

Roles of Technological Innovation in Enhancing the Service Delivery of Information Managers in Public Organizations in Ekiti State

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Abstract

Technological innovation enabled service delivery and having significant impact by generally being more cost effective than traditional supply investments. The broad aim of this study is to examine the roles of technological innovation in enhancing service delivery of information managers in public organizations in Ekiti state. The researcher used a survey method and sampled one hundred and fifty (150) respondents who are information managers from Federal Polytechnic Ado Ekiti (FPA), Ekiti State University (EKSU) and Federal University of Oye Ekiti. (FUOYE). Instrument used for this research work is questionnaires. Findings revealed that the use of technological innovations such as computers and other ICT facilities have and play a significant role on the service delivery of information managers. It was concluded that, with the advancement in technology, the performances of information managers in public organizations are better enhanced. Lastly the researcher recommended; The organizations should make available relevant modern office technologies to all the departments of the organization; The organization should give the information managers opportunities of training on the job to enable them operate with modern trend of office technology and also regular attention to the provision of adequate maintenance and constant review of the performance of these machines is necessary.

Keywords: Technological Innovation, Service Delivery, Information Management, Public Organization, ICT.

Introduction

Over the last fifteen years, the adoption of new technology by public institutions has resulted in widespread innovations and transformations across many parts of the public sector. Over this time period, the most significant technological advancement has been in information and communications technology (ICT), which has had a significant impact on public services and their delivery, both through websites and portals on the Internet, mobile phones, and particularly smart phones, and social media. ICT-enabled service delivery is having a big

impact because it's often cheaper than traditional supply investments. They also provide information managers with significant advantages in terms of access, convenience (due to 24/7 availability), time and cost savings (because to less travel to physical locations), and the capacity to offer whole new sorts of services.

A development in the utilisation of technologies is required for an organisation to accomplish its defined objectives efficiently. In this era of technological advancement, the entry of sophisticated machines into the office has sparked questions among information managers about whether the traditional functions of information managers will be destroyed by the employment of machines. This horror led to acts of sabotage against office technologies, particularly when there was a communication gap between organisations, management, and workers prior to the implementation of such advances.

Western countries have fully embraced technology advancements, with machines now performing tasks that were previously performed manually by information administrators. The role of the information manager is one of the areas where technological progress and automation have an impact. Accounting and sales are two other areas that are impacted. As a vital instrument of an organisation, the information manager must be subjected to training on as many various types of office computers and technology as feasible. Technological innovation/innovation, according to Chouldhi (2016), plays a significant role in the development of organisations because it allows individuals exposed to perform certain operations. As a result, technological advancements make the job of an information manager more effective, appealing, and lucrative, while also improving the quality of the job.

Furthermore, organisations purchase advanced technical tools to improve the manager's job delivery, work-task facilitation, improved communication, increased efficiency, and higher levels of organisational effectiveness. The emergence of advanced technology has altered the way in which jobs are performed. Employee performance improved as a result of technological innovation, as did employee working effort and job completion time.

New technology is crucial not just for public organisations, but also for the country. Organizations cannot function using outdated technology. When humans or employees use technology for the benefit of the organisation and in accordance with ethical standards, it

improves human performance. Individuals have a difficult time adopting technology; however, groups of people do. Technological innovation reduces the workload of managers.

Computers, electronic mail, word processors, telex machines, and other office machines are all used by an efficient and effective information manager. Despite this, some office managers oppose the introduction of office computers, claiming that they would result in job losses, while others welcome them, claiming that they will increase work efficiency and effectiveness. As a result, this claim must be investigated. Previously, the duties of an information manager were performed using manual machines such as a manual typewriter, filing, giving and receiving information, processing and editing information before it was dispatched, and writing reports, but technology has now automated the office manager's office to improve workplace activities. To utilise these systems, information managers require training. In the absence of such experience and skilled staff, the organisation may suffer a setback, or the information management may require training. This is the foundation of this research, which aims to determine the influence of technological innovation in improving the service delivery of information managers in Ekiti state's public organisations.

