



Application of ICT and Job Performance of Administrative Staff in Redeemer's University, Nigeria

Adeniran Pauline Oghenekaro

Tekena Tamuno Library, Redeemer's University

Tel: 08027883540

Email: adeniranp@run.edu.ng

Alabi Stephen Olakunle

Tekena Tamuno Library, Redeemer's University

Tel: 08165280690

Email: alabio@run.edu.ng

Abstract

This study examines and explores the application of information communication technology by Redeemer's University's administrative staff and its impact on their job performances. The study employed a descriptive research design using the questionnaire instrument for data collection. The population consists of 50 administrative staff of Redeemer's University. A total enumerative sampling was adopted for the study. The data collected were analyzed using frequency, percentages, and tables. The findings revealed that most participants use ICT tools to perform their official duties. It also revealed that the respondents found it easy to use ICT tools. The findings further revealed that the use of ITC tools helped the participants to achieve quality work output. It also revealed that electricity interruption and limited ICT tools were the challenges faced by the respondents. Based on the study's findings, the researchers recommended that the Management of universities provide a constant supply of electricity. It was also recommended that government should support universities in the procurement of ICT tools to ensure the quality performance of staff duties.

Keywords: ICT, ICT Use, Administrative Staff, Job Performance, Learning environment, Impact of ICT on Job Performance.

Introduction

Nowadays, technologies are being applied in all aspects of organizations to promote productivity and efficiency. Information and communication technology in the 21st century has revolutionized the world's academic environment. Information and communication technology (ICT) is a force that has changed many aspects of how we live (Ron, n.d). Technological innovation has generated considerable interest among academics and practitioners in recent years. Information and Communication Technologies (ICT), such as computer terminals, email, and the Internet and their applications, have become the significant drivers of innovation, growth, and social change (Gargallo-Castel &Galve-Górriz, n.d). Higher learning institutions have embraced ICT to ensure quality assurance to meet stakeholders' standards and ensure that their products fit the market. The introduction of new technology to process and transport data and information in the education sector has significantly affected employees, managers, and institutions. IT application is versatile. It is applied in different aspects of life for desire development. Amutha (2020) observed that information communication technologies influence all aspects of life, including education. They promote changes in working conditions, handling and exchanging information, teaching-learning approaches, etc. IT is contributing immensely to the world economies and is becoming increasingly interdependent. Technologies are employed to meet diverse challenges in the education sector today.



Statement of the Problem

In the academic environment, administrative staff play an essential role by providing information to students and others who need information in the university community. They are responsible for the day to day management activities in academic institutions. They, therefore, need ICT facilities to be effective in the performance of their duties in the 21st century. However, there is little literature on studies on ICT use and job performance of administrative staff in academic institutions. This could be the result of the fact that most often, the concern is on the academic staff when it comes to ICT use. This study, therefore, investigates ICT use and job performance of the administrative staff of Redeemer's University, Nigeria.

The objective of the study

The main objective of this study is to examine the effect of ICT use on administrative staff job performance at Redeemer's University, Nigeria. The specific objectives are to:

1. identify ICT facilities used by administrative staff in Redeemer's University, Nigeria
2. ascertain the ease associated with ICT use by administrative staff in Redeemer's University, Nigeria
3. assess the effect of ICT use on job performance of administrative staff in Redeemer's University, Nigeria
4. to identify challenges associated with the use of ICT by administrative staff in Redeemer's University, Nigeria

Research Questions

1. What are the ICT facilities used by administrative staff in Redeemer's University, Nigeria?
2. How easy is it for the administrative staff at Redeemer's University, Nigeria, to use ICT?
3. What is the effect of ICT on the job performance of administrative staff in Redeemer's University, Nigeria?
4. What are the challenges of using ICT by administrative staff in Redeemer's University, Nigeria?

Literature Review

Academic institutions are taking advantage of the opportunities advanced by ICT to gain a competitive advantage. Educational institutions employ ICT to improve efficiency in both functional and operational areas. Dauda and Akingbade (2011) submitted that workers of different categories, even the less educated factory workers, benefited from ICT. The authors stressed that the Internet, multimedia telephone, and other communication systems provided opportunities for all employees to receive and send information globally, providing a technical and non-technical solution to their individual and organizational problems. Ting and Grant (2005) investigated how local government employees use the Internet to carry out their work. Most employees use the Internet to download information, communicate, and perform routine tasks. ICT has drastically changed the work of the office, changing work patterns and attitudes of employees, and these people are now working towards an acceptance of change.

