessed how useful ICT has been in students’ records management thus far. This assesses the experience of the staff with regards to how efficient and useful they have found the process of integrating ICT thus far.

In terms of level of readiness, findings from the study showed that the University has positioned itself ready to integrate ICT into students’ records management. There have been a creation of data management center (i.e. DIMC), different ICT tools have been introduced and the two have helped in the easy movement of students’ records. However, when it comes to the extent of ICT use, there is limited integration. For instance, despite the establishment of the DIMC and introduction of ICT tools, the university is yet to fully integrate ICT in all areas of students’ records management. While some aspects have been found to be fully integrated, other aspects are still done in the old manual way. In terms of usefulness of ICT integration, findings showed that the staff have found ICT useful in their day to day activities. They indicated that the integration of ICT is making work easier, convenient and faster.

The findings mean that University of Professional Studies has begun positioning itself for full integration of ICT into students’ records management. However, it is yet to
achieve full integration of ICT into students’ records management. These findings are contrary to what has been reported in some African countries. Some studies have reported that many universities in Africa are not ready to integrate ICT into students’ records management. For example, Asogwa (2013) reported among some universities in Nigeria that they are not ready for integration of ICT into records management. Similar findings have also been reported by Moses (2009) among some universities in Kenya where findings indicated low level of readiness among the universities.

Similar findings have been reported among some tertiary institutions in Ghana. Obiri-Yeboah et al. (2013) argued that ICT integration in tertiary institutions in Ghana is low. The institutions are characterized by lack of technological infrastructures, unavailability of ICT equipment and also unreliable power supply. Buabeng-Andoh (2015) also added that integration of ICT into records management in some pre-tertiary institutions was low. Findings from these studies together, point to the fact that integration of ICT in records management in both tertiary and pre-tertiary institutions is very low.

This study however shows high level of readiness for integration of ICT into records management. This readiness is demonstrated by the provision of infrastructures to aid in the integration of ICT into students’ records management. This means that the University is poised for improving their records management in general and students’ records management in particular. In the era of technological advancement, integration of ICT into every aspect of records management is integral to achieving high ranking among universities. Findings from the current study show that University of Professional
Studies shows high readiness and in a large extent has made significant progress in integration of ICT into students’ records management.

4.9.2 Challenges of ICT Use in Students’ Records Management

The study also assessed the challenges associated with the integration of ICT into students’ records management. This was examined with the aim of identifying barriers to successful and efficient integration of ICT into students’ records management in the university. Findings showed that, despite the attempt made so far, there are several challenges that are inhibiting full integration of ICT into students’ records management in the university. The dominant challenges mentioned were; staffing challenges, frequent power outages, slow internet access, small storage environment as a result of office rooms being converted to records rooms, delay in accessing records, lack of financial resources and security.

The challenges identified in the current study show structural problems at the institutional policy level. The findings in this study are in line with what other studies have reported on the structural policy challenges for addressing ICT challenges in African countries have. Several studies have reported that the challenges tertiary institutions face in efficient records management happens at the institutional policy levels. For instance, Mnjama and Wamukoya (2004) have reported that universities in East and Southern Africa member countries face several challenges. Some of the challenges identified include absence of organizational plans for managing records, absence of budgets dedicated for records management, low awareness of the role of
records management in support of organizational efficiency and accountability and lack of policies and procedures to guide the management of records.

Iwhiwhu (2005) has also reported among universities in Nigeria poor quality and quantity of manpower in records management in the school system. Lack of personnel at the records center for instance was identified as the major issue affecting the department. In Ghana, Obiri-Yeboah et al. (2013) have also reported that ICT infrastructure and specially trained personnel are the most dominant challenges that tertiary institutions face when it comes to successfully integrating ICT into records management in its general sense.

The findings therefore point to the fact that the challenges identified in integration of ICT into students’ records management at University of Professional Studies, reflects in broader terms the situation of what tertiary institutions in Africa generally face. These challenges also reflect the resource constraints that universities in Africa face. Integration of ICT into records management in all institutions require substantial capital investment. From the provision of ICT infrastructure to the procurement of software and the hiring and training of specially trained personnel come with high financial cost. This might explain the institutional level challenges that have been found to characterize ICT integration in records management in general and students’ records management in particular among tertiary institutions in Ghana and other African countries.
4.9.3 Addressing the Challenges of ICT Use in Students’ Records Management

The last objective examined what the participants thought constituted pragmatic ways of addressing the challenges they were facing in fully integrating ICT into students’ records management. This was to enable the participants, who were in charge of students’ records management in the university to share their perspective on how best to address the challenges in order to ensure successful integration of ICT into records management.

Findings showed that the recommendations made by participants included; investing in ICT equipment, employing more staff, introduction of electronic request system, creating bigger storage environment and instituting periodic training and retraining programs. The suggestions made by the participants reflect the institutional-level nature of the challenges they face in their process of integrating ICT into students’ records management.