The overall goal of this research is to investigate the role of technological innovation in improving the service delivery of information managers in public organisations in Ekiti state, as well as to determine the level of technological tool availability and usage in improving the service delivery of information managers in public organisations in Ekiti state, and to identify the handicaps and challenges that information managers face when using modern technologies and machines.

Research Questions

1. To what extent would technological innovation affect the service delivery of information managers?
2. To what extent is the availability and usage of technological tools in enhancing the service delivery of information managers in public organizations in Ekiti state?
3. What challenges do information managers encounter in the office while using modern technologies and machines?

Conceptual Review

Service Delivery

Service delivery can be described as any interaction with the government in which customers — citizens, residents, or businesses – seek or supply data, manage their affairs, or carry out their responsibilities. These services should be given in a way that is efficient, predictable, dependable, and friendly to customers (Huselid, 2017). The distribution of basic services is referred to as service delivery.

Technological innovation and Employees Performance (Information Managers)

The act of merging and structuring knowledge to develop new ideas is known as technological innovation. The advancement of technology has an impact on the performance of managers (Mumford, 2016). Internal advancement originates from employee competence, and internal advancement comes from technological innovation. As a result, there is a strong link between technological innovation and the performance of managers. Only when human resources properly combine technology with other resources, or when technology is used productively and ethically, can it contribute to enhanced productivity or improved performance (Dauda & Akingbade, 2018). The performance of information managers is greatly influenced by technological progress. Technological innovation is a critical aspect in affecting performance improvement (Hitt, 2017).

Training and Technological innovation

Every organisation must have training; training corrects flaws identified at the time of employee appointment and prepares personnel to meet upcoming progression obstacles. Employee training not only stimulates them, but it also serves as a spark for completing any new assignment at work. According to Becker (2017), training allows employees to put their acquired abilities to use. Organizational information managers with advanced expertise are valuable resources, and they are always learning new skills and knowledge to help with the creation of new technology. Training can help them increase their knowledge and skills for advancement.

Training is a long-term endeavour. It's a continuous and methodical procedure. Employees have been analysed, and the firm's needs have been assessed. Following that, the

specified training programme is adapted. The organisation adapts a training approach that is consistent with the employees' needs while also meeting the organization's objectives (Singh & Mohanty, 2016). Training is not only useful to individuals in terms of improving their job abilities and skills, but it is also necessary for businesses to fulfil their objectives. Organizations must manage and develop highly qualified personnel in order to gain a competitive advantage over competitors.

Motivation and Technological innovation

Motivation is defined as a shift in behaviour that is not due to individual differences that are stable. Motivation refers to a person's willingness to put out effort toward a specific set of behaviours (Quinone, 2017). The motivation of information managers has a direct impact on technological innovation. To improve the progression process, information managers require organisational incentives (Harsanyi, 2019). Material and non-material incentives can be distinguished; material incentives are mostly based on financial gain, whereas non-material incentives are primarily based on social approval. Incentives that are both material and non-material can be used to suit the various needs of information managers involved in technological innovation activities (Gruber, 2016).

Internal motivation is a sensation that originates from within. When information managers are enthusiastic about their professions, they are more likely to work harder. When a person is not motivated by self-interest, he or she is at risk of being dismissed or not being promoted further. As a result, it is vital to establish such a workplace for Information Managers in order for them to feel inspired and perform at a higher level. Motivated information managers, according to research, are critical to an organization's success. Motivation is an important aspect in determining how well someone performs. Individuals are in charge of containing this driving energy. It is concerned with individual behaviour, and people act in order to attain something in order to meet their wants (Saeed & Asghar, 2018).