The acquisition of ICT use has become necessary for the worker to maintain set standards. Baralou (2010) observed the growing demand for highly skilled ICT practitioners and users. This, the author noted, is critical for the success of European industries to re-skilled Europe's workforce for the needs of the knowledge-based economy. The success and competitiveness

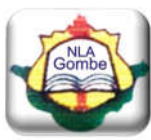


of any organization today depend on the availability and effective use of ICTs and the workforce's knowledge, skills, competencies, and inventiveness. UNESCO (2003b) asserted that understanding and mastering ICT basic concepts is part of the core of education. The introduction of ICT has increased the demand for skilled ICT labour in the recent decade.

Information and communication technology (ICT) systems are widely accepted and used in organizations. Information communication technologies (ICT) are influencing every aspect of human life by playing salient roles in workplaces, business, education, and entertainment (2018). Information technology harnesses electronic technology in its various forms to improve the operations and profitability of the business as a whole. ICT has been embraced in the workplace due to its favourable consequences on interaction, collaboration, workplace learning, and work performance. Kaluyu and Wambugu (2015) contend that ICT application in higher education management has been found in the literature to reduce the complexity of administration. Kumar and Kumar (2005) found that ICT application as a modern-day techno-management tool greatly benefits higher institutions in India. The authors reiterated that enhancing ICT usage in functional administration areas would enable higher education to improve quality in the global competitive environment. ICT significantly influences organizational performance among the factors that promote organizational performance. Rajeev (2008) has specified that ICT has played a significant role in reducing operational inefficiency and improving decision-making in many areas of governance, which propels the quality assurance agenda. ICT enables more efficient use of information between workers and management and increases the interaction among employees.

The application of ICT has been found to enhance the coordination of activities by improving information systems and internal and external communication. Organizations now enjoy benefits that are brought about by the capacity of ICTs to create new services, new sources of revenue, new markets, new employment opportunities, increased productivity, and cost-effectiveness. Organizations' modes of operations and competition are increasingly changing today due to ICT diffusion than in the past. UNCTAD (2004) observed that ICTs have considerable potential to promote development and economic growth, foster innovation, and improve productivity. Mohamed (2014) emphasized that ICTs can result in remarkable gains in the working environment, fairness, and living standards. The application of ICT plays as catalysts and accelerators of knowledge codification, information treatment, transmission, on and storage. It makes it possible to access knowledge systems and e-learning, observe any phenomenon in real-time, and monitor all flows (Adel, 2013). Technology provides the tools that revolutionize the role of secretarial professionals, from information recorders to business strategists, making them much more critical to the success of an enterprise (Jaiyeola, 2007). Buseni (2013) posited that ICT improves word processing, communication facilities in electronic mail, and databases concerning filling and data retrieval. The author reported that the opportunities advanced by ICT are helping to improve business efficiency, eliminating unnecessary delays in communication between routine filling and correspondence.

Introducing new technology to process and transport data and information has significantly impacted business organizations. Management has been dramatically affected as information has altered how people do their jobs and has changed the nature of work in industrialized nations. The author stressed that many firms and their managers must understand the implications of this new information technology revolution which requires substantial future readjustment, and quickly learn how to benefit. Information technology supports activities involving creating, storing, manipulating, and communicating information (principally



computing, electronics, and electronic communications) and their related methods, management, and applications.

