Vol. 13(1), pp. 10-17, January 2025 https://doi.org/10.14662/ijebm2024305 Copy © right 2025 Author(s) retain the copyright of this article ISSN:2384-6151 https://www.academicresearchjournals.org/IJEBM/ijebm.html

International Journals of Economic and Business Management

Full Length Research

The Role of Office Management Technology in Enhancing Administrative Processes in Isa Mustapha Agwai I Polytechnic, Lafia-Nasarawa State.

¹Anvah Moses, ²Daniel Mercy Ashedzi and ³Amos Anyesha Audu

¹Department of Office Technology and Management, School of Communication Technology, Isa Mustapha Agwai I Polytechnic, P.M.B 109 Lafia-Nasarawa State.

²Department of Business Administration and Management, School of Administration and Business Studies, Isa Mustapha Agwai I Polytechnic, P.M.B 109 Lafia-Nasarawa State.

³Department of Business Administration and Management, School of Administration and Business Studies, Isa Mustapha Agwai I Polytechnic, P.M.B 109 Lafia-Nasarawa State.

12 Accepted August 2024

This study examines the role of Office Management Technology (OMT) in enhancing administrative processes in Isa Mustapha Agwai I Polytechnic, Lafia. The increasing integration of technology into administrative operations has revolutionized traditional office practices, leading to improved efficiency, accuracy, and communication. The study explores how various OMT tools such as automated filing systems, enterprise resource planning (ERP) software, and digital communication platforms are utilized within the institution to streamline administrative tasks. The study adopts a mixed-methods approach, combining quantitative surveys with qualitative interviews of administrative staff, lecturers, and key stakeholders. It investigates the extent of technology adoption, its impact on workflow efficiency, and the challenges faced in implementing and maintaining such systems. Findings indicate that OMT significantly reduces manual errors, enhances decision-making processes, and improves service delivery to students and staff. However, challenges such as inadequate training, resistance to change, and limited infrastructure hinder the full potential of these technologies. This study underscores the importance of continuous investment in technology infrastructure and capacity-building programs to ensure sustainable improvements in administrative efficiency. It also highlights the need for robust policies that support technology integration in academic institutions.

Keywords: Office Management Technology, Administrative Processes, Higher Education, Efficiency, Technology Integration.

Citation: Anvah M., Daniel, M.A. Amos, A.A (2025). The Role of Office Management Technology in Enhancing Administrative Processes in Isa Mustapha Agwai I Polytechnic, Lafia-Nasarawa State. Inter. J. Econ. Bus. Manage. Vol. 13(1), pp. 10-17

INTRODUCTION

Office Management Technology (OMT) has become a critical component in modern administrative processes, particularly in higher education institutions. The integration of tools such as automated filing systems, digital communication platforms, and enterprise resource planning (ERP) software has significantly transformed traditional administrative practices (Akinyemi & Oloruntoba, 2020). However, in Isa Mustapha Agwai I Polytechnic, Lafia, its role enhances efficiency, ensuring accuracy, and streamlining workflows in the management of academic and non-academic operations. These technologies enable faster communication, more secure data management, and improved decision-making processes, thereby creating a conducive environment for academic excellence and operational sustainability (Johnson et al., 2019).

Despite its transformative potential, the adoption of office technology management in Isa Mustapha Agwai I Polytechnic is not without challenges. Limited funding, inadequate training, and infrastructural deficiencies often hinder the unified integration of these technologies (Okoro, 2021). Furthermore, resistance to change among administrative staff and technical challenges related to system maintenance and updates further complicate the process. Nonetheless, addressing these challenges through capacity-building programs, investments in infrastructure, and policy support can enhance the institution's ability to harness it full potentials. This study explores the role of office technology management in enhancing administrative processes within the polytechnic, identifying its benefits, challenges, and the strategies required for effective implementation.