Motivation and Manager's service Delivery

There is a lot of evidence that showing individuals that they are valued and that their contributions are essential and recognised is the greatest way to get a devoted and motivated staff to go the additional mile. Managers will perform better if they believe their

accomplishments and efforts are recognised and rewarded. Our goal is to encourage a shift in pay culture and change the way people are handled by inspiring employees to achieve and offering more clarity on their objectives. Improvements in performance and improving standards are both important factors that contribute to an organization's success and ensure that we have the best people in the right jobs who are motivated to stay (Rudge, 2016).

Motivation is a factor that can influence service delivery in an organisation, according to the literature. Here we have another metric, motivation, which we must examine to see if it has an impact on service delivery, i.e., if increased or decreased motivation improves or degrades the performance of information managers in the business. Motivation is critical in persuading office managers to achieve organisational goals, as individuals set their own objectives. This inner drive and motivation drives individuals to generate constructive behaviour in the organisation, which has a beneficial impact on job delivery, in order to meet unmet and specialised demands. Recognizing employees' efforts and work while they are performing their jobs, providing a healthy work environment, and designing pleasant job designs based on their needs allows organisations to achieve their objectives more efficiently. Motivation improves performance in this way. (2016, Khan).

Training and information managers' performance

Training aids in the bridge-building process between information managers and management. It allows them to actively engage in decision-making and produce active output. After training, the information manager's coordination with peers, subordinates, and senior officers improves. These types of actions improve the organization's image in the eyes of think tanks that aim to maximise its value. Training not only improves an employee's mental abilities, but it also provides physical benefits, such as active participation in decision-making, which can help relieve mental stress (Farooq & Khan, 2015).

Employee loyalty to the organisation is also linked to the performance of information managers. Low commitment leads to low commitment, while great commitment leads to high performance. So, in basic terms, when employees are deeply engaged to the organisation, we may infer that their performance is excellent. Employee commitment to the organisation improves as a result of training. Employees that are committed to an organisation work for it

for a long time. Training boosts employee skills, which forces organisations to improve employee perks and pay. Scholars and researchers agree that training increases employee loyalty to the business, yet training does not generate the desired results.

Technology Acquisition

Acquisitions have an unmistakable impact on the organization's technical innovation. This assessment is critical from the standpoint of organisational learning and innovation, as it helps to define how companies receive and utilise external knowledge. Some theories of technological change claim that increased knowledge base leads to increased innovation (Griliches, 2020). The impact of acquisitions on a company's technological innovation output can be considered in the context of the acquisition's technological inputs. Acquisitions can have two different effects on technological innovation capacity. To begin, an acquisition of another organisation can be viewed as the absorption of the acquired organization's knowledge base into the knowledge base of the acquiring organisation (Ahuja & Katla, 2018).

Technology Exploitation

For organisations, especially public institutions, the timing of exploitation is critical. Window of opportunity closes quickly in public organisations, and having early access to know-how or technology that enable rapid exploitation can mean the difference between finishing first and dropping out (Reinganum, 2017). Previous study has demonstrated that collaborating to realise technical potential is the most effective way to get resources for exploitation. Early collaboration allows organisations to establish themselves and gain access to critical technology from her management. (Mosakowski, 2016).

The Productivity of Information Managers when Using Modern Technologies

Modern technologies have had a significant impact on the performance of information managers. Modern technologies are revolutionising office operations at an alarming rate due to technical progress around the world. So much so that no two days at work are the same. Modern technologies are required for proper document management in every firm. Modern technology, on the other hand, have made people fearful. According to Olusegun (2018), in another fifteen years, there will be nothing left for workers to perform because technology and automation will have advanced to the point that machines will be able to operate themselves.

Furthermore, managers in the 1960s predicted mass unemployment as a result of the introduction of computers that would allow them to perform their work more efficiently and in a shorter amount of time; however, by the end of the decade, fear had vanished because there was no mass unemployment, only changes in the nature of information management work.