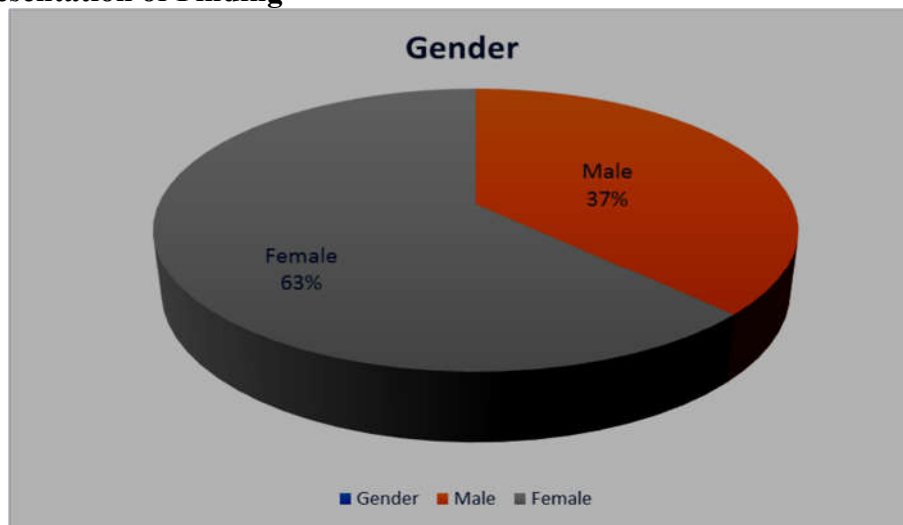
Job performance of non-academic staff

Job performance is of great importance to managers of business organizations. In any organization, success or failure depends on the individuals' job performance in that organization. Job performance could be described as the record of an individual's accomplishment on the job. Stephen and Ayaga (2014), reported that employee performance consists of observable behaviors that people do in their jobs relevant to their goals. Hasan, Mehmet, and Demet (2011) see performance as reaching the target both for the institution and the individual. Johari and Yahya (2009) defined performance as the level of an individual's work achievement after exerting effort. Job performance is a set of appropriate behaviours for the organization's goals. The indices of job performance can be measured in terms of each individual's proficiency and level of contribution. Employees' performance in terms of productivity and efficiency is a primary concern of managers of organizations, the education institution inclusive worldwide. In the 21st century, management of organizations demands more efficiency and productivity from their employees than at any other time in history. They strive to improve their performance to be ahead of their competitors. Some job performance techniques, such as Total Quality Management (TQM) and Business Process Reengineering (BPR), have gained recognition from many authors in the second half of the twentieth century and were found helpful in increasing business performance by focusing on operational and process improvements (Sridevi, 2010).

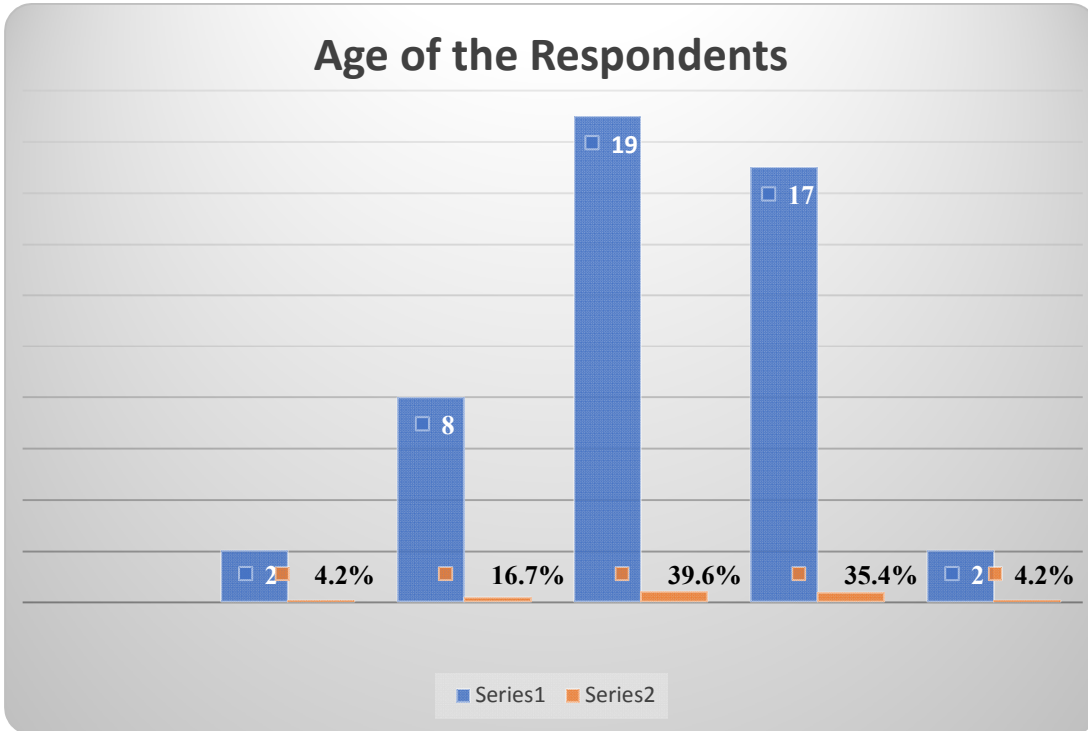
Methodology

The research design adopted for this research work was the survey research design. The study population comprised all administrative staff of Redeemer's University. The total enumeration sampling technique was adopted since the population was small, (50 administrative staff on the university campus). A self-constructed structured questionnaire was used as a data collection instrument for this research work. The questionnaire was well structured to clearly identify the important variables to be measured. It included demographic information, ICT tools used, ease of use, ICT use and job performance, and the challenges of ICT use. The data collected were analyzed to conclude the paper.