Statement of the Problem

In an era where technology has become integral to organizational success, many higher education institutions, including Isa Mustapha Agwai I Polytechnic, face significant challenges in fully leveraging Office Management Technology to optimize administrative processes. Thus, it offers immense potential to rationalize workflows, enhance communication, and improve decision-making, its adoption in the polytechnic has been constrained by infrastructural limitations, inadequate training for staff, and inconsistent policy support. These challenges often result in inefficiencies such as delayed decision-making, poor records management, and suboptimal service delivery, which can hinder the institution's ability to meet the demands of its students, staff, and other stakeholders.

Despite efforts to modernize administrative practices, there is limited empirical evidence on the extent to which office technology management has been implemented and its actual impact on the institution's operations. Furthermore, the specific barriers to effective technology integration in Isa Mustapha Agwai I Polytechnic have not been systematically analysed, leaving gaps in understanding how to overcome them. This study seeks to address these issues by investigating the role of office technology management in enhancing administrative processes within the polytechnic, identifying its benefits, challenges, and the strategies required for its effective utilization.

Objectives of the Study

- To evaluate the extent of adoption and utilization of Office Management Technology in administrative processes in Isa Mustapha Agwai I Polytechnic.
- 2.To examine the impact of Office Management Technology on the efficiency and productivity of administrative operations within the Polytechnic.
- 3. To identify the challenges hindering the effective implementation of Office Management Technology in Isa Mustapha Agwai I Polytechnic.

Research Questions

How does the adoption and utilization of Office Management Technology enhance the efficiency and effectiveness of administrative processes in Isa Mustapha Agwai I Polytechnic, Lafia-Nasarawa State?

CONCEPTUAL REVIEW

The Concept of Office Management Technology

Office Management Technology refers to the integration of modern tools, systems, and software designed to streamline and optimize administrative tasks within organizations. These technologies facilitate efficient communication, data management, and workflow processes, enabling institutions to achieve operational excellence. According to Adebayo and Samuel (2020), encompasses a wide range of tools, including digital filing systems, enterprise resource planning (ERP) software, and communication platforms, which collectively enhance decision-making and administrative efficiency.

In the context of educational institutions such as Isa Mustapha Agwai I Polytechnic, perform a critical role in managing complex administrative processes, such as student registration, record management, and staff coordination. Chukwu (2019) highlights that reduces redundancy and ensures data accuracy, thereby contributing to better resource utilization and improved service delivery. Moreover, the adoption of aligns with the global shift toward digital transformation, which

emphasizes the importance of technology in fostering organizational growth and innovation (Eze et al., 2020).

Despite its benefits, the implementation of is not without challenges. Okoro (2021) identifies barriers such as limited technical expertise, infrastructural deficits, and resistance to change as common obstacles in Nigerian educational institutions. These issues require strategic investments in technology, staff training, and policy reforms to fully realize the potential of office management technology in enhancing administrative processes.

The Concept of Administrative Efficiency

Administrative efficiency refers to the ability of an organization to perform its administrative tasks effectively, promptly, and with optimal resource utilization. It is a measure of how well an institution manages its operations to achieve desired outcomes, such as smooth communication, accurate record-keeping, and timely decision-making (Adebayo & Samuel, 2020). For institutions like Isa Mustapha Agwai I Polytechnic, administrative efficiency is crucial for delivering quality services to students, staff, and other stakeholders.

Main indicators of administrative efficiency include reduced operational delays, error minimization, cost-effectiveness, and enhanced stakeholder satisfaction. Efficient administration ensures that resources such as time, finances, and human labour are utilized optimally to achieve institutional goals (Eze et al., 2020). For example, effective student records management and timely processing of staff payrolls are essential administrative functions that contribute to overall institutional success.

The integration of Office Management Technology significantly enhances administrative efficiency by automating repetitive tasks, streamlining workflows, and improving data accessibility. According to Okoro (2021), technologies such as enterprise resource planning (ERP) systems, automated filing systems, and digital communication platforms reduce redundancy and increase accuracy in institutional processes. However, achieving administrative efficiency also depends on staff competency, the availability of modern infrastructure, and supportive organizational policies (Chukwu, 2019).