Challenges of managers in the Usage of Modern technology

According to various authors, modern technology boosted and improved the Manager's efficiency and accuracy in achieving organisational objectives. It's embarrassing to learn that most office managers have a lot of issues with the sophisticated devices they're expected to deal with due to a lack of training on how to handle these technologies in today's office. If organisational objectives are to be met, proper attention must be paid to the use of office automation machinery. Despite the numerous advantages provided by new technologies, office managers nevertheless face some difficulties in carrying out their responsibilities. The difficulties are as follows:

Inadequate or lack of modern facilities and technologies: According to Otobo (2017), the automated office employs sophisticated technology to deliver information more quickly. Nonetheless, it is costly, causing public companies to supply only a few whiles relying on other old devices to supplement the information manager's efforts.

Constant power failure: Computers, projectors, scanners, printers, smart phones, and other technological devices are used. These can't be used unless there's a power source. For the Manager to effectively execute and harness the benefits of such technologies, a constant power supply is required. Umar (2019) backed this up by claiming that energy in Nigeria has been unpredictable, making it difficult for technologies to function properly.

Lack of funds: Grace (2018) cited a lack of cash as another barrier to the procurement of new technology in some government offices, resulting in the Manager's office becoming impoverished due to a lack of technology.

Lack of training and retraining: Due to a shortage of money, training information managers has become extremely challenging. Any organization's unwillingness to send its office managers to training would stymie the learning of new skills and competences required to operate modern technologies. As a result, the development of new technology necessitates the

learning of new skills. As a result, office managers must be trained and retrained in order to make use of new technologies.

Other challenges according to Ojohwoh (2019) are:

Conservatism, a poor internet connection, the high expense of new technologies, a lack of management support for acquiring technical innovations, and so on.

Theoretical Framework

Theory of Technological Innovation

The theoretical framework used in this study is Wolfensohn's (Wolfensohn, 2000). He claims that technical innovation refers to the finding of new and better ways to manufacture commodities. Changes in technology result in higher labour, capital, and other productivity. It can be utilised to boost value in a variety of areas, including financial, social, physical, and intellectual. He divided the technological stages in the office information and management field into four separate stages, which he believes advanced countries go through before reaching the stage of development. The stages are research and development, ascent, maturity, and decline, according to Wolfensohn 2000. Innovators, early adopters, early majority, late majority, and laggards are the five chronological demographics that make up the adoption of various technologies. To do so, you must first identify an issue, then produce various solutions, choose the best one, build a model, test it, tweak and retest it as needed, then present the final solution. As a result, the framework's assumption is based on the above-mentioned steps, which must be implemented to suit the needs of information managers and management in general.

Empirical Review

Various researchers have researched technological innovation, and multiple empirical studies on the impact of technical innovation on information managers' service delivery have been done. Gabriel (2000) explored the impact of technological innovation on office workers in private organisations in Edo State, collecting and analysing relevant secondary data to reach the paper's goal. The outcome demonstrates that technological innovation aids in the transformation of the office system in order to meet organisational objectives. Nwoye (2004)

investigated the impact of technological innovation on office people in private firms in order to determine whether technological innovation may aid in improving office worker performance. The findings suggest that technology innovation has a favourable impact on office worker performance.

Adelusi (2008) looked into the impact of ICT on secretaries' service delivery in public institutions in Osun. According to the findings, information and communication technology (ICT) aids in improving secretarial performance and the office system's image. Adeoye (2012) examined the effect of technology education on information manager in private organisation in Oyo State. The study adopted the use of technological model analysis to explore the effect of technology evolution on office information and management. The result indicated that technology improves the efficient performance in office information and management. Hauben (2016) investigated on the roles of technological innovation on the performance of office personnel in tertiary institutions in Ekiti state. The study analysed the relationship between technological innovation and office employees using quantitative time series data and multiple regression approaches. According to the findings, every office worker needs to keep up with technological advancements in order to do their job properly.