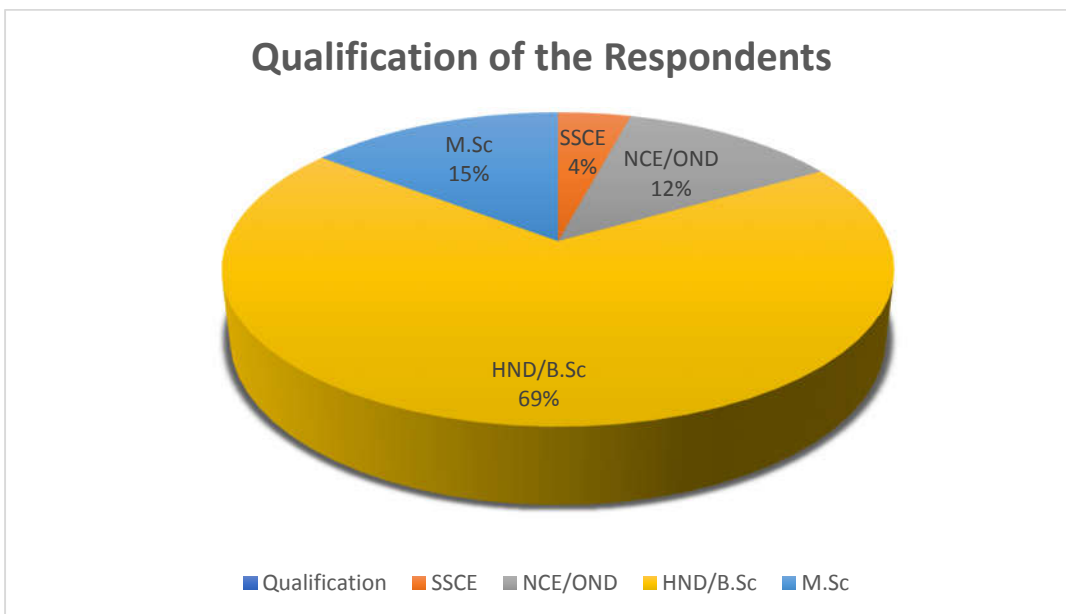
Presentation of Finding



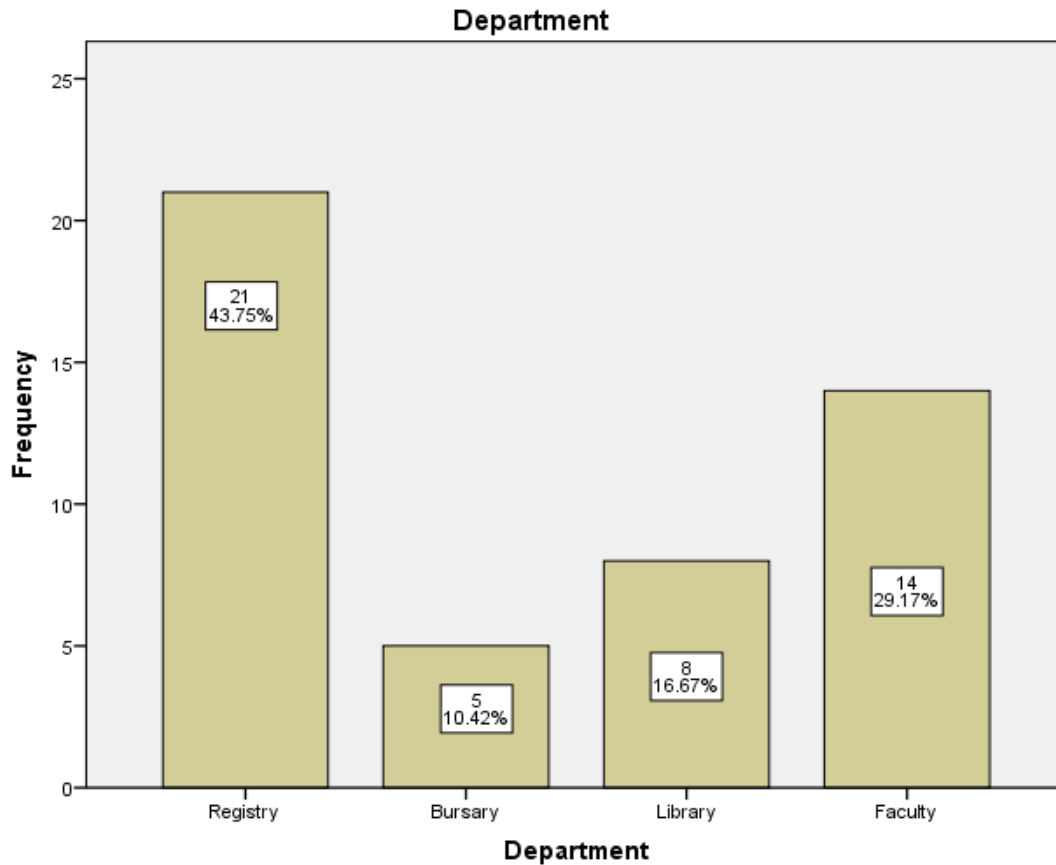
More females participated in the study than males, as indicated in the figure.