Investing in ICT equipment and creating bigger storage space or environment are in line with the challenge of limited infrastructure that they face in terms of digitizing students’ records. Employing more staff and instituting periodic training and retraining programs are also in line with the limited human resource challenges that the university faces in integrating ICT into students’ records management.

The proposed ways of addressing the challenges point to the fact that there is the need for commitment from the management of the university to the urgent need for fully
integrating ICT into students’ records management in particular and other records management in general. Managerial commitment has been implicated in the low integration of ICT into records management in tertiary institutions in Africa. Some researchers have argued from their findings that provision of ICT infrastructure did not constitute top priorities of many universities in Africa (Aduku & Aisha, 2012; Kalusopa, 2016; Marutha, 2012).

This therefore creates a situation where limited funding is always allocated to records management departments in many universities in Africa for the provision of ICT infrastructure or equipment (Godwin, 2013). For as long as tertiary institutions in Africa do not prioritize integration of ICT, the challenges identified will continue to persist (Asogwa, 2013; Bempah & Amoako-Ohene, 2014; Obiri-Yeboah et al. 2013). What this means is that for University of Professional Studies to address its challenges associated with efficient integration of ICT into students’ records management, there is the need for them to prioritize it, in order to allocate the needed resources to address the challenges.
CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusion and recommendations

An organization is a body made up of interrelated parts whose inputs help in its functioning. In the same way that University of Professional Studies, is a body made up of interconnected and interdependent parts who come together to contribute and help maintain and hold the organization. The Document and Information Management Centre (DIMC) records system is one part which collaborates with other units within the institution to help maintain the organization and also to help attain its institutional plans and objectives.

The study was carried out within the Theoretical framework the Technology Acceptance Model (TAM). The Technology Acceptance Model was selected amidst other theories and concepts because it is particularly strong in explaining how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it. The theoretical framework fits perfectly into the topic of this study by helping to better appreciate and understand the use of Information and Communication Technology (ICT) in students’ records management at the University of Professional Studies, Accra. Though the adoption of ICT in educational institutions has become a global phenomenon in recent times, this particular study was specifically devoted to the analysis of the topic from the perspective of the University of Professional Studies in
Accra, Ghana. In this regard, the objectives of the study included to examine the types of students’ records kept in the University of Professional Studies, to examine the ease of use of ICT in the management of students’ records at the University of Professional Studies, to examine the usefulness of ICT in students’ record management at the University of Professional Studies, to examine the extent of use of ICT in students’ records management, to examine the policies that have been put in place in addressing the challenges associated with incorporating ICT into students’ records management and to make recommendations based on the findings of the study.

5.2 Summary of Research Findings

The major findings of the study were as following:

- The study showed that the UPSA utilizes ICT in the creation and management of student records. Paramount among these records included application documents which contain basic information about students, including name, gender, age, date of birth, nationality previous educational backgrounds, among others; transcripts which entails students’ academic records; matriculation and graduation records.

- With regards to the ease to the use of ICT for students’ record management at UPSA, the study revealed that UPSA has a Documents and Information Management Centre (DIMC) which is mandated to keep and management of students’ records with the application or utilization of ICT components and personnel. Findings showed that despite the establishment of the DIMC and introduction of ICT tools, the university is yet to fully integrate ICT in all areas
of students’ records management. While some aspects have been found to be fully integrated, other aspects are still done in the old manual way.

- The integration of ICT in the management of students’ records have yielded some positive achievements or benefits at the UPSA. These include effective monitoring and evaluation of students’ records, fast and easy way of processing students’ records, improvement in the management of students’ records in an efficient way, provided employment avenues and opportunities for students and other personnel with specialization and expertise in ICT knowledge and skills and finally, an improvement in organizational performance in terms of publicity and modern standards of education.

- Notwithstanding the above, the study also revealed that UPSA as an education institution faces some challenges in the integration of ICT in their operation of the management of students’ records. Paramount among these challenges are staffing challenges, frequent power outages, slow internet access, small storage environment as a result of offices being converted to records rooms, delay in accessing records, lack of financial resources and security concerns with services persons.

5.3 Conclusion

The study investigated the use of ICT in student records management at the Document and Information Management Centre of the University of Professional Studies. Findings have shown that University of Professional Studies has demonstrated high readiness in integrating ICT into the management of students’ records. This is demonstrated by the setting up of the Document and Information Management Centre (DIMC) and the provision of other infrastructure to accelerate the process. However, it is yet to achieve
full and efficient integration of ICT in the management of the students’ records. Several institutional-level challenges were identified that act as barriers to efficient use of ICT in managing records of students in the university. These challenges ranged from low investment in ICT infrastructure in the university to lack of professionally trained human resources for efficient use of ICT in the management of students’ records. This means that measures for addressing the challenges need to focus on institutional policy level, that prioritizes digitization of records management in general and students’ records in particular.