In Kogi State, Enijini (2018) investigated the impact of technological innovation on the performance of information managers in government parastatals. The research is based on the science and technology studies (STS) tradition, which investigates how social interactions and institutions drive innovation in science and technology, as well as the technological qualities that affect social arrangements when implemented. The findings suggest that there is a social interaction between technology innovation and office information managers and management that can shape office information and management.

In light of the findings of previous research, the purpose of this study is to investigate the impact of technological innovation on the service delivery of office managers in Ekiti State's public organisations.

Conceptual Framework

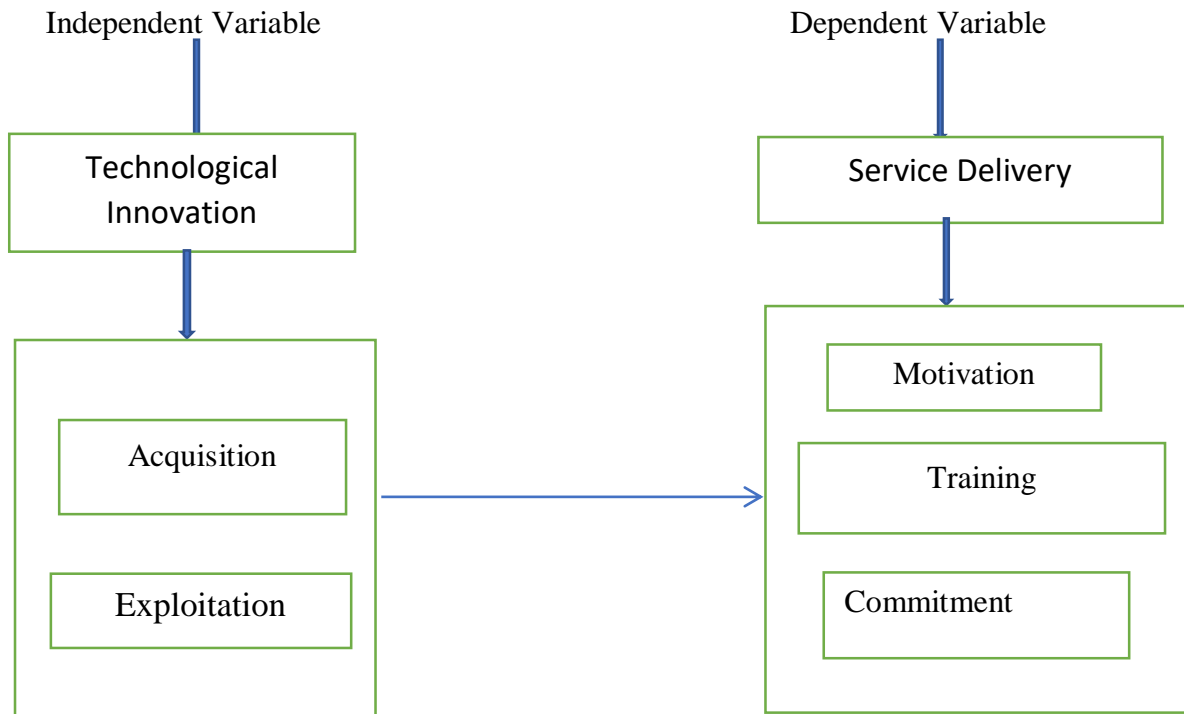


Figure 1: Conceptual Framework

Source: Researcher Design 2022

The model has two variables, as shown in figure 1, with the dependent variable being service delivery and the independent variable being technical innovations. These two variables are employed in this study. As adapted from Pavitt, the measures of service delivery are motivation, training, and commitment (2009). This study's independent variable is technical innovation, which is quantified through acquisition and exploitation. The study identified two indicators of technical innovation, which were adapted from Richard's (2010) work since they were relevant to the study.

Methodology

The study employed the survey research design. According to George (2017), survey is the investigation of behaviour, opinion or other manifestation of a group of people by questioning them. The study aims at collecting data for analysis in the most adequate way for the chosen population of the study. The main source of data was through administration of questionnaires. The data collected from respondents were analysed using simple percentage method.