However, in Isa Mustapha Agwai I Polytechnic, improving administrative efficiency involves settling challenges such as limited technological infrastructure and inadequate staff training. By leveraging office technology management and investing in capacity-building initiatives, the institution can optimize its administrative processes and improve service delivery to its stakeholders.

THEORETICAL REVIEW

The Concept of Theoretical Review

A theoretical review examines existing theories and frameworks that are relevant to a specific research topic, providing a foundation for understanding and analysing the subject matter. For the topic," Here a theoretical review focuses on the principles, models, and frameworks that explain the relationship between technology adoption and administrative efficiency.

Relevant Theories

Technology Acceptance Model

Developed by Davis (1989), the Technology Acceptance Model (TAM) posits that perceived usefulness and perceived ease of use are critical factors influencing an individual's decision to adopt new technology. In the context of Isa Mustapha Agwai I Polytechnic, the theory explains how staff members' perceptions of Office Management Technology tools such as digital filing systems and communication platforms affect their willingness to integrate these tools into their workflows. The model underscores the importance of user-friendly interfaces and clear demonstrations of benefits to encourage adoption and maximize efficiency.

Resource-Based View (RBV)

The Resource-Based View (RBV) theory emphasizes that an organization's resources, including technological capabilities, are vital for achieving competitive advantage. Applied to the polytechnic, the theory suggests that effective utilization of office technology management as a strategic resource can significantly enhance administrative processes by optimizing resource allocation, streamlining operations, and fostering innovation (Barney, 1991).

Diffusion of Innovations Theory

Introduced by Rogers (1962), this theory explains how innovations are adopted within an organization. It identifies factors such as relative advantage, compatibility, complexity, trialability, and observability as determinants of the adoption process. The theory is particularly relevant in understanding how Isa Mustapha Agwai I Polytechnic can address barriers to adopting office management technology, such as resistance to change and inadequate training.

Empirical Review

Empirical studies provide evidence-based insights into the implementation and impact of Office Management Technology in administrative processes. In the context of higher education institutions, research highlights the transformative potentials in improving efficiency, accuracy, and productivity. Adebayo and Samuel (2020) investigated Nigerian polytechnics and found that adopting technologies such as enterprise resource planning systems and automated filing significantly reduced administrative errors and streamlined operations. Similarly, Chukwu (2019) reported that the use of digital communication tools enhanced coordination among staff, enabling faster decision-making and better service delivery in academic institutions. These findings underscore the importance of office management technology as a critical enabler of operational excellence in educational settings.

However, empirical evidence also highlights challenges that institutions face in effective leverage. Eze et al. (2020) observed that infrastructural deficits, inadequate training, and resistance to change are significant barriers to technology adoption in Nigerian higher education. Okoro (2021) emphasized that limited financial resources and inconsistent policy frameworks further impede the effective deployment of office management technology. Therefore, office management technology in Isa Mustapha Agwai I Polytechnic, curbed these challenges to maximizes its benefits. Existing empirical studies provide valuable lessons on greatest practices, including investing in capacity building, enhancing infrastructure, and fostering a culture of technological adaptability to enhance administrative processes.

METHODOLOGY

Research Design

The study employed a descriptive survey research design, which is appropriate for exploring and describing the role of Office Management Technology in enhancing administrative processes. This design allows for the collection of both quantitative and qualitative data to provide a comprehensive understanding of the subject matter.

Population of the Study

The population consists of administrative staff, lecturer, and other main stakeholders at Isa Mustapha Agwai I Polytechnic, Lafia-Nasarawa State. The study focused on those who are directly or indirectly involved in using office management technology for administrative purposes.