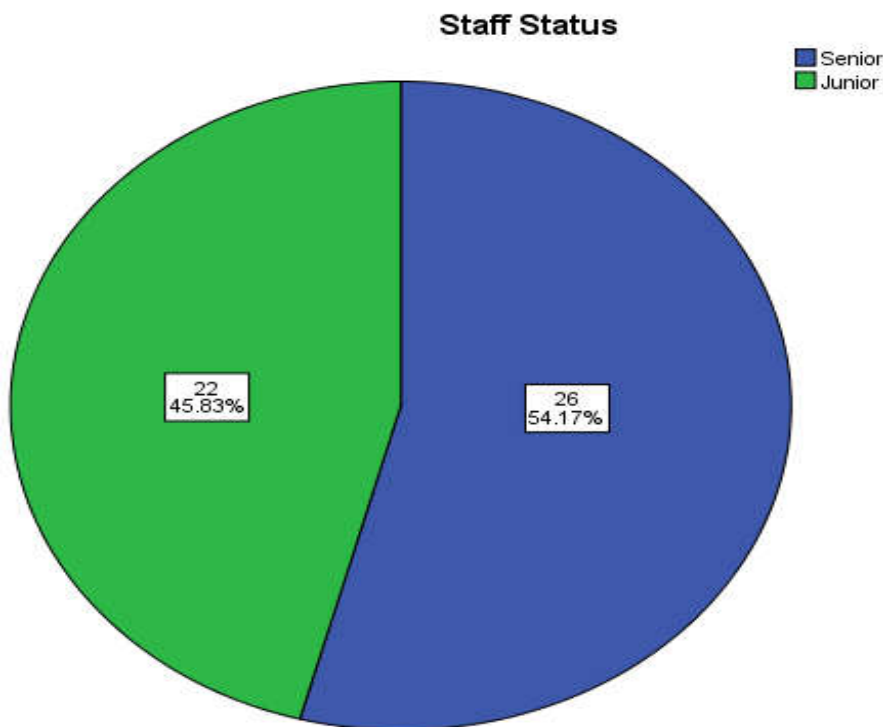
Respondents between 31 and 40 years, formed the highest number, followed by those between 41 and 50. The least was 20 years and below.



Fifteen (15%) respondents had M.Sc, 69% B.Sc/HND, 12% NCE/OND, and 4% had SSCE.



A majority of the respondents were from the Registry (43.75%).



A majority of the respondents were in the senior category (54.17%)



Research Question 1

What are the ICT facilities used by administrative staff in Redeemer's University, Osun State, Nigeria?

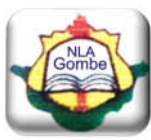
Table 1: ICT Tools Used by Administrative Staff

I use:	Yes		No	
	Frequency	%	Frequency	%
desktop computer	44	91.7	4	8.3
scanner	35	72.9	13	27.1
printer	46	95.8	2	4.2
smart phone	32	66.7	16	33.3
laptop	33	68.8	15	31.3
CD-ROMs	25	52.1	23	47.9
flash drives/hard drive	42	87.5	6	12.5
Internet	48	100	-	-
photocopier	43	89.6	5	10.4
projector	20	41.7	28	58.3

As shown in Table 1, all the respondents, 48 (100%), indicated they use Internet facilities. This is followed by printer, with 46 (95.8%) of the respondents indicating they use it, whereas only 2 (4.2%) claimed they do not use it. 44 (91.7%) of the respondents indicated their desktop computer usage, with only 4 (8.3%) administrative staff who claimed they do not use it. Next is the photocopier, with 43 (89.6%) respondents indicating that they use it, while 5 (10.4%) do not. For flash drives/hard drives, 42 (87.5%) of the respondents claimed they use it, whereas 6 (12.5%) indicated they do not use it to discharge their duty. 35 (72.9%) of the respondents attest that they use the facility, whereas 13 (27.1%) do not. 33 (68.8%) of the administrative staff claimed they use laptops, while 15 (31.3%) do not use them.