5.4 Recommendations

In the world of information now, there is the need to keep abreast with the current trend and technological practices. The adoption of ICT in records management should therefore be a must for every institution to be able to access the file of the student easily. To avoid future challenges that may bring about negative impact on the management of student records at the University of Professional Studies and all other universities, it is necessary to organize regular training for those who handle the records in the university. Professionals should be put in charge of the records. Moreover, the records should be treated like an asset. Alternative power supplies should be provided to avoid disruptions during working hours since majority of the ICT equipment operate with power.

Also, a classification scheme that will be effective and functional should be developed in order to achieve efficiency in the retrieval of records and its management. The number of staff in the records management system should be increased.
5.4.1 Organizing regular training programs

Due to the delicate nature of student records, seminars and workshops should be organized for the Staff involved in the management of student records, Department Heads and other sections that are linked with the records department for them to acquire some skills and also to appreciate records management practices.

5.4.2 Appointment of Professionals

Instead of the National Service Personnel that are always taken to the records department, professionals with records management skills should be employed to help manage the records. These service personnel are always trained when they are taken to the records department and at the end of their service, they go with the skills acquired. The duties assigned them have to also come to a halt because there is no one to perform those tasks. It is therefore necessary to employ people who will be at the post at all times. Keeping records is sensitive and must be handled with utmost care. The change of service persons every year is not advisable.

5.4.3 Digitization of students’ records

The digitization of student records cannot be over emphasized. In this age of information technology, it is important to automate from manual to electronic. Information about the student can also be captured, processed, stored and updated. All these manual records should be computerized into electronic records to enable easy processing and retrieval of records. Moreover, the students’ population keeps increasing. Also, to provide effective services, the automation of student records should be enforced.
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APPENDIX – INTERVIEW GUIDE

THE USE OF ICT IN STUDENTS RECORDS MANAGEMENT AT THE UNIVERSITY OF PROFESSIONAL STUDIES, ACCRA.

STAFF AT THE RECORDS AND ACADEMIC DEPARTMENT

Dear respondents, this interview is to collect data on the use of ICT in students’ records management in UPSA for research purposes only. All information given would be treated strictly confidential. Thank you for your co-operation.

1. Background Information of Participant

This section of the guide will solicit demographic information of the interviewees. Information to be gathered here include; gender, age, educational level, years of working with the university, category of staff and department of operations.

2. Types of students’ records kept in the University of Professional Studies

This section explores all types or kinds of students’ records that are kept in the University.

a. Can you please tell me the different types of students’ records that are kept here? (Encourage respondent to generate list; e.g. admission register, health records, personal records, examination records, students account records, student disciplinary records etc.)
b. What purpose does each of the types of students’ records serve? (Let respondent explain the types of students’ records and probe into the functions that each of the records serve)

3. **ICT use in the management of students’ records**

This section explores how ICT has impacted students’ records management in the University

a. When was ICT introduced into the records management in general and students’ records management in particular in the University?

b. What are some of the ICT facilities (e.g. software programs) used by your school in managing students’ records?

c. How has ICT impacted the management of students’ records here? Probe into:

   - The state of students’ records management (e.g. storage, retrieval etc.) before the introduction of ICT in the records keeping in the University
   - How students’ records management in the University has changed since introducing ICT in their records management system

4. **Staff’s experiences with ICT use in managing students’ records**

This section explores how the staff experience the use of ICT in managing students’ records:

a. How will use describe the use of ICT in managing students’ records in the University?

b. How useful it is and let them explain why? (Probe to generate list of areas of usefulness, e.g. helping students in admission, students’ registration,
verification of student’ payment, managing of students personal records, examination records etc.)

c. The extent of training and retraining that they receive the use of all soft wares in relation to the use of ICT in students’ records.

d. How easy or difficult it is and let them explain why.

5. Records creation, access and security

This section explores creation, access and security surrounding students’ records:

a. How are records created in this university? (Probe into all the processes involved in creating students records).

b. How are students records accessed? (Probe into all the procedures involved in accessing students’ records).

c. Is the movement of files recorded?

d. What type of classification and indexing system do you use in managing the records?

e. Do you request for files? If so are they delays in retrieving or locating it?

f. Are you informed of the reason for the delay?

g. What security measures are available to ensure the integrity of the records?

h. What happens after the record becomes redundant? (Probe into what records they consider as redundant, how they decide on redundancies and what they do with redundant records).

i. Which ICT equipment do you use in managing your records? (Probe further depending on the type of answers given).
6. **Challenges encountered and ways of addressing them**

This section will explore the challenges that the staff face in the use of ICT in students’ records management and what they recommend should be done to address them

a. Are there some challenges you face in using this type of students’ records in your school? (Probe to get a list and explanation to all the challenges they face)

b. Are there laid down policies related to students’ record management and if yes, how do the policies address the challenges

c. How will you recommend that these challenges are addressed? (Probe their recommendations for the different challenges that they mention)

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**End of interview**