DATA PRESENTATION AND ANALYSIS

The data below presents the population of the staff members of Isa Mustapha Agwai I Polytechnic Lafia cutting across the different categories, such as lecturers, administrative staff members, principal officers, casual staff members and consultancy services staff members. The data of the finding is presented below as thus:

Presentation of Data

Table 1: General mean, standard deviation and variance

| N | Valid | 1214 | | |
|----------------|---------|---------|--|--|
| IN | Missing | 0 | | |
| Mean | - | 2.2414 | | |
| Std. Deviation | | 1.99593 | | |
| Variance | | 3.984 | | |

The table summarizes key statistical measures for a dataset with 1,214 valid entries and no missing data. The mean value of the dataset is 2.2414, indicating the average value of the data points. The standard deviation, measured at

1.99593, reflects a moderate spread of the data around the mean, suggesting that most values lie within approximately two units of the average. Additionally, the variance of 3.984, which is the square of the standard deviation, further highlights the extent of variability within the dataset. This provides a concise overview of the data's central tendency and dispersion.

Table 2: Categories of Staff members in Isa Mustapha Agwai I Polytechnic Lafia

| Items | Frequency | Percent |
|----------------------------|-----------|---------|
| Lecturers | 420 | 34.6 |
| Administrative Staff | 511 | 42.1 |
| Principal Officers | 33 | 2.7 |
| Casual Staff | 120 | 9.9 |
| Consultancy services staff | 130 | 10.7 |
| Total | 1214 | 100.0 |

The table categorizes the staff members at Isa Mustapha Agwai I Polytechnic Lafia, highlighting their distribution across different roles. Out of a total of 1,214 staff members, lecturers make up 34.6% (420 individuals), while administrative staff represent the largest group at 42.1% (511 individuals). Principal officers are the smallest category, accounting for only 2.7% (33 individuals). Casual staff constitute 9.9% (120 individuals), and those involved in consultancy services make up 10.7% (130 individuals). This breakdown provides insight into the workforce composition, with administrative staff being the predominant group.

Table 3: Individual Category's mean and standard deviation

| | | Lecturers | Administrative staff | Principal Officers | Casual Staff | Consultancy Services Staff |
|--------|-----------|-----------|----------------------|-----------------------|--------------|-------------------------------|
| N | Valid | 420 | 511 | 33 | 120 | 130 |
| | Missing | 91 | 0 | 478 | 391 | 381 |
| Mean | 1 | 1.0000 | 2.0000 | 3.0000 | 4.0000 | 5.0000 |
| Std. [| Deviation | .00000 | .00000 | .00000 | .00000 | .00000 |

The table presents the mean and standard deviation for each category of staff members at Isa Mustapha Agwai I Polytechnic Lafia. The number of valid entries varies across the categories, with 420 lecturers, 511 administrative staff, 33 principal officers, 120 casual staff, and 130 consultancy services staff. The missing values indicate data gaps in some categories, such as 91 for lecturers and 478 for principal officers.

The mean values range from 1.0000 for lecturers to 5.0000 for consultancy services staff, essentially serving as identifiers for each category. Notably, the standard deviation is 0.00000 across all categories, indicating no variation within the recorded data for each group. This suggests that the data for each category is uniform and consistent.

The bar chart visually represents the distribution of staff categories at Isa Mustapha Agwai I Polytechnic Lafia. The x-axis lists the staff categories (Lecturers, Administrative Staff, Principal Officers, Casual Staff, and Consultancy Services Staff), while the y-axis shows the frequency of individuals in each category.

From the chart, administrative staff members have the highest frequency, exceeding 500, followed by lecturers with around 420 individuals. Casual staff and consultancy services staff have comparable frequencies, slightly above 100 each. Principal Officers represent the smallest group, with fewer than 50 members. This visualization confirms the dominance of administrative staff in the workforce composition.