Besides, 32 (66.7%) respondents indicated that they use smartphones, whereas 16 (33.3%) claimed they do not. For CD-ROMs, 24 (52.1%) indicated they use them, while 23 (47.9%) of the staff do not use them. Finally, the projector has the lowest number of respondents, with 20 (41.7%) indicating that they use it, whereas 28 (58.3%) claimed they do not use it.

The study's finding reveals that the participants generally use the Internet while the projector is rarely used.



Research Question 2

What is the ease associated with ICT use by administrative staff in Redeemer's University, Osun State, Nigeria?

Table 2: Level of Ease Associated with ICT Use

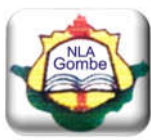
How easy is the use of?	VE (%)	E (%)	SE (%)	NE (%)	\bar{x}	Std Dev.
desktop computers to you	81.3	14.6	-	4.2	3.72	.676
scanner to you	70.8	10.4	8.3	10.4	3.42	1.03
printer to you	79.2	14.6	2.1	4.2	3.69	.719
smart phone to you	81.3	10.4	2.1	6.3	3.67	.808
laptop to you	66.7	22.9	4.2	6.3	3.50	.851
CD-ROMs to you	37.5	31.3	16.7	14.6	2.92	1.07
flash drives/hard drive to you	81.3	12.5	4.2	2.1	3.73	.644
Internet to you	85.4	8.3	2.1	4.2	3.75	.699
photocopier to you	72.9	12.5	10.4	4.2	3.54	.849
projector to you	33.3	18.8	18.8	29.2	2.56	1.24

Grand Mean = 3.45

VE = Very Easy, E = Ease, SE = Somewhat Easy, and NE = Never Easy

Table 2 reveals that the respondents rated their level of ease associated with ICT use with the Grand \bar{x} = 3.45. This shows that all of the respondents find the use of ICT easy. The finding shows that Internet use had the highest mean of 3.75, meaning that the level of respondents' ease associated with the Internet is rated very easy. The respondents found it much easier to use the Internet. Table 2 also reveals that respondents can use flash drives (\bar{x} = 3.73, SD = .644), desktop computers (\bar{x} = 3.72, SD = .676), printer (\bar{x} = 3.69, SD = .719), smartphone (\bar{x} = 3.67, SD = .808), photocopier (\bar{x} = 3.54, SD = .849), and laptop (\bar{x} = 3.50, SD = .851) very easy.

Similarly, Table 2 clearly reveals that the respondents can also use ICT tools like scanner (\bar{x} = 3.42, SD = 1.03), CD-ROMs (\bar{x} = 2.92, SD = 1.07), and projector (\bar{x} = 2.56, SD = 1.24) easily.



Research Question 3

What is the effect of ICT on the job performance of administrative staff in Redeemer's University, Osun State, Nigeria?

Table 3: Influence of ICT Use on Job Performance

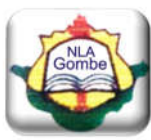
The use of ICT:	SA (%)	A (%)	SD (%)	D (%)	\bar{x}	Std Dev.
helps me to contribute meaningfully during group discussions	64.6	27.1	4.2	4.2	3.52	.772
easily helps me to pass on information to my co-workers that will help them to perform their work effectively	60.4	35.4	2.1	2.1	3.54	.651
helps me in ensuring that jobs within areas of specific responsibilities are completed in a timely manner	66.7	27.1	2.1	4.2	3.56	.741
helps me in creative thinking	50.0	33.3	12.5	4.2	3.29	.849
enables me to have access to quality information which help me to exercise good judgments by making sound and well-informed decisions	56.3	31.3	4.2	8.3	3.35	.911
helps me to respond appropriately to the needs and feelings of different people in different situations	50.0	39.6	4.2	6.3	3.33	.834
enables to come up with unique ideas	45.8	39.6	10.4	4.2	3.27	.818
helps me to adapt and work with others	45.8	37.5	10.4	6.3	3.23	.881
enables me to encourage employees in my unit to participate in deciding how to get work done promptly	41.7	35.4	18.8	4.2	3.15	.875
helps me to put in more than I am required to do	45.8	45.8	8.3	-	3.38	.640
helps me to perform difficult tasks	37.5	45.8	14.6	2.1	3.19	.762
helps me to solve problems by negotiating/discussing with colleagues	37.5	45.8	12.5	4.2	3.17	.808
helps me in ensuring that work output is of quality and quantity	50.0	41.7	6.3	2.1	3.40	.707
helps me to perform technical (professional) tasks	50.0	41.7	6.3	2.1	3.40	.707

Grand Mean = 3.34

On the influence of ICT use on the job performance of the administrative staff in the selected institution, Table 3 reveals that the respondents agreed that the use of ICT affects their job performance with a grand mean of 3.34.