Sample and Sampling Techniques

A total of one hundred and fifty (150) information managers were selected from Public organizations in Ekiti State and were used as sample population for the study. one hundred and fifty (150) questionnaire copies were administered to respondents which comprise selected information managers of the public organizations in Ekiti State. The questionnaires were distributed as follows: Federal polytechnic Ado Ekiti (50), Ekiti State University (50) and Federal University of Oye Ekiti. (50). All the questionnaires were returned for processing.

Validation of the Study Instrument

Two Directors at the Federal Polytechnic, Ado-Ekiti, were given a draft copy of the study instrument (questionnaire) for face and content validation. These resource persons' input was taken into account, and required changes were made.

Reliability of the Instrument

Following the validation of the study instrument, the test-retest reliability approach was used to administer 10 copies of the validated instrument to respondents who were not part of the sample. It took two weeks from the initial test (administration) to the final administration of the instrument on these selected respondents.

Data Analysis

The data collected was put into tables and analysed using the simple percentage approach. The total number of respondents to a particular item was divided by the total number of questionnaires returned, then multiplied by a hundred to get the percentages.

The following are the methods used in the analysis:

$$\frac{F \times 100}{N}$$

$$N \quad 1$$

Where F = frequency of Responses

Where N = total number of respondents

100 = percentage figure

1 = constant figure

Research Question 1: To what extent would technological innovation affect the service delivery of information managers?

Table 1: Roles of technological innovation on the service delivery of information managers.

S/N	Items	Total No. of respondents	Agree	%	Disagree	%
1	The use of ICT facilities ensures job accuracy.	150	111	74	39	26
2.	The use of computer eliminates time wasting.	150	123	82	27	18
3	Computer creates neat document.	150	97	65	53	35
4	The use of computer enhances productivity of information managers.	150	105	70	45	30
5	Computer ensures quick data processing.	150	131	87	19	13

Source: Field Survey, 2021

Interpretation of Data

From the above result, 111 respondents representing 74% indicated that the use of ICT facilities ensure job accuracy of the while 39 respondents representing 26% disagreed. In item 2, 123 respondents representing 82% indicated that the use of computer eliminates time wasting while 27 respondents representing 18% disagreed. In item 3, 95 respondents representing 65% indicated that Computer creates neat document while 53 respondents represent 35% went on disagreement. Item 4, stated that the use of computer enhances productivity of information managers 105 respondents representing 70% agreed and 45 respondents representing 30% disagreed. In item 5, 131 respondents representing 87% were of the opinion that computer ensures quick data processing while 19 respondents represent 13% disagreed.

Research Question 2: To what extent is the availability and usage of technological tools in enhancing the service delivery of information managers in public organizations in Ekiti state?

Table 2: Availability and usage of technological tools

S/N	Items	Total No. of respondents	Agree	%	Disagree	%
1.	The use of modern machines helps in easy passage of office information.	150	104	69	46	31
2.	Are technological tools available for information managers in your organisation?	150	60	40	90	60
3.	It enhances fastest means of communication in the office.	150	121	81	29	19
4.	It saves the cost and time of mail posts or information delivery.	150	109	73	41	27
5	The use of modern technologies reduces office fatigue for information managers.	150	103	69	47	31

Source: Field Survey, 2021

Interpretation of Data

From the above result, 104 respondents representing 69% indicated that the use of modern machines helps in easy passage of office information while 46 respondents representing 31% disagreed. In item 2, 60 respondents representing 40% agreed that technological tools are available for information managers in their organisation while 90 respondents representing 60% disagreed. Item 3 stated that modern technology enhances fastest means of communication in the office, 121 respondents representing 81% agreed while 29 respondents represent 19% disagreed. In item 4, 109 respondents representing 73% agreed that modern technology saves the cost and time of mail posts or information delivery while 41 respondents representing 27% disagreed. In item 5, 103 respondents representing 69% indicated that the use of modern technologies reduces office fatigue for information managers while 47 respondents represent 31% disagreed.