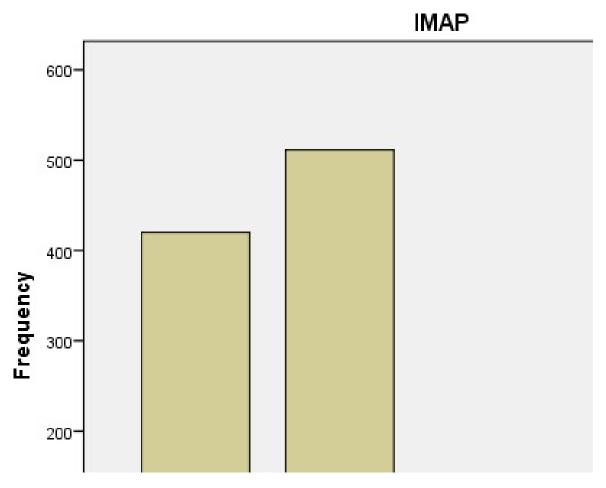


Table 4: Hypothesis Test Summary

| S/n | Null Hypothesis | Test | Sig | Decision |
|-----|------------------------|-----------------------------|-----------------|-----------------|
| 1 | The categories of IMAF | occur with equal One-Sample | Chi-Square .000 | Reject the null |
| | probabilities | Test | | hypothesis |

Asymptotic significance are displayed. The significance level is .05.

The table presents the summary of a hypothesis test conducted to assess whether the categories of staff at Isa Mustapha Agwai I Polytechnic (IMAP) occur with equal probabilities. The test used is a One-Sample Chi-Square Test, with a significance value (Sig) of 0.000. Since the significance level is set at 0.05, the p-value (0.000) is less than 0.05, leading to the rejection of the null hypothesis.

This decision implies that the categories of staff at IMAP do not occur with equal probabilities, confirming that the distribution of staff across the various categories (e.g., lecturers, administrative staff, etc.) is significantly uneven.

CONCLUSION

In conclusion, the analysis of staff distribution at Isa Mustapha Agwai I Polytechnic Lafia reveals significant disparities among the various categories. Administrative staff members, representing 42.1% of the workforce, constitute the largest group, followed by lecturers, who account for 34.6%. Consultancy services staff and casual staff make up 10.7% and 9.9%, respectively, while principal officers represent the smallest category at just 2.7%. The hypothesis test confirms that these categories do not occur with equal probabilities, highlighting an uneven distribution. This pattern reflects the organizational structure and functional demands of the institution, where administrative roles are predominant. These insights could inform workforce planning and policy adjustments to address any structural imbalances.

Based on the above analysed data, the following are the recommendations:

1. Optimize Workforce Distribution:

The institution should evaluate the workload and responsibilities of administrative staff, who make up the largest category (42.1%). If administrative tasks are disproportionately staffed, redistributing roles or automating repetitive processes may help balance the workforce and improve efficiency.

2. Strengthen Leadership Capacity:

With principal officers comprising only 2.7% of the staff, the institution might consider increasing this category to enhance leadership and decision-making capacity. Investing in leadership development programs could also help maximize the impact of this small but crucial group.

3. Enhance Casual and Consultancy Integration:

Casual staff (9.9%) and consultancy services staff (10.7%) play vital roles in supporting the institution. Offering clearer career pathways or training opportunities for these groups can boost their engagement and ensure their contributions align with institutional goals.

RECOMMENDATION

To enhance the system's effectiveness, it is recommended to prioritize resource allocation for Administrative Staff and Lecturers, given their significant representation, by investing in capacity-building programs, resources, and support mechanisms to improve their performance. Efforts should also focus on settling the underrepresentation of Principal Officers by reviewing their roles and responsibilities and providing training opportunities to foster active participation in decision-making. For Casual and Consultancy Services Staff, it is essential to improve job security, working conditions, and integration into strategic initiatives, recognizing their crucial supportive roles. Furthermore, periodic workforce assessments should be conducted to ensure optimal balance and functionality across all staff categories.