The findings also reveal that the respondents strongly agree that the use of ICT tools helps/enables them to: ensure that jobs within areas of specific responsibilities are completed on time ($\bar{x} = 3.56$, $SD = .741$), pass on information to their co-workers that will help them to perform their work effectively ($\bar{x} = 3.54$, $SD = .651$), and to contribute meaningfully during group discussions ($\bar{x} = 3.52$, $SD = .772$).

Furthermore, Table 3 shows that administrative staff agreed that the use of ICT tools helps/enables them to: ensure that work output is of quality and quantity ($\bar{x} = 3.40$, $SD = .707$), perform technical (professional) task ($\bar{x} = 3.40$, $SD = .707$), put in more than they are required to do ($\bar{x} = 3.38$, $SD = .640$), have access to quality information which help them to exercise good judgments by making sound and well-informed decisions ($\bar{x} = 3.35$, $SD = .911$), respond



appropriately to the needs and feelings of different people in different situations ($\bar{x} = 3.33$, $SD = .834$), think creatively ($\bar{x} = 3.29$, $SD = .849$), come up with unique ideas ($\bar{x} = 3.27$, $SD = .818$), adapt and work with others ($\bar{x} = 3.23$, $SD = .881$), perform difficult tasks ($\bar{x} = 3.19$, $SD = .762$), solve problem by negotiating/discussing with colleagues ($\bar{x} = 3.17$, $SD = .808$), and to encourage employees in their units to participate in deciding how to get work done promptly ($\bar{x} = 3.15$, $SD = .875$).

Research Question 4

What are the challenges of using ICT by administrative staff in Redeemer's University, Osun State, Nigeria?

Table 4: Challenges Associated with ICT use

To me, challenges associated with ICT use include:	SA (%)	A (%)	SD (%)	D (%)	\bar{x}	Std Dev.
limited ICT facilities	16.7	35.4	6.3	41.7	2.27	1.18
frequent electricity interruption	20.8	41.7	8.3	29.2	2.54	1.13
lack of ICT skills	12.5	29.2	12.5	45.8	2.08	1.13
high cost of ICT facilities/components	16.7	43.8	14.6	25.0	2.52	1.05
limited budget	16.7	37.5	20.8	25.0	2.46	1.05
poor perception of ICTs among staff	10.4	25.0	16.7	47.9	1.98	1.08
lack of interest in ICT application/use on the part of staff	8.3	27.1	16.7	47.9	1.96	1.05
lack of maintenance culture	14.6	22.9	22.9	39.6	2.13	1.10
poor management on the part of administrators	10.4	25.0	16.7	47.9	1.98	1.08
lack of training on the use of ICTs	10.4	29.0	16.7	43.8	2.06	1.08

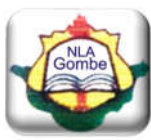
Grand Mean = 2.20

On the challenges associated with ICT use, the study's findings, as indicated in Table 4, reveal that most respondents strongly disagreed with most of the challenges raised in this study, with the Grand Mean of 2.20. This implies that they were not constrained by many of the likely challenges presented in the study.

However, the respondents agreed that only frequent electricity interruption ($\bar{x} = 2.54$, $SD = 1.13$), and high cost of ICT facilities/components ($\bar{x} = 2.52$, $SD = 1.05$) constituted major challenges associated with their use of ICT tools.

Discussion of Findings

The study findings reveal that the administrative staff of Redeemer's University used ICT tools such as the Internet, Desktop computers, Scanner, Printer, Smartphone, Laptop, CD-ROMs, Hard-Drive, photocopiers, and projectors. However, the Internet was found to be used mainly by the respondents. The findings also reveal that the respondents found it easy to use the ICT



tools presented in the study. The results indicate that ICT tools significantly impact the participants' job performance. Furthermore, it was revealed that frequent electricity interruption and the high cost of ICT facilities/components were the significant challenges associated with the use of ICT tools by the respondents.