Research Question 3: What challenges do information managers encounter in the office while using modern technologies and machines?

Table 3: Challenges of information managers using modern technologies and machines in the office.

S/N	Items	Total No. of respondents	Agree	%	Disagree	%
1.	Lack of Access and Security	150	99	65	51	35
2.	Irregular power supply	150	120	80	30	20
3.	Lack of poor and further training.	150	117	78	33	22
4.	Inadequate Automation	150	100	67	50	33
5	Lack of technicians	150	116	77	34	23

Source: Field Survey, 2021

From the above result, 99 respondents representing 65% indicated that one of the challenges facing information managers in the office is lack of access and security while 51 respondents representing 35% disagreed. In item 2, 120 respondents representing 80% indicated that among the challenges facing information managers in the office is irregular power supply while 30 respondents representing 20% disagreed. In item 3, 117 respondents representing 78% indicated that that among the challenges facing information managers in the office is lack of poor and further training of employees while 33 respondents represent 22% disagreed. In item 4, 100 respondents representing 67% indicated that among the challenges facing information managers in the office is inadequate automation while 50 respondents representing 33% disagreed. Finally, in item 5, 116 respondents representing 77% indicated that among the challenges facing information managers in the office is lack of qualified technicians while 34 respondents represent 23% disagreed.

Key findings

- i. Based on the above analyses, it was found that, the use of technological innovations such as computers and other ICT facilities have and play a significant role on the service delivery of information managers.
- ii. It was also found that, there are no enough technological tools for information managers to effectively carry out their duties in such a way that will enhance good service delivery and progress of the organization.
- iii. The findings finally revealed that lack of access, problems of power supply, lack of training, lack of technicians etc. posed as the challenges facing information managers in public organizations in Ekiti State.

Conclusion

Based on the findings, the study concludes that technological innovations have become an important part of organization administration as these technologies standardize office routines, relieve managers, enhances quality and accuracy of service delivery. The study stressed that with the advancement in technology, the performances of information managers in public organizations are better enhanced. The study also concludes that technological innovations are of great assistance to the managers in the office and that information managers adapts very well to the modern technologies put in place. through proper training.

Recommendations

Based on the above conclusions, the following recommendations were made by the researcher:

- i.) The organizations should make available relevant modern office technologies to all the departments of the organization.
- ii.) The organization should give the information managers opportunities of training on the job to enable them operate with modern trend of office technology.
- iii.) Finally, regular attention by the management of the organization to the provision of adequate maintenance and constant review of the performance of these machines is necessary. The organization should contact with reputable companies in the areas of modern office technologies routine devices.

References

- Adelusi G.. (2008). Technological acquisitions & the innovation performance of acquiring firms: a longitudinal study. *Strategic Management Journal*, 22, 197–220. <https://doi.org/10.1002/smj.157>
- Adeoye M. H. (2012). Impact of Motivation on the working performance of employees- A case study of Pakistan. *Global Advanced Research Journal of Management and Business*, 1 (4), 126-133.
- Becker, G. (2017), “Human capital”, Chicago University, Chicago, IL.
- Chouldhi, S. (2016). Effect of Motivation on Work Performance at Ireland Blyth Limited. *Proceedings of 8th Annual London Business Research Conference*, 1-16. imperial College, London, UK.
- Dauda, D. Y., & Akingbade, W. A. (2018). technological change and employee performance in selected manufacturing industry in Lagos state of Nigeria. *Australian Journal of Business and Management Research*, 12.
- Enijini, M.W. (2018), “Generational technological change: effects of innovation and local rivalry on performance”, *Academy of Management Journal*, (39), 1185-217.
- Farooq, M., & Khan, M. A. (2011). Impact of Training and Feedback on Employee Performance. *Far East Journal of Psychology and Business*, 4-6.
- Grabriel P. (2000), “Training system issues in the year 2017”, *American Psychologist*, (45), 134-43.
- Grace, C.C. (2018). Impact of Training and Development programmes on secretarial productivity in selected business organizations in Owerri, Imo State, Nigeria. *Business Research Journal of School of Business and Management Technology* 1 (1) 106 – 110
- George, A. (2017). “A methodology for competitive advantage analysis and strategy formulation: an example in a transitional economy”, *European Journal of Operational Research*, (118), 259-70.
- Griliches, Z. (2016). Introduction. In *R&D, Patents and Productivity*, Griliches Z (ed). University of Chicago Press: Chicago, IL; 1–20. <https://doi.org/10.7208/chicago/9780226308920.001.0001>
- Gruber, H.E. (2016), “The life space of a scientist: the visionary function and other aspects of Jean Piaget’s thinking”, *Creativity Research Journal*, (9), 251-65.
- Harsanyi, J. (2019), “Rational-choice models of political behaviours functionalist and conformist theories”, *World Politics*, (21), 513-38.