REFERENCES

- Adebayo, K., & Samuel, J. (2020). Streamlining administration through technology: A case study of Nigerian polytechnics. African Journal of Educational Technology, 10(1), 23-34.
- Adebayo, K., & Samuel, J. (2020). Streamlining administration through technology: A case study of Nigerian polytechnics. African Journal of Educational Technology, 10(1), 23-34.
- Adebayo, K., & Samuel, J. (2020). Streamlining administration through technology: A case study of Nigerian polytechnics. African Journal of Educational Technology, 10(1), 23-34.
- Adebayo, K., & Samuel, J. (2020). Streamlining administration through technology: A case study of Nigerian polytechnics. African Journal of Educational Technology, 10(1), 23-34.
- Adebayo, K., & Samuel, J. (2020). Streamlining administration through technology: A case study of Nigerian polytechnics. African Journal of Educational Technology, 10(1), 23-34.
- Akinyemi, B., &Oloruntoba, F. (2020). The impact of office technology on administrative efficiency in Nigerian higher institutions. Journal of Management Studies, 12(4), 45-56.
- Armstrong, M. (2021). A Handbook of Human Resource Management Practice. London: Kogan Page.
- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.
- Chukwu, E. (2019). *Digital communication and organizational efficiency in higher education institutions*. Nigerian Journal of Management Studies, 6(2), 56-71.
- Chukwu, E. (2019). *Digital communication and organizational efficiency in higher education institutions*. Nigerian Journal of Management Studies, 6(2), 56-71.
- Chukwu, E. (2019). *Digital communication and organizational efficiency in higher education institutions*. Nigerian Journal of Management Studies, 6(2), 56-71.
- Chukwu, E. (2019). *Digital communication and organizational efficiency in higher education institutions*. Nigerian Journal of Management Studies, 6(2), 56-71.
- Chukwu, E. (2019). *Digital communication and organizational efficiency in higher education institutions*. Nigerian Journal of Management Studies, 6(2), 56-71.

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340.
- Dessler, G. (2021). Human Resource Management. Pearson Education.
- Eze, N., Nwosu, C., & Okafor, A. (2020). *Technology adoption in Nigerian higher institutions: Challenges and prospects*. International Journal of Educational Research, 15(4), 89-103.
- Eze, N., Nwosu, C., & Okafor, A. (2020). *Technology adoption in Nigerian higher institutions: Challenges and prospects*. International Journal of Educational Research, 15(4), 89-103.
- Eze, N., Nwosu, C., & Okafor, A. (2020). *Technology adoption in Nigerian higher institutions: Challenges and prospects*. International Journal of Educational Research, 15(4), 89-103.
- Eze, N., Nwosu, C., & Okafor, A. (2020). *Technology adoption in Nigerian higher institutions: Challenges and prospects*. International Journal of Educational Research, 15(4), 89-103.
- Eze, N., Nwosu, C., & Okafor, A. (2020). *Technology adoption in Nigerian higher institutions: Challenges and prospects*. International Journal of Educational Research, 15(4), 89-103.
- Johnson, R., Smith, T., & Adeyemi, L. (2019). *Digital tools in education: A framework for enhancing institutional performance*. Education Technology Review, 15(2), 78-92.
- Johnson, R., Smith, T., & Adeyemi, L. (2019). *Digital tools in education: A framework for enhancing institutional performance*. Education Technology Review, 15(2), 78-92.
- Johnson, R., Smith, T., & Adeyemi, L. (2019). Digital tools in education: A framework for enhancing institutional performance. Education Technology Review, 15(2), 78-92.
- Okoro, M. (2021). Barriers to technology adoption in Nigerian educational institutions. African Journal of Administrative Studies, 8(3), 112-125.
- Okoro, M. (2021). *Barriers to technology adoption in Nigerian educational institutions*. African Journal of Administrative Studies, 8(3), 112-125.
- Okoro, M. (2021). *Barriers to technology adoption in Nigerian educational institutions*. African Journal of Administrative Studies, 8(3), 112-125.
- Okoro, M. (2021). *Barriers to technology adoption in Nigerian educational institutions*. African Journal of Administrative Studies, 8(3), 112-125.
- Okoro, M. (2021). *Barriers to technology adoption in Nigerian educational institutions*. African Journal of Administrative Studies, 8(3), 112-125.
- Okoro, M. (2021). *Barriers to technology adoption in Nigerian educational institutions*. African Journal of Administrative Studies, 8(3), 112-125.ers, E. M. (1962). *Diffusion of innovations*. New York: Free Press.
- Robbins, S.P., & Judge, T.A. (2022). Organizational Behavior. New Jersey: Pearson Education.