Conclusion

Based on the findings of this study, it could be concluded that the use of ICT tools by the administrative staff of Redeemer's University has a significant impact on their job performance. The use of ICT tools helped the participants to achieve the followings: quality output, perform technical tasks, put in more than is required of them, have access to quality information which helps them to exercise good judgments by making sound and well-informed decisions, respond appropriately to the needs and feelings of different people in different situations, think creatively, come up with unique ideas, adapt and work with others, perform complex tasks, solve problems by discussing with colleagues, and also to encourage employees in their units to participate in deciding how to get work done promptly.

Recommendation

Based on the findings and conclusion, the following recommendations are made:

1. The Management of the university should make provision for a constant supply of electricity
2. University Management should regularly train their staff on ICT to ensure a continuous usage of ICT facilities for effectiveness in their day-to-day activities.
3. University Management should ensure regular maintenance of available ICT facilities to save the cost of frequent replacement.
4. Government should support universities in the procurement of ICT tools to ensure the quality performance of staff duties.

References

- Amutha, D. (2020) The Role and Impact of ICT in Improving the Quality of Education. Available at SSRN: <https://ssrn.com/abstract=3585228> or <http://dx.doi.org/10.2139/ssrn.3585228>
- Baralou, E. (2010) IT Skills: The Business Gain Measuring Employees Efficiency After E-Skills Training and Certification. ALBA Graduate Business School
- Buseni, J. (2013) Effects of Information and Communication Technology on Secretaries' Performance in Contemporary Organizations in Bayelsa State, Nigeria. *Information and Knowledge Management*, 3 (5), 87-93
<https://www.iiste.org/Journals/index.php/IKM/article/view/5609>
- Dauda, Y. A. & Akingbade, W. A. (2011) Technological change and employee performance in the selected manufacturing industry in the Lagos state of Nigeria. *Australian Journal of Business and Management Research*. 1 (5), 32-43
- Gargallo-Castel, A. & Galve-Górriz, C (n.d) The Impact of ICT on Productivity: The Moderating Role of Worker Quality and Quality Strategy. www.intechopen.com
- Hasan T, Mehmet A, Demet C (2011). The Effect of Employees on Achievement Motivation and the Contextual Performance of Employees. *An African Journal of Business Management*. 5(15), pp.6318-6329



- Jaiyeola, R. (2007). "Information Communication Technology as a Tool for Effective Performance of Chartered Accountants". *The Nigerian Accountant*, 40(1), 48-49.
- Johari, J. and Yahya, K.K. (2009). "Linking Organizational Structure, Job Characteristics, and Job Performance Construct: A Proposed Framework". *International Journal of Business and Management*, 4(3): 145 – 152. Available at: www.ccsnet.org/journal.html.
- Jones, N. & Kochtanek, T. (2004). Success Factors in the Implementation of a Collaborative Technology and Resulting Productivity Improvements in a Small Business: An Exploratory Study, *Journal of Organizational and End User Computing*, 16(1), 1-20.
- Kaluyu & Wambugu (2015) Impact of Proficiency In Information Communication Technology Skills on Job Performance: A Case of University Quality Assurance Officers in Kenya. *International Journal of Economics, Commerce and Management*, 3 (2), 1-12. <http://ijecm.co.uk/wp-content/uploads/2015/02/3228.pdf>
- Ratheeswari, K. (2018) Information Communication Technology in Education. *Journal of Applied and Advanced Research*, 2018: 3(Suppl. 1) S45–S47 <https://dx.doi.org/10.21839/jaar>.
- Kumar, A. (2005). IT-based KM for Institutions of Higher Education A Need, Paper published in *A weekly Journal of Higher Education in India* from Association of Indian Universities, New Delhi India, 43, No. 30, July 25-31, 2005, p.4 – 9
- Mohamed, E. (2014). Influence of ICTs On Workforce Productivity In Egyptian Industrial Organizations. *International Journal of Advanced Information Technology (IJAIT)*. 4 (3)
- Ron, O. (n.d). The role of ICT in higher education for the 21st century: ICT as a change agent for education
- Sridevi, M. S. (2010) Employee Engagement: The Key to Improving Performance. *International Journal of Business and Management*, 5 (12)
- Stephen, I. D. & Ayaga, D. (2014). Job satisfaction theories: Traceability to employee performance in organizations. *Journal of Business and Management (IOSR-JBM)*, 16(5), 11-18
- UNCTAD, (2004). E-Commerce and Development Report. [Online]. United Nations Conference on Trade and Development. Retrieved December 17, 2013, from http://unctad.org/en/Docs/ecdr2004overview_en.pdf
- UNESCO (2002). Information and Communication Technology in Education: A curriculum Guide for schools and Programs of Teacher Development. Division of Higher Education.