- Hauben, B.A. (2016), "Reward, intrinsic motivation, and creativity", *American Psychologist*, (53), 674-5.
- Hitt, M.A. (2017), "International diversification effects on innovation and firm performance in product diversified firms", *Academy of Management Journal*, (40), 767-98.
- Huselid, M. (2017), "The impact of human resource management practices on turnover, productivity, and corporate financial performance", *Academy of Management Journal*, (38), 635-72.
- Katila, R., & Mang, P. Y, (2016). Exploiting technological opportunities: the timing of collaborations. *Research Policy*, 32, 317–332.
- Mosakowski, E. (2016). Organizational boundaries and economic performance: an empirical study of entrepreneurial computer firms. *Strategic Management Journal*, 12, 115–133. <https://doi.org/10.1002/smj.4250120204>.
- Mumford, M.D. (2016), "Managing creative people: strategies and tactics for innovation", *Human Resource Management Review*, 10(3), 313-51.
- Nwoye, R. (2004), "Is slack good or bad for innovation?" *Academy of Management Journal*, (9), 245-64.
- Ojohwoh, M. D. (2016), "Creativity syndrome: integration, application, and innovation", *Psychological Bulletin*, (103), 27-43.
- Olusegun S.L. (2018), "impact of training on employee performance: a study of telecommunication sector in Pakistan. *Interdisciplinary journal of contemporary research in business*, 4 (6), 646-661.
- Otobo, E.A. (2017). Office machines Technology for Tertiary Institution, Ughelli Ikabaka Press.
- Pavitt, K. (2009), "What we know about strategic management of technology", *California Management Review*, (33), 17-126.
- Quinone's, M.A. (2017), "Contextual influences: on training effectiveness", in Quinone's, M.A. and Ehrenstein, A. (Eds), *Training for a Rapidly Changing Workplace: Applications of Psychological Research*, American Psychological Association, Washington, DC, 177-99.
- Reinganu, J. (2017). The timing of innovation: research, development and diffusion. In: Schmalensee, R., Willig, R. (Eds.), *Handbook of Industrial Organization*. North-Holland, Amsterdam, 849–908.
- Richard, K. (2018). Entrenched success: the reciprocal relationship between interfirm collaboration and business sales growth. *The Proceedings of Academy of Management Conference*, New York, United States. <https://doi.org/10.5465/AMBPP.1996.4978166>

- Rudge, M. (2016). Impact of Training Practices on Employee Productivity: A Comparative Study. *Intercedence Management Review*, 2 (2), 87-92.
- Saeed, D. M., & Asghar, M. A. (2018). Examining the Relationship between Training, Motivation and Employees Job Performance – The Moderating Role of Person Job Fit. *Journal of Basic and Applied Scientific Research*, 2 (12), 12177-12183.
- Umar, C. (2019), “Interactive effects of work motivation and personal control on employee job performance and satisfaction”, *Journal of Social Psychology*, (134), 855